



# Introduction

This is our second catalog of Super 8 sync sound film-making equipment. As in the last catalog, the principal emphasis is on double-system filmmaking with the Super8 Sound Recorder using Super 8 fullcoat magnetic film. However, two clear new areas of Super 8 filmmaking have recently emerged. They are single-system Super 8 and Super 8 Video.

Single-system Super 8 will have applications as a TV news-film, as a first film for filmmaking students, and of course, for home movies. Double-system will be used for productions requiring significant editing, and those with multiple sound tracks. We believe that Kodak's single-system format will gradually be adopted by all camera manufacturers who want to sell to the home-movie maker, and have therefore eliminated references to most other amateur sync systems.

We expect that single-system and double-system will coexist in Super 8, as they have in 16mm filmmaking for the last two decades, with each enjoying distinct advantages over the other. The Super8 Sound Recorder can transfer sound from the magnetic edge stripe to fullcoat magnetic film, thus providing the Super 8 filmmaker with the best of both worlds — single-system location equipment *and* double-system fullcoat editing.

Super 8 Video gives the Super 8 filmmaker considerable economic advantages over the 16mm filmmaker producing for television, or the video producer himself. Editable color video equipment portable enough for location work is ten to one hundred times the cost of Super 8 sync sound equipment. The Kodak Super 8 Videoplayer is a color video transfer machine to which nothing comparable exists in 16mm, and 16mm equipment with similar capability costs ten times the Videoplayer's low price.

Whether you're getting into double-system Super 8, single-system Super 8, or Super 8 Video, there are 8 important reasons why Super8 Sound is the place to start.

1. **Single-Point Source for Super 8 Equipment** Super8 Sound has constantly strived to be a single-contact source for everything that is "professional" Super 8. We now represent virtually all brands of Super 8 film equipment, and a wide range of audio products usable in sync sound filmmaking. We also carry many non-sound products such as lighting equipment, tripods, animation stands, projection screens, videotape recorders, and Super 8 video transfer equipment — essentially everything needed to mount a serious Super 8 film or video production.

2. **First with New Super 8 Products** Super8 Sound not only carries everything Super 8, it tries to tell you about new products and get them to you faster than any other supplier. We were the first Herculite dealer to announce the Beaulieu 5008S, and the first Kodak dealer to announce and sell the Videoplayer nationwide, and of course our proprietary products include a number of firsts for Super 8 — fullcoat recorders, camera silencers, interlock projectors, motorized editing equipment — and many other smaller items.

3. **Knowledgeable Sales People** Super8 Sound's staff are specialists in sync sound Super 8; they are better informed about new equipment options than camera stores that sell Super 8, or 16mm equipment supply houses that sell 16mm sync sound. Our staff in Cambridge is always ready to consult with you by telephone. Call (617)-876-5876 9:00 AM-6:00 PM Monday-Friday. If we can clarify a technical point with a phone call, we save you and us the extended time and poorer communications involved in writing.

4. **Comprehensive, Concise, and Critical Equipment Advice** To simplify your task of reviewing equipment options, our staff prepares the Super8 Sound Catalog. The Catalog attempts to have at least a brief comment about every professional Super 8 tool. It attempts to be objective, and frankly critical where necessary. The Catalog is supplemented by Reference Book Super 8 — a 500-page compendium of original manufacturers' literature — and by a number of technical pamphlets on sync Super 8.

5. **Discount Prices** Super8 Sound has low discount prices on Super 8 cameras, projectors, viewers, film, etc. With the addition of the 2% cash discount and the system discount offered when a complete integrated film production system is purchased from Super8 Sound, you are assured of both maximum economy and the advantage of expert advice on putting equipment together in an optimal system.

6. **An Unconditional Return Policy and Double Warranty** Super8 Sound always adds 2 weeks to the beginning of your warranty, on any item purchased from us, during which time you may return equipment for an unconditional full refund. You must not fill out any warranty cards until you are satisfied you want to own the equipment. In the unlikely event that the original manufacturers do not make good on their warranty, Super8 Sound pledges to back them up with a replacement or repaired item at our expense.

7. **A Solid Reputation Within the Motion Picture Industry** Super8 Sound is a sustaining member of the Society of Motion Picture and Television Engineers, and has worked to develop engineering standards for sync sound Super 8 equipment. Without such standards, Super 8 will not have the equipment compatibility and interchangeability that is the hallmark of a professional medium. In the long run, only equipment that conforms to basic standards will survive.

Super8 Sound equipment is compatible with virtually every sync sound system in existence, professional or amateur, and we hope we have set an example for other manufacturers entering the new field of professional Super 8.

8. **A National and International Dealer Network** Super 8 Sound is building a growing network of distributors, dealers, and sales representatives across the U.S. and abroad. We hope to provide Super 8 filmmakers everywhere with local sales and service of the same quality they have come to expect from our Cambridge headquarters. We invite inquiries concerning local dealerships, or exclusive national distributions abroad. Not every Super8 Sound dealer can stock every Super8 Sound product, so call ahead before visiting, but our dealers can supply any item regularly sold by Super8 Sound and listed in this Catalog.

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DESIGN/Funktions, Inc. Watertown, MA

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# Super8 Sound Recorder I



Super8 Sound Recorder I records on Super 8 fullcoat magnetic film and combines the functions of location recorder, laboratory resolver, sound studio dubber, and transfer recorder. It is fully compatible with all other sync sound systems: Professional or Amateur ■ Pilotone or New Digital 1/F Sync Pulse ■ Reel-to-Reel or Cassette. It is also fully compatible with the new Super8 Sound Recorder II.

Super8 Sound Recorders can be used with a number of Super 8 cameras, with no camera modifications, to shoot original sync sound. They produce a sound track directly on easily edited Super 8 fullcoat magnetic film.

Super8 Sound Recorders can transfer sound to Super 8 magnetic film from any sync sound tape recorder, cassette or reel-to-reel. The tape recorder must have a standard sync output, either pilotone or the new one-pulse-per-frame (1/F) digital sync pulse.

Super8 Sound Recorders can synchronize with any Super8 Sound Projector equipped with a standard 1/F contact switch, making possible transfers of edited magnetic film to magnetic edge stripe. They can also transfer Ektasound single-system sound from edge stripe to Super 8 magnetic film for professional double-system editing.

Any number of Super8 Sound Recorders can be interlocked in sync with the AC line frequency for multiple track studio work. The Recorder can also synchronize to a pilotone track on a four-channel tape recorder for multi-track transfers to and from quarter-inch tape.

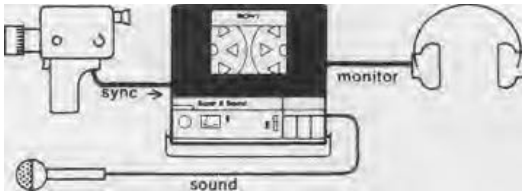
Super8 Sound Recorders operate at both professional (24fps) and amateur (18fps) film speeds, and have built-in quartz-crystal control for cableless sync work at 24fps. They also record on new split-sixteen magnetic film at 7.2 ips (24fps). A separate built-in sync meter provides positive indication of sync condition.

The Super8 Sound Recorder I is a modified Sony TC800B quarter-inch tape recorder. It operates on batteries (12V) or 60Hz/110VAC. Super8 Sound Recorders have a one-year warranty on parts and 90 days on labor, and an unconditional full refund if returned within two weeks of purchase.

An extensive Super8 Sound Recorder User's Manual is supplied and is available separately for \$1. Super8 Sound Recorders can be ordered directly from Super8 Sound or from our authorized dealers in the U.S., Canada, Europe and Australia. Export models operate on 50Hz, 220V or 110V; they synchronize at 24fps, 25fps, and 18fps, and with a built-in 25fps crystal.

Super8 Sound Recorders are protected by U.S. Patent No. 3,900,251 and other patents applied for.

# Super 8 Sound Recorder I



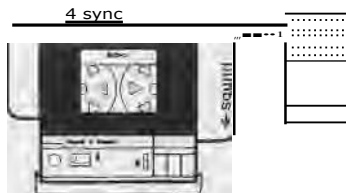
## On Location

The Super8 Sound Recorder I will record in sync on location with over 40 available Super 8 sync sound cameras. The cameras must be equipped with a 1/F contact switch (electronic flash PC socket), a pilotone generator, or be crystal-controlled. The list of sync cameras currently available from Super8 Sound (all of which are also compatible with our sync cassette recorders) is given below.

Crystal controls are available for a number of these cameras from Super8 Sound. Single-system cameras can also be used as location recorders, with transfers to Super 8 magnetic film made back in the laboratory.

Bauer C-Royal 8E, 10E  
 Beaulieu 4008ZM2, 5008S,  
 5008MS, 3008MS  
 Bolex 450, 480  
 Canon 814E, 1014 E, DS8  
 Chinon 806SM, 1200SM  
 Cinema Pa the DS8  
 Elmo Super 110R, 612  
 Eumig 830XL, 860PMA,  
 880PMA  
 Fujica 2800, ZC1000  
 GAF ST/802, ST/1002

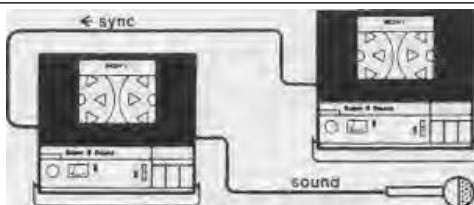
Leicina Special  
 Minolta Autopak-8 D 12  
 Minolta XL400  
 Nikon R8, R10  
 Nizo 136XL, 148XL, 156XL,  
 S480, 481, 5560, 561  
 801, 800P  
 Sankyo CME444, CME666,  
 CME1100, ES66XL,  
 ES44XL, ES25XL



## In the Laboratory

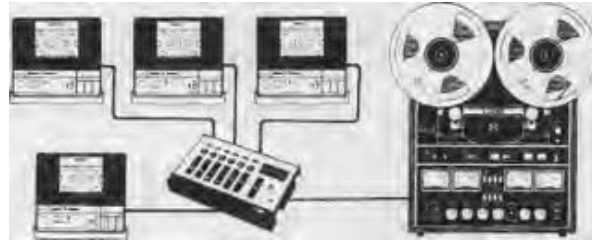
Transferring sync sound to Super 8 magnetic film requires a sync signal that provides frame rate information to the Super8 Sound Recorder I. The Recorder servo-controls its speed so that one frame of magnetic film passes the recording head for each "frame" of the sync signal, whether a pilotone or digital 1/F signal. Transfers can be made from professional sync recorders such as Nagra, Stellavox, Arrivox-Tandberg, and Uher Neo-Pilot, and from the new sync cassette recorders such as Philips 2209 AV, Uher CR134, and CR210, Super8 Sound's XSD Recorder and others.

Transfers can also be made from the magnetic edge stripe of a single-system film by connecting the Super8 Sound Recorder to a projector with a 1/F contact switch. Professional sound labs can use the Super8 Sound Recorder in AC line sync with their other recorder/reproducers.



## In the Dubbing Theater

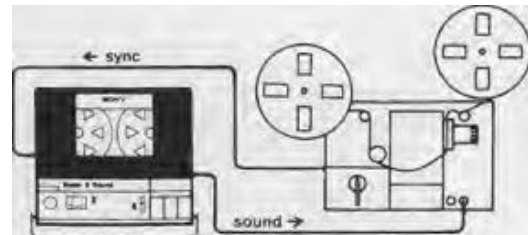
Since the Super8 Sound Recorder will run in perfect interlock with other Super8 Sound Recorders, with Super8 Sound Sync Projectors, and even with the Super8 Sound DoubleBand Projector, the possibilities for dubbing and mixing are extensive. Filmmakers can listen to the original sync material, on headphones, while they prepare new material, over and over if necessary until perfect, on a second fullcoat magnetic film recorder.



## In the Sound Studio

The Super8 Sound Recorder offers two basic approaches to multiple track sync recording. One is to use multiple fullcoat magnetic film recorders, all running in sync with the AC line frequency. Any number of Super8 Sound Recorders can be interlocked this way. No sync rollback is possible.

Another method is to transfer edited lip-sync material to one track of a four-channel quarter-inch tape. A pilotone sync signal from the Super8 Sound Recorder is also recorded as a control track. Now the same Super8 Sound Recorder can transfer a second fullcoat strand, with additional sync material, to a third track of the four-channel machine. The Super8 Sound Recorder will maintain sync against the control track. The fourth track can be used for music, narration, etc. All three tracks can then be mixed down to make a composite master fullcoat track, again on the same Super8 Sound Recorder synced to the control track.



## In the Screening Room

Sound on fullcoat magnetic film, from the first look at synced-up rushes to the final composite master sound track, can be run in double-system sync with any projector equipped with a 1/F contact switch. Projector and Recorder are started together using either a Common Start Box or the Super8 Sound PhotoStart. The PhotoStart reacts to a flash frame in the picture leader, and releases the Super8 Sound Recorder for precisely repeatable starts.

Double-system interlock screenings with a sync rollback capability can be accomplished on the Super8 Sound DoubleBand Projector. The Super8 Sound Recorder will also synchronize with AC synchronous equipment such as the Kodak TVM100A telecine projector. The Kodak Videoplayers can be supplied with a 1/F sync pulse for double-system video transfers.

**Super 8 Sound, Inc.**

95 Harvey Street, Cambridge, Mass. 02140

# Super 8 Sound Recorder I



METER-FUNCT I ON SW ITCH (2-Position): S-NC

SPEED SELECTOR SWITCH (4-Position): 24fps/18fps

SPEED TUNING SWITCH (2-Position): ON/OFF

SPEED TUNING Control Knob

## Audio Section

**Audio Circuit** 16 Transistors  
**Electronics** 9 Diodes  
 1 Integrated Circuit

**Audio Frequency Response** 24fps; 30-13,000Hz  
 18fps; 30-10,000Hz

**Wow & Flutter** 24fps; less than 0.15%  
 18fps; less than 0.2%

**Signal/Noise Ratio** 45db at 24fps

**Bias Frequency** 55KHz

**Built-in Microphone** Electret Condenser, Response: **50-12,000** Hz  $\pm$ 3db

**Speeds** 24fps, (4ips), and 18fps (3ips) using Super 8 fullcoat mag film. Each speed is variable plus or minus 7%. Export model is 25fps and 18fps, and can usually synchronize also at 24fps.

**Track Location** Half-track monophonic. (.082 inches wide opposite sprocket holes) Super 8 Sound standard for magnetic film

**Recording Time** 5 inch reel, 24fps standard sync sound speed:  
 19 minutes on polyester base Super 8 mag film (380 feet)

**Rewind Time** 30 seconds (380 feet)

**Audio Inputs** Microphone Input:  
 Unbalanced  
 Impedance: 60052 nominal (200-1,00052 acceptable)  
 Sensitivity: 72dBs (0.1'19mV)  
 Plug type: Miniphone

Auxiliary Input:  
 Impedance: 100K  
 Sensitivity: 72dBs (0.119mV)  
 Plug type: Miniphone

**Audio Outputs** Monitor:  
 Impedance: 8, C2  
 Sensitivity: OdBs (0.775V)  
 Power Output: 1 Watt RMS maximum  
 Plug Type: Miniphone

**Audio Function** TONE Control Knob  
**Switches and Controls** PLAYBACK VOLUME Control Knob  
 STOP, FAST FORWARD, PLAY and REWIND Keyboard  
 RECORD INTERLOCK Lever  
 RECORD LEVEL Control Knob  
 AUTOMATIC LEVEL CONTROL Switch (3 Positions): MUSIC/SPEECH/MANUAL  
 MICROPHONE SELECTOR/MIXER Switch (3 Positions): EXTERNAL/MIX/INTERNAL  
 SPEAKER/MONITOR Level Switch (3 Positions): OFF/1/2

**Power Requirements** DC 12V, 8 size "D" cells (15 hours recording time with al kaline cells)  
 12V Car Battery Cord, SONY DCC-2AW  
 120 volts, AC, 60Hz  
 Export Model: 120 volts, 50Hz (230V/120V transformer optional)

**Battery Check** Meter reads battery condition by depressing battery check button, with machine in PLAY mode, and METER SWITCH on VU.

**Size** 1 2.1/2" x 4 3/16" x 1 0%" (32 x 11 x 26 cm)  
**Weight** 1 2 lbs. with batteries (5.5kgm)

Super8 Sound Recorder ..... S8SR  
 Super8 Sound Recorder — Export Model ..... S8SR50 (50Hz, 110V or 220V, 25fps crystal)

## Technical Specifications of the Super8 Sound Recorder

### Sync Section

**Sync Circuit Electronics** 8 Integrated Circuits (4 CMOS, 2 Dual Op Amps)  
 LED/Phototransistor Sensor Assembly  
 5V Voltage Reference Power Supply  
 15 Diodes, 3 Transistors  
 Crystal Oscillator

**Crystal Speed Accuracy**  $\pm$  one frame in 13 minutes, -10 to 40° C  
 0.005% (50ppm)

**Sync Circuit Inputs** PIN 1: With SYNC REFERENCE switch set to DIGITAL, this pin accepts an external 1/F pulse at a rate between 22.3-25.7fps (nominal 24fps) or between 16.7-19.2fps (nominal 18fps). Voltage swing must be 500mV minimum, 5V maximum. Virtually any wave form with a 1/F repetition rate is acceptable. With SYNC REFERENCE switch set to PI LOTONE, this pin will accept the standard pilotone 60Hz sine wave, 1 volt rms, or any 60Hz signal between 0.7 volts rms and 4 volts rms. Input impedance at Pin 1 is 15K ohms.  
 PIN 4: Sync signals entering Pin 4 go through an extra stage of amplification and are then fed to Pin 1 as above. Minimum acceptable voltage is 500 MV. Input impedance at Pin 4 is 1000 ohms.

PIN 3: With SYNC REFERENCE switch set to DIGITAL, this pin accepts a 1/F switch closure, at the frame rates described above. Maximum "on" resistance of the switch and cable connections that will produce a guaranteed sync is 100 ohms.

**Sync Circuit Outputs** PIN 3: With SYNC REFERENCE switches set to AUTOMATIC, LINE, and the S8S Recorder plugged into a 60Hz AC line source, this pin provides a standard pilotone signal — 60Hz, 1 volt rms, suitable for recording as a sync track.  
 Output impedance 1500 ohms.

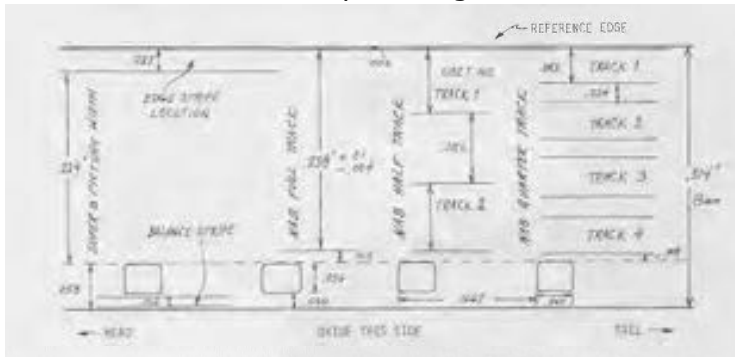
PIN 5: Output of the servo-control wave form. This is the signal whose average voltage is displayed on the sync meter. Range 0-5V. Can drive an external sync meter.

PIN 2: GROUND

**Sync Function Switches and Controls** SYNC REFERENCE SWITCHES (Two 3-Position): AUTOMATIC/MANUAL/CRYSTAL and DIGITAL/PI LOTONE/LIN E

# Super8 Sound Recorder I

## Track Placement on Super 8 Magnetic Film



## Super8 Sound Recorder Accessories

The following accessories are supplied with every Super8 Sound Recorder:

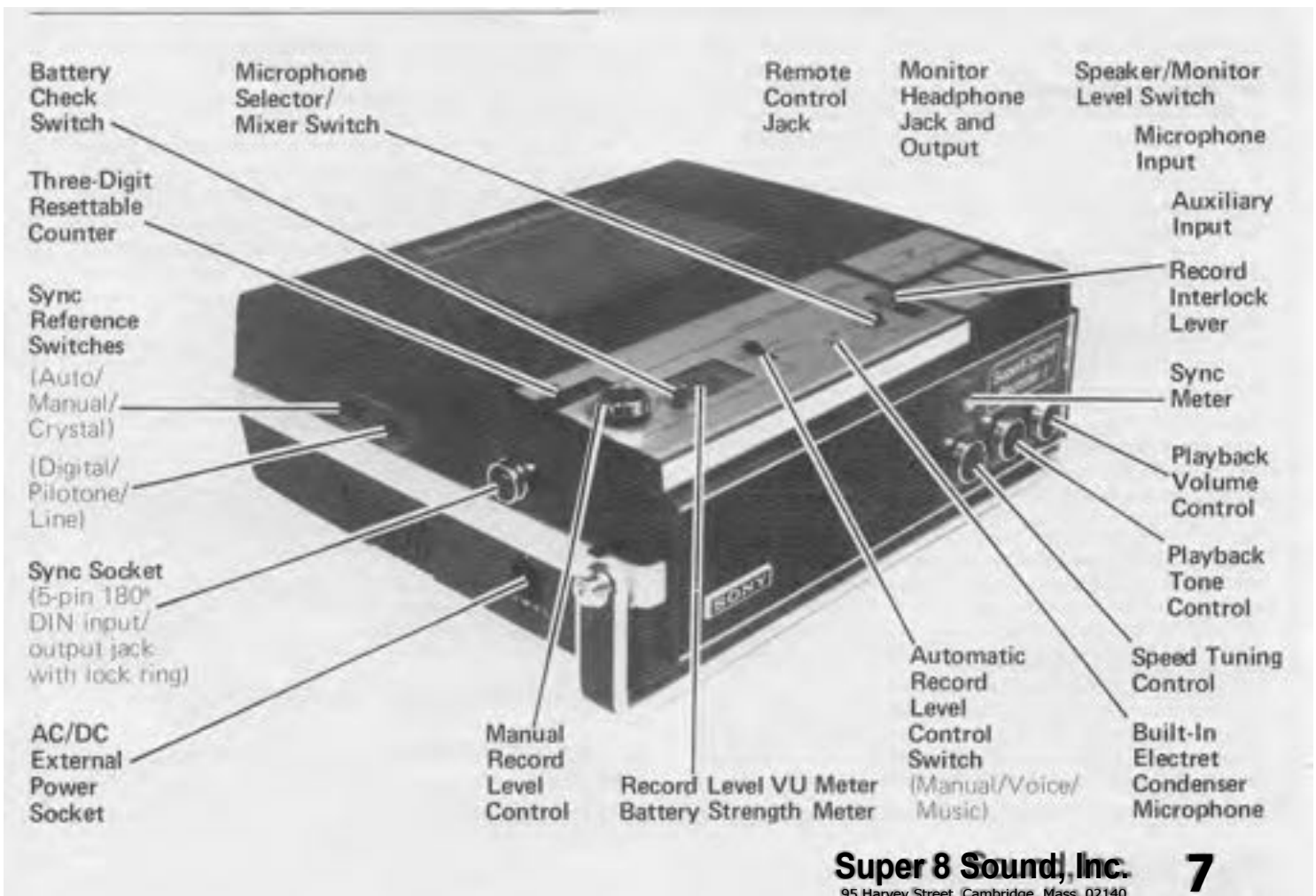
- F-26S Dynamic Microphone with Remote Control Switch
- AC Power Cord
- RK-69 Miniphone-to-Miniphone Audio Cable
- 8 "D" Cell Batteries
- Accessory Bag
- 380 ft. Super 8 Fullcoat Polyester on 5" Autothread Reel with Hub Adapter
- Empty 5" Autothread Super 8 Reel with Hub Adapter
- SONY TC800B Operating Manual
- Super8 Sound Recorder User's Manual

The following accessories are optional at extra cost:

- Carrying Case with Shoulder Strap ..... LC8B
- 12V Automobile Cigarette Lighter Power Adapter . . . DCC2AW
- Magnetic Phono Input Adapter ..... RK66  
(allows direct connection of magnetic cartridge)
- 220V/1 10V Step-down Transformer ..... 220110  
(allows use of 220V AC — essential for export version)

See the Cables section of the Super8 Sound Catalog for the many sync cables and audio cables available for the Super8 Sound Recorder.

See the Production Accessories section of the Super8 Sound Catalog for microphones, head demagnetizers, and headphones.





# Super 8 Sound Recorder II

1



S8S# S8SR II

Super8 Sound Recorder II records on Super 8 fullcoat magnetic film and combines the functions of location recorder, laboratory resolver, sound studio dubber, and transfer recorder. It is fully compatible with all other sync sound systems: Professional or Amateur, Pilotone or New Digital 1/F (once-per frame) Sync Pulse, Reel-to-Reel or Cassette, Crystal or Cable Sync. It is also fully compatible with the original Super8 Sound Recorder — the standard of Professional Super 8.

Super8 Sound Recorders can be used with a number of Super 8 cameras, with no camera modifications, to shoot original sync sound. They produce a sound track directly on easily edited Super 8 fullcoat magnetic film. The camera must have a 1/F sync pulse, a pilotone (60Hz) sync pulse, or be crystal-controlled.

Super8 Sound Recorders can transfer sound to Super 8 magnetic film from any sync sound tape recorder, cassette or reel-to-reel. The tape recorder must have a standard sync output, either pilotone or the 1/F digital sync pulse.

Super8 Sound Recorders can synchronize with any Super8 Sound projector (equipped with a standard 1/F contact switch) making possible transfers of sound from edited magnetic film to the magnetic edge stripe of a release print. They can also be used to transfer Ektasound single-system sound from edge stripe to Super 8 magnetic film, for professional double-system editing.

Any number of Super8 Sound Recorders can be interlocked in sync with the AC line frequency for multiple-track studio work. The Recorder can also synchronize to a pilotone track on a four-channel tape recorder for multi-track transfers to

and from quarter-inch tape. A safe copy of a fullcoat original track can be made on any stereo recorder.

Super8 Sound Recorders operate at both professional (24fps) and amateur (18fps) film speeds, and have built-in quartz crystal control for cableless sync work at 24fps. They also record on new split-sixteen magnetic film at 7.2 ips (24fps). A separate built-in sync meter provides positive indication of sync condition.

The separate ACPAC unit is a Preamp, AC Adapter, and Charger. It provides preamplification of 1/F low-level sync pulses from cassette sync tracks, permits AC operation, including Line sync, and automatic recharging of NiCad batteries. It contains an automatic start circuit triggered by a beep tone or flash frame (PhotoStart included).

All sync cables are compatible and interchangeable with those of S8SR I. Audio cables are standard DIN types.

Super8 Sound Recorder 11 is a modified Uher 4000 Report IC quarter-inch tape recorder. It operates on 5 "D" cells or 60Hz/110 AC. Super8 Sound Recorders have a one year warranty on parts and 90 days on labor, and an unconditional full refund if returned within two weeks of purchase.

An extensive Super8 Sound Recorder User's Manual is supplied, and can be purchased separately for \$1. Super8 Sound Recorder II can be ordered directly from Super8 Sound or from our authorized dealers in the U.S., Canada, and Europe. Export models operate on 50Hz, 220V or 110V; they synchronize at 24fps, 25fps, and 18fps, and with a built-in 25fps crystal.

Super8 Sound Recorders are protected by U.S. Patent No. 3,900,251 and other patents applied for.



# Super8 Sound Recorders



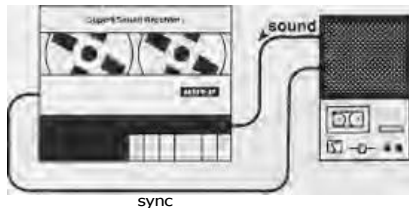
## On Location

The Super8 Sound Recorder /I will record in sync on location with over 40 available Super 8 sync sound cameras. The cameras must be equipped with a 1/F contact switch (electronic flash PC socket), or tone burst, a pilotone generator, or be crystal-controlled. A quick-acting electromagnetic solenoid provides start/stop operation from cameras equipped for tape recorder remote control (asterisks in list of sync cameras below).

Crystal controls are available for a number of cameras from Super8 Sound. Single-system cameras can also be used as location recorders, with transfers to Super 8 magnetic film made in the laboratory.

*Bauer C-Royal 8E", 10E\**  
*Beaulieu 4008ZM2, 5008S*  
*Bolex 450, 480"*  
*Canon 814E, 1014E, DS8\**  
*Chinon 806SM, 1200SM*  
*Cinema Pa the DS8*  
*Elmo Super 110R, 612*  
*Eumig 830XL, 860PMA, 880PMA*  
*Fujica Z800, ZC1000*

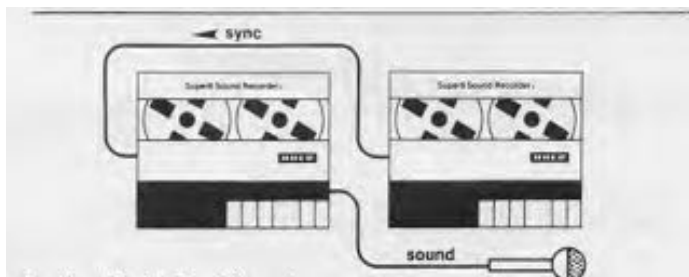
*GAF ST/802, ST/1002*  
*Leicina Special*  
*Minolta Autopak-8 D12*  
*Minolta XL400*  
*Nikon R8, R10\**  
*Nizo 136XL, 148XL, 156XL,*  
*S480\*, 481\*, S560\*,*  
*561", 801\*, 800P"*  
*Sankyo CME444, CME666, CME1100*



## In the Laboratory

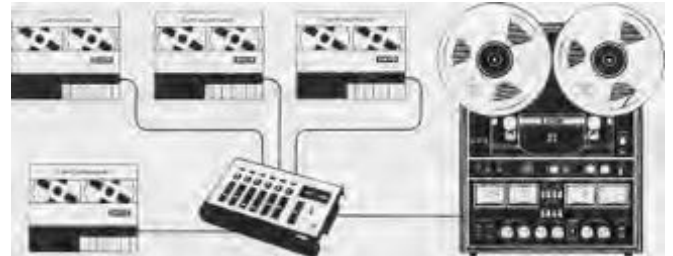
Transferring sync sound to Super 8 magnetic film requires a sync signal that provides frame rate information to the Super8 Sound Recorder H . The Recorder servo-controls its speed so that one frame of magnetic film passes the recording head for each "frame" of the sync signal, whether a pilotone or digital 1/F signal. Transfers can be made from professional sync recorders such as Nagra, Stellavox, Arrivox-Tandberg, and Uher Neo-Pilot, and from new sync cassette recorders such as Phillips 2209 AV, Uher CR134 and CR210, Super8 Sound's XSD Recorder, and others.

Transfers can also be made from the magnetic edge stripe of a single-system film by connecting the Super8 Sound Recorder to a projector with a 1/F contact switch. Professional sound labs can use the Super8 Sound Recorder in AC line sync with their other recorder/reproducers.



in the Theater

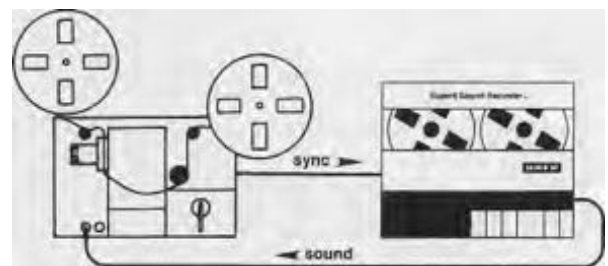
Since the Super8 Sound Recorder will run in perfect interlock with other Super8 Sound Recorders, with Super8 Sound Sync Projectors, and even with the Super8 Sound DoubleBand Projector, the possibilities for dubbing and mixing are extensive. Filmmakers can listen to the original sync material, on headphones, while they prepare new material, over and over if necessary until perfect, on a second fullcoat mag film recorder.



## In the Sound Studio

The Super8 Sound Recorder offers two basic approaches to multiple-track sync recording. One is to use multiple fullcoat magnetic film recorders, all running in sync with the AC line frequency. Any number of Super8 Sound Recorders can be interlocked this way. No sync rollback is possible.

Another method is to transfer edited lip-sync material to one track of a four-channel quarter-inch tape. A pilotone sync signal from the Super8 Sound Recorder is also recorded as a control track. Now the same Super8 Sound Recorder can transfer a second fullcoat strand, with additional sync material, to a third track of the four-channel machine. The Super8 Sound Recorder will maintain sync against the control track. The fourth track can be used for music, narration, etc. All three tracks can then be mixed down to make a composite master fullcoat track, again on the same Super8 Sound Recorder synced to the control track.



## In the Screening Room

Sound on fullcoat magnetic film, from the first look at synced-up rushes to the final composite master sound track, can be run in double-system sync with any projector equipped with a 1/F contact switch. Projector and Recorder are synchronized using the supplied Super8 Sound PhotoStart. The PhotoStart reacts to a flash frame in the picture leader, and releases the Super8 Sound Recorder for precisely repeatable starts.

Double-system interlock screenings with a sync rollback capability can be accomplished on the Super8 Sound DoubleBand Projector. The Super8 Sound Recorder will also synchronize with AC synchronous equipment such as the Kodak TVM100A telecine projector. The Kodak Videoplayers can be supplied with a 1/F sync pulse for double-system video transfers.

# Super8 Sound Recorders

## Technical Specifications of Super8 Sound Recorder *ti* Sync Section

**Sync Socket Inputs** **PIN 1:** With SYNC REFERENCE switch set to 1/F, this pin accepts an external 1/F pulse at a rate between 21-27fps (nominal 24fps) or between 16-20fps (nominal 18fps). Voltage swing must be 500mV minimum, 5V maximum. Virtually any wave form with a 1/F repetition rate is acceptable.

With SYNC REFERENCE switch set to **PILOTONE**, this pin will accept the standard pilotone 60Hz sine wave, 1 volt rms, or any 60Hz signal between 0.7 volts rms and 4 volts rms. Input impedance at PIN 1 is 1.5K ohms.

**PIN 3:** With SYNC REFERENCE switch set to 1/F, this pin accepts a 1/F switch closure, at the frame rates described above. Maximum "on" resistance of the switch and cable connections that will produce a guaranteed sync is 100 ohms.

**PIN 4:** This pin is prepared to accept an external speed control input, to be used in the future for catch-up sync circuitry.

**PIN 6:** This pin accepts a switching signal to ground (PIN 2) that starts and stops the S8SRI I by remote control (from a camera, for example)

**Sync Socket Outputs** **PIN 5:** The output of the photosensor, a 1/F signal that swings between 0V and approximately 5V, is supplied on this pin, for use by an external frame counter or catch-up correction circuitry.

**PIN 7:** No Connection.

**PIN 2:** Ground.

**Crystal Sync** With SYNC REFERENCE switch set to **XTAL**, the S8SRII will run at 24fps ± one frame in 13 minutes, —10 to 40 °C. (accuracy 0.005%-50ppm).

**Sync Function Switches and Controls** SYNC REFERENCE SWITCH (3 position): 1/F, Pilotone, XTAL  
 SYNC MODE SWITCH (Incorporated in Speed Tuning Control)  
 PUSH-Automatic Speed Control  
 PULL-Manual Speed Control  
 SPEED TUNING CONTROL Knob  
 SPEED SELECTOR SWITCH (4 position): 24fps, 18fps, and split-sixteen 24fps.

## Audio Section

**Speeds** 24fps (4ips), and 18fps (3ips) using Super 8 fullcoat magnetic film. Each speed is variable plus or minus 1.5%. Export model (S8SR50-1) is 25fps and 18fps and can synchronize also at 24fps.

**Frequency Response** 24fps: 35-16,000Hz, 18fps: 35-12,000Hz  
 Split-sixteen: 35-19,000 Hz

**Signal/Noise Ratio** 24fps: 63dB; 18fps: 61dB  
 Split-sixteen: 64dB

**Wow and Flutter** 24fps: 0.18% (rms); 18fps: 0.25% (rms)  
 Split-sixteen: 0.15% (rms)

**Track Location** NAB standard half-track monophonic (.082 inches wide opposite sprocket holes). Proposed SMPTE standard for Super 8 magnetic film

**Recording Time** 5 inch reel, 24fps standard sound speed: 19 minutes on polyester base Super 8 mag film (380 feet)

**Audio Inputs** Microphone Input  
 Unbalanced  
 Impedance: 200Ω  
 Sensitivity: 0.12mV-40mV  
 Plug Type: DIN 5-pin, 3-pin, or 7-pin (with lock-ring)

Auxiliary Input (Radio)  
 Impedance: 47KΩ  
 Sensitivity: 2.4mV-700mV  
 Plug Type: DIN 5-pin

Auxiliary Input (Phono)  
 Impedance: 1 MΩ  
 Sensitivity: 45mV-20V  
 Plug Type: DIN 5-pin

**Audio Outputs** Speaker Output  
 Impedance: 4Ω  
 Level: 2 Volts  
 Plug Type: **DIN** 2-pin

Auxiliary Output:  
 Impedance: 15KΩ  
 Level: 1 Volt  
 Plug Type: **DIN** 5-pin

**Audio Function Switches and Controls** PLAYBACK VOLUME Control Knob  
**STOP, START, PAUSE, FAST FORWARD** and **REWIND** Keyboard  
**RECORD INTERLOCK** Key  
**RECORD LEVEL** Control Knob  
**AUTOMATIC GAIN** Control Switch  
 (3 positions): **MUSIC/SPEECH/MANUAL**

**Power Requirements** **DC 6-7.5V**, 5 size "D" cells (15 hours recording time with alkaline cells) AC60Hz, 120 Volts, 12V car battery adapter available.  
 (220V-240V, AC 50Hz)

**Battery Check** VU Meter reads battery condition by pulling **RECORD LEVEL** Control Knob, with recorder in the playback mode

**Size** **28.5 x 22.7 x 9.5 cm** (11 x 9 x 3 3/8 inches)

**Weight** 3.6 Kg (8 lbs. without batteries)

## AC Adapter/Sync Preamp Section (ACPAC)

**Sync Input Socket** **PIN 2:** GROUND  
**PIN 1:** With SYNC REFERENCE Switch set to 1/F **HIGH LEVEL** or **PILOTONE**, this pin is connected directly to PIN 1 of the S8SRII.

**PIN 4:** With SYNC REFERENCE Switch set to 1/F **LOW LEVEL**, this pin accepts signals as low as 500µV. They are preamplified and fed to PIN 1 of the S8SRI I, which must be set to 1/F. Input impedance 1000Ω.

**PIN 3:** This pin is connected directly to Pin 3 of the S8SRII, and accepts 1/F switch signals.

**PIN 5:** Connected to pin 5 of S8SRII SYNC SOCKET, this pin provides a 1/F sync output from the photosensor assembly.

**Start Input Socket** **PIN 1:** BeepStart Input — accepts nominal 1000 Hz burst to start recorder.

**PIN 2:** Ground  
**PIN 3:** No Connection  
**PINS 4, 5:** PhotoStart Input

**Sync/Start Output Socket** **PIN 1:** BeepStart Output will start other S8SRI I's simultaneously).

**PIN 3:** With the ACPAC plugged into an AC line source, this pin provides a standard pilotone signal - 60Hz, 1V rms.

**PIN 2:GROUND**  
**PIN 4:** No Connection

**PIN 5:** A supply voltage of minus 6 volts is provided to power future accessories.

**Connections to S8SRII** Two integral cables with DIN connectors, to the **SYNC SOCKET** and **POWER (A) SOCKET** of the Super8 Sound Recorder *H*.

**Function Switches** **SYNC REFERENCE SWITCH**  
 (3 positions) **LOW-LEVEL 1/F**  
**HIGH-LEVEL 1/F**  
 and **EXTERNAL PILOTONE,**  
**AC LINE PILOTONE**  
**REMOTE START SWITCH**  
 (3 positions): 1/F  
**PILOTONE**  
**OFF**  
**REMOTE START READY SWITCH**  
 (Momentary action)  
**PUSH-STOP**  
**RELEASE-READY**

**Power Requirements** 120V, 60 Hz AC  
 (Export model 220-250V, 50 Hz)

**Fuse** 120V, 1A (250V, .5A — Export Model )

**Size** 4" x 2 1/2" x 7 1/2"

**Weight** 3 lbs.

# Super8 Sound Recorder

## Super8 Sound Recorder H Accessories

The following accessories are supplied with the Super8 Sound Recorder // :

- 380 feet Super 8 Fullcoat Polyester Magnetic Film on a 5-inch Autothread Reel with Hub Adapter
- Empty 5" Autothread Super 8 Reel
- Uher 4000 Report IC Operating Instructions
- Super8 Sound Recorder User's Manual
- AC Adapter/Sync Preamp (ACPAC)
- PhotoStart

Super8 Sound Recorder II ..... S8SR II  
 Super8 Sound Export Model ..... S8SRI150

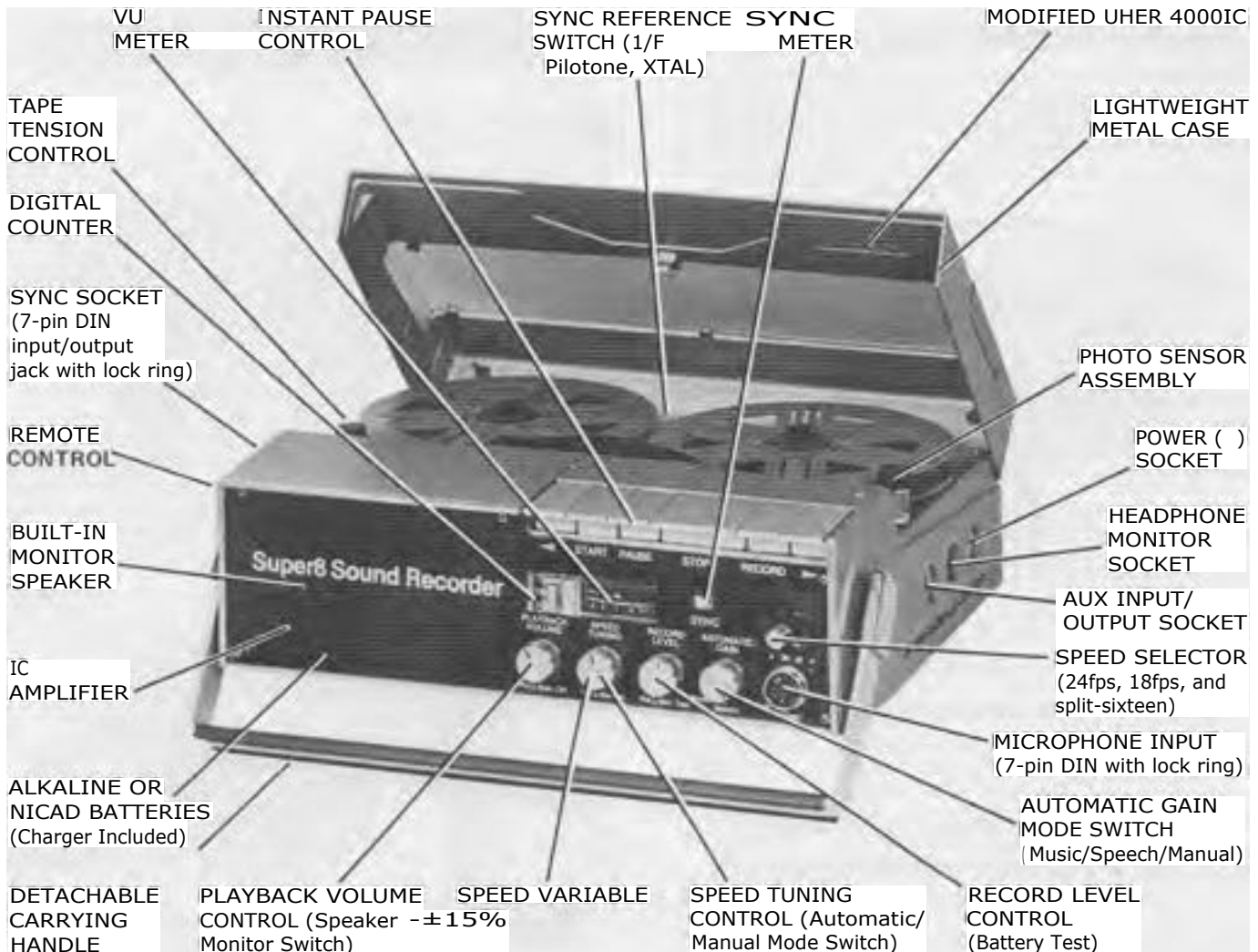
## Optional Accessories

Carrying Case with Shoulder Strap ..... CCII  
 Deluxe Carrying Case with Strap ..... CCDII  
 Automobile 12V Battery Adapter Cord ..... K715  
 5 Rechargeable Nickel-Cadmium Batteries ..... NICAD5U

## Improvements on the Original Super8 Sound Recorder

- Separate VU Meter and Sync Meter (Built-in)
- PhotoStart/BeepStart included (with ACPAC)
- Instant Pause Control (Electromagnetic Solenoid)
- Instant Remote Start/Stop
- Wider Frequency Response
- Better Signal/Noise Ratio
- IC Amplifier
- Tape Tension Control
- NiCad Battery Charger Included
- Controls and Switches More Conveniently Grouped
- Meters Visible in Over-the-shoulder Operation
- Locking DIN-type Microphone and Sync Connections
- Metal Case/Rugged Construction
- Lighter Weight (3/4 Weight)
- Smaller Size (2/3 Volume)

# Super8 Sound Recorder Features



# Super8 Sound Sync Cameras

Choosing a Super 8 camera from among the many fine double-system sound, single-system sound, and Double Super 8 cameras on the market is a difficult task. You are faced by an array of features that includes zoom ratios up to 13.3 to 1, lenses as fast as f/1.2 for filming in available light, interchangeable lens mounts, running speeds from time-lapse intervalometry to 80 frames per second, crystal camera controls, through-the-lens automatic exposure control with manual override and manual offset by one or two stops from the automatic setting, single-lens reflex viewing, macro-cinematography down to the lens front element, and in-camera fades, dissolves, and superimpositions.

Double Super 8 cameras use 16mm-width film perforated Super 8 (1-4) and permit up to twenty-minute continuous-run loads, full backwind, professional emulsions such as 7252 (ECO), superior image registration, and stock processing economy.

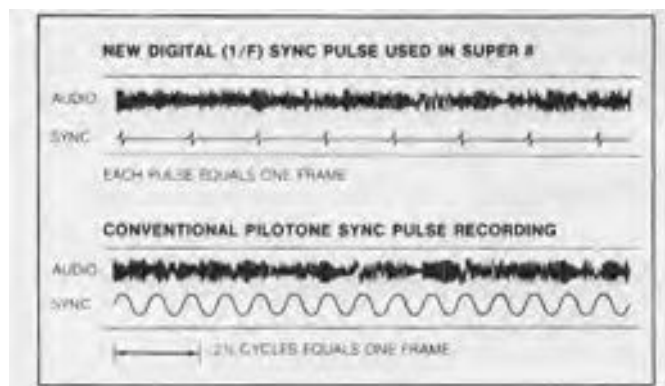
Single-system cameras offer in-camera recording on a magnetic edge stripe, some with high-fidelity sound recording specifications, and you can transfer later to fullcoat magnetic film for serious editing. New 200-foot sound cartridges allow up to ten-minute continuous-run filming, and some single-system cameras also have double-system sync connections.

## Double-System Super 8 Cameras

What makes a Super 8 camera a double-system sync sound camera? All that's required is some means of carrying information (sync signal) about the frame rate of the camera (exact speed in fps) to a sync sound tape recorder. This sync signal may be recorded by a tape recorder on a special sync track alongside the audio track. Alternatively, the sync signal may be used to speed control Super 8 fullcoat magnetic film if a Super8 Sound Recorder is used. Electronic servo-control of the recorder's speed insures that for each frame of picture film exposed in the camera exactly one sprocket hole of magnetic film passes the magnetic head of the Super8 Sound Recorder.

The sync signal from the camera can be as simple as a switch that opens and closes once for each frame of film exposed. This 1/F (once-per-frame) sync signal is available on over 40 Super 8 cameras, where it has generally been included by the manufacturer as an electronic flash (PC) contact.

The traditional sync signal used in 16mm and 35mm film-making is a 60Hz pilotone continuous wave, and this sync signal is used in three Super 8 cameras. The difference between pilotone and 1/F sync signals is shown in the accompanying figure.



In the following section, we summarize the major characteristics of the Super 8 cameras that are most widely used for double-system sync sound work. Important accessories, such as crystal camera controls and silencers, are available only for some cameras; if you need these devices, choose your camera carefully. Besides a brief description of the more notable cameras, we have collected data on 29 double-system cameras, 14 single-system cameras, and 2 Double Super 8 cameras into a convenient comparison table. Unless otherwise specified, all Super 8 cameras described here have the following features:

- Use Super 8 film in 50' cartridges
- Automatically keyed to film's ASA speed from ASA 25 to 160
- Integral type-A (Wratten 85) filter manually keyed
- Footage counter
- End-of-film indicator in viewfinder
- Zoom lens with battery-powered zoom, and manual override
- Reflex groundglass viewing with beamsplitter in front of diaphragm
- Focusing down to approximately 3-4 feet (some have macro capability)
- Automatic exposure control (CdS cell) through the lens with exposure value displayed in viewfinder and manual override
- Powered by AA (penlight) batteries
- Screw-in filter mount (size specified)
- 24fps speed as well as amateur 18fps
- Single frame with separate cable release socket
- Sound sync jack with one contact per frame (1/F).

## Beaulieu 4008ZM2 and 4008M3 Sync Cameras

Beaulieu and Nizo cameras represent more than two-thirds of all the Super 8 cameras in use as double-system sync sound cameras. The Beaulieu 4008ZM2 is the single most popular camera among Super8 Sound customers, and also the most expensive. The Beaulieu's popularity is due to its Schneider 6-66mm lens (the widest angle lens of any Super 8 camera), its C-mount lens interchangeability, variable speeds from 2 to 70fps, and manual ASA setting, together with the availability of a crystal camera control and silencer. The 4008M3 is a less expensive version of the 4008ZM2, with the electric zoom replaced by a smooth manual zoom. See the camera data table for more details.



# Super8 Sound Sync Cameras

The Beaulieu has some negative features. It is relatively noisy and somewhat fragile. It has no internal 1/F switch, and requires the addition of the modified Erlson sync contact switch to provide 1/F sync signals. Note that the single-system Beaulieu 5008S described below is also a double-system camera.

<i>Beaulieu 4008ZM2</i> .....	<i>CB4008ZM2</i>
<i>Beaulieu 4008M3</i> .....	<i>CB4008M3</i>
<i>Beaulieu Sync Contact (1/F) Switch</i> .....	<i>4008S8SR</i>
<i>Pilotone Sync Generator (60Hz)</i> .....	<i>PILB4</i>
<i>Pilotone Sync Generator (50Hz)</i> .....	<i>PILB450</i>
<i>Spare Battery</i> .....	<i>BAT4008</i>
<i>Custom Aluminum Carrying Case</i> .....	<i>CASE4008</i>
<i>Crystal Camera Control for Beaulieu 4008</i> .....	<i>XTALB</i>
<i>Super8 Sound Silencer for 4008 Cameras</i> .....	<i>SILBEAU</i>
<i>EWA Silencer for 4008 with 8-64 lens</i> .....	<i>EWAB44</i>
<i>EWA Silencer for 4008 with 6-66 lens</i> .....	<i>EWAB46</i>

## Nizo Sync Cameras

The Nizo cameras are probably the most reliable double-system Super 8 sync cameras; they are also the quietest. They withstand heavy student use (and abuse) with a minimum of repairs. The old Nizo S56 was chosen by MIT to be the crystal sync camera in the Leacock system. The S56 was re-designed by Braun as the Nizo S560 to include lap dissolves and a 1/F sync pulse tone burst. Its current version, the Nizo 561, has an improved viewfinder that makes the f/stop scale easily visible. The 481 and 801 cameras are similar to the 561 except for the lens capability. See the camera data for detail is.



S8S# CN481                      S8S# CN561                      S8S# CN801

The Nizo cameras have always had two sync contacts — their 1/F tone burst system, and the PC contact 1/F switch. Now the Nizo Professional 800P has a third sync capability — the standard 60Hz pilotone signal (50Hz in European cameras). The Nizo Professional also has a macro version of the 7-80mm Schneider lens used on the 801, and a built-in slating lamp that fogs a frame and fires a bloop-marker voltage for use with recorders having a bloop (beep) oscillator.

All the Nizo sync cameras except the S56 and S80 can be modified by Braun North America (55 Cambridge Parkway, Cambridge, MA 02142) to accept the Super8 Sound Crystal Camera Control.

Nizo also offers a number of "XL" cameras with a 225° shutter. The lens speed has not been increased to f/1.2, as with most cameras carrying the XL designation. These cameras have a PC contact for sync sound filming, and are the smallest sync sound cameras available.



<i>Nizo 136XL</i> .....	<i>CN136XL</i>
<i>Nizo 148XL</i> .....	<i>CN148XL</i>
<i>Nizo 156XL</i> .....	<i>CN156XL</i>
<i>Nizo S480</i> .....	<i>CNS480</i>
<i>Nizo 481</i> .....	<i>CN481</i>
<i>Nizo S560</i> .....	<i>CNS560</i>
<i>Nizo 561</i> .....	<i>CN561</i>
<i>Nizo 801</i> .....	<i>CN801</i>
<i>Nizo Professional 800P</i> .....	<i>CN800P</i>
<i>Crystal Camera Control for Nizo</i> .....	<i>XTALN</i>
<i>Braun Modification of Nizo for Super8 Sound Crystal.</i>	• <i>SCNIZO</i>
<i>Super8 Sound Silencer for Nizo S480, 481, S560, 561.</i>	••• <i>SIL560</i>
<i>Super8 Sound Silencer for Nizo 5800, 801, 800P</i> .....	<i>SIL800</i>
<i>EWA Silencer for S560, 561, S480, 481</i> .....	<i>EWAN560</i>
<i>EWA Silencer for 5800, 801, 800P</i> .....	<i>EWAN800</i>
<i>Shoulder Brace for Nizo Cameras</i> .....	<i>BRACEN</i>



S8S# CC1014E

## Canon Sync Cameras

Canon cameras are very ruggedly built. Their f/1.4 lenses were the fastest Super 8 lenses until the new XL camera f/1.2 lenses. The Canon cameras are the next most popular after Nizo and Beaulieu as sync sound cameras. They have been used for sync sound since Bell & Howell first modified the Canon 814 for Filmosound 8 in 1970.

The Canon's low prices make them perhaps the lowest cost high-quality Super 8 cameras.

<i>Canon 814E Electronic</i> .....	<i>CC814E</i>
<i>Canon 1014E Electronic</i> .....	<i>CC1014E</i>

# Super8 Sound Sync Cameras



## Nikon Sync Cameras

The strong points of the recently introduced Nikon Super 8 cameras are the excellent lens quality of the CineNikkor, and the very complex controls which allow virtually every effect, and which are extremely well thought out. For example, when the exposure control is switched from auto to manual it does not reset to the maximum f/stop; it stays on the f/stop that had been automatically set.

The Nikon PC sync socket is an unusual locking type that provides a secure sync sound connection. The camera is very ruggedly built.

*Nikon R8* ..... *CNR8*  
*Nikon R10* ..... *CNR10*



## Bauer Sync Cameras

Bauer was the first manufacturer to include lap dissolve in its cameras and to incorporate automatic exposure control down to one frame per minute. Bauer sync sound cameras are equipped with the same miniature DIN 8-pin sync socket used by Nizo. The cable is different, however, because Bauer provides a 1/F switch, and not a tone burst like the Nizo.

*Bauer C-Royal 8E* ..... *CBCR8E*  
*Bauer C-Royal 10E (Macro)* ..... *CBCR10 E*

## Bolex Sync Cameras

Although Bolex is one of the great names in 16mm, Bolex Super 8 cameras show little sign of benefitting from the technical expertise that produced the Bolex H-16 camera, the Bolex 16 Pro, and the new crystal-controlled Bolex EL. Bolex was first to introduce a macro lens on a Super 8 camera. They now include 1/F sync contacts on their two best Super 8 cameras, the 450 and the 480 Macrozoom.

*Bolex 450* ..... *CB450*  
*Bolex 480 Macrozoom* ..... *CB480*

## Other Sync Cameras

Super8 Sound also regularly supplies a number of other Super 8 cameras that are usable as double-system sync cameras with no modification.

*Elmo Super 1108* ..... *CE1108*  
*GAF ST/802* ..... *CGAF8*  
*GAF ST/1002* ..... *CGAF10*  
*Minolta Autopak8-D12* ..... *CMD 12*  
*Minolta XL-400* ..... *CMXL400*  
*Sankyo CME444* ..... *CS444*  
*Sankyo CME666* ..... *CS666*  
*Sankyo CME1100* ..... *CS1100*

The following double-system sync Super 8 cameras can be obtained from Super8 Sound on a special order basis.

*Fuji Z800 (Single 8)* ..... *CFZ800*  
*Leicina Special* ..... *CLSPEC*

Finally, there are a number of Super 8 cameras that have been discontinued, but which have a PC contact and can be used as sync cameras. Examples are Nizo S56 and S80, Nizo S800, Minolta Autopak8 D-6 and D-10, Argus 736 and 738, and others.

## Double Super 8 Cameras

Double Super 8 is 16mm film with Super 8 sprocket holes along both edges (perforated 1-4). It is used exactly as was old regular 8mm — which was 16mm film with twice the usual number of 16mm sprocket holes. DS8 film is run through the camera once, turned over, and run through again to expose the other side. Film is loaded on daylight spools, 100 ft. or 400 ft. in length. Most 16mm films are available in the DS8 format (e. g. Ektachrome Commercial). See the Film, Fullcoat, Etc. section of the Super8 Sound Catalog for details on film stocks available in the DS8 format.

Only two manufacturers have regular production Double Super 8 (DS8) cameras — Cinema Pathe and Canon. Since the DS8 format has so many advantages to offer to the professional Super 8 filmmaker, we expect that other 16mm manufacturers may soon offer DS8 versions of their equipment. Eclair and Arriflex both have built special DS8 versions of their cameras, and given them limited publicity, e. g. at Photokina. Bolex has a strong position in the 16mm and Super 8 market, and might be expected to offer a DS8 version of their H-16 or new EL cameras. Beaulieu could offer a DS8 version of their R16B.

## Cinema Pathé Electronic DS8

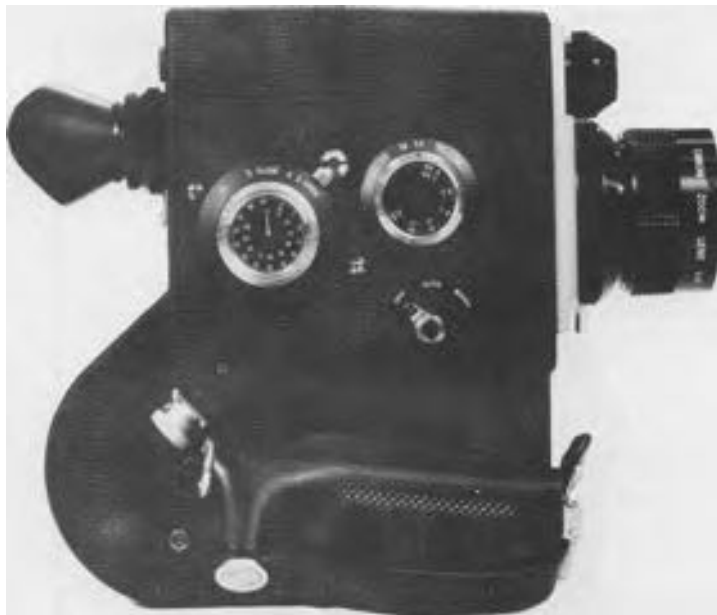
The Pathe DS8 is a conversion of the Pathe 16mm Electronic camera. Into the rotating 3-lens turret has been mounted the new 6-80mm f/1.2 Angenieux lens. The 6-66mm f/1.8 Schneider-Optivaron lens is available as an option. (C-mount).

# Super8 Sound Sync Cameras

The variable speed (8 to 80fps) includes the highest speed of any Super 8 camera. The Pathe DS8 is a fully-equipped sync sound camera, with built-in 60Hz pilotone generator and 1/F sync switch. It is thus compatible with all sync recorders, cassette or reel-to-reel. The Pathe DS8 can be fitted with a 400 ft. magazine with an integral take-up motor. This permits a continuous shot of 20 minutes, one of the longest available runs in any film gauge. A custom sound barney is available, making the camera very quiet in operation.



Cinema Pathe DS8 Electronic Double Super 8 Camera  
 —with 6-80mm Angenieux ..... CCPDS8A  
 —with 6-66mm Schneider ..... CCPDS8S  
 Cinema Pathe. DS8 Barney ..... CPBARNEY  
 Cinema Pathe DS8 400' Magazine ..... CP400MAG  
 Custom Carrying Case for Camera, Lenses, etc. .... CPCASE  
 Shoulder Support for Cinema Pathé DS8 ..... BRACECP



S8S# CCDS8

## Canon DS8

Although closely related structurally to the Canon Scoopic 16mm, the Canon DS8 is actually a completely reworked camera. The permanently-mounted zoom lens is the same 8-to-1, f/1.4 lens as is on the Canon 814E. The Canon DS8 is not built as a sync sound camera; it must be modified (e. g. by Professional Camera Repair of New York) to include a 1/F sync switch. Nevertheless, as it is widely used as a sync camera with the Super8 Sound Recorder, we are including it in the Catalog. Image registration and stability are superior to any Super 8 cartridge camera. It is very noisy, and a Silencer Kit is an essential accessory. The electric eye is not through-the-lens. Other technical details are listed in the table.

Canon DS8 Double Super 8 Camera ..... CCDS8

## Bolex DS8

Owners of the Bolex H8 Rex camera should consider a conversion to the Double Super 8 format. This under-\$200 modification is performed by J-K Camera Engineering, Dept. S8S, 5101 San Leandro St., Oakland, CA 94601.

## Single-System Super 8 Cameras

A single-system camera is a complete sync sound location outfit, combining a sync camera and a sync recorder in one housing. Sound is recorded in sync on the magnetic edge stripe at a standard position 18 frames from the picture gate. Shot after shot is in perfect sync; slating is only useful for transfers to double-system. For one-person film crews, single-system is the ultimate in convenience and simplicity. All the controls are in one place; all decisions, sound and picture, can be made by one person. For these reasons, it is clear that single-system sound cameras will eventually dominate the home movie market. This is probably also the best way to introduce a beginner to sync sound filmmaking, since it postpones learning how to sync up the rushes until the student has a creative reason for wanting separate sound and picture.

The Super8 Sound Recorder can be used to transfer sound from the magnetic edge stripe to fullcoat mag film for double-system editing. This gives the single-system filmmaker the best of both worlds — single-system production and double-system post-production. The Super8 Sound Recorder User's Manual, section III.K , explains how to transfer single-system sound to fullcoat. See the Editing section of the Super8 Sound Catalog for a discussion of single-system and double-system editing equipment.

The first single-system cameras (Kodak Ektasound) are very primitive designs — 18fps only, rangefinder viewing, automatic gain control and exposure control, noisy, and with a sound hiatus between shots.

The second manufacturer to enter the field, Cinema Beaulieu, built a camera (the 5008S) that is probably the highest quality Super 8 camera of any kind, single- or double-system, with sound recording specifications superior to most cassette recorders.

Five or six other camera manufacturers have now built single-system cameras and it appears likely that most will eventually do so. These cameras are much more sophisticated than the Kodak Ektasound, and some, like the Beaulieu, are clearly aimed at professional Super 8 applications. Some run at 24fps, accept 200 ft. sound cartridges, have manual gain control, headphone sound monitoring, and advanced lenses.



# Double•System Camera Data Table

CAMERA	Batt.	Sync Cable	ASA Range	Zoom Range (mm)	f/Stop	Min. Focus	Filter Thread	Weight	Noise Level	S8S XTAL	S8S Silencer	Other Features
<b>Bauer C Royal 8E</b>	6AA	CC8	25-160	7.5-60	f/1.8	Macro	49mm	1.1kg	NA	NO	KIT	1,2,3,4
<b>Bauer C Royal 10E</b>	6AA	CC8	25-160	7-70	f/1.8	Macro	55mm	1.1 kg	NA	NO	KIT	1,2,3,4
<b>Beaulieu 4008ZM2</b>	7.2V	Erlson, Pilotone	10-400	6-66	f/1.8	Macro	61mm	1.5kg	55dB	YES	YES	1*,2,3,5
<b>Beaulieu 4008M3</b>	7.2V NiCad	Erlson, Pilotone	10-400	6-66	f/1.8	4'	61mm	1.5kg	55dB	YES	YES	1*,2,3,5
<b>Bolex 450</b>	5AA	PC	25-160	8-40	f/1.8	4'	55mm	1.4kg	55dB	NO	KIT	
<b>Bolex 480</b>	5AA	PC	25-160	7-56	f/1.8	4'	55mm	1.5kg	55dB	NO	KIT	
<b>Canon 814E</b>	4AA	PC	16-400	7-56	f/1.4	Macro	58mm	1.55kg	54dB	NO	KIT	1,2
<b>Canon 1014E</b>	6AA	PC	16-400	7-70	f/1.4	Macro	58mm	2.0kg	54dB	NO	KIT	1,2
<b>Elmo Super 110R</b>	4AA	Special	25-160	7-70	f/1.8	3'	62mm	1.4kg	51dB	NO	KIT	3*
<b>Fujica Z800</b>	4AA	Special	25-400	8-64	f/1.8	Macro	62mm	1.4kg	NA	NO	KIT	1,2,3
<b>GAF ST802</b>	4AA	PC	16-250	7.5-60	f/1.7	5'	58mm	1.7kg	NA	NO	KIT	
<b>GAF ST1002</b>	4AA	PC	25-640	6.5-65	f/1.7	5'	77mm	1.9kg	NA	NO	KIT	
<b>Leicina Special</b>	6AA	CC9	10-1000	Interchangeable	Leica- Mount Lenses				55dB	Jensen	KIT	3,4*
<b>Minolta Autopak8 D-12</b>	5AA	CC9	10-400	6.5-78	f/1.8	Macro	67mm	2kg	55dB	NO	KIT	1,2,3,4*
<b>Nikon R8</b>	6AA	Locking PC	10-400	7.5-60	f/1.8	Macro	52mm	1.6kg	NA	NO	KIT	1,2,3
<b>Nikon R10</b>	6AA	Locking PC	10-400	7-70	f/1.4	Macro	67mm	1.9kg	NA	NO	KIT	1,2,3
<b>Nizo 136XL</b>	4AA	PC	10-160	9-36	f/1.8	3'	49mm	.8kg	NA	YES	KIT	4
<b>Nizo 148XL</b>	4AA	PC	10-160	6-48	f/1.8	3'	49mm	.85kg	NA	YES	KIT	4
<b>Nizo 156XL</b>	4AA	PC	10-160	7-56	f/1.8	3'	49mm	.85kg	NA	YES	KIT	4
<b>Nizo 481, S480</b>	6AA	PC,CC8	10-160	8-48	f/1.8	3'	49mm	1.35kg	52dB	YES	YES	1,2,3,4
<b>Nizo 561, S560</b>	6AA	PC,CC8	10-160	7-56	f/1.8	3'	49mm	1.35kg	52dB	YES	YES	1,2,3,4
<b>Nizo 801</b>	6AA	PC,CC8	10-160	7-80	f/1.8	4'	62mm	1.6kg	52dB	YES	YES	1,2,3,4
<b>Nizo 800P</b>	6AA	PC,CC8, Tichel	10-160	7-80	f/1.8	Macro	62mm	1.6kg	52dB	YES	YES	1,2,3,4
<b>Rollei SL84</b>	3AA	PC	25-160	7-70	f/1.8	5'	55mm	1.1kg	NA	ISS	KIT	1,3,4*
<b>Sankyo CME444</b>	4AA	PC	25-400	8.5-35	f/1.8	4'	49mm	1.3kg	NA	NO	KIT	
<b>Sankyo CME666</b>	4AA	PC	25-400	8-48	f/1.8	4'	49mm	1.3kg	NA	NO	KIT	
<b>Sankyo CME1100</b>	4AA	PC	25-400	6.5-65	f/1.8	Macro	55mm	1.6kg	NA	NO	KIT	

1. Lap Dissolve (\* if with accessory) 2. Variable Shutter 3. Tape Recorder Start/Stop 4. Intervalometer (\* if with accessory) 5. Mirror Shutter

# Single System Camera Data Table

CAMERA	Head Phone Monitor	200'	Speeds	ASA	Zoom Range (mm)	f/Stop	Min Focus	Filter	Batt.	Double- System Sync
Beaulieu 5008S	YES	NO	24,18	25-400	6-80	f/1.2	2'	72mm	NiCad	YES
Bell & Howell Filmosonic 1230	NO	NO	18	25-160	8.5-24t	f/1.3		none	6AA	NO
Bolex 550XL	YES	NO	18	25-160	8-40	f/1.2	5'		6AA+9V	NO
Bolex 580	YES	NO	18	25-160	7.5-60	f/1.7	5'			NO
Eumig 30XL	YES	NO	18	25-160	8.5-24	f/1.3	4'	none	6AA	NO
GAF SS805	YES	NO	18*	25-160	7.5-60	f/1.7	5'	58mm	6AA	NO
GAF SS605	YES	NO	18*	25-160	8-48	f/1.7	5'	58mm	6AA	NO
GAF SS250XL	YES	NO	18*	25-160	9-22.5	f/1.1	6'	none	6AA	NO
Kodak Ektasound 130	NO	NO	18	25-160	9	f/1.2	6'	none	6AA+9V	NO
Kodak Ektasound 140	NO	NO	18	25-160	9-21t	f/1.2	6'	none	6AA+9V	NO
Kodak Ektasound 150	NO	NO	18	25-160	9-21	f/1.2	6'	none	6AA+9V	NO
Kodak Ektasound 160	NO	NO	18	25-160	9-21	f/1.2	6'	none	6AA+9V	NO
Kodak Supermatic 200	YES	YES	24,18	25-160	9-21	f/1.2	6'	none	6AA+9V	NO
Sankyo XL4OS	YES	YES	24,18	25-160	8.5-34	f/1.2	macro	55mm	6AA	NO

## Double Super 8 Cameras

CAMERA	Battery	Sync Socket	ASA	Zoom	f/Stop	Min Focus	Filter	Weight	Noise Level	Options
Cinema Pathe DS8	Special NiCad	Special 4-pin (1/F switch + pilotone)	12-400	6-80	f/1.2 (T/1.4)	2'	72mm	3.4kg	NA	400' loads Barney
Canon DS8	8AA	none	10-320	8-64	f/1.4 (T/2)	4'	58mm	3.4kg	60dB	—

\* Professional Camera Repair can convert to 24fps, see p. 12.

tManual zoom only

# Super8 Sound Cassette Recorders

Super8 Sound offers four sync cassette recorders, three utilizing the new 1/F digital sync pulse and one with the 16mm industry-standard 60Hz pilotone sync pulse. Cassette tape is the least expensive and most convenient method available of recording location sync sound. Cassettes are easily labeled with dates, locations, take numbers, etc. They can be permanently protected from accidental erasure or reuse by punching out the record-protection tabs. Two hours of cassette tape are packed into the same volume as 2 1/2 minutes of Super 8 film.

Our 1/F sync cassette recorders are compatible with over forty Super 8 cameras equipped with a once-per-frame (1/F) sync contact switch or internal pulse generator.

Our 60Hz pilotone sync cassette recorder is compatible with any 16mm or 35mm double-system sound camera, including crystal sync cameras, and with four Super 8 pilotone cameras — the Beaulieu 4008ZM2 and 5008S, the Nizo Professional 800P, and the Cinema Pathe DS8.

Camera sync cables are listed in the table of cassette recorder accessories below. Some cameras (e.g., Nizo) have

an internal 1/F sync pulse generator. Most, however, require a special Super8 Sound sync cable with a built-in pulse generator. This cable includes a miniature circuit that creates a sync voltage signal from the camera's PC electronic flash socket (1/F switch).

Some cameras (Nizo, Bauer, Rollei, Leicina) have built-in tape recorder start/stop circuitry. Special sync cables can include this capability, but scene-to-scene sync is not always achieved because of different run-up and run-down times in camera and recorder.

Sync resolver cables and audio resolver cables are also listed for each machine. We strongly recommend the use of an audio equalizer during transfers to Super 8 fullcoat magnetic film, especially with the Scipio and 2209 which have a relatively high level of tape hiss.

All our cassette recorders can be used for cableless sync filming, by adding a Crystal Sync Generator to the recorder, and a Crystal Camera Control on the camera. See the Crystal Sync section of the Super8 Sound Catalog for details.

S8S# SCIPIO with XG24S



S8S# P2209 with XG24P



## Super8 Sound Scipio Cassette Recorder

Our least expensive and smallest sync cassette recorder is a Philips 3302/Norelco 150 Carry-corder modified for sync location recording with any of the once-per-frame digital sync pulse cameras. The sync pulse or burst is recorded on cassette track 4 in conformity with the ANSI standard for audio-visual cue pulses, and with proposed SMPTE standards for film sync signals. Standard cassettes may be used. The resulting sound can be transferred to Super 8 mag film on the Super8 Sound Recorder, which speed controls itself to match the original sync pulse frame-for-frame. Manual gain control. Comes with carrying case.

Super8 Sound camera sync cables are available to connect the Scipio to over 40 Super 8 cameras. Resolver cables allow sync transfers to Super 8 fullcoat magnetic film. See the cable and accessories table for details.

Scipio Specifications: Frequency Response, 60 - 10,000Hz ± 3dB; Signal/Noise Ratio, 45dB; Wow and Flutter, 0.4%; Power, DC 7.5V/0.8W (5 C cells); Size, 20cm x 11.5cm x 5.5 cm (7 7/8" x 4 1/2" x 2 3/16"); Weight, 1.35kg (3 lbs.) with batteries; Temperature extremes, 5 - 45° C (40° - 110° F); DIN input/output jacks; Microphone sensitivity, .2mV at 2000&2; 1 /F sync pulse on cassette track 4.

Super8 Sound Scipio Sync Cassette Recorder ..... SCIPIO  
Crystal Sync Generator for Scipio ..... XG24S

## Super8 Sound Philips 2209 Cassette Recorder

The Philips 2209AV recorder has a sync pulse channel on cassette track 4, like the Scipio. Although its original purpose was for synchronizing tape/slide shows, Braun/Nizo have recommended it for use with their cameras with internal sync pulse generators. Until the advent of the Super8 Sound Recorder, American filmmakers with sync sound cassettes made on the 2209 could do nothing with their sound. Super8 Sound has further extended the usefulness of the 2209 by manufacturing an inexpensive pulse generator (built into the camera/recorder cable) that allows any camera with a once-per-frame contact switch to be used with the Philips 2209. Automatic gain control only. Battery and AC operation. Comes with carrying case.

2209 Specifications: Frequency Response, 60 - 10,000Hz ± 3dB; Signal/Noise Ratio, 45dB; Wow and Flutter, 0.4%; Power, DC 9.0V/1.1W (6 C cells), AC 110V/3VV; Size, 21.5cm x 17.1cm x 5.8cm (8 1/2" x 6 3/4" x 2 1/4"); Weight, 1.85kg (4 lbs.) with batteries; Temperature extremes, -5° - 50° C (20° - 120° F); Microphone sensitivity, .2mV at 20002; DIN input/output jacks; 1/F sync pulse on cassette track 4.

Super8 Sound/Philips Sync Cassette Recorder ..... P2209  
Crystal Sync Generator for Philips 2209 ..... XG24P

# Super8 Sound Cassette Recorders

S8S# UCR134 with XG24U



3

## Super8 Sound Uher CR134

The Uher cassette stereo recorder is the smallest high quality portable cassette recorder made. Super8 Sound has adapted this machine for use as an extremely portable location sync recorder, especially useful for one-man filming operations. Sync cables are available for connection to more than forty Super 8 cameras.

The machine can record original location sound in *stereo* on cassette tracks 1 and 2, and *simultaneously* record the digital sync pulse on cassette track 4. This is not a converted stereo machine with one stereo channel used for sync. It is fully compatible with ANSI standards and proposed SMPTE standards for the placement of sync and audio signals.

This machine is of special interest to those preparing stereophonic sound tracks, for example, for 3/4" video-cassette programs. The two-channel capability is primarily useful in filmmaking to record sound from two different perspectives (e.g., both sides of a two-shot). Another important application for the two-channel capability is in interviews, where two microphones can be used to insure redundancy in case of one microphone or cable failing.

Automatic and manual gain control. Defeatable source monitor through speaker. Built-in microphone. Automatic reverse (sync in one direction only). Counter. Battery or AC operation. Rechargeable NiCad batteries available. Comes with carrying case.

Uher Specifications: Frequency Response, 25 - 15,000Hz ± 2dB; Signal/Noise Ratio, 48dB; Wow and Flutter, 0.14%; Stereo separation, 20dB; Power, DC 9.0V/7W (6 C cells), AC 110V/15W; Size, 18.1 cm x 18.4cm x 5.7 cm (7 1/8" x 7 1/4" x 2 1/4"); Weight, 2kg (4.5 lbs.) with batteries; DIN input/output jacks; Microphone sensitivity, 0.2mV at 5002; 1/F sync pulse on cassette track 4.

Uher Stereo Sync Cassette Recorder ..... UCR 134  
 AC Adapter ..... ACU134  
 NiCad rechargeable batteries ..... NCU134  
 Crystal Sync Generator for Uher CR134 ..... XG24U



S8S# XSD and S8S# XSDR



## Super8 Sound XSD Recorder

The XSD (Crystal-Sync-Dolby\*) Recorder is a SONY TC153SD stereo cassette recorder, modified to include a built-in 60Hz pilotone quartz crystal oscillator. It can record sound in sync with any Super 8, 16mm, or 35mm camera that is crystal-controlled or has standard pilotone sync output. The XSD Recorder uses high-density chromium-dioxide cassettes or standard cassettes. In sync use, the XSD Recorder is monophonic with sync on cassette track 1. It reverts to a stereo cassette recorder in non-sync use. In addition to cableless crystal sync work, the recorder can be cable-connected to pilotone cameras.

The XSD Recorder has Dolby B noise reduction encoding and decoding circuitry. Location tapes can be transferred to Super 8 fullcoat while still encoded for Dolby noise reduction. Successive generations of sound can also remain encoded, up to the stage of mixing with another sound track. Even transfer of a Dolby-encoded track to Super 8 magnetic edge stripe is possible. Dolby Noise Reduction Adapters are available for use at the mixing stage or with a Super 8 projector at the playback stage.

The XSD Recorder has a built-in capability for self-resolving. The 60Hz pilotone signal can be matched to the AC 60Hz line frequency for transfers to 16mm magnetic film on sprocketed synchronous dubbers. This requires the use of the optional XSD Resolver Unit. Cinema sound labs are equipped with the XSD Recorder and XSD Resolver, and can transfer sound to 16mm fullcoat magnetic film. Write Super8 Sound for a list of these labs.

Of course, transfers to Super 8 fullcoat do not require the XSD Resolver, since the Super8 Sound Recorder can match its speed to the 60Hz pilotone signal.

XSD Specifications: Frequency Response, 30 - 15,000Hz (CrO<sub>2</sub> cassette); Signal/Noise Ratio, Dolby OFF 48dB, Dolby ON 53dB at 1 KHz, 58dB at 5KHz; Wow and Flutter, 0.15% NAB RMS; Bias Frequency, 105KHz; Pilotone separation, 36dB; Crystal accuracy ± 1/2 frame in 10 minutes; Power, DC 6.0V/8W (4 D cells), AC 110V/16W; Size, 23.8cm x 37.8cm x 10.8cm (9 3/8" x 14 7/8" x 4 1/4"); Weight, 5.4kg (12 lbs.) with batteries; Microphone input, 1/4" phone jacks; Line input/output, RCA phono jacks; Stereophone output; Microphone sensitivity, 0.2mV at 2002; 60Hz standard pilotone sync pulse on cassette track 1.

\*Dolby™ Dolby Labs

XSD Recorder ..... XSD  
 XSD Resolver ..... XSDR  
 Leather carrying case ..... LC28  
 Rechargeable NiCad battery pack ..... BP8  
 SONY NR 115 Dolby Noise Reduction Adapter ..... NR 115

### Camera Sync Cables

--for Eclair NPR, and others using Cannon XL R connector . XLRXSD  
 --for Arri S, BL, Bolex, Nizo Professional 800P  
 and others using standard Tuchel connector ..... TUCXSD  
 --for Beaulieu R 16B, 4008ZM2, 4008M3, 5008S,  
 and others using BNC connector ..... BNCXSD

# Cable Table

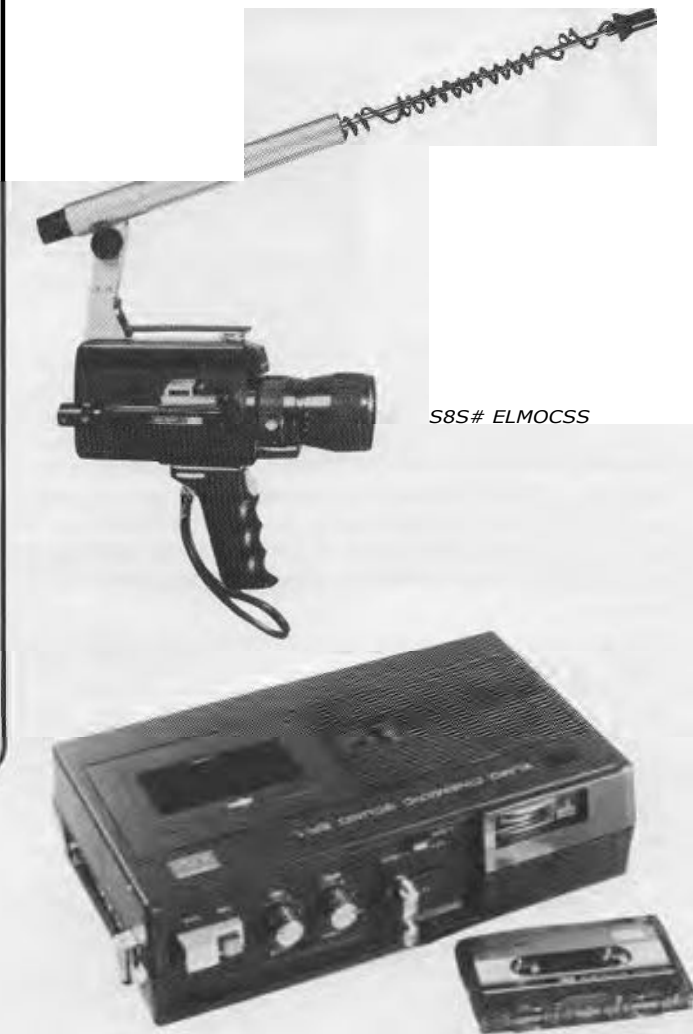
	Scipio	2209	Uher 134*	XSD
PC Camera Cable	PCSKP	PC2209	PCU134	NA
CC8 Camera Cable	CC8SKP	CC82209	CC8U134	NA
CC8 with Start/Stop	CC8SKPS	CC82209S	NA	NA
CC9 Camera Cable	CC9SKP	CC92209	CC9U134	NA
Adapter for Beaulieu 1/F Contact Switch	SKPA	2209A	U134A	NA
Pilotone (specify cameral)	NA	NA	NA	BNCXSD, TUCXSD, XLRXSD
Sync Resolver Cable	RCSKP	RC2209	RCU134	RCRCA
Audio Resolver Cable	ARCDIN	ARCDIN	ARCDIN mono ARCU134 stereo	RCAMINI
Equalizer Adapter	MPRCA	MPRCA	MPRCA	RCARCA
Equalizer to Superb Sound Recorder	RCAMINI	RCAMINI	RCAMINI	RCAMINI
Adapter to use Microphone with Miniphone Plug	MPDIN	MPDIN	MPU134 mono MPU134S stereo	MPPHON
Headphone Adapter	HPDIN	HPDIN	HPU134	HPXSD
Crystal Sync Generator	XG24S	XG24P	XG24U	Built-in

\*All connections for Uher CR134 also fit the discontinued Uher 124. Please see the Cables Section of the Superb Sound Catalog for further explanation and technical details on these cables.

## Elmo Cinematic Sound System

One amateur cassette sync system that deserves mention here is the Elmo Cinematic Sound System. The Elmo CR-1 cassette sync recorder uses the standard one pulse per frame on cassette track 4 (same as Scipio, Philips 2209, and Uher CR134) and it interlocks with the Elmo 110R camera to provide scene-to-scene sync. The same cassette recorder is then capable of interlock with the Elmo ST-1200 projector to provide transfers of cassette sound to magnetic edge stripe. A special synchronizer unit allows the cassette recorder to resolve its speed to the projector. Since the cassette cannot be edited, we aren't sure of the value of this step compared to using single-system sound originally, but many customers have requested this capability. The Elmo CR-1 cassette recorder and Elmo 110R camera can only be purchased as a pair.

*Elmo Cinematic Sound Camera/Recorder* ..... *ELMOCSS*  
*Synchronizer for ST1200* ..... *ELMOR1*



# Super8 Sound Crystal Sync

## Crystal Sync Operation

Crystal sync equipment eliminates the sync cable used to send a pilotone signal or 1/F sync pulse signal from the camera to a second track of the sync recorder. This signal was a record of the variations in the camera speed during sound filming. With crystal sync the camera is precisely speed-controlled to run at an exact 24fps (or 25fps for sync work in 50Hz countries). A companion crystal sync generator for the recorder provides an equally precise 24fps or 25fps signal, derived from a quartz crystal oscillator exactly like that used to set the camera speed. This signal is recorded on the sync track just as the cable signal would be. As with cable sync filming, it is necessary to slate and provide a clap-mark for each scene.

Why consider crystal sync when a 25-foot coiled extension cable is available for the Super8 Sound Recorder and when additional cables can be connected in series? There are two basic reasons: first, complete freedom of mobility for camera-man and soundman, and second, the need for multiple sync cameras and recorders. Multiple cameras are essential for complete coverage of non-repeatable phenomena such as concerts, sporting events, or important interviews. Multiple sync recorders capture sound from different perspectives - crowd, performers, etc.

S8S# XTALN

S8S# XG24S



## Super8 Sound Crystal Camera Control

The Crystal Camera Control matches the speed of a Super 8 camera to a quartz crystal clock at precisely 24 frames per second, allowing cableless sync sound filmmaking with the Super8 Sound Recorder and other crystal sync sound recorders.

Crystal Camera Controls are available for the Beaulieu 4008ZM2 and 4008M3, and for the Nizo S480, S560, S800, 481, 561, 801, and 800P Professional.

The Control is 1" x 2" x 2" mounted on a 2" x 4" bracket and weighs six ounces. It attaches directly to the camera, which is its power source. It is accurate to within one frame in 14,400 frames (10 minutes). No battery, cables or belt attachments encumber the cinematographer. A light-emitting diode indicates proper sync operation.

Beaulieu cameras require no modification but must be equipped with a 1/F sync contact switch, available from Super8 Sound.

Braun North America will adapt a Nizo camera for crystal speed control.

<i>Super8 Sound Crystal Camera Control</i>	
—for Beaulieu (24fps) .....	XTALB
—for Beaulieu (25fps) .....	XTALB50
—for Nizo (24fps) .....	XTALN
Speed Control Adaptation of Nizo .....	SCNIZO
Beaulieu Sync Contact Switch .....	4008S8SR

## Super8 Sound Crystal Sync Generator

The Crystal Sync Generator 24 provides a precise 24fps sync pulse, derived from an accurate quartz crystal clock, suitable for recording on the sync track of our cassette sync recorders.

The Crystal Sync Generator 24 is 1" x 2" x 2" and weighs about five ounces. It mounts directly to the strap of the recorder's carrying case. It derives its operating power from the cassette recorder batteries. Accuracy is one frame in 14,400 frames (10 minutes). 25fps is also available.

<i>Super8 Sound Crystal Sync Generator</i>	
—for Scipio .....	XG24S
—for Philips 2209 .....	XG24P
—for Uher CR134 .....	XG24U

## Super8 Sound Crystal Sync Nizo

Seven Nizo cameras are adaptable for Crystal Camera Control: Nizo S480, S560, S800, 481, 561, 801, and the 800P Professional. Braun North America will adapt your Nizo camera for Crystal Camera Control. Specify that the camera be sent to Super8 Sound after modification and it will be tested with the Crystal Control you have ordered.

<i>Super8 Sound Crystal Sync Nizo S480</i> .....	XS480
<i>Super8 Sound Crystal Sync Nizo S560</i> .....	XS560
<i>Super8 Sound Crystal Sync Nizo 481</i> .....	X481
<i>Super8 Sound Crystal Sync Nizo 561</i> .....	X561
<i>Super8 Sound Crystal Sync Nizo 801</i> .....	X801
<i>Super8 Sound Crystal Sync Nizo Professional</i> .....	X800P

# Super8 Sound Crystal Sync

S8S# X2209, XSKP and XSS



## Super8 Sound Crystal Sync Beaulieu

Any Beaulieu 4008ZM2, or 4008M3 is directly usable with our Crystal Camera Control. No modification is necessary, but the camera must be equipped with an Erlson frame-rate switch, available from Super8 Sound.

Super8 Sound Crystal Sync Beaulieu 4008ZM2 . . . . . X4008ZM2  
 Super8 Sound Crystal Sync Beaulieu 4008M3 ..... X4008M3

For details on crystal sync cameras see the Sync Cameras section of the Super8 Sound Catalog.

## Super8 Sound Crystal Sync Scipio and Crystal Sync Philips 2209

The Scipio and 2209 cassette recorders are the least expensive crystal sync recorders available. At these low prices, you can afford to have multiple crystal sync recorders on location at all times. External Crystal Sync Generator 24.

Scipio Sync Cassette with Crystal ..... XSKP  
 Philips 2209 Sync Cassette with Crystal ..... X2209

## Super8 Sound XSS Recorder

This crystal sync stereo cassette recorder (Uher CR134 with crystal) can record high fidelity stereo sound on cassette tracks 1 and 2, and simultaneously record a 1/F sync pulse on track 4 provided by an external Crystal Sync Generator 24.

Super8 Sound XSS Recorder ..... XSS

## Super8 Sound XSD Recorder

The XSD Recorder records a standard 60Hz pilotone sync signal on one cassette stereo track, derived from a built-in quartz crystal oscillator. It can be used with any crystal-controlled camera or in cable sync with pilotone Super 8 cameras like the Beaulieu and the Nizo Professional, and any 16mm sound camera equipped with pilotone output. Dolby noise reduction and a massive capstan flywheel make this our highest fidelity cassette recorder. Modified SONY TC153SD. An external Resolver is available to resolve sync cassettes, matching the speed of the XSD Recorder to the 60Hz AC line frequency, for transfer to 16mm or 35mm magnetic film.

Super8 Sound XSD Recorder ..... XSD  
 Super8 Sound XSD Resolver ..... XSDR

For more technical specifications on these recorders see the Cassette Sync Recorder section of the Super8 Sound Catalog. And don't forget that the Super8 Sound Recorder is also a crystal sync recorder!

Super8 Sound Recorder ..... S8SR





# Super8 Sound Silencers



A major problem that limits serious professional applications of Super 8 sync sound filmmaking is the high noise level of most Super 8 cameras. Even the most expensive and sophisticated cameras have a noise level at three feet as high as 56dB above the threshold of hearing. Super8 Sound has developed a barney which reduces camera noise between six and eight decibels. We also import a blimp-like device that reduces noise between ten and twelve decibels.

## Super8 Sound Silencers

The Super8 Sound Silencer is a fine leather barney lined with a sheet of lead surrounded by advanced acoustic foam. In addition to reducing noise, the Silencer serves as a sturdy protective case against shock and the elements. The leather and foam insulate the camera from low temperatures, extending battery life in cold weather.

The footage counter is visible through a window, and the Silencer snaps open easily for quick change of the Super 8 cartridge. Exposure can be set without removing the Silencer, and extensions of the zoom buttons allow operation of the electric zoom. Holes are provided for sync cable connections.

Super8 Sound now has Silencers available for the Beaulieu 4008ZM2 and 4008M3 cameras, for the Nizo S480, S560, S800, 481, 561, 801, and 800P cameras, and for the single-system Ektasound 130, 140, and 160 cameras.

### Super8 Sound Silencers

for Beaulieu 4008ZM2, 4008M3 .....	SILBEAU
for Nizo S480, 481, S560, 561 .....	SIL560
for Nizo S800, 801, 800P .....	SIL800
for Kodak Ektasound 130, 140, 160 .....	SILEKTA
for Kodak Supermatic 200 .....	SIL200

## Super8 Sound Silencer Kit

Super8 Sound has also developed the Silencer Kit, a do-it-yourself package of materials that includes the same advanced

foam/lead combination as our Silencers, a vinyl outer covering, Velcro-type fasteners, etc. Extensive instructions are included, with a basic design pattern suited to Super 8 cameras with the typical box-shaped body. The Kit is usable with the following cameras:

Argus/Cosina 736, 738, 7310	Leicina Super RT1, Special
Bauer C Royal 8E, 10E	Minolta Autopak 8 D12
Bolex 450, 480	Nikon R8, R10
Canon 814E, 1014E	Rollei SL84
GAF ST/802, 1002	Sankyo CME 444, 666,
Elmo 110R	1100

Many of our customers have adapted the Kit for use with other cameras, for example, the Canon DS8.

Super8 Sound Silencer Kit ..... SILKIT

## Super8 Sound/EWA-Blimp Silencer

Super8 Sound imports from Germany another type of Silencer called the EWA-Blimp. Although it is not a true hard-shelled blimp, it does completely enclose the camera, with an optical glass seal over the lens, and it virtually eliminates all camera noise. The Super8 Sound EWA-Blimp Silencer is large, consisting of five layers of different sound-absorbing materials and an outer covering of artificial leather. The size allows it to be about 4dB quieter than our tight-fitting lead/foam/leather Silencers. Its bulk is a drawback in hand-held documentary work, but the extra quieting is worth it, particularly for tripod filming. Extensions of the electric zoom buttons and focus control are provided.

### Super8 Sound EWA/Blimp Silencers

for Beaulieu 4008ZM2, 4008M3 with 8-64mm lens . . .	EWAB44
for Beaulieu 4008ZM2, 4008M3 with 6-66mm /ens . . .	EWAB46
for Beaulieu 5008S with 6-66mm lens .....	EWAB56
for Beaulieu 5008S with 6-80mm lens .....	EWAB58
for Nizo 5560, 561 .....	EWAN560
for Nizo 5800, 801, 800P .....	EWAN800

# Production Accessories

## Camera Supports

One of the great advantages of Super 8 filmmaking is the light weight of the Super 8 camera. However, in untrained hands, this light weight becomes one of Super 8's greatest disadvantages — causing jumping images on the screen. Whenever possible, nail your camera down on a tripod. When this isn't possible, use a chest-pod or shoulder brace to stabilize the camera, and keep your zooms below 40mm telephoto. If you must handhold, don't walk with the camera, and if you must walk, use only the widest angle. Don't try to sight through the viewfinder while walking; just aim the camera in the right direction.

Camera Chestpod ..... *CPOD*  
 Camera Shoulder Brace (Universal) ..... *BRACE*  
 Camera Shoulder Brace (Nizo) ..... *BRACEN*

Even a good still camera tripod is probably poor for motion picture use. Before buying a pan-head tripod, see whether you can pan smoothly at maximum telephoto, with no backlash at the extremes. The best such tripod head is the famous Miller Super 8. The Miller legs are conventional wood and aluminum. No triangle or dolly is available.

We also offer heavy-duty metal tripod legs with an elevator section. The elevator rises 18" and is braced by three spider struts that also serve as a triangle to hold the legs. Overall height adjustable 34" to 76". The Miller Fluid Head can be mounted on these legs. A dolly is also available.

Miller Fluid Head/Tripod ..... *MILLER*  
 Miller Fluid Head Only ..... *MILHED*  
 Elevator Tripod Legs ..... *ELEVPOD*  
 Dolly for Elevator Tripod ..... *DOLLY*

## Special Effects Filters

Dramatic motion picture effects can be accomplished with a Super 8 camera and a variety of special effects filters such as diffusion, low-contrast, fog effect, star effect, or prism (multi-image) effect. You get to see the effect since you look directly through the filter at the created scene.

Order a screw-in adapter to convert your camera to the next larger standard "series" size, then a series filter holder and you're ready to begin experimenting.

Accessory lenses such as split-field or close-up lenses can be mounted in the same adapters, as can UV-haze filters or fluorescent-light color-correction filters.

Most of the large zoom-ratio Super 8 cameras require the use of Series 8 filters, and these are the only filters available from Superb Sound. For other sizes, consult a camera specialty shop.

Step-up adapters convert the screw-in threads of your camera lens to a Series 8 filter adapter (see the data table on sync cameras for your filter ring size).

Series 8 Adapter (specify your camera) ..... *FILTAD*  
 Diffusion Filter, grade 3 ..... *FILT D*  
 Low-Contrast Filter, step 3 ..... *FILTLC*  
 Fog Effect Filter, density 3 ..... *FILTFG*  
 Star Effect Filter, 6 pt. .... *FILTST*  
 Split Field Lens, 2 diopters ..... *FILTSTF*

## Matte Box

There is no professional matte box available for Super 8 cameras yet, but this large square lens shade and masking tape can accomplish many matte effects. Fits Series 8 Filter Ring.

Square Lens Shade ..... *LSHADE*



# Production Accessories

## Lens Cleaner

Frequent cleaning of your camera lens will ensure the clearest, brightest film image possible. You should also clean around the film gate with compressed air. Don't use a brush. If it goes through the gate, it could scratch your 85 filter, and a brush tends to deposit more dirt in the gate than it removes.

*Kodak Lens Cleaner, 1 1/4 oz. bottle* ..... *CLNK*  
*Kodak Lens Cleaner, 16 oz. bottle* ..... *•CLNK16*  
*Kodak Lens Cleaning Paper, folder* ..... *CLNPK*  
*Falcon Pocket Dustoff* ..... *DUSTOFF*

See the Silencers section of the Super8 Sound Catalog for camera quieting devices.

## Exposure Accessories

### Neutral Gray Test Card

Your single most valuable exposure accessory is an inexpensive Neutral Gray (18% reflectance) Test Card. By placing this card at the subject, your Super 8 zoom-lens camera becomes an accurate spot meter. Just aim at the gray card and zoom to fill the field of view with the card. Set your camera to automatic exposure; the f/stop reading corresponds to the reading of an expensive incident light meter, plus all the corrections for light lost in your lens, any filters you might be using, etc. — all done automatically.

*Neutral Gray Test Card (set of 4, Kodak)* ..... *GRAYTC*



### Light Meter

The next most valuable exposure accessory is an incident light meter with light-averaging hemisphere (Norwood type). The Spectra Pro (or Combi-500 with an auxiliary CdS cell for low light levels) is the motion picture industry standard. The inexpensive Sekonic LC28 Studio Deluxe will do the same job with a little less prestige.

*Spectra Combi-500* ..... *SPEC500*  
*Spectra Pro* ..... *SPECPRO*  
*Sekonic LC28 Studio Deluxe* ..... *SEKONIC*

## Contrast Viewing Filter

The final essential exposure accessory is a contrast viewing filter. This neutral gray filter forces your eye to view the scene with the same limited dynamic range with which the film sees it. You will see where you are losing detail, especially in the shadows, and can take corrective steps by adding appropriate lighting.

*Contrast Viewing Filter (Spectra)* ..... *CONFIL*

## Color/Gray Control Patches

An additional inexpensive exposure accessory is a set of color and gray-scale control patches. Shoot a short segment of these on your film and the lab can use them to balance the final print back to natural tones. 2" x 7" long cardboard.

*Color/Gray Control Patches (Kodak)* ..... *COLORTC*

## Lighting

Super8 Sound has studied various motion picture lighting systems available, made price comparisons of comparable equipment, and has decided to recommend the Lowel-Light line as best suited to Super 8 work, and as a best buy for the money. Ross Lowell's ingenious designs have produced extremely compact light sources — notably the tiny but powerful Tota-Light, but also his clever collapsible Softlight, his Quartz lights which combine spot and flood capabilities in a single unit, and the original hang-anywhere Lowel-Light—an inexpensive mounting and barndoors system for R40 tungsten reflector lamps. The extreme portability of the Lowel-Lights matches well with the small size and light weight of all other Super 8 location equipment.

We can list here only a few of the basic lights. Write us for a complete lighting catalog listing all available accessories, including the remarkable Lowel-Link system — modular grip equipment for lighting support, background support, sun diffusers, microphone booms, etc.

### Lowel Tota-Light

The Tota-Light is an extremely lightweight (20 oz.), small (11" x 3" x 2") and powerful (500W to 1000W) quartz light. One Tota-Light may provide your total lighting needs for much Super 8 indoor filming, if you learn to place this tiny powerhouse properly, relative to ceilings and walls, to achieve reasonably even lighting everywhere. It mounts easily atop doors, or may be gaffer-taped directly to the wall.



S8S# TOTA94

# Production Accessories



S8S# TOTA10

The Tota-Light System is a complete system with stands, flags, umbrellas, gels, and other accessories. Send for further information.

Lowel Tota-Light .....	TOTA10
Lowel Tota-Mount, for doors or to be gaffer-taped to walls .....	TOTA32
Lowel Tota-Brella, mounts to Tote-Light .....	TOTA25
Lowel Tota-Light 3-Kit, accessories, case .....	TOTA93
Lowel Tota-Light 4-Kit, accessories, case .....	TOTA94

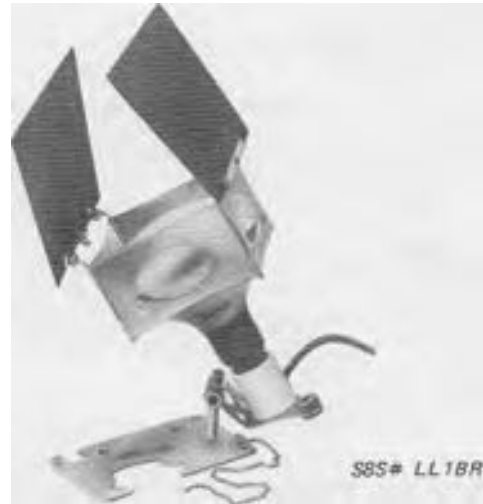


S8S# SOFT10 and SOFT20

## Lowel Softlight

The Lowe' Softlight is extremely lightweight, with a collapsible frame. Velcro tabs hold the fabric reflector in place. 23" x 21" illuminated area provides shadowless lighting. 1000W or 1500W in a unit half the size and one-fifth the weight of conventional units.

Lowel Softlight .....	SOFT10
Lowel Softlight Barndoors .....	SOFT20

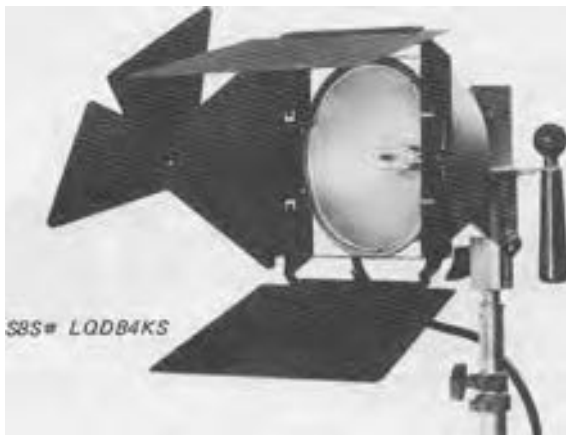


S8S# LL1BR

## Lowel-Light

The Lowel-Light is a porcelain lamp socket with a patented universal mounting device, and a set of barndoors that snaps onto any standard R40 tungsten reflector lamp — flood or spot, 150W to 500W.

Lowel-Light with Barndoors .....	LL1BR
Lowel-Light 5-Kit with Barndoors, carrying case .....	LLK5BR



S8S# LQDB4KS

## Lowel Quartz D

This is focusing light that changes from a 10° spot to a 70° flood light with the turn of a knob. 500W to 1000W bulbs. Interchangeable reflectors. Complete line of accessories — barndoors, dichroics, 1/2 scrims, scrims, snoots, cookies, wall brackets, stands, cases. We suggest you buy light, barndoors, and stand. We also suggest a quartz kit with 2 lights, stands, complete accessories, and carrying case.

Lowel Quartz D with barndoors and stand .....	LQDB4KS
(less lamp)	
Lowel Quartz D 2-Kit .....	LQD2K

## Sylvania Sungun SG-77

The portable Sylvania Sungun is a battery-powered light with a reflector head that accepts a 150W quartz lamp and a battery pack that recharges in one hour and provides nearly one hour of running time.

Sylvania SUNGUN with battery pack .....	SUNGUN
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## Lowel Variflector

This is a portable mirror for directing sunlight into the scene as a fill light. It can be curved to reduce the strength of the direct rays and spread out the beam..

Large Variflector (27" x 42") .....	VAR144
Small Variflector (17" x 24") .....	VAR122
Variflector Stand .....	VARIS

# Production Accessories

## Lowel Flag Frame with Diffuse Mat (16" x 30")

This component from the Lowel-Link system of stands, poles, clamps, water-weights to balance booms, etc., is a valuable device for outdoor filming to soften the harsh shadows of direct sunlight.

*Flag Frame with Diffuse Mat* ..... *KFFKFD*

## Lowel-Link Multi-Kit

A complete system consisting of 3 stands, 4 poles, 4 grips (clamps), 4 interlink adapters, 2 suction cup adapters, 2 flag frames, 1 diffuse mat, 1 black mat, 1 clear mat, 1 sun diffuser, 1 black screen, 3 waterweights, 10 clips, carrying case.

*Lowel-Link Mu/ti-Kit* ..... *LOMKIT*

## Lighting Bulbs

### Tota-Light

1000W ..... *FHM*  
 750W ..... *EMD*  
 500W ..... *FDN*

### Quartz D

1000W ..... *FEL*  
 750W ..... *EHF*  
 500W ..... *EHC*

### Softlight (2 needed)

750W - 2 bulbs ..... *2EJG*  
 500W - 2bulbs ..... *2FDF*

*Lowel-Light R40 500W Flood Lamp* ..... *EAL*

### Sungun

150W quartz lamp ..... *EKT*

## Gaffer Tape

A roll of inexpensive 3/4-inch masking tape is essential on any location, but for the important jobs like taping a light to a wall you should use professional gaffer's tape. 2" wide, silver surface, cloth adhesive tape (by Lowel).

*Gaffer Tape, 12 yds.* ..... *GAFF12*  
*Gaffer Tape, 30 yds.* ..... *GAFF30*

# Light Diffusion, Reflection, and Control Media

Light control media include an enormous range of relatively inexpensive materials — sheets of colored gelatin or vinyl, thin aluminized polyesters, spun glass fabrics, etc. — that change the color temperature of, or reflect or diffuse, light sources. An important example is a red filter material that mounts over window glass and converts the outdoor daylight into the color temperature of a tungsten light source, allowing you to film indoors with tungsten lights, plus the window light. This is a giant roll of the same Type A-85 filter that's inside every Super 8 camera for filming outdoors with Super 8 film, which is balanced for indoor tungsten illumination. A large roll of ROSCO Cine 85 is one of the best lighting investments a Super 8 filmmaker can make.

Super8 Sound carries the ROSCO line of light control media, and there is not enough space here to list even the most important items. Send for a ROSCO catalog; Super 8 Sound can supply any ROSCO materials, generally on a special order basis.

*ROSCO Cine 85 (4' x 25' roll)* ..... *CINE85*  
*ROSCO Catalog* ..... *ROSCO*

# Recording Accessories

## Microphones

We have had excellent results with the new electret condenser microphones. They can be wired through many feet of extension cable without loss of high frequencies. The cardioid microphones are highly directional, cancelling sounds from the rear by 22dB at 1KHz, which is comparable to older "shotgun" mics. They react very little to rubbing and mechanical shock compared to dynamics. The only slight drawback is that the electrets tend to be less sensitive than the poorer quality dynamic microphones.



## SONY ECM-16

The tiny SONY ECM-16 tieclip microphone is a perfect mic for hiding on a set, or wearing as a lavalier mic. Frequency response, 50-13,000Hz; Output impedance, 250 ohms±20% unbalanced; Output level, -57dB; Cable length, 7 feet; M iniphone plug; Omnidirectional.

*SONY ECM-16 Tieclip Mic* ..... *ECM16*

*SBS# ECM18*

## wan



## SONY ECM-18

The microphone recommended for use with cassette recorders such as the Scipio and the Philips 2209 is the SONY ECM-18. Frequency response, 40-14,000Hz; Output impedance, 250 ohms unbalanced; Output level, -56.8dB; Cable length, 6 feet; Miniphone plug; Built-in windscreen; Cardioid.

*SONY ECM-18* ..... *ECM18*

## SONY ECM-50

This is the smallest SONY microphone. Frequency response, 50-16,000Hz; Output impedance, 50, 250, and 600 ohms balanced; Output level, -53.2dB; Cable length, 10 feet; Cannon XLR plug; Omnidirectional.

*SONY ECM-50* ..... *ECM50*

# Production Accessories

S8S# ECM220



## SONY ECM-220

Frequency response, 50-12,000Hz; Output impedance, 200 or 10,000 ohms; Output level, -57dB; Cable length, 7 feet; Miniphone plug; Omnidirectional.

SONY ECM-220 ..... ECM220

S8S# ECM250



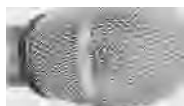
## SONY ECM-250

The microphone recommended for use with the Super8 Sound Recorder is the SONY ECM-250. Frequency response, 50-14,000Hz ±3dB; Output impedance, 200 ohms unbalanced; Output level, -57dB; Cable length, 16.5 feet; Miniphone plug; High performance windscreen for outdoor filming; Cardioid.

SONY ECM-250 ..... ECM250



S8S# ECM280



## SONY ECM-280

Frequency response, 30-18,000Hz ±3dB; Output impedance, 200 ohms unbalanced; Output level, -56dB; Cable length, 10 feet; Cannon XLR plug; High performance removable windscreen; Bass rolloff switch; Cardioid.

SONY ECM-280 ..... ECM280  
 15 foot Mic Extension Cable (locking) ..... EC5M  
 30 foot Mic Extension Cable (locking) ..... EC10M



S8S# SNDBM with SHKMNT

## Microphone Booms

A fishpole boom is essential for getting the microphone close to the subject, including following a moving subject, while keeping the soundman out of frame.

The Super8 SoundBoom is a ten-ounce three-section aluminum fishpole boom that extends from 33" to 63". It comes with a standard 5/8"-27 microphone thread, an optional 3/4" diameter microphone mount, or an optional elastic suspension shock mount.

Super8 SoundBoom ..... SNDBM  
 Plastic 3/4" Microphone Mount ..... MICMNT  
 Elastic Suspension Shock Mount ..... SHKMNT

## Parabolic Microphone Reflector

This clear see-through parabolic reflector increases microphone directivity and sensitivity by between 10 and 20dB for distant sources. Essential for getting tight close-in sound that matches the tight shots possible with a Super 8 telephoto zoom lens. Especially useful for concerts, sporting events, lectures, press conferences, etc. where it's difficult to place a microphone at the subject. Includes a vinyl carrying case. Use the SONY ECM220 microphone for best results.

SONY Parabolic Mic Reflector ..... BPR400

## Headphones

Monitor headphones are an essential part of location sound recording. They are the precise sound equivalent of the camera's reflex viewfinder, revealing sound quality from the point of view of the microphone, which may be on a fishpole boom, or placed on the set. They help the beginning soundman to overcome his ear's normal tendency to filter out location noise such as traffic and airplanes. They force him to hear that noise as it will sound objectively on playback, through the one dimension of the screening room loud speaker, rather than the subjective impressions of the three-dimensional original location.

Heavy duty, modest sound quality stereophones ..... HP

A stereophone-to-miniplug adapter permits you to use any pair of stereophones as a monitor headset with the Super8 Sound Recorder and other recorders with miniphone ear-phone jack.

Stereophone-Miniphone Adapter ..... HPMINI

The Scipio and Philips 2209 recorders require a stereophone adapter for their 2-pin DIN speaker/earphone jack.

Stereophone-DIN Adapter ..... HPDIN

## Radio Control Start/Stop Unit

We offer a radio control device that will start and stop the Super8 Sound Recorder, or other recorders with a sub-mini plug remote control, from up to 100 feet away. Transmitting and Receiving Units both included. Can also be used to start/stop cameras with remote control.

Radio Control Start/Stop System ..... RADIOC

## Slate/Clapstick

Our standard wooden slate and clapper board are somewhat smaller and less expensive than the normal size. With a Super 8 camera it is easy to zoom in to read the scene markings, then pull back to shoot the scene.

Slate/Clapstick ..... SLATE

## Sync Meter

This accessory plugs into the sync socket of the Super8 Sound Recorder, and mounts securely to the handle of the Recorder. It has a standard locking DIN sync socket into which any Super8 Sound sync cable may be plugged, and serves to display sync condition, allowing the internal meter of the Recorder to be dedicated to record level settings.

Sync Meter ..... SMETER

# Production Accessories



S8S# SMETER

## Soundman's Repair Kit

Every Super 8 Soundman should carry a test and repair kit on location. We suggest you buy a small VOM multi-tester, a battery-operated soldering iron, small pliers, screwdrivers, wirestrippers (a Swiss Army Knife can replace all three of these tools), insulating tape, solder, alligator-clip leads, and 5-minute epoxy. Any local Radio Shack or similar electronics supply house can provide these for you.

## Filmmaker's Pocket Tool Kit

We suggest you purchase a Swiss Army Knife. We recommend the version with scissors, magnifying glass for inspecting films, soft plastic toothpick for scraping emulsion safely from the picture gate, metal file, hacksaw, Phillips type and 3 flat screwdrivers, tweezers, and other features. This may prove to be the tool you use most on many film productions.

## Carrying Cases

Super8 Sound can supply, on special order, custom carrying cases for all our sync cameras, with die-cut foam inserts or custom contoured cases designed by the camera manufacturers. However, the original camera case is often less convenient than a single large case or cases that can hold a camera and many production accessories.

We have found the least expensive and most versatile case to be the Fiberbilt Adapt-a-Case. With movable interior padded partitions, or pre-cut cubes of foam, you can safely store cameras, cables, etc. in the same box. The larger cases come in fibre or aluminum construction, and in a variety of sizes and shapes. We list here only two of the most popular sizes. We can order any Fiberbilt case; send for a complete listing of sizes and prices.

### Carrying Cases with Movable Partition System

—Aluminum, 22" x 16" x 10" .....	CCP20A
—Aluminum, 22" x 16" x 5" .....	CCP20B
—Fibre, 22" x 16" x 10" .....	CCP30A
—Fibre, 22" x 16" x 5" .....	CCP30B

### Carrying Cases with Die-cut Foam Cubes

—Aluminum, 22" x 16" x 10".....	CCP21A
—Aluminum, 22" x 16" x 5" .....	CCP21B
—Fibre, 22" x 16" x 10".....	CCP31A
—Fibre, 22" x 16" x 5" .....	CCP31B

We also have special lightweight cases for carrying lighting equipment.

## Animation Stands

The most widely used Super 8 animation equipment is the Oxberry Animator 8, and the new larger Oxberry Media Pro that can also be used with 16mm and video cameras.

The Oxberry animation stands are complete animation systems: Super 8 camera, lights, viscous-damped compound table, and 12-field art registration guide.

The Media Pro also includes a backlighting stage, adjustable lights, a heavy-duty aluminum table top with two moving peg bars, and a vertically adjustable camera carriage.

Super8 Sound can supply either of these fine systems, and with a selection of Super 8 and Single 8 cameras that are capable of various effects. Write for a brochure for more details on the Oxberry Animator 8 or the Oxberry Media Pro.



Oxberry Animator 8 System A .....	OXA8A
Oxberry Animator 8 System B .....	OXA8B
Oxberry Animator 8 System C (Single 8 camera) .....	OXA8C
Oxberry Animator 8 System D .....	OXA8D
Oxberry Media Pro System A (Nizo 5560) .....	OXMPA
Oxberry Media Pro System B (Nizo S800) .....	OXMPB

## Cinegraphica Titler

This easy-to-use titler superimposes white letters on a Super 8 or 35mm slide image, simulating the effect of A & B roll double-exposure printing.

Cinegraphica Titler .....	TITLER
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# Super8 Sound Studio

The principal reason for the extreme low-cost of Super8 Sound Studio Equipment, when compared to similar equipment used in conventional film sound studios, is the extensive use of equipment designed for the consumer hifi market. Mixers, equalizers, compressor/expanders, Dolby noise reducers, etc. are available at prices about one-tenth the cost of **professional studio equipment**.

With the continued interest in "professional Super 8", we expect that many of the companies now building 16mm sound studio equipment will offer Super 8 versions. When they do, Super8 Sound hopes to represent them. Don't expect significant price reductions compared to 16mm items, since production quantities will probably remain small. Despite the cost, such equipment will appeal to the commercial sound studios and labs where heavy daily use might destroy equipment originally designed for consumer use.

At the present time, however, virtually any post-production sound film technique can be accomplished with today's sophisticated Super 8 equipment.

**Sync Transfers** Sync cassette tape to fullcoat; Magnetic edge stripe to fullcoat; Fullcoat to quarter-inch tape; Quarter-inch tape to fullcoat; Fullcoat to stripe.

**Sync Recording** Voice overs; Narration; Sound effects; Music tracks.

**Rerecording** Dubbing dialogue in sync with original dialogue; Dubbing in sync with loops of picture.

**Multi-Track Recording** Multiple fullcoat recorders in sync (with one fullcoat strand for each track); Multi-track quarter-inch tape recorders in sync with one or more fullcoat recorders.

**Mixing** Sound mix with picture; Mix without picture (blind); Loops of sound for room tone, wind, traffic effects; Disc recordings of library effects.

*S8S# SCIPPIO, S8SR and FEW3*



## Sync Transfers (Resolving)

If original sound was not recorded directly onto fullcoat magnetic film, the first use of the sound studio will be for transfers of location sync sound from a sync tape, or from a single-system film's magnetic edge stripe, to fullcoat magnetic film.

The original sync sound is generally played back on the same sync recorder that was used in the field. The sync recorder is connected to the Super8 Sound Recorder by a (sync) Resolver Cable. This cable carries the 1/F (or pilotone) sync signal recorded in the field, and feeds it to the servo-control speed-

matching circuitry of the Super8 Sound Recorder. The Super8 Sound Recorder will change its speed to match any variations in the original camera speed, plus any variations in the sync tape recorder playback. It will record one frame of fullcoat magnetic film for each frame of picture originally taken, and without letting camera or recorder speed variations affect the sound fidelity.

*S8S# S8SR, PE807 and FEW3*



If the original sync sound was recorded on magnetic stripe in a single-system sound camera, the film must be played back on a sync projector equipped with a 1/F contact switch. The sync cable from the projector acts as the Resolver Cable, which allows the Super8 Sound Recorder to match its speed to the projector, and therefore to the original camera speed.

An Audio Resolver Cable is needed to carry the sound from the original sync recorder, or the projector, to the fullcoat recorder. Generally, this sound should be sent first through an equalizer, to eliminate unwanted sounds from the original recording, or from the playback equipment (projector hum).

All the cables necessary to accomplish sync resolving are listed in the Cables section of the Super8 Sound Catalog. Equalizers are listed below. For a complete explanation of the resolving procedure, see the Super8 Sound Recorder User's Manual.



*S8S# S8SLR*

## Super8 Sound Laboratory Recorder

The Super8 Sound Laboratory Recorder is a professional version of the Super8 Sound Recorder. It records on Super 8 fullcoat magnetic film, using 10 1/2-inch reels (one full hour). It has all the automatic sync functions of the Super8 Sound Recorder except portable crystal sync operation. These include: transferring (resolving) sync sound from any sync recorder — cassette or reel-to-reel, 1/F sync pulse or pilotone; transferring sync sound to a magnetic edge stripe with any sync projector equipped with a 1/F sync switch or AC synchronous motor; transferring sound from the magnetic edge stripe to fullcoat magnetic film; and multiple recorder synchronization via AC line interlock.

# Super8 Sound Studio

The Lab Recorder is a modified Crown PRO-700 three-motor tape deck. The record-reproduce electronics are available in monophonic and stereophonic versions. The Super 8 fullcoat head assembly is manufactured by Crown to Super8 Sound specifications. Each Lab Recorder is supplied by Crown biased and equalized for recording on Super 8 fullcoat magnetic film, with calibrated frequency response test charts.

The Super8 Sound Laboratory Recorder consists of three components — the fullcoat transport, record/reproduce electronics, and sync electronics. A portable case is available but the three components are designed for rack-mounting in standard 19-inch racks.

With its one hour running time, the Lab Recorder can do transfers to the longest available Super8 film loads — 1200 feet. This length facilitates double-system sync transfers from Super 8 to video with no need for intermediate stops on even the longest video cassette.

Technical Specifications at 24fps (Preliminary)  
 Frequency Response: Overall Record/Playback: 20-1 7,000Hz  
 +1 —3dB, 20-15,000Hz +1 —2dB; Amplification: 10Hz-50,000Hz  
 Signal/Noise Ratio: Record/Playback: 65dB  
 Wow and Flutter: Record/Playback: 0.18%  
 Speed: 4ips (24fps)  
 Track Location: Half track NAB standard monophonic or stereophonic  
 Recording Time: One hour on 10 1/2" reel, 3.3 mil fullcoat  
 Rewind Time: Less than 60 seconds  
 Audio Inputs: Line Input (2 per channel): Impedance 100K ohms  
 Sensitivity — 24dB  
 Mic Input (2 per channel): Impedance 350K ohms  
 Sensitivity — 64dB

(Front panel controls allow for mixing between two sources per channel.)

Audio Outputs: Line Out: Impedance 600 ohms +4dBm

Controls: Four push buttons: REWIND, FORWARD, STOP, PLAY;  
 Reel size adjustment

Super8 Sound Laboratory Recorder..... S8SLR

S8S# S8SR (4), TC854, FEW3 and MX14



## Multiple Fullcoat Recorders

Since any number of Super8 Sound Recorders will run together in sync with the AC line frequency, any number of tracks can be mixed, and recorded on a master track recorder also running in sync. The Super8 Sound Recorders are started simultaneously in sync by using an AC Common Start Box or a PhotoStart/BeepStart device, which responds to a beep tone, and releases each recorder at the same instant. How to accomplish multiple track mixes with multiple Super8 Sound Recorders is described in detail in Section III.G of the Super8 Sound Recorder User's Manual.

With an AC synchronous projector or an AC synchronous editing table these mixes can be done while watching the picture in sync. If your projector only has 1/F sync capa-

bility, you can still run up to six Super8 Sound Recorders in sync with it by using special multiple recorder sync cables.

Post-synchronous sound, e.g. dubbing dialogue or replacing lines which are unusable in the original recording, can be accomplished with two Super8 Sound Recorders with or without picture.

See the Super8 Sound Recorder section of the Super8 Sound Catalog for technical details on the Super8 Sound Recorder.

Super8 Sound Recorder .....	S8SR
PhotoStart/BeepStart .....	PSTART
AC Common Start Box .....	CSTART
<b>Multiple Recorder Sync Cables</b>	
—for two recorders .....	MRC2
—for three recorders .....	MRC3
—for four recorders .....	MRC4
—for five recorders .....	MRC5
—for six recorders .....	MRC6

S8S# S8SR, TC854, FEW3 and MX14



## Multiple Track Recorders

Multiple-track tape recorders, used in conjunction with the Super8 Sound Recorder, allow voice-overs, narration, sound effects, and music tracks to be added alongside original sync dialogue or on-location sound effects tracks.

Mixes of up to three sync tracks are readily achieved on quadraphonic four-channel tape recorders (one channel carries sync pilotone). Wild tracks may be fed in at the same time, for example from wild recorders carrying loops of room tone, wind effects, etc., using a multi-channel mixer.

The most desirable four-channel recorders have independent recording channels and the capability to record straight across from a prerecorded track, while listening to that previously recorded track in sync with the track being laid down via the record head (and not through a separate monitor or playback head some distance away, which would introduce a delay). Such machines are described as having "Syncro-Trak" (SONY) or "Simul-Sync" (TEAC). In some cases, it is possible to live with the delay, e.g., at 15ips it usually amounts to only a couple of frames out of sync, at 7.5ips it can be four or five frames.

The four-channel recorders listed below have straight-across sync heads and four completely independent recording amplifiers, unless otherwise indicated. They all have RCA phono jack line inputs/outputs and are connected to the Super8 Sound Recorder with a single resolver and transfer cable that carries sync signals to and from the Super8 Sound Recorder.

Transfer/Resolver Cable for RCA phono jack ..... RCRC

# Super8 Sound Studio

## SONY TC854-4S Four Channel Recorder

The TC854-4S is the most elegant 4-channel recorder on the consumer market. 10 1/2 inch reel capacity. 15/7.5/3.75ips speeds. Variable speed control (Speed Tuning as in the Super8 Sound Recorder) for special effects. Remote control of all functions. Syncro-Trak, source-tape monitors, and record/playback mode independently switchable on all four channels. Specifications at 7.5ips: 30-22,000Hz±2dB, Wow and Flutter .04%, S/N 59dB.

SONY TC854-4S Four Channel Recorder ..... TC854



## SONY TC788-4 Four Channel Recorder

The TC788-4 has 10 1/2 inch reel capacity and two speeds (15 and 7.5ips). It has Syncro-Trak, source-tape monitoring, and record/playback mode independently selectable on all four channels. Specifications at 7.5ips: 30-23,000Hz±3dB, Wow and Flutter .06%, S/N 56dB.

SONY TC788-4 Four Channel Recorder ..... TC788



## SONY TC277-4

The TC277-4 has a single record/playback head so that it effectively can be used for "Syncro-Trak" work even though SONY does not label it as such. However, record controls are interlocked so that two front and/or two rear channels are simultaneously in the record mode. This limits the use to a two-track mix. Source monitoring only. 7 inch reel capacity. Three speeds (7.5/3.75/1.875ips). Specifications at 7.5ips: 50-18,000Hz±3dB, Wow and Flutter, .12%, S/N 55dB.

SONY TC277-4 ..... TC277

## TEAC 3340S

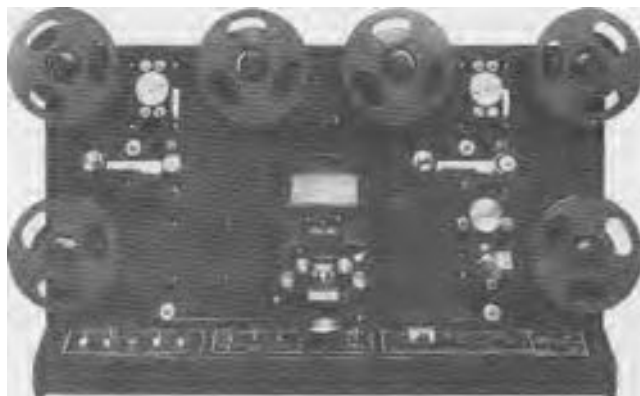
This is TEAC's finest four-channel recorder. 10 1/2 inch reel capacity and two speeds (15 and 7.5ips). Logic-type controls and remote control of all functions. Simul-Sync, source-tape monitoring, and record/playback mode independently selectable on all channels. Specifications at 7.5ips: 40-24,000Hz ±3dB, Wow and Flutter .06%, S/N 55dB.

TEAC 3340S ..... T3340

## TEAC 2340

The major difference between this and the TEAC 3340 is 7-inch reel capacity and slower speeds (7.5 and 3.75ips). Specifications at 7.5ips: 40-18,000Hz±3dB, Wow and Flutter .08%, S/N 55dB.

TEAC 2340 ..... T2340



S8S# ESTEC

## Sprocketed Fullcoat Recorders

### Optasound ESTEC

In our last catalog, we announced that Optasound had dropped Peter Lawson's Cinetape system and had converted to a special perforated cassette tape recorder. They were then developing an Electronic Sync Transfer and Editing Console for use with the special cassette tape. However, the ESTEC as now envisioned is not for cassette tape. Instead it is planned as an ambitious interlock dubbing and mixing console with two Super 8 fullcoat tracks and one Super 8 picture track.

We are hopeful that Optasound will employ proposed standard track locations in their use of Super 8 fullcoat. We note that they plan to use standard 1/F sync signals in their new Optasound Cassette Recorder, which will record a 1/F sync pulse like the Scipio, Philips 2209, and Uher CR134.

At this time we have not had an opportunity to study the ESTEC, but if it accomplishes even the non-automatic functions advertised, it would probably be widely used in Super 8 studio work. It is also reported to have an electronic cueing and spliceless editing capability like that used by Inner Space Systems. This will be appreciated by editors with a video tape background.

We hope to study the Optasound ESTEC when it is available, and expect to offer it for sale if it performs as advertised. In the meantime, those interested should direct their inquiries to Optasound Corporation, 26 East 26th Street, New York, NY 10010.

Optasound ESTEC ..... ESTEC

# Super8 Sound Studio



58S# R107UP

## Multi-Track Magnetics R107U Dubber

The first manufacturer of 16mm sound studio equipment to build a Super 8 version of their sprocketed magnetic film recorder is Multi-Track Magnetics. Their R107U Dual-Lock Recorder/Reproducer is available in a Super 8 fullcoat model, with interchangeable half-track fullcoat magnetic head assembly (compatible with the Super8 Sound Recorder) and/or edge stripe magnetic head assembly. The edge stripe head assembly is relieved in the picture area, and this model can be used by labs to transfer sound to striped film from a fullcoat track on an interlocked reproducer.

Simple mechanical interlock is available for multiple units in the same rack mount. Selsyn electrical interlock (single phase or three phase) is available for labs with a selsyn distribution system. In this manner projectors can be interlocked and run forward and backward in sync. Another projector interlock method is by flexible shaft from the R 107U to the main drive shaft of the projector (24fps - 1440rpm). This requires custom modification of the projector.

United States 110V/60Hz and Export 230V/50Hz versions available.

Multi-Track Magnetics Recorder Reproducer ..... R107UR  
 Multi-Track Magnetics Reproducer Only ..... R107UP

## Mixers

### SONY MX-8 Six-Channel Passive Mixer

This mixer can only attenuate sound, since it has no internal amplification. Straight-line controls.

SONY MX-8 Mixer ..... MX8

### SONY MX-510 Five Channel Active Mixer

The new MX-510 is a light-weight portable mixer designed for field recording applications. It has five microphone inputs, three line inputs, and two phono inputs. One channel is switchable into a variable pan pot facility. Two VU meters. Straight-line controls.

SONY MX-510 Mixer ..... MX510 SONY MX-20 Mixer ..... MX20



58S# MX14

### SONY MX-14 Six-Channel Active Mixer

This mixer has amplifiers operated by 8 C cells. Two VU meters. Sliding controls on each channel plus one master level control. AC operation with optional adapter. We recommend this mixer as the one best matched to the Super8 Sound Recorder for multiple track work.

SONY MX-14 Mixer ..... MX14  
 AC adapter for MX-14 ..... AC 12

### SONY MX-16 Eight-Channel Active Mixer

This portable studio mixer has 16 inputs — 8 mic, 8 line — each of which can be fed to 4 outputs. Four VU meters. Extremely quiet FET electronics. AC/DC operation. Cascading.

SONY MX-16 Mixer ..... MX16



58S# MX20

### SONY MX-20 Eight-Channel Active Mixer

An improved version of the MX-16 with pan pot facilities on channels 7 and 8, equalization (5 positions), and balanced Cannon XLR microphone connectors. Cascading.

# Super8 Sound Studio

## TAPCO Reverberation Preamp/Mixer

We also offer a six-channel studio mixer and preamplification unit that has a built-in reverberation/effects capability on each channel. Reverberation is used to alter the quality of dialogue recorded in a dead sound studio, making it fit the character of the location interior. No VU meters. AC operation 110V.

*TAPCO Six-Channel Mixer with Reverb ..... TAPCO*

## Equalizers

A good equalizer is the first studio equipment investment you should make. Equalization is almost always essential at each transfer stage and during mixing. Equalizers can knock out the tape hiss from less expensive sync cassette recorders, or eliminate the low frequency wind noise distortion of a low-quality microphone. Equalizers can increase or decrease the "presence" of a given voice, so that during a zoom shot the voice quality will have the same perspective as the apparent camera proximity. Equalizers can distort normal voice qualities to produce a wide range of special effects we've all heard, in the Beatles' recordings, for example. An equalizer is useful as a 60Hz (and 120Hz overtone) AC hum filter, especially for transfers from a magnetic edge stripe on a typical Super 8 projector.

### BSR/Metrotec FEW2

The BSR/Metrotec equalizers are all hifi market devices, which despite their low cost have excellent audio specifications comparable to or better than equalizers found in many recording studios. Internal noise level is 80dB below OVU, and distortion is less than .007%. The FEW2 is a two-channel model with 5 audio bands centered at 60Hz, 240Hz, 1000Hz, 3500Hz, and 10,000Hz. Sound can be boosted or cut 12dB in each band. Straight line graphic controls (10).

*BSR/Metrotec 5-band 2-Channel Equalizer ..... FEW2*



S8S# FEW3

### BSR/Metrotec FEW3

The FEW3 model is a two-channel model with 12 audio bands in each channel (centered at 30, 50, 90, 160, 300, 500, 900, 1600, 3000, 5000, 9000, 16,000Hz). Straight line graphic controls (24). Two VU meters.

*BSR/Metrotec 12-band 2-Channel Equalizer ..... FEW3*

### BSR/Metrotec FEW4

The FEW4 is a four-channel model with 5 audio bands in each channel. It is essentially two FEW2's in the same enclosure.

*BSR/Metrotec 5-band 4-Channel Equalizer ..... FEW4*

## Compressor/ Expanders

### DBX117 Compressor/Expander

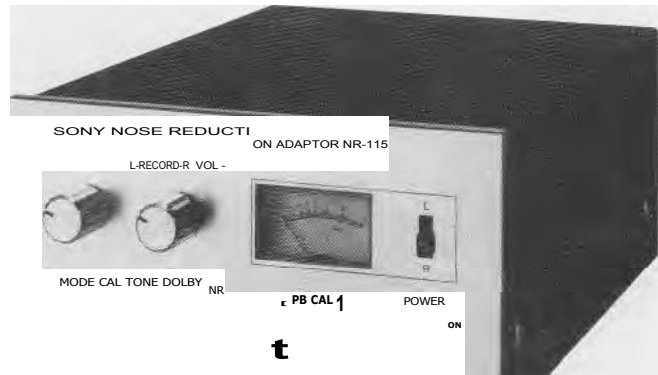
A compressor allows you to fit a much wider dynamic range of sound into the limited maximum signal/noise ratio of most Super 8 sound equipment. With re-expansion on playback this is like a manually operated Dolby system. In some respects it is superior to Dolby, since the compression action is over the entire frequency spectrum, not just the high frequencies as in the Dolby process. Even for release prints that will not be re-expanded on playback, a Super 8 sound film track can be greatly improved with deft use of the compressor on the master sound track. Two to one compression and expansion ratios.

*Noise Reduction System ..... DBX117*

### DBX119 Compressor/Expander

This version of the DBX has infinitely variable compression and two-to-one expansion ratio.

*Noise Reduction System ..... DBX119*



S8S# NR115

## Dolby Noise Reduction Equipment

A Dolby adapter allows any tape recorder to make Dolby-encoded recordings, or to decode recordings made with a Dolby unit in the field, such as the Super8 Sound XSD Recorder. The decoding can wait until the projection stage, thus producing a higher fidelity sound track on the Super 8 edge stripe. Built-in calibration tone. Meter.

*SONY NR 115 Dolby Noise Reduction Adapter ..... NR115*

# Super8 Sound Studio

## Studio Accessories

### Microphone Stands and Booms

See the Production Accessories section of the Super8 Sound Catalog for Microphones and Fishpole Booms. A Baby Boom and Microphone Floor Stand can be quite useful in the studio to suspend the microphone in a convenient place. Our boom and stand have a standard 5/8"-27 mic thread fitting. In addition, the Super8 Sound Boom slides over the Baby Boom, extending it to a 63" boom.

*Microphone Stand (extends to 62")* ..... *MCSTAND*  
*Baby Boom (31" long)* ..... *BBOOM*  
*Elastic Shock Mount* ..... *SHKMNT*

### Sound Level Meter

A sound level meter is used to equalize the overall sound studio or screening room response. A frequency test record is supplied to balance the frequency response of your entire sound system from initial recording through screening room playback.

*BSR/Metrotec Sound Level Meter* ..... *SLM*

### Beep Tapes

A strip of pre-recorded tone on an adhesive backing. Beep or "bloop" tones are very useful in preparing projection leaders and as a simple way to produce the beeps that trigger the Super8 Sound Photo/BeepStart when doing a mix.

*Beep Tapes* ..... *BEEPS*

### Bulk Magnetic Erasers

Bulk erasure of tape or fullcoat insures a minimum of tape hiss, and eliminates any slight signals that might remain from any previous use. We have a large AC operated model that will erase up to 1200 feet (10 1/2" reels) of tape or fullcoat. We also have a cassette eraser that will not erase any tape which has its record protection tabs punched out. This will prevent accidental loss of valuable original sound.

*AC Bulk Eraser* ..... *BERASE*  
*Cassette Bulk Eraser* ..... *CERASE*

### Magnetic Erasing Pencil

This AC-operated magnetic pencil will erase a small (quarter-inch) area of magnetic film or tape, to delete an unwanted sound.

*Magnetic Erasing Pencil* ..... *MAGPEN*

### Head Demagnetizer

All recording heads should be periodically cleaned with Q-tips and alcohol, and then demagnetized.

*Head Demagnetizer* ..... *HDEMAG*

### AC60Hz Sync Generator

Steps down the 1 10V 60Hz AC signal to provide a 1 Volt rms signal suitable for recording as a 60Hz pilotone signal. Can drive auxiliary level inputs on most tape recorders. Short-proof RCA phono output. Comparable to conventional lab units costing \$90. Super8 Sound Recorders with serial numbers 501 and above provide this 1 Volt signal on sync socket pin 3.

*AC60Hz Sync Generator* ..... *LINEBOX*

### Magnetic Edge Stripers

We strongly recommend that you send your magnetic striping work to a top laboratory. Kodak's Sonotrack with its balance stripe has the best general reputation. The balance stripe is one of the most valuable assets of Super 8 magnetic sound. The two sound stripes work like guard rails to keep successive layers of film from contact with one another and any intervening dust. Kodak's stripe is a liquid dispersion in which the oxide adheres directly to the film, base side or emulsion.

If you do do your own striping, you will not be able to add a balance stripe. However, if you must do your own work, we recommend the Bolex/Weberling Striper. The elegant Bolex/Weberling machine is self-motorized and laminates a thin strip of magnetic tape to the base side of Super 8 acetate films (not to polyester Single 8) at the rate of 1800 feet per hour. Note that the laminated stripe will not adhere to the emulsion side of the film and therefore should be used only on original film or second generation prints.

*Bolex Striper* ..... *STRIPER*  
*Bolex Stripe* ..... *BSTRIPE*  
*Bolex Cement* ..... *CSTR IPE*

A more economical striper is now available from Eumig — known as the Juwel Mini. 600 foot reel capacity. Laminated tape — for base side only.

*Eumig Juwel Mini Striper* ..... *JUWEL*  
*Juwel Mini Stripe* ..... *JUWELS*  
*Juwel Stripe Adhesive* ..... *JUWELA*  
*Juwel Stripe Cleaning Fluid* ..... *JUWELC*



# Super8 Sound Editing

## Super8 Sound Editing Benches

The Super8 Sound Editing Bench has become the standard for filmmakers who are working in double-system Super 8 fullcoat editing. There are approximately five times as many Super8 Sound Editing Benches in use as the next most popular Super 8 fullcoat editing system. While this is undoubtedly due in part to the low price (40% of the least expen-

sive horizontal editing table) it is also because the Editing Bench provides almost all the operating functions of a horizontal table, as well as some additional advantages.

Now the Super8 Sound Editing Bench is also available in multiple sound strand models (3-gang and 4-gang synchronizers) with new Super8 Sound Reel Spacer/Adapters to allow even take-up of up to four strands without spilling any strand on the bench surface.



### Super8 Sound Editing Bench (2-Gang)

This is the original Super8 Sound Editing Bench. It incorporates all the traditional editing techniques of 16mm filmmaking, yet overcomes some of the problems usually encountered in editing with a sync block and rewinds. Features include:

- 24fps Synchronous Motor Drive

The rugged two-gang Moviola synchronizer is driven at sound speed in the forward direction by a heavy-duty synchronous motor. This drive system reproduces both voice and music intelligibly, as well as providing a means to accurately time the film. The motor is operated by a convenient foot switch which also engages an electric clutch. The clutch instantly engages or disengages the motor from the synchronizer, which allows for accurate dialogue cutting and a quick transition from motor-driven sound speed to hand-driven rapid traverse.

An 18fps conversion kit is supplied with every bench to allow handling amateur speed films.

- Sliding Magnetic Head Assembly

An unusual sliding magnetic head assembly permits sync "tuning" while running at sound speed over a range of 12 frames in either direction from a reference point in line with the viewer. This simplifies finding sync in difficult passages, such as scenes with no clapmark.

- Differential Rewind Adapters

Differential Rewind Adapters allow Super 8 reels to fit on 16mm rewind shafts and eliminate the familiar problem of "reel banging" in order to take up slack caused by reels of

different diameters on the same shaft. Because the adapters provide true differential action between the reels of sound and picture, they allow the editor to move either strand independently without having to spend time adjusting clamps and spacers.

- Roller Outriggers

A pair of roller "outriggers" have been added to the sync block. These "outriggers" pull the film free from the sprocket teeth when the synchronizer's regular roller arms are released and hold the film in the synchronizer rollers for fast forward and rewind of both strands, or one strand while the other is held still. They also help reduce the time spent removing and repositioning either strand whenever it must be taken out of the synchronizer.

- Bright Viewer

The Super8 Sound Editing Bench incorporates a modified Minette S-5 viewer, which has the brightest, sharpest image of any Super 8 viewer on the market today.

The Editing Bench comes complete with a pair of Moviola 16mm rewinds, a pre-drilled 2' x 4' formica board, and all the necessary mounting hardware. Legs are an optional extra. A single-system magnetic head reader is available as an accessory for single-system editing (add the suffix "-1" to the product code).

Electrical Specifications: Power Requirement, 117VAC, 20W.

*Super8 Sound Editing Bench* ..... S8SEB2  
(2 gangs, double-system only)  
*Super8 Sound Editing Bench with single-system head reader* ..... S8SEB2-1  
(2 gangs, single and double-system)



# Super8 Sound Editing

## Economy Version

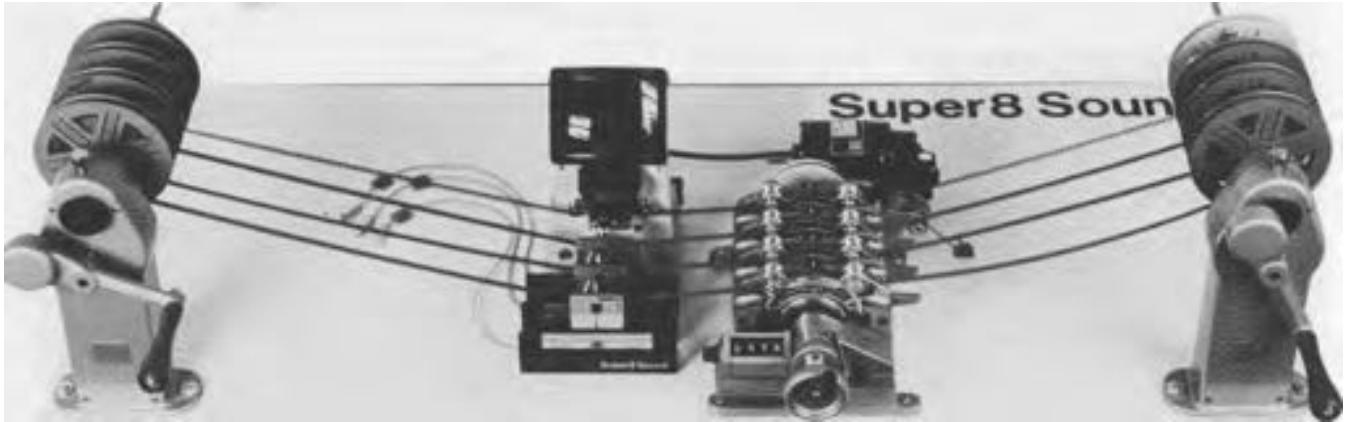
We also offer a stripped down economy version of the Super8 Sound Editing Bench, without Motorization and without Differentials. It is supplied with a pre-drilled board and is ready to accept later motorization.

*Economy Editing Bench* ..... S8SEB2-E

## Stereo Head Option

Any Super8 Sound Editing Bench can be supplied with a stereo head in the Sliding Magnetic Head assembly. Simply add an "-S" to the Editing Bench product code, e.g. the basic 2-gang bench with one speed and stereo head would be S8SEB2-S.

*Stereo Head on an Editing Bench* ..... -S



S8S# S8SEB4

## Super8 Sound Editing Bench (3 gang, 4 gang)

Super8 Sound Multiple-Strand Editing Benches have all the operating conveniences of the 2-gang version when used in the 2-strand mode. They are supplied with Differential Rewind Adapters, and the viewer can be placed in line with the second gang for 2-strand work. For multiple sound strand work, the viewer is moved back, and the Differentials are replaced with Reel Spacer/Adapters for each strand (6 Adapters and 4 Spacers are supplied with the 3-gang bench, and 8 Adapters and 6 Spacers with the 4-gang bench). Spring clamps are provided. Sound tracks are read with Super8 Sound Sliding Magnetic Heads (2 for the 3-gang bench, and 3 for the 4-gang bench). Since the sync block supplied with the 3-gang bench has 4 sprockets, it is easily converted to 4-gang use, with the addition of a Super8 Sound Sliding Magnetic Head and a set of Spacer/Adapters.

The 3-gang and 4-gang Editing Benches operate like conventional 16mm multiple strand benches, with one major improvement: Super8 Sound has added a crank to the synchronizer and unique "Third Hand" devices to each rewind to prevent film spillage. There is no need for holes in the bench top and film bins under the table.

When all strands are threaded through the block, the crank moves them forward or backward at whatever speed is desired. Take-up is accomplished by cranking the appropriate rewind. Spillage of the feed reel strands is prevented by the Third Hand attached to each rewind. These one-way clutches prevent the rewind shaft from turning when film is being fed from the rewind. Each reel, regardless of diameter, feeds without spilling. During take-up, the Third Hand allows the shaft to be cranked freely. At the motorized sound speed, only one hand is required to take up, leaving the other hand free to operate mixing level controls.

Super8 Sound's smooth-acting spacers and hub adapters allow a single strand to be moved while the others are locked in the sync block. The feed spring clamp is loosened and spacers on the take-up rewind let the other strands slip while only one is being taken up.

As with the 2-gang bench, single-system magnetic heads, and stereo track readers are available as accessories.

*Super8 Sound Editing Bench 3* ..... S8SEB3  
(3 gangs, double-system only)  
*Super8 Sound Editing Bench 3 with single-system head* . . S8SEB3-1  
*Super8 Sound Editing Bench 4* ..... S8SEB4  
(4 gangs, double-system only)  
*Super8 Sound Editing Bench 4 with single-system head* . . S8SEB4-1  
*Super8 Sound Add-A-Strand Kit* ..... ADDSTRND  
(2 Spacers, 2 Adapters, Sliding Mag Head)

## Legs Option

Another option is a set of legs to convert the 2' x 4' bench top into a free-standing table.

*Editing Bench Legs* ..... EBLEGS

## Export Versions

We can supply a 50Hz (230V or 110V) version of any Super8 Sound Editing Bench. A step-down transformer is required to reduce 220-240V to 110-120V. A transformer of 40W capacity is adequate.

The 50Hz version operates at a 25fps rate in AC line sync, providing accurate program timing for European television broadcast applications.

To order a 50Hz version, add the suffix "-50" to the Editing Bench product code, e.g. S8SEB2-50. There is no extra charge for the 50Hz version (prices are the same as 60Hz models), but there is a general surcharge on export shipments.

# Super8 Sound Editing

playback and mixing capabilities. The Model 1224R, in the same console unit, is projected to have those same basic functions as well as recording capability to and from all sound tracks.

<i>MKM Editing Machine Model 824</i> .....	<i>MKM824</i>
<i>MKM Editing Machine with AC Sync</i> .....	<i>MKM824S</i>
<i>MKM Matching Work Table</i> .....	<i>MKMLEGS</i>
<i>MKM Editing Machine Model 1024</i> .....	<i>MKM1024</i>
<i>(Console version, built into a work table)</i>	
<i>MKM Editing Machine Model 1224</i> .....	<i>MKM1224</i>
<i>(6-plate console version)</i>	
<i>MKM Editing Machine Model 1224 with</i>	
<i>recording capability</i> .....	<i>MKM 1224R</i>
<i>Cost of a single-system head for MKM</i> .....	<i>MKM-1</i>
<i>Cost of 2-channel amplifier for MKM</i> .....	<i>MKM-2</i>

## Super 8 Research Associates Post-Production Console

These horizontal editing tables were introduced in early 1975 and immediately were available in 4-plate, 6-plate, and 8-plate versions. An optional picture head can be added to the left and right hand sides of the table, allowing combinations of three picture tracks with one sound, two picture and two sound, or one picture and three sound tracks. The 4-plate and 6-plate versions may be expanded later to add additional plates, up to eight.



## Horizontal Editing Equipment

### MKM Horizontal Editing Machine

The MKM Editing Table was introduced in 1973, and it is the most widely used horizontal Super 8 fullcoat editing facility.

The picture head is an original design incorporating an 8-sided prism, a 21V/150W projector-type lamp with dichroic reflector and an additional dichroic mirror to keep film cool, and a large bright groundglass rear screen (3.75" x 5") that can be viewed comfortably by as many as 6 to 10 people sitting up to 45° off axis, in a normally lit room.

The sound path has a flywheel/capstan and flutter filter tensioner to provide excellent sound fidelity. With the AC synchronous version of the table, it is possible to do transfers or mixes using the Super8 Sound Recorder in AC sync mode. A built-in solid state amplifier and speaker have volume and tone controls, and a headphone monitor jack.

Picture and sound have separate electric clutches. Either strand or both can be moved forward or backward at continuously variable speeds from 0 to 62fps. Creep speeds at less than 1fps can be accomplished, and there is a manual inching control for locating an exact frame. Both picture and sound can be marked, at the frame in the gate or at the sound head.

Options include a matching work table with folding legs, a console version built into a work table with permanent chrome-plated legs, a single-system magnetic head on the picture strand, and a two-channel amplifier. To order a single-system head on an MKM table, add the suffix "-1" to the product code, e.g. MKM824-1. To order a 2-channel amplifier on an MKM table, add the suffix "-2" to the product code, e.g. MKM824-2, or for a table with a single-system head and two channel amp, MKM824-1-2. Both the single-system head and the two-channel amplifier must be ordered with the table; they cannot be added later.

Two 6-plate versions of the MKM table, with one picture and 2 sound heads, will be available later this year. The Model 1224 is a self-contained unit, with legs, with complete editing,



S8S# PPC45 with PPCPIC

The picture head is a conversion of an action-principle viewer with a 4-sided prism. The rear screen is a 5" x 7" color corrected fresnel lens, which focuses the light into a bright narrow beam suitable for viewing by one person even in a brightly lit room. The lamp is a 6V/10W quartz viewer lamp.

The sound paths use a large 40-tooth single sprocket drive to advance the sound smoothly and intelligibly. Sound amplification is provided, and multi-track models have volume controls for each track.

Picture and sound paths are independently clutched. Independent torque motors on the take-up and supply reels can be turned on and off separately from the drive motor, allowing one track to be rewound while another is moving at 24fps. Manual inching control. A common start outlet allows any number of Super8 Sound Recorders to start in sync with the editing table, and sound tracks from the table be laced through the sound heads of Super8 Sound Recorders for

# Super8 Sound Editing

a mechanically-interlocked high fidelity mix.

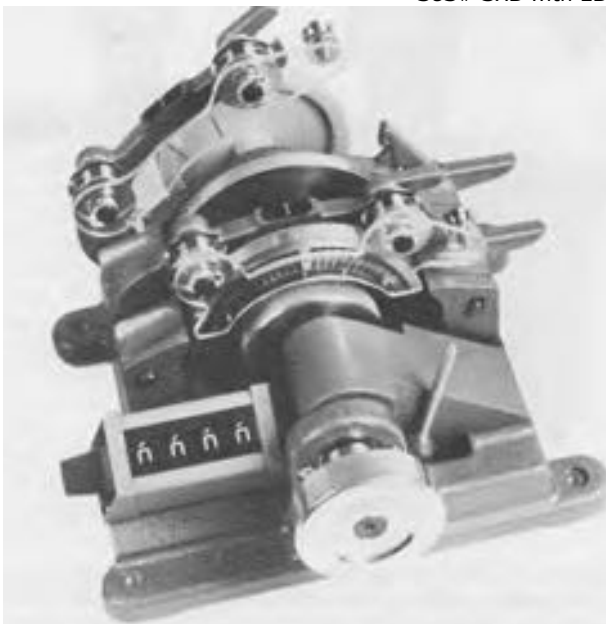
<i>Super8 Research Associates Post-Production Console</i> 4-plate (1 picture, 1 sound)	PPC25
<i>Super 8 Research Associates Post-Production Console</i> 6-plate (1 picture, 2 sound)	PPC35
<i>Super8 Research Associates Post-Production Console</i> 8-plate (1 picture, 3 sound)	PPC45
<i>Super 8 Research Associates Extra Picture Head</i>	PPCPIC
<i>Add-a-Track Module</i> .....	PPCTRK
(to add one track to a PPC25 or PPC35)	
<i>Single-System Magnetic Head</i>	PPC-1

## Editing Components

With the entry into the Super 8 field of the world's largest and best-known editing equipment manufacturer, editing bench components, particularly multi-gang synchronizers, which were formerly in very short supply, have now become stock items at Super8 Sound. We are pleased to announce the availability of Magnasync/Moviola equipment for Super 8, and the selection of Super8 Sound as a Magnasync/Moviola dealer — the first Super 8 dealer.

The consequences of this for Super 8 are significant: greater availability of Super 8 editing components, and reduction of the synchronizers' price, since they are now being built in quantity, instead of as special-order items.

S8S# SXB with EBROLL



S8S# EBROLL



We are hopeful that the continued strong interest of our customers will convince Moviola of the need for Super 8 versions of their more sophisticated editing and sound studio equipment. We look forward to offering you Super 8 versions of the 4-gang Moviola, Jr. and eventually the world-renowned Moviola console flatbed editors.

## Super 8 Synchronizers

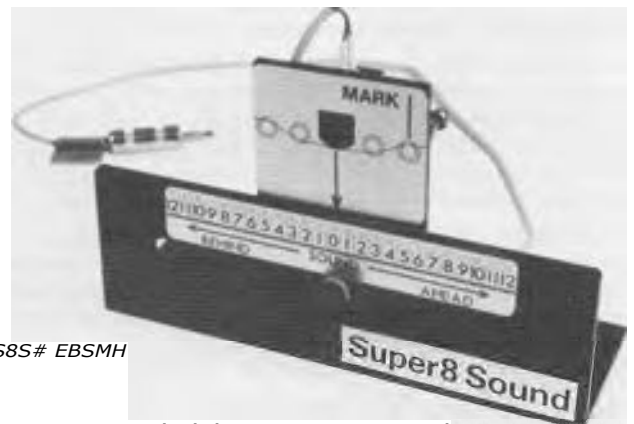
The synchronizers we supply are built with the sprocket teeth away from the operator, and with footage counters that advance when film is moved from left to right. You should be aware that pulling by hand in Super 8 to produce intelligible sound quality at 24fps is quite a bit more difficult than in 16mm, where there are fewer frames per linear foot and which therefore allows the fullcoat to be pulled faster. We feel that motorizing a Super 8 sync block is essential and all our synchronizers are supplied with a 2" shaft extension for later motorization.

<i>Moviola Timer (one gang only)</i> .....	SXA
<i>Moviola Synchronizer — 2 gang</i> .....	SXB
<i>Moviola Synchronizer — 3 gang</i> .....	SXC
<i>Moviola Synchronizer — 4 gang</i> .....	SXD
<i>Moviola Synchronizer — 5 gang</i> .....	SXE
<i>Moviola Synchronizer — 6 gang</i> .....	SXF

## Sync Block Roller Outriggers

Super8 Sound's unique roller outriggers lift the film cleanly away from the sprocket teeth so that it is not scratched, and hold it in the guide rollers straight over the sprocket wheel. Film can usually be lowered back into place with one hand, instead of fumbling with two hands to pick it out of the space next to the sprocket wheel. You must order these outriggers with the sync block, as they are custom-fitted to provide accurate alignment of all the rollers. You need one outrigger for each gang of the synchronizer.

<i>Super8 Sound Roller Outrigger (per gang)</i> .....	EBROLL
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S8S# EBSMH

## Super8 Sound Sliding Magnetic Head

The Sliding Magnetic Head is mounted directly in line with the editing bench viewer. It can be unlocked and moved to advance or retard the sound relative to the picture by up to twelve frames in either direction. This greatly simplifies syncing up the rushes, especially in shots with no clapmark where sync must be achieved by reading lips. The sliding head can be moved back and forth to "tune in" the best sync as one tunes in a radio station. Fitted with a miniphone plug for connection to a squawk box or Super8 Sound Recorder.

<i>Super8 Sound Sliding Magnetic Head</i> .....	EBSMH
<i>Super8 Sound Sliding Magnetic Head (Stereo)</i> .....	EBSMHS

# Super8 Sound Editing

## Magnetic Head Reader Attachments

These Moviola attachments are mounted directly on any gang of a Super 8 synchronizer. The magnetic head flips down to ride on the fullcoat and read the sound track. Equipped with a miniphone plug that can be plugged into any squawk box or the Super8 Sound Recorder to amplify the magnetic head signal.

*Moviola Magnetic Head Attachment*

*MHMOV*

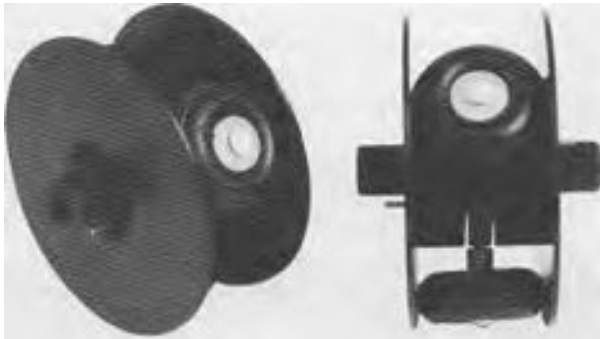
## Sync Block Motorization

The Super8 Sound Motorization is the same as that used on the Super8 Sound Editing Benches. An integral DC electric clutch allows the foot pedal to both start the motor and connect the motor to the sync block. A timing belt system and expensive AC synchronous motor combine to produce the best sound fidelity achievable with a sync block. We suggest that a predrilled formica bench top be purchased with the motorization to simplify locating the editing components. Your sync block must have a 2-inch extension of the 1/2 inch diameter main shaft. The motorization includes motor, clutch assembly, footpedal, timing belt, and pulley for attachment to sync block shaft extension. A separate pulley for conversion to 18fps operation is available. Owners of Super8 Sound Economy Editing Bench may simply add this motorization to their predrilled bench.

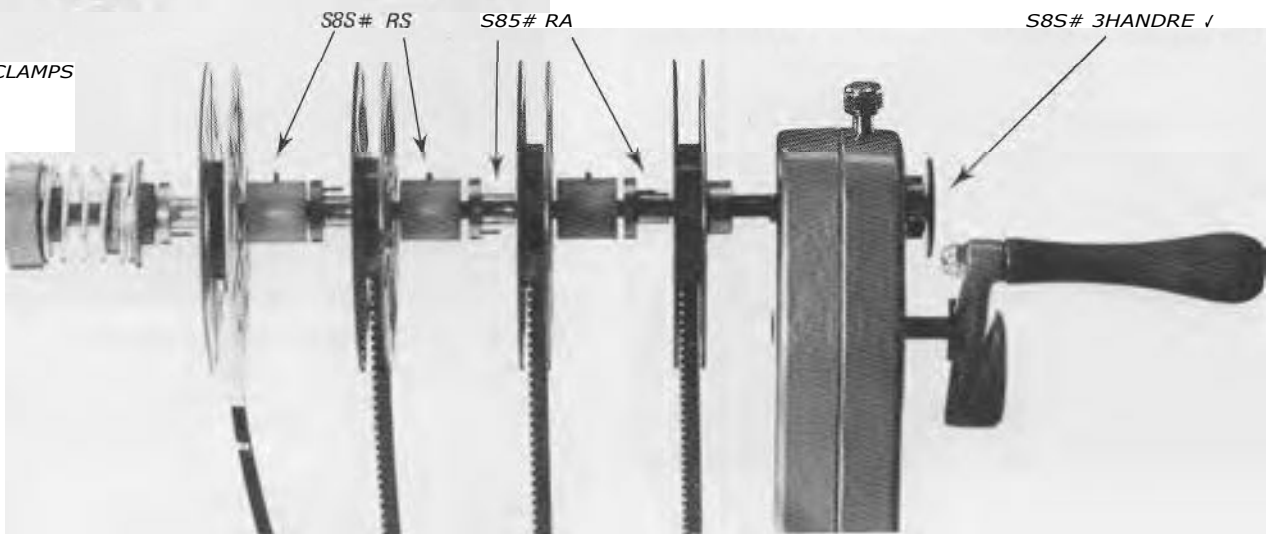
*Super8 Sound Sync Block Motorization* ..... *EBMOTOR*  
*18fps Pulley* ..... *EB18*

*Pre-drilled Formica Bench Top for Moviola or Ediquip*  
*Sync block (2' x 4')*  
*for 2-gang* ..... *EBTOP2*  
*for 4-gang* ..... *EBTOP4*

*S8S# EBDIFF*



*S8S# CLAMPS*



## Rewinds

The Moviola rewinds we supply are regular 16mm rewinds with 5/16" shafts (round with a slot). Shafts are long enough to handle 4 Super 8 reels. With Differential Rewind Adapters no spacers or clamps are necessary. Adjustable friction drags are available, and we strongly recommend their purchase.

*Moviola Rewinds (pair)* ..... *REWINDS*  
*Moviola Friction Drags (pair)* ..... *DRAGS*  
*Moviola Shafts (pair)* ..... *SHAFTS*  
*Moviola Spacers (pair)* ..... *SPACERS*  
*Moviola Spring Clamps (pair)* ..... *CLAMPS*

## Super8 Sound Third-Hand Rewinds

Super8 Sound's novel one-way rewinds are available as separate components. The left rewind turns only clockwise, and the right rewind only counterclockwise. The Third Hand feature can be easily switched on or off, so the rewinds can be used normally. Modified Moviola rewinds.

*Third Hand Rewinds (pair)* ..... *3HANDREW*

## Super8 Sound Differential Rewind Adapters

These are the main devices that give our 2-gang vertical editing set-up the operating convenience of a horizontal editing table. When one film strand (picture or sound) is released from the synchronizer, the Differential will apply all the rewind torque to that one strand. The other strand must be stopped by holding back with one hand or locking the synchronizer. This allows rapid traverse of one strand, forward or backward, at speeds several times sound speed. This was previously possible only on a horizontal editing table, where each strand is separately motorized.

The Differentials also pull both strands evenly when film on one reel is larger than the other, eliminating the need for holes in the bench and bins under the table. They fit on standard 16mm (5/16") rewind shafts and serve to adapt the narrow shaft to the half-inch Super 8 reel hubs.

*Super8 Sound Differentials* ..... *EBDIFF*

# Super8 Sound Editing

## Super8 Sound Reel Spacer/Adapters

These are combination spacers, shaft hub adapters, and slipping devices that allow you to take up evenly on several Super8 reels. Each reel Spacer keys to a standard (5/16") rewind shaft. The Adapter section adapts the shaft to fit a Super 8 reel and provides a smooth surface against which the Spacer is pressed by the force of a spring clamp. Torque is thus applied to the reel through a smooth slip-clutch surface that pulls smoothly to produce the best sound fidelity. The Spacer/Adapters are supplied with Super8 Sound 3-gang and 4-gang Editing Benches. You need one Adapter for each reel, and Spacers for every reel except the front one.

We also offer a keyed version of the hub adapter, to facilitate single-strand Super 8 on rewinds.

Super8 Sound Reel Spacer/Adapter Set for 3 reels 16 hub adapters (RA) 4 spacers (RS)] .....	RSA3
Super8 Sound Reel Spacer/Adapter Set for 4 reels 18 hub adapters (RA), 6 spacers (RS)] .....	RSA4
Super8 Sound Reel Spacer (pair) .....	RS
Super8 Sound Reel Hub Adapter (pair) .....	RA
Super8 Sound Hub Adapter with key .....	RAKEY



## Specialties Super 8 Editor

The Specialties Editor is a 4-gang motorized sync block with three Super 8 mag heads, built into a housing that includes a 3-channel amplifier. A viewer (not supplied) can be mounted on the upper surface of the housing, which is diffuse white acrylic and serves as a light well. Teeth on the film sprocket are at the rear, compatible with the Minette S-5 viewer (recommended). Footage counter. Foot switch. Rewinds are not supplied. Super8 Sound's Third-Hand Rewinds and Reel Spacer/Adapters are recommended.

Specialties Super 8 Editor .....	SPECEDB
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## Super 8 Viewers

### Minette S-5

The Minette is the brightest and sharpest Super 8 viewer on the market. It is the viewer used on the Super8 Sound Editing Benches. Teeth are in the standard position at the rear for proper editorial wind. A built-in pressure plate keeps the image in focus even when not winding. A single-system version is available.

Minette S-5 .....	VMS5
Single-System Minette S-5 .....	VMS5SS
Single-System head attachment .....	MS5SS
(for Minette S-5 only)	

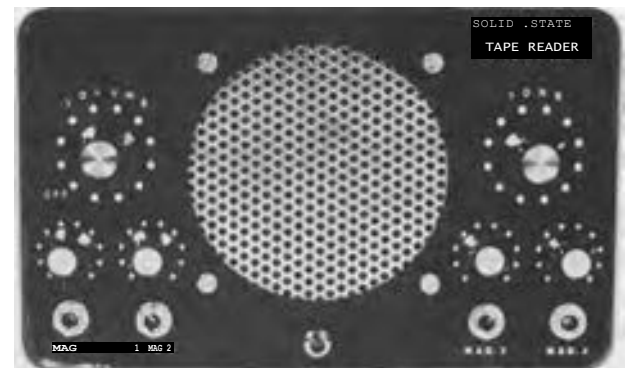


### Elmo 912

The Elmo 912 is a single-system viewer, with a larger but dimmer picture than the Minette S-5. Teeth are at the front and the viewer is therefore not compatible with standard Super 8 synchronizers. Accessories are available for counting frames and cleaning film.

Elmo 912 with single-system head .....	ELM912SS
Elmo frame counter only .....	912FM
Elmo film cleaner only .....	912CLN
Elmo 912 viewer complete with all accessories .....	ELM912

S8S# EBAMP4



## Super8 Sound Editing Bench Amplifier

Preamplifiers, amplifier, and speaker with enough gain to amplify up to 4 magnetic track readers. Master volume control and tone control. Separate volume controls for each magnetic head input.

Editing Bench Amplifier, 1 channel .....	EBAMP
Editing Bench Amplifier, 2 channel .....	EBAMP2
Editing Bench Amplifier, 4 channel .....	EBAMP4

# Super8 Sound Editing

## Single-System Editing

Cutting film with sound on a magnetic edge stripe has the drawback that the sound and picture are displaced from one another by 3/4 second (18 frames). An editor with a mag stripe reader is essential with single-system footage to make the best cutting decisions.

Super8 Sound offers the single-system viewer/editors listed above, as well as single-system versions of the Super8 Sound Editing Benches, the MKM Editing Table, and the Super 8 Research Associates Post-Production Console. These last three allow both single-system and double-system editing.



S8S# MOSER

### Moser Displacement Recorder

It is also possible to edit single-system by eliminating the 18 frame sound and picture separation with a displacement recorder. The Moser Displacement Recorder will pick up the sound from the 18-frame advance position and re-record it on the edge stripe in "editorial sync" (immediately next to the corresponding picture). When picture is cut, the accompanying sound is also cut. After editing, the Displacement Recorder will replace the sound on the edited footage at the normal 18-frame advance position for projection or transfer to video.

Moser Autosync 8 Displacement Recorder ..... MOSER

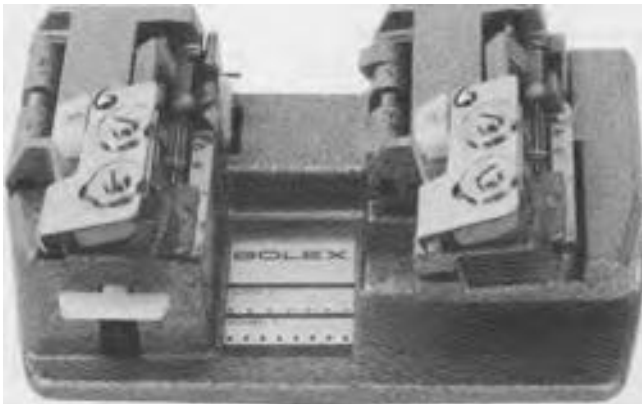


## Super 8 Splicers

### Super 8 Splicers

There are two basic types of splicer, cement and tape. Cement splices are stronger and more permanent. They bend in the same way unspliced film does (tape splices tend to fold sharply) and consequently they have better sound fidelity on some equipment. They must be made carefully and quickly (cement sets in less than 10 seconds), and they cannot be changed without destroying at least two frames. All the cement splicers listed here can produce a splice that adds no thickness to the original film.

S8S# SBOLEX



Tape splices offer an editorial advantage since you can peel them off and insert another shot without losing a frame. All tape splicers cut on the frame line, so that a cut is reversible if the outtake has been saved. For permanent tape splices, put tape on both sides of your film, but for fast initial assembly of a workprint, tape can be temporarily applied to just one side.

Magnetic film is always spliced with tape (cement splices adhere only to the acetate base material), on one side only, or with a flap over just the sprocket holes on the oxide side.

Bolex (cement) .....	SBOLEX
Braun FK1 (cement).....	SBRAUN
(motorized sapphire wheel)	
Fuji Splicer (tape) : .....	SFUJI
Guillotine Professional Super 8 (tape) .....	SGUILPRO
Guillotine Metal (tape) .....	SGUILM
Guillotine Plastic (tape) .....	SGUIL
Eumig Chemo Splicer 701 (cement) .....	SEUMIG
(produces an unusual serrated butt splice)	
Hahnel Collmatic S1000 (cement) .....	SH1000
(motorized sapphire wheel)	
Hahnel Collmatic SD8 (cement) .....	SHSD8
(faster than the Hahnel S-1000)	
Hervic Minette (tape) .....	SMINET
HPI Quik-Splice (tape) .....	SHPI
Kodak Presstape (tape) .....	SKODAK
(this is the longest, strongest tape splice — six frames in length)	
Maier-Hancock 816ST Hot Splicer (cement).....	SMAIER
(includes a heating element for the tightest possible splices)	

See the Editing Accessories section of the Super8 Sound Catalog for splicing tape, film cement, etc.

# Editing Accessories

## Grease Pencils

A grease pencil — china marker is the simplest way to mark workprint or mag film. The grease can be removed with a cloth dampened with film cleaner. Use sparingly and clean the film or grease will accumulate on guides, gates, etc.

*Grease Pencil (1 dozen)..... GREASEP*

## Marking Pen

An alternate, cleaner, and, unfortunately, permanent marker is the Sharpie-type marking pen. Marks either emulsion or base of both acetate and polyester films, including fullcoat.

*Sharp-point Marking Pens (1 dozen)..... MARKERP*

## Vis-A-Vis Acetate Markers

These sharp-point markers are especially formulated to wash off an acetate surface. Film cleaner will remove them from the base side of film. They are permanent on the emulsion side (water removes the mark but mars the emulsion). Assortment of colors.

*Acetate Markers (1 dozen)..... VISAVIS*

## Cue Punch

This punch puts a 1/16" hole in a frame of fullcoat or picture film to indicate corresponding frames for "projection sync". A punched hole in fullcoat magnetic film is the recommended method for producing flash frames for use with the Super8 Sound PhotoStart.

*Cue Punch..... PUNCH*

## Beep Tapes

These bloop tones or beep tapes are 1000Hz prerecorded tones on magnetic tape with a pressure sensitive backing. A short segment should be placed on the sound frame that corresponds to the frame "2" in the SMPTE Universal Leader. See the Film, Fullcoat, Etc. section of the Super8 Sound Catalog for a description of sync leaders.

*Beep Tapes..... BEEPS*

## Film Cement

Most cement splicers can use any brand film cement (Eumig's Chemo Splicer claims to be an exception). We carry Kodak Film Cement in 1/2 ounce bottles and 16 ounce cans. You should empty the small bottle periodically and refill with fresh cement. Keep both containers capped tightly when not in use.

*Kodak Film Cement (1/2 oz. bottle).....CEMK  
Kodak Film Cement (2 oz. bottle).....CEMK2  
Kodak Film Cement (16 oz. can).....CEMK16  
Eumig Film Cement (1 oz.).....CEMEUM*

## Film Splicing Tape

There are unfortunately almost as many types of tape as there are splicers.

*Fuji Splicing Tape (roll).....TFUJI  
Guillotine Clear Splicing Tape (set of 2).....TGUIL  
HPI Quik-Splices (package).....THPI  
Kodak Press-Tapes (20 packs of 20 splices).....TKODAK  
Minette Tape Splices (package).....TMINET*

## Film Cleaner

Super 8 emulsions are tough and resistant to scratches, but frequent cleaning, with lubrication, is the best way to keep

films dust and scratch free. It also helps keep the projector gate and film path clean and lubricated. Use a soft lint-free cloth or film-wipe dampened with cleaner, and squeeze gently on the film as you wind. Wind slowly to allow the cleaner to evaporate before it winds on to the reel, and change the spot on the cloth often to avoid scratches from dust particles.

*Kodak Movie Film Cleaner (with lubricant).....CLEANK  
Webril-Wipes (100).....WEBRIL*

## Editing Gloves

We have gloves in soft cotton and in nylon. Gloves are helpful in keeping fingerprints off film, and in keeping dust off — if they are frequently cleaned. Minimum order: 12 pair.

*Nylon Editing Gloves — Men's.....NGLOVESM  
Nylon Editing Gloves — Women's.....NGLOVESW  
Cotton Editing Gloves — Men's.....CGLOVESM  
Cotton Editing Gloves — Women's.....CGLOVESW*

## Film Scissors

We have film nippers (spring-action) and special non-magnetic scissors for cutting magnetic film.

*Film Nippers.....NIPPER  
Non-magnetic Scissors.....SCISSOR*

## Plastic Storage Bags

The famous Mini-Grip plastic bags with the patented plastic zip-lock top are an essential part of any editing room. All film and most smaller accessories should be stored inside these airtight, completely dust-free bags. We supply a sample selection of bags from 2" x 3" to 12" x 15", to introduce you to them.

*Mini-Grip Plastic Bags (Sampler of 60 bags).....MINIGRIP*

## Quarter-Inch Masking Tape

Primarily used to hold film on rolls, this tape also serves a multitude of other film purposes — as a miniature gaffer's tape.

*Quarter-inch Masking Tape (roll).....MASKTP*

## Replacement Editing Lamps

We stock replacement bulbs for our principal editing equipment, and a standard 6V/10W bulb that replaces the lamp in most Super 8 viewers.

*Minette S-5 Lamp.....MLAMP  
Super 8 Research Associates Table Lamp.....S8LAMP  
MKM Editing Table Lamp.....MKMLAMP  
MIT/HAMTON Editing Table Lamp.....MITLAMP  
Viewer Lamp (6V/10W) — not for Minette).....VLAMP*

## Film Frame Inspection Viewer

Simply place this viewer on the Super 8 film and a few Super 8 frames fill the field of view. Best used over a light-table. Use to inspect your splices.

*Film Frame Inspection Viewer.....LOUPE*

## Editing Bench Ruler/Scale

This is a two-foot long Super 8 ruler showing 144 frames. Self-adhesive back so you can stick it down to your editing surface.

*Editing Bench Ruler.....EBRULER*

See the Film, Fullcoat, Etc. section of the Super8 Sound Catalog for leader, mag film stock, and empty reels.

# Super8 Sound Sync Projectors

The projector plays a much more important role in Super 8 filmmaking than it does in 16mm. The reason is that the Super 8 projector is used as part of the sound transfer system for getting sound from fullcoat to magnetic edge stripe (and from stripe to fullcoat in the case of single-system original films). You should therefore give some thought to the functions you plan for your Super 8 projector before buying, and you may even find it necessary to buy more than one machine — with one primarily for screening or presentation and another dedicated to sound transfer work. If you are active in Super 8 production you will eventually use still other types of Super 8 projectors such as continuous-loop repeating projectors for exhibits, telecine projectors for video film chain work, Xenon-arc or metal-arc lamp projectors for theater use, and interlock projectors for screening a workprint with double-system sound just before final editorial decisions are made. Most of these types of projectors are available now from Super8 Sound, and are described below. See the Video section of the Super8 Sound Catalog for telecine projectors.

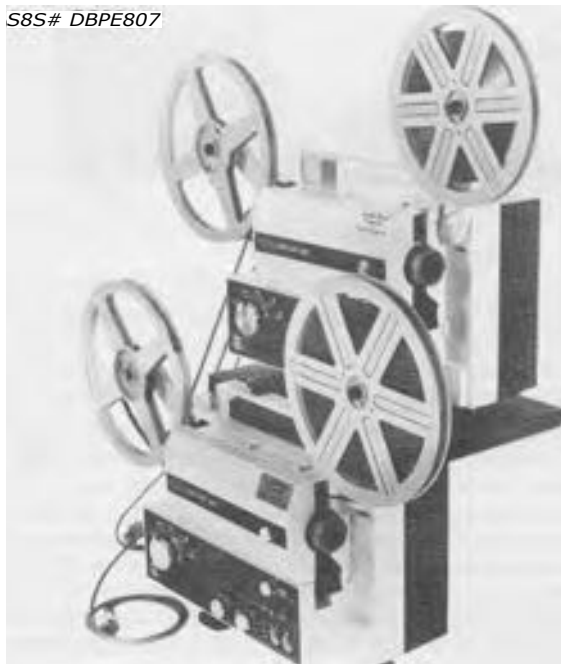
Any Super 8 sound-recording projector can be adapted for sync work with the installation of an inexpensive sync signal

generator, e.g. the one pulse per frame (1/F) magnetic reed switch device described below (PKIT). This sync signal is used to control the speed of a fullcoat mag film recorder, matching up picture and sound on an exact frame-for-frame basis. All projectors supplied by Super8 Sound are sync projectors.

To start sound and picture in sync, both projector and recorder can be plugged into the same switched outlet box. When power is turned on, both machines make a "common start". If start frames of picture and sound are precisely at the gate of the projector and at a calibrated point near the magnetic head of the recorder respectively, the two will start in sync and then remain in sync because of the Super8 Sound Recorder's speed servo-control. A sync start method superior to common start is a photoflash start, in which a punched frame in opaque leader fires an electronic switch to start the fullcoat recorder.

If you want to be able to stop and restart, and even rewind, in sync, then you need the capabilities of a double-band (picture film and magnetic film) interlock projector.

S8S# DBPE807



The Super8 Sound DoubleBand Projector is a versatile tool for the Super 8 Filmmaker's sound studio, dubbing theatre and screening room. It consists of two identical Super 8 sound movie projectors which are mechanically interlocked to permit stopping, restarting, and even rewinding in perfect sync. Its primary use is to permit a double-system screening of an edited workprint and fine-cut sync sound on Super 8 fullcoat magnetic film.

The two projectors can be instantly uncoupled and run separately. This permits easy threading of picture film and sound film. Each projector has an inching knob to facilitate setting of start marks in the gate. Once running in sync, either projector can be in the playback or the record mode, permitting sound transfers from fullcoat magnetic film to magnetic edge stripe, or from stripe to fullcoat.

Each projector is equipped with a once-per-frame (1/F) sync contact switch, permitting sync operation with the Super8 Sound Recorder. With the DoubleBand Projector and two Super8 Sound Recorders, a two-track sync sound mix can be made while simultaneously viewing the picture workprint. Of course, wild sounds may be mixed in at the same time. If Super 8 fullcoat is run in both projectors, a three-track blind mixdown can be accomplished.

The DoubleBand Projector can be used to dub new sounds on fullcoat in sync with the picture. Its sync rollback capability allows concentration on just one short segment at a time. A short loop of picture, or original sound, can be run in one projector for the repeated playings needed to achieve a precise replacement of the original material.

The DoubleBand Projector is essential for classroom screening of student films while they are still at the editing stage.

Independent producers will want to screen sound and picture in sync for their clients before making final cuts in the original film footage. Sync rollback capability permits easy review of one shot or several scenes, without loss of sync.

The DoubleBand Projector is supplied with complete assembly and operating instructions. It consists of two Eumig S807 projectors and mechanical interlock connections. A supporting table for one projector holds it above the other so all recording and transport controls are easily accessible from one side of the unit. DIN to RCA adapters are supplied for the audio outputs. Specifications: 75-10,000Hz frequency response, automatic record level control, 4 Watt amplifier, monitor capability, wow less than 0.15%, flutter less than 0.2%, 12V75W dichroic tungsten halogen bulb with pre-heat, f/1.6 17-30mm zoom lenses, 600 foot reel capacity.

The DoubleBand Projector can also be supplied with one Bolex SP-80 Special projector and one Eumig S807. This combination has the same specifications except that it offers manual record level control in the SP80 unit.

Super8 Sound DoubleBand Projector ..... DBPE807  
(2 Eumig S807)  
Super8 Sound DoubleBand Projector ..... DBPBSP80  
(1 Eumig S807, 1 Bolex SP80 Special)



# Super8 Sound Sync Projectors

Two other more expensive projectors may also be substituted for the upper unit of the DoubleBand Projector. These both offer superior sound and much brighter pictures than the S807. They are the Eumig 810 HQS (High Quality Sound) with an f/1.3 lens and a 100W lamp, and the Bolex SM80, which has an f/1.2 lens and a 150W lamp. See the projector data table for further details.

*Super8 Sound DoubleBand Projector* ..... *DBPEHQS*  
 (1 Eumig S807, 1 Eumig 810 HQS)  
*Super8 Sound DoubleBand Projector* ..... *DBPBSM80*  
 (1 Eumig S807, 1 Bolex SM80)

Filmmakers who already own a Eumig or Eumig-type Bolex with an inching knob at the back, may consider buying just the lower half of the DoubleBand Projector. This is a sync Eumig S807 with a double-band conversion kit that can easily be fitted to your Eumig-made projector. Includes the supporting table for the upper projector, and timing belt/pulley/clutch system. Can be used with the following projectors: Eumig S807, S807D, S810D, 810D Deluxe, 810 HQS, 810D HQS, 810D Deluxe HQS, and Mark S-O&M (optical and magnetic sound); Bolex SP8, SP80, SM80.

*Half Double Band Projector* ..... *HDBP*

Finally, filmmakers with certain Eumig projectors may send them to Super8 Sound to be converted into the lower half of a DoubleBand Projector. The supporting table is fitted to the projector, a sync PKIT is installed, and the timing belt/pulley/clutch system is included in this conversion price. This is available for the Eumig S807, 5807D, S810D, 810D Deluxe, 810 HQS, 810D HQS, 810D Deluxe HQS, and Mark S-O&M (optical and magnetic sound).

*DoubleBand Projector Conversion* ..... *DBPCONV*

## Projector Sync Modification Kit

This is a simple kit of materials — magnetic reed switches, magnets, mounting strips, adhesives, cable with wired DIN plug — and a set of basic instructions that cover installation of a 1/F sync contact switch in most popular Super 8 projectors. It is intended for installation by a qualified camera repairman or knowledgeable handyman.

*Projector Sync Modification Kit* ..... *PKIT*

Super8 Sound will install a 1/F sync contact switch in your Super 8 sound-recording projector.

*Projector Sync (1/F) Modification* ..... *PKITIN*

*S85# PSTART with P1200M and S8SR*



## Super8 Sound PhotoStart

The PhotoStart plugs into the remote control jack of the Super8 Sound Recorder, and prevents the Recorder from running until activated by a bright flash of light, e.g. a scraped frame of an opaque leader, or a 1000Hz burst or beep tone. This device insures a repeatable double-system sync start without the frame calibration required for "common start".

*Super8 Sound PhotoStart* ..... *PSTART*

## Super8 Sound Common Start Box

Use this switched outlet box to provide a sync start for a projector and the Super8 Sound Recorder, or for up to three Super8 Sound Recorders (any number with extra taps). Pilot light. 3 outlets.

*Super8 Sound Common Start Box* ..... *CSTART*



*S85# P1200M with S8SR*

## Elmo ST1200 Sync Projector

The Elmo stands out as the highest fidelity Super 8 projector currently available. It also has the largest reel capacity (1200 feet, 365m), one of the brightest lamps, the fastest projection lens available in a Super 8 projector (f/1.1, as an optional extra), and an automatic threading system that can be monitored by opening the projector side and (with difficulty) be unthreaded in the middle of a film. It handles fullcoat well, and it is almost impossible to damage film with the Elmo. The major drawback is the Elmo ST1200's poor sound fidelity on film spliced with tape. This is no problem for transfers to prints, or with a well-cemented spliced original, but every time a tape splice passes the loop former there is a significant wow, and occasionally, a lost loop. It is easy to regain loop with the loop-former.

The Elmo ST1200 is the first Super 8 sound projector supplied directly by the manufacturer with a standard 1/F sync contact switch, and it therefore does not need a Super8 Sound sync conversion.

*Elmo ST1200 Projector, with f/1.3, 15-25mm lens, magnetic sound recording* ..... *P1200M*  
*Elmo ST1200 Projector, with f/1.3, 15-25mm lens, optical sound, and magnetic sound recording* . *.P1200MO*  
*Elmo ST1200 Projector, with Hi-Fi f/1. 1, 12.5-25mm lens, magnetic sound recording* ..... *P1200HF*  
*Elmo Hi-Fi f/1. 1, 12.5-25mm lens* ..... *ELHIFI*  
*Elmo Auditorium f/1.4, 25-50mm lens* ..... *ELAUD*

# Super8 Sound Sync Projectors

S8S# PE807 with S8SR and PS TART



## Super8 Sound Sync Eumig Projectors

The Eumig line of Super 8 Sound projectors are the most widely used in the United States, primarily because they are the lowest-priced adequate sound-recording and reproducing Super 8 projectors. They have an inching knob and a dimly visible still frame on the preheat lamp position. Autothreading. Automatic gain control only. No VU meter. They have a significant 60Hz hum on playback (you must learn to adjust the hum-bucking coil) and it is essential to have an equalizer with a 60 Hz cut. They handle fullcoat well, but are unforgiving if improperly loaded and occasionally chew up polyester-base films. Supplied by Super8 Sound with a 1/F sync contact switch installed.

<i>Super8 Sound Sync Eumig S-807</i> .....	<i>PE807</i>
<i>Super8 Sound Sync Eumig 810 High Quality Sound</i> .....	<i>PE810HQS</i>
<i>Super8 Sound Sync Eumig Mark S-O&amp;M (optical and magnetic sound recording)</i> .....	<i>PEOM</i>

## Super8 Sound Sync Bolex Projectors

The Bolex SM8 is a very sturdily built projector. It is reliable with well-cemented acetate base splices. VU recording meter. Manual gain control. Autothreading. It cannot handle fullcoat or polyester-base Single 8 films; it often buckles at a tape splice and chews up the film in the top sprocket. No inching knob. No still frame.

The Bolex SP8, SP80, and SM80 are built for Bolex by Eumig and are mechanically similar to the Eumig projectors — inching knob, dim still frame, 60Hz hum, and no VU meter (LED's are used for record level). They have manual gain control as well as automatic gain control. Supplied by Super8 Sound with 1/F sync contact switch. See the projector data table for further details.

<i>Super8 Sound Sync Bolex SM8</i> .....	<i>PBSM8</i>
<i>Super8 Sound Sync Bolex SP8</i> .....	<i>PBSP8</i>
<i>Super8 Sound Sync Bolex SP80 Special</i> .....	<i>PBSP80</i>
<i>Super8 Sound Sync Bolex SM80</i> .....	<i>PBSM80</i>

## Super8 Sound Sync Kodak Supermatic 70

This is Kodak's compromise between a conventional projector and a continuous-loop cartridge projector. It accepts film in Kodak Supermatic cassettes, and projects them onto either a built-in Ektalite screen or a standard wall screen using just one lens. It has high speed automatic rewind through the gate, and is ready to restart moments after showing the film. Still frame. Auto/manual gain control. VU meter. The same cassette fits the Kodak Videoplayer VP-1 or VP-X. Supplied by Super8 Sound with 1/F sync contact switch installed.

<i>Super8 Sound Sync Kodak Supermatic 70</i> .....	<i>PSUP70</i>
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Some other sync projectors which are available from Super8 Sound are (see data table for details):

<i>Super8 Sound Sync GAF 3000S</i> .....	<i>PGAF3000</i>
<i>Super8 Sound Sync Kodak Ektasound 245</i> .....	<i>PEKTA</i>
<i>Super8 Sound Sync Sankyo 600</i> .....	<i>PSANKYO</i>
<i>Super8 Sound Sync Silma Bivox D-Lux</i> .....	<i>PSILMA</i>

## Continuous-Loop Super 8 Projectors

These cartridge projectors are highly portable rear-screen projectors (some with optional front screen), usually packaged in an attache case. Console versions are also available. They allow Super 8 sound films to be shown in a normally-lit office, plant, or exhibit. They are widely used by salesmen to make a specific point that is best made by a short single-concept film. They are much less expensive and more portable than color videotape recorders/monitors that are also widely used to accomplish the same thing.

A large fraction of all Super 8 release prints made are presented in this cartridge format. In the past such films were produced in 16mm and reduction printed for Super 8 release. Today many Super 8 cartridge films are produced on Super 8 original stock, with a cost saving of between 50 to 70% on the stock cost, and a saving of 80% on the production and post-production equipment costs, compared to 16mm production.



S8S# MPOCOM

Super8 Sound can supply the well-known Technicolor and Fairchild cartridge projectors for producers whose clients already have such equipment, but we recommend that a new installation be equipped with the remarkable MPO Videotronic Compact Super 8 projector.

We have found the Videotronic to be quieter, with better sound and a brighter, larger picture (the 21V/150W bulb is the strongest used in any Super 8 projector), and all this in a lighter and smaller package than its two major competitors.

Super8 Sound can supply sync versions of any MPO Videotronic recording projector on special order, and we also have quantity discount prices on the Videotronic for the producer who wants to supply a large number of projectors with his release prints, or for an in-house film group that wants to project film simultaneously in a number of places. We also have a special rental program for testing acceptability of a film in the rear-screen presentation method. Send for details on Super8 Sound's Videotronic Program.

<i>MPO Videotronic Compact</i> .....	<i>MPOCOM</i>
<i>MPO Videotronic Compact (Recording Sync model)</i> . . .	<i>MPOCOMR</i>
<i>MPO Videotronic Console Model</i> .....	<i>MPOCON</i>
<i>MPO Videotronic Super Exhibit Model</i> .....	<i>MPOEX</i>

# Sync Projector Data Table

PROJECTOR	AMP POWER	FREQ RESPONSE	RECORD LEVEL CONTROL	FINCHING KNOB	STILL FRAME	REEL CAP.	SPLICE HANDLING
Bolex SM8	8W	60-8500Hz	MANUAL (VU)	NO	NO	800'	EATS FILM W/TAPE SPLICES
Bolex SP8	3W	75-10,000Hz	AUTO/MANUAL (LED's)	YES	PREHEAT ONLY	600'	GOOD
Bolex SM80	10W	75-10,000Hz	AUTO/MANUAL (LED's)	YES	PREHEAT ONLY	600'	GOOD
Bolex SP80 Special	10W	75-10,000Hz	AUTO/MANUAL (LED's)	YES	PREHEAT ONLY	600'	GOOD
Elmo ST1200	10W	50-9500Hz	AUTO/MANUAL (VU)	YES	YES	1200'	SOUND WOWS W/TAPE SPLICES
Eumig S807	3W	75-10,000Hz	AUTO	YES	PREHEAT ONLY	600'	GOOD
Eumig 810 HQS	10W	75-10,000Hz	AUTO	YES	PREHEAT ONLY	600'	GOOD
GAF 3000S	NA	100-5000Hz	AUTO	NA	NA	400'	
Kodak Ektasound 245	NA				YES	400'	EXCELLENT
Kodak Supermatic 70	4W	100-5000Hz	AUTO/MANUAL (VU)	NO	YES	400'	EXCELLENT
Kodak TVM100A	4W	100-5000Hz	MANUAL (VU)	YES	NO	1200'	EXCELLENT
Sankyo	NA	NA	AUTO/MANUAL (VU)		NO	600'	
Silma Bivox D-Lux	4W	100-7000Hz	MANUAL	NO	PREHEAT ONLY	600'	
Videotronic Compact	5W	NA	NA	NO	NO	400'	

10

## Projection Lamps

For Bolex SM8, SP8, SP80, Eumig 810

Sankyo, Silma ..... EFP  
 For Bolex SM80, Elmo ST1200 ..... EFR  
 For Eumig S807 ..... P6853  
 For GAF 3000S ..... DIVE  
 For Kodak Ektasound 245 ..... DFE  
 For Kodak Supermatic 70 ..... ELB  
 For Kodak TVM100A, MPO Videotronic ..... DNF

A note on sound projector fidelity: Figures quoted here are as supplied by manufacturers, who vary widely in their criteria for frequency response, power output, etc. Power is generally quoted at the 5% distortion level. Frequency response is generally quoted if there is any response — a few manufacturers also give the range over which response is linear within a certain  $\pm$ dB figure. Most projectors have a significant 24Hz flutter component, at least .2%.

VOLT/WATT	LAMP			AUDIO TRANSFER CABLE	AUDIO RESOLVER CABLE	REMARKS
	ANSI CODE	LIFE/HOURS	LENS			
12V/100W	EFP (P6834)	50	f/1.3, 15-25mm	RCAMINI	ARCSPKR	RUGGED, RELIABLE
12V/100W	EFP	50	f/1.3, 15-30mm	DIN2MINI	DIN2MINI	
15V/150W	EFR	50	f/1.2, 12.5-25mm	DIN2MINI	DIN2MINI	ELECTRONIC SYNC START SYSTEM
12V/100W	EFP	50	f/1.3, 15-25mm	DIN2MINI	DIN2MINI	
15V/150W	EFR	50	f/1.3, 15-25mm, f/1.1, 12.5-25mm, f/1.4, 25-50mm	MINIMINI	MINIMINI	AVAILABLE WITH OPTICAL SOUND
12V/75W	(P6853)	NA	f/1.6, 17-30mm	DIN2MINI	DIN2MINI	
12V/100W	EFP	50	f/1.3, 15-30mm	DIN2MINI	DIN2MINI	AVAILABLE WITH OPTICAL SOUND
12V/150W	DNE	12	f/1.3, 15-25mm			
30V/80W	DFE	50	f/1.3, 15-30mm	RCAMINI	MINIPHON	FAST FORWARD THROUGH THE GATE, FRAGILE
30V/80W	ELB	15	f/1.3, 15-30mm	RCAMINI	MINIPHON	
21V/150W	ONE	25	f/1.6, f/2.0, f/2.5	RCAMINI	MINIXLR	AC SYNC, 5-BLADED SHUTTER
12V/100W	EFP	50	f/1.4, 15-25mm	MINIMINI	MINIMINI	
12V/100W	EFP	50	f/1.3, 16.5-30mm	DIN2MINI	DIN2MINI	
21V/150W	DNF, ELZ, ELV	25		NA	NA	

**A** note on cables: The projector sync cable is a D IN2MIN I. Audio cables (**AUDIO TRANSFER CABLE** from full-coat to stripe and **AUDIO RESOLVER CABLE** for stripe to fullcoat) are for direct connection to the Super8 Sound Recorder. The connector is a miniphone plug which fits the MONITOR output (AUDIO TRANSFER CABLE) and AUX input (AUDIO RESOLVER CABLE) of the Super8 Sound

Recorder. We recommend strongly that you use an equalizer during such transfers, and especially when resolving from stripe. In this case, you'll usually need to adapt the miniphone plug to an RCA phono for input to the equalizer, and you'll need an RCAMINI to connect the equalizer to the Super8 Sound Recorder.

# Super8 Sound Sync Projectors

S8S# ELMOSC8T



## Elmo SC-8T Rear-Screen Projector

Although this is not a continuous-loop projector, it has many of the same applications. The Elmo SC-8T is basically the same mechanical and electrical components as the Elmo ST1200, but squeezed into a portable case with a large rear screen. It accepts film on reels (400 ft.), and can project them both rear screen and front screen.

*Elmo SC-8T Rear Screen Projector ..... ELMOSC8T*

## Xenon Arc Projectors

A Xenon-arc conversion of the Heurtier ST42 is being offered by Valley Projection of Burbank, CA. The lamp is an ozone-free 500-watt Osram Xenon. 1500-hour lamp life. Another firm doing Xenon arc conversions of Super 8 projectors is the Optical Radiation Corporation. See the Publications section of the Super8 Sound Catalog for a list of Super 8 industry addresses.

*Valley Projection Xenon Heurtier ST42 Mono ..... VPXST42*  
*Valley Projection Xenon Heurtier ST42 Stereo . . . . VPXST42S*

## Metal-Arc Projectors

We expect General Electric or Sylvania will soon offer a version of the Marc (GE) or Colorarc (Sylvania) metal-arc lamps and power supplies suitable for replacing the standard Super 8 quartz-halogen lamp. Most Super 8 projectors now use the common EFP lamp, and the blower system can adequately cool the lowest-power metal-arc projector lamps.

This is especially true of the Elmo ST1200, which already uses the 150W EFR bulb. Elmo has introduced a metal-arc projector in Japan, and we hope it will be available soon in the U.S.

## Leader Trimmer

The best way to avoid misthreading an automatic-loading projector is to keep the leader free of wrinkles and with a sharply-cut leading edge. Most projectors have built-in trimmers. If not, use a fingernail clipper or buy this elegant Kodak Leader Trimmer.

*Kodak Leader Trimmer*

*TRIMMER*

## Projection Screens

You should choose a screen surface based on the shape of the audience seating pattern and the ambient light conditions.

**Matte** — reflects less than one-quarter of the incident light straight back, and distributes the rest evenly to sides of room, ceiling, and floor. Equally bright from any angle, but dimmest of all screens.

**Lenticular** — concentrates light in the vertical direction; about one-third the light appears to come straight back and the rest is distributed widely so that seats to sides have a bright image. Best for wide, shallow rooms.

**Beaded** — concentrates light in vertical and horizontal directions; beams about one-half the incident light straight back into a relatively narrow cone. Best view for a long narrow audience in line with the projector.

**Ektalite** — Kodak's special aluminum curved surface concentrates light even more strongly than a beaded screen. It is so bright and so mirror-like that it can be used in rooms with open windows and overhead lights. Of course it can be viewed only from limited angles.

You should choose a screen size based on your room size, seat distribution, and projector brightness. The old rule of thumb is that the screen width should be one-third the distance to the rear seats. Today theaters often use screens that are even wider. The typical Super 8 projector zoom lens (15-25mm) will fill a screen of width four to eight feet at 20 feet. The typical Super 8 projector lamp produces a screen brightness of only a few foot-lamberts for a 3' by 4' image on a matte screen. A foot-lambert is the surface brightness of a diffuse matte white surface on which one footcandle is incident. You can use your light meter to measure screen and projector performance. The SMPTE screening room brightness recommendation is sixteen footlamberts. You can improve things by a) darkening the room, b) using a higher gain screen, or c) getting a metal-arc or Xenon-arc lamphouse for your projector.

Super8 Sound carries Da-Lite beaded surface roll-up screens and Kodak Ektalite screens. The most popular sizes are listed below. These screens are easily suspended from eye-hooks in the ceiling.

<i>Da-Lite Classic (50" x 50")</i> .....	<i>DALITE50</i>
<i>Da-Lite Classic (60" x 60")</i> .....	<i>DALITE60</i>
<i>Da-Lite Classic (70" x 70")</i> .....	<i>DALITE70</i>
<i>Da-Lite Model B (63" x 84")</i> .....	<i>DALITEB7</i>
<i>Da-Lite Model B (72" x 96")</i> .....	<i>DALITEB8</i>
<i>Da-Lite Model C (72" x 96")</i> .....	<i>DAL ITEC8</i>
<i>Da-Lite Model C (108" x 144")</i> .....	<i>DALITEC12</i>
<i>Kodak Ektalite Screen (40" x 40")</i> .....	<i>EKTASC</i>
<i>Kodak Ektalite Screen Sample (9" x 12")</i> .....	<i>EKTASS</i>
<i>(excellent for table top screening)</i>	

# Super 8 Video



S8S# VP1, S8SR, V01800, and KV1910

"Super 8 Video" is a new concept in video production, utilizing inexpensive Super 8 film cameras as the original medium, and Super 8 editing, studio, and transfer equipment in post-production. Four factors combine to make Super 8 Video the lowest cost video production method:

- Super 8 cameras, with built-in single-system or external double-system sound recording facilities, are the least expensive means of original program production for video release or television broadcast.
- Super 8 editing equipment, with its capabilities for multiple sound tracks, multiple (A & B roll) picture tracks, and straightforward physical editing (cutting) at an exact frame, is the least expensive means of editing an original production for video or television.
- Super 8 sound studio equipment, with up to three sound tracks and a sync control track on an inexpensive but high-fidelity four-channel tape recorder, is the least expensive means of sophisticated post-production sound for video or television.
- Super 8 television film chains, especially the extraordinary Kodak Videoplayer flying-spot scanner, are the least expensive means of transfer to video, or direct broadcast of film.

Super 8 Video thus offers the video producer the lowest cost production and post-production techniques available, including color, sync sound, sound and picture editing, and multiple sound track capability. Super 8 Video offers all this plus the extreme portability of three-pound cameras and light-weight cassette sync sound recorders, or the new single-system Super 8 cameras that combine sound and picture recording in a single unit. Super 8 cameras go anywhere, operate on penlight or rechargeable batteries, and film in extreme low light situations (approximately 10 footcandles) in full color.

## Transferring Super 8 to Video

Transfers of Super 8 films to video can be accomplished using conventional film chain techniques since AC synchronous telecine Super 8 projectors are now available. This allows the use of image enhancers, electronic color correction, and other sophisticated video processing. Alternatively, transfers can be made with the extraordinary Kodak Videoplayer, an inexpensive flying-spot scanner that converts Super 8 film to standard NTSC color signals, 525 lines fully-interlaced composite video, with separate audio derived from the magnetic edge stripe or a fullcoat magnetic film recorder running in double-system sync.

## Video Editing of Super 8 Original

Although the double-system Super 8 sync editing equipment available today is by far the least expensive way to edit a Super 8 Video production, a video editor with access to sophisticated 2" quad editing equipment may prefer to transfer the Super 8 original film and sound directly to 2" quad tape for video editing. This practice is recommended by the Canadian Broadcasting Corporation study group that endorsed Super 8 as acceptable for broadcast on Canadian television.

Super8 Sound offers the editor who prefers to edit in video the new SONY VO-2850 U-matic 3/4 inch Videocassette editing system. This relatively inexpensive video editing system and a Kodak Videoplayer (for inexpensive video transfers without tying up a color camera) are an attractive low-cost combination that many smaller television stations and cable companies will find fits well in today's tight budgets.

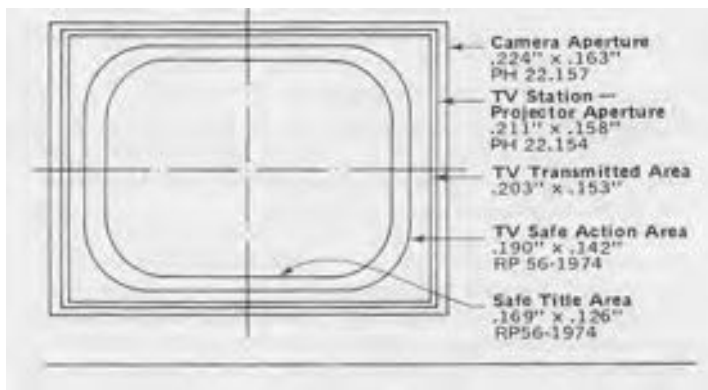
# Super 8 Video

## How Good Is Super 8 on TV?

Super 8 image quality — assuming use of the finest resolution film available in the Super 8 format, Kodachrome 40, and assuming camera lenses of the highest optical quality available — can achieve 100 lines per mm resolution. The Super 8 frame is 4.2mm high by 5.7mm wide, giving a horizontal resolution in excess of 500 lines, which is comparable to the finest 2" quad videotape equipment and to broadcast-standard resolution. By comparison, the 3/4" videocassette (U-matic) recorder has a horizontal resolution of only 240 lines, and the home video format of the future — Videodisc — is expected to have only 300 lines resolution.

There is of course a distinctive change in the video image quality whenever the original medium is film, rather than video camera or video tape. Characteristic differences between film and video in their dynamic contrast range, and associated color shifts, produce the familiar "film" look, as compared to the "live video camera" look. But this look of film is the same whether the original film is 16mm or Super 8. With a crisp Super 8 original, with image enhancement as is generally used for 16mm film transfers, and with electronic color correction, it is extremely difficult to distinguish Super 8 from 16mm in off-the-monitor tests reported in the SMPTE Journal.

Super 8 Television Film Apertures and Safe Areas



## Kodak Supermatic Film Videoplayers

The Kodak Super 8 Film Videoplayer replaces an entire conventional telecine film chain — including telecine projector, optical imaging system, and color video camera — at a price about one-tenth the lowest-cost 16mm film chain. It does this with a device known as a flying-spot-scanner.

The Videoplayer moves Super 8 film continuously (no intermittent motion) past an aerial image of a small TV screen. The screen has no picture on it, just a gray raster-scanning pattern. The image of the screen is the same size as a Super 8 picture frame, and falls directly on the film. If the image could be seen in micro second intervals, it would appear to be a small spot (the image of the spot where the electron beam falls on the TV tube phosphor), raster scanning back and forth across the Super 8 frame. Three photomultiplier detector tubes (Red, Green, Blue) on the other side of the film measure the color of the spot from moment to moment and convert the result into a full NTSC standard composite color signal. There is no color camera.

S8S# VP1, S8SR, K V1910



The Kodak Videoplayer is an enormous engineering breakthrough that expands the options of a Super 8 film producer to include video distribution of his films as well as normal projection. Super8 Sound was selected by Kodak to be in the first group of dealers for the Kodak Videoplayer, and we are franchised to sell the Videoplayer nationwide. A combination of a Super8 Sound film production system and a Kodak Videoplayer is the lowest cost independent video production system with color, editability, and extreme location portability.

### Kodak Film Videoplayer VP-1

The VP-1 accepts Super 8 film, color or black/white, sound or silent, on standard Super 8 reels or automatic-loading Supermatic cassettes (400 ft. maximum — 20 minutes). It operates at 24fps or 18fps, and converts the Super 8 picture film into a standard color television signal that can be displayed on an ordinary color television receiver or a color monitor. Sound is derived from the magnetic edge stripe of a single-system film, or from Super 8 fullcoat magnetic film being played back in synchronism on a double-system sync recorder (Super8 Sound Recorder).

Kodak Videoplayer controls include still frame capability, framing adjustment for still and running frame, a vertical steadiness adjustment, blue/red tint control, and focus.

RF signal outputs are channels 2 or 3. A switch is provided to select between the Videoplayer or the VHF antenna of an ordinary color TV set. Video signal output is a fully interlaced (525 lines) NTSC composite video, with a separate audio. These signals are suitable for display on a color TV monitor, or recording on a video-tape recorder.

### Kodak Film Videoplayer VP-X

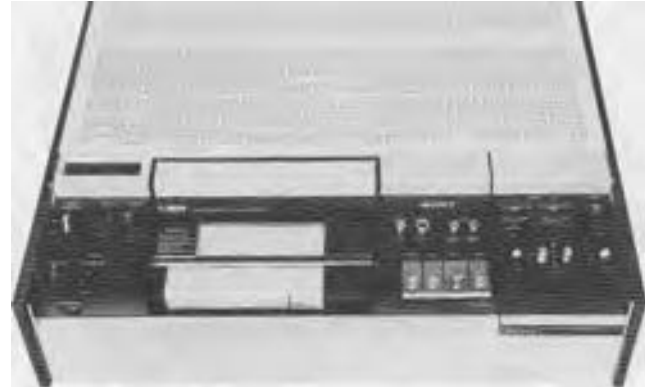
The VP-X has the same specifications as the VP-1 except that it has no RF-modulated output, and it is equipped to accept external synchronization for use in broadcast situations, or where a large video system is run on system-wide "station sync". The external sync inputs include burst flag, composite blanking, vertical drive, composite sync, horizontal drive, and color sub-carrier (BNC connectors). The outputs are composite video 1V peak-to-peak across 75 ohms (BNC connector), and a 600-ohm unbalanced audio signal (RCA phono jack). Signal/rms noise ratio is greater than 37dB. Horizontal resolution is 240 lines — color. No time-base correction is required.

# Super 8 Video

S8S# V01800



S8S# VPX



## SONY U-Matic 3/4-Inch Videocassette Systems

The SONY VO-1800 U-Matic Videocassette Recorder can record or play up to 60 minutes of NTSC color programming on standard 3/4 inch videocassettes. Automatic video gain control; Two audio recording channels, including post-dubbing of sound only; Pause control; Automatic shutoff on rewind; Skew and tracking adjustments for accurate playback of tapes made on other machines. Accepts input signal directly from a color video camera, Kodak Super 8 Film Videoplayer, or from video output of any color monitor. Horizontal resolution 240 lines. Signal/Noise ratio (video) 40dB. Operates on 110V/60Hz.

SONY VO-1800 Videocassette Recorder ..... V01800  
 SONY VP-1200 Videocassette Player ..... VP1200  
 (same as VO-1800 except playback only)

## SONY VO-3800

The SONY VO-3800 is a portable U-Matic videocassette recorder. It records and plays up to 20 minutes of color programming on a special videocassette that can be played on other 3/4" Videocassette Recorders. **Internal** sync generator, audio dubbing, and freeze-frame playback capability. Horizontal resolution 240 lines. Operates on 110V/60Hz, internal rechargeable batteries or external DC source. Comes with AC adapter/charger. Weight 30 lbs., 13 oz.

SONY VO-3800 Portable Color Recorder..... V03800

## SONY DXC-1600

The SONY DXC-1600 is a portable color camera that uses SONY's remarkable one-gun Trinitron pick-up tube. This 1-inch tube has a full 525-line scan, interlaced 2:1, with more than 300 lines resolution at the tube center. **Internal** or external sync. Built-in viewfinder. Built-in condenser microphone. Automatic gain control. Indoor/outdoor color filter. Comes with f/2.5 (18mm-108mm) manual zoom lens. Accepts C-mount lens. Camera comes with a separate battery-operated camera control unit, and a separate AC adapter/charger. Weight: Camera, 8 lbs., 3 oz.; Control Unit, 12 lbs., 9 oz.

SONY DXC-1600 Portable Color Camera ..... DXC1600

## Double-System Sync Videoplayers

Super8 Sound supplies both the VP-1 and the VP-X equipped with a 1/F sync signal, suitable for synchronizing a double-system fullcoat mag film recorder (Super8 Sound Recorder) for high-fidelity double-system video/audio transfers. Cables for video transfer to 3/4" video-cassette are described below.

**Technical Specifications** (on all Videoplayers as supplied by Super8 Sound, except as noted)

**Video Output:** Interlaced NTSC 1V p-p composite video (75 ohms)  
 Signal/rms noise ratio 37dB minimum  
 Horizontal resolution: 240 lines (color)  
 Connector: BNC

**Audio Output:** Reference SMPTE Super 8 Signal Level Test Film: -12dB minimum  
 Impedance: 600 ohms unbalanced  
 Signal/Noise ratio: 37dB minimum (45dB for double-system fullcoat recorder)  
 Flutter: .1% maximum NAB  
 Frequency Response: 100Hz to 7000Hz ±3dB  
 Connector: RCA phonojack

**RF Output (VP-1 only):** Channel 2 or 3  
 Signal level: 3.0mV rms <sup>+0</sup>/<sub>-6</sub> across 75 ohms

Connector: TNC (Coaxial cable supplied to RF isolation switch)  
 FCC classification: The VP-1 is a Class I device.

**Sync Input (VP-X only):** Burst flag, composite blanking, vertical drive, composite synchronization, horizontal drive, color subcarrier.  
 Connector: BNC

**Sync Output:** 1/F sync waveform suitable for synchronizing Super8 Sound Recorder  
 Connector: Miniphone jack  
 Sync Resolver Cable: **DIN2MINI**

**Power Requirements:** 110V-125V, 60Hz, 3 amps

**Weight:** 45 lbs.

**Size:** 21" W x 13-5/8" L x 8-1/2" H

Kodak Videoplayer VP-1 ..... VP1  
 Kodak Videoplayer VP-X ..... VPX



# Super 8 Video



S8S# SONY2850

## SONY VO-2850 Editing System

The SONY VO-2850 Videocassette Editing System consists of two U-Matic Videocassette Mastering Recorder/Editors, and an Editing Remote Control Unit. Electronic editing of a tape on the first machine is accomplished by transferring the desired scenes one at a time to a tape on the second machine. Two Trinitron monitors are used to display the last frame of the previous shot and allow you to single-frame or slow motion to select the first frame of the next shot. The remote controller then starts both recorders simultaneously and makes the transfer.

You can start by buying just one VO-2850 Mastering Recorder and Editor. Later add a second Mastering Recorder/Editor and the Remote Editing Controller.

The VO-2850 System has rotary erase heads, capstan servo control, vertical interval switcher for clean edits without picture roll, separately editable video and two (stereo) audio channels, still frame, and slow motion. Horizontal resolution 240 lines, Signal/Noise ratio, (audio and video) 45dB.

SONY VO-2850 Videocassette Editing System ..... SYST2850  
 SONY VO-2850 Mastering Recorder/Editor (1) . . . SONY 2850  
 Remote Automatic Editing Controller ..... RM400

There are many videocassette system accessories available. We can list only a few of them here. Send for a complete SONY Video catalog. Of course, all the microphones, mixers, tripods, lighting, and many other accessories used for Super 8 sync sound production are also usable for videotape productions, and many of the SONY video accessories are directly usable with the VP-X videoplayers — e.g., external sync generators, distribution amplifiers, phase shifters, and special effects generators.

SONY Color Special Effects Generator ..... SEG600  
 SONY Tuner-Timer (Digital Clock and TV Tuner) ..... TT100  
 SONY Color Distribution Amplifier ..... DA 101  
 SONY Color Sync Generator ..... CG 101  
 SONY Co/or Phase Shifter ..... PSA101

## Sony EIAJ-1 Standard 1/2-Inch Video Systems

These black-and-white and color "porta-pak" systems are what produced the "independent video" revolution. We strongly recommend the latest version Video Rover II (black and white), or Video Rover III (color recorder), as a vital



S8S# VR0111

tool in teaching a beginning cameraman the techniques of steady camera, slow pan, in-focus zoom, follow focus, general composition, lighting, etc. Students get rapid feedback when they do things right or wrong, and good camera handling techniques can be developed quickly.

SONY Video Rover 11 ..... VROV11  
 (AV3400 Recorder, AVC3400 Camera)  
 SONY Video Rover III with black-and-white camera . . . VR0111  
 (AV8400 Recorder, Color Version; AVC3400 B/W Camera)

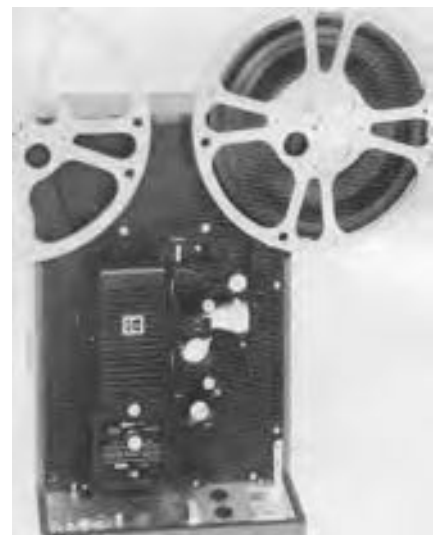
## Video Transfer Cables

Video transfer cable — Kodak Videoplayer (BNC connector) to SONY Videocassette Recorder (UHF) or SONY Monitor (UHF).

Video Transfer Cable (6 feet) ..... BNCUHF

Coaxial cable with UHF connectors and a spare female feed. Use between VCR's and monitors.

Video Cable (5 feet) ..... UHFUHF5  
 Audio Transfer Cable (RCA to RCA) ..... RCA RCA



S8S# TVM100A

# Super 8 Video

## Eastman Super 8 Videofilm Projector TVM100A

This is a conversion of the rugged Kodak Pageant chassis and is probably the heaviest-duty Super 8 projector on the market today. Feed this into an open port on your multiplexer and your TV station will have full Super 8 capability. AC synchronous, 24fps, 5-bladed shutter (120 images per second). Remote control of all functions. Inching knob. No still frame. Automatic threading through the gate. 21V/150W, DNF lamp. 3-level lamp switch. Neutral Density or Color Correction filter holder. VU meter. Manual gain control. 600 ohms balanced line output (XLR). Projection lens not included. 1200 foot reel capacity.

<i>Eastman Videofilm Projector</i> .....	<i>TVM100A</i>
<i>Ektanar Lens 2 inch f/1.6</i> .....	<i>KLENS2</i>
<i>Ektanar Lens 3 inch f/2.0</i> .....	<i>KLENS3</i>
<i>Ektanar Lens 4 inch f/2.5</i> .....	<i>KLENS4</i>

## Elmo TC1200 Telecine Projector

Elmo makes a telecine version of their fine ST1200 projector. 60Hz (U.S.) and 50Hz (Europe) versions are available. 1200 foot reel capacity (360m) — one hour of film. Magnetic or optical tracks. Special telecine lens (25-50mm), 15V/150W lamp. Automatic threading, removable in the middle of a film. 120 images per second (60Hz); 50 images per second (50Hz). Output 0.2V into 10K ohms. Remote control of forward projection only.

<i>Elmo TC1200 Telecine Projector</i> .....	<i>TC1200</i>
<i>Elmo Telecine Projector for 50Hz</i> .....	<i>TC120050</i>

## SONY Trinitron Monitors/Receivers

These monitors have UHF-type connectors and SONY 8-pin connectors for video and audio inputs and outputs. The receiver can accept only RF signals input through the antenna (RF signals are provided by the Kodak Videoplayer VP-1, and the SONY VO-1800 TNC Connectors).

<i>SONY 12" Monitor/Receiver</i> .....	<i>CVM1225</i>
<i>SONY 17" Monitor/Receiver</i> .....	<i>CVM1720</i>
<i>SONY 12" Receiver Only</i> .....	<i>KV1203</i>
<i>SONY 17" Receiver Only</i> .....	<i>KV1711</i>
<i>SONY 19" Receiver Only</i> .....	<i>KV1910</i>



S8S# VIDBEAM

## Advent VideoBeam

The Advent VideoBeam is a unique color television projection system that produces an 87" diagonal color picture on a special Ektalite screen standing 8 feet in front of the projector. The Advent Model 1000A projector is a full VHF/UHF (detent-tuning) television receiver and a video monitor with video inputs and outputs (UHF connectors) suitable for use with SONY videocassette recorders and with the Kodak Videoplayer.

The VideoBeam can be an important part of an in-plant video distribution system, including video distribution of Super 8 training films, since a very large audience can simultaneously view the VideoBeam, and it does not require a completely darkened environment.

Super8 Sound can arrange with the growing national network of authorized Advent dealers to have the VideoBeam installed and serviced in your school, showroom, studio, or home.

<i>Advent VideoBeam</i> .....	<i>VIDBEAM</i>
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## Philips/MCA Optical Videodisc System

Super8 Sound expects the introduction of the Videodisc player in 1976 will create an enormous demand for original new programming aimed at diverse audiences: Educational films for home-study, work-technique films for individual self-instruction, cultural films that previously might have appealed only to local or specialized audiences, unusual entertainment films for the most part probably X-rated material, rock concerts, etc., child-oriented teaching films for use at home and in the schools, and more. Much of this material will be produced in Super 8, transferred to 2" quad videotape masters in a process designed to minimize Super 8 contrast and grain problems, and then recorded as a Videodisc Master. The role of Super 8 in Videodisc programming will depend most on the creative talent of the many aspiring filmmakers who learn Super 8 production techniques in the next few years, and then employ those techniques to produce programs whose content can only be guessed at today.

## Super 8 Video Transfer Services

Super8 Sound can provide low-cost transfer of Super 8 films, with single- or double-system sound, to 3/4" Videocassette. Transfers are fully automatic, using the Kodak Super 8 Film Videoplayer VP-1, and a SONY 3/4" U-Matic Videocassette. No timing, color correction, or image enhancement is possible. Sound is equalized to reduce build-up of tape hiss. Write for our Super 8 Video Services brochure for further information.

## Videocassette Tape

Our videocassettes are SONY brand. Minimum order is 2 cassettes

<i>10 minute cassette</i> .....	<i>KC10</i>
<i>20 minute cassette</i> .....	<i>KC20</i>
<i>30 minute cassette</i> .....	<i>KC30</i>
<i>40 minute cassette</i> .....	<i>KC40</i>
<i>50 minute cassette</i> .....	<i>KC50</i>
<i>60 minute cassette</i> .....	<i>KC60</i>
<i>V03800 Cassette</i> .....	<i>KC520</i>
<i>Kodak Leader Trimmer</i> .....	<i>TRIMMER</i>

# Super8 Sound Systems

Each Super8 Sound System has been designed to accomplish a specific production or post-production function — TV News, Film School Class, Lowest Cost, etc. — and to provide guidance to those selecting a new system or completing an existing one. Super8 Sound Systems also have a money-saving aspect, since Super8 Sound has priced them at an additional discount of five percent below our already low prices for the individual items. Each System contains components carefully chosen to complement one another at the given price level and generally includes a minimum of four units:

**Location Unit** with capability of filming and recording sync sound — generally includes Super8 Sound Sync Camera, Sync Recorder, Microphone, Monitor Headphones, Chestpod, and all necessary cables. Optional equipment could include additional Sync Cameras and Recorders, Wild Recorders, Camera Silencers, Crystal Camera Control, Fishpole Boom and Shock Mount, Tripods, Extension Cables, Carrying Cases, Slate.

**Studio Unit** with capability for sync transfers from location sync tape to Super 8 fullcoat magnetic film. Optional Equalizer, Mixer, Multi-track Recorder, additional Fullcoat Recorders, Compressor/Expander, Dolby Unit, Microphone, and Microphone Stand.

**Editing Unit** with double-system capability for separately cutting picture and mag film, including an Editing Bench or Editing Table and Splicer. Optional Single-System Track Reader, Displacement Recorder, Multiple Strand Editing Equipment.

**Projection Unit** with capability for double-system and single-system screenings, including Super8 Sound Sync

Projector, PhotoStart and necessary cables. Used in conjunction with Studio Unit, the Projection Unit provides for double-system transfers to and from mag stripe. Optional DoubleBand Projector, Screen, Amplifier, Speaker(s), Xenon Arc Projector.

There are many accessories for each of these units, and there are a few production units that perform distinctly different functions from the basic sync sound units above. These include:

**Video Unit**, e.g. Kodak Videoplayer, SONY Trinitron Monitor or Receiver and Video Cassette Recorder. An alternative to the Kodak Videoplayer would be a Super 3 Telecine Projector in a video film chain.

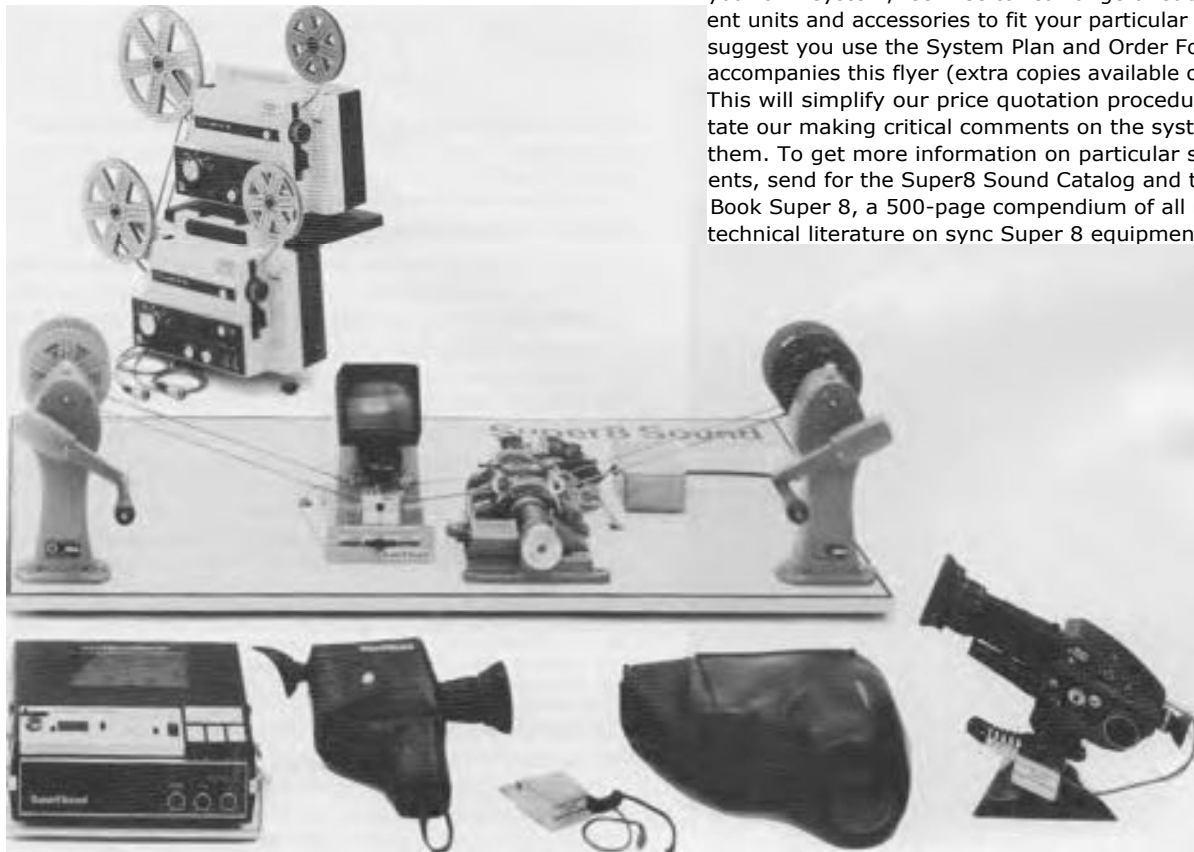
**Lighting Unit**, e.g. new quartz miniature broads, spots, tiny "Tota-Lights", diffusers, gels, etc.

**Titling/Optical Printing/Rephotography Unit**, e.g. an animation stand, a step printer with fades, dissolves, etc., a synchronized projector and camera set-up to permit pans and zooms on Super 8 original material.

**Processing Unit**, e.g. the new fully automatic Kodak Supermatic 8 Processor.

**Special Function Units**, e.g. Crystal Sync Location Units, Cinema Lab Transfer Units, Mixing Studio Units.

Each Super8 Sound System consists of components selected for their suitability and complementarity at the given price level. Nevertheless, a unit from one System is always compatible and may be used with other units from other Systems, since at every stage standard double-system or single-system techniques are being employed. In planning your own system, feel free to rearrange or substitute component units and accessories to fit your particular needs. We suggest you use the System Plan and Order Form that accompanies this flyer (extra copies available on request). This will simplify our price quotation procedure and facilitate our making critical comments on the system, if you wish them. To get more information on particular system components, send for the Super8 Sound Catalog and the Reference Book Super 8, a 500-page compendium of all manufacturers' technical literature on sync Super 8 equipment.



# Super8 Sound Systems

## Super8 Sound Basic Double System

This is our basic double system, not the least expensive system, as there are cheaper cameras and projectors available, but one that contains rugged equipment with a demonstrated capability to stand up to heavy use.

### Location Unit

Sync Camera	Super8 Sound Sync Canon 814E
Sync Recorder	Super8 Sound Scipio Cassette
Camera/Recorder Sync Cable	PCSKP
Microphone	SONY ECM-18 with MPDIN adapter
Monitor Headphones	HP with HPDIN adapter
Camera Pod	Canon Chestpod

### Studio Unit

Fullcoat Recorder	Super8 Sound Recorder
Resolver Cable	RCSKP
Audio Re-olver Cable	ARCDIN
Graphic Equalizer	BSR/Metrotec FEW-2

### Editing Unit

Editing Bench	Super8 Sound Editing Bench S8SEB2
Splicer	Guillotine tape splicer

### Projection Unit

Sync Projector	Super8 Sound Bolex SP80, PhotoStart
Audio Transfer Cable	DIN2MINI

*Super8 Sound Basic Double System ..... BDSYS*

## Super8 Sound Single/Double-System

The purpose of this System is to demonstrate the fundamental compatibility of single-system and double-system Super 8. The single-system camera functions as a location sync recorder, since the sound on stripe can be transferred in sync to fullcoat magnetic film on the Super8 Sound Recorder.

### Location Unit

Sync Camera/Recorder	Kodak Supermatic 200
Microphone	SONY ECM-250
Camera Pod	Canon Chestpod

### Studio Unit

Fullcoat Recorder	Super8 Sound Recorder
Graphic Equalizer	BSR/Metrotec FEW-2
Audio Resolver Cable	MINIPHON

### Editing Unit

Editing Bench	Super8 Sound S8SEB2-1
Splicer	Guillotine tape splicer

### Projection Unit

Sync Projector	Super8 Sound Kodak Supermatic 70, PhotoStart
Audio Transfer Cable	RCAM I N I

*Super8 Sound Single/Double System ..... SDSYS*

## Film School Systems

### General Remarks

Sync sound works best in the film curriculum if it is taught as an advanced subject, following at least one semester of still photography, and one semester of silent filmmaking. The student's first encounter with location sync work should probably be on new single-system Ektasound-type cameras, so there is no hassle with syncing up rushes until the student knows why he wants to edit sound and picture separately. The first encounter with sync editing should probably be editing of visuals into sync against a music track, or other track requiring tight picture editing.

### Space Requirements

In addition to space for an editing room and screening room, there should be a separate space, preferably acoustically insulated, for a sound studio. If it adjoins the screening room, with double-paned soundproof glass, these two rooms can serve also as a dubbing theater.

### Student-Owned Equipment

Film students should be counseled when they are about to purchase their own Super 8 equipment, so that the cameras, recorders, etc. they buy are compatible with the school's equipment. The school can then provide resolving, editing, and transfer facilities. The great majority of Super 8 sync equipment conforms to proposed SMPTE standards

and recommended practices. If the student's equipment conforms, he or she can count on laboratory support being available for film-making activities after graduation. Considering the expense of university education today, and the low cost of Super 8 sync equipment, it is not unreasonable to *require* that students participating in the advanced sync sound courses own their own location equipment.

### Compatibility With Existing 16mm Sync Equipment

Super 8 fullcoat equipment should be (as the Super8 Sound Recorder is) fully compatible with any 16mm sync equipment the school already owns.

### Compatibility With University Videotape Equipment

Films made in Super 8 are valuable source materials for university video programming. A film-to-video transfer capability, such as the Kodak Videoplayer, is all that is required. The video department may wish to utilize the Super 8 facilities as a low-cost color sync sound location production system.

The Super8 Sound Basic Double System above is the minimum teaching system, usable by a small class of six to ten students, with essentially one production being worked on at any one time. It is easily expanded by adding extra cassette sync location units, extra editing units, etc.

## Super8 Sound Film School System A

This is a medium-sized system, with enough facilities for 10 to 20 students in a normal 4-semester-hour laboratory/studio course. The course is assumed to have two or three assistants, and one of these acts as sound technician, doing lab transfers to fullcoat, supervising mixes, and transferring master tracks to stripe. If the students tend to be very enthusiastic and are allowed to work days, nights, and weekends, it will be necessary to have additional location units and editing units.

### Location Unit 1

Sync Camera	Super8 Sound Canon 814E (Macro)
Sync Recorder	Super8 Sound Scipio Cassette
Microphone	SONY ECM-18 with MPDIN adapter
Camera/Recorder Sync Cable	PCSKP, PCS8SR
Monitor Headphones	HP with HPDIN adapter
Fishpole Boom	Super8 SoundBoom with Shock Mount
Camera Pod	Canon Chestpod

### Location Unit 2

Sync Camera	Super8 Sound Nizo S480
Camera Silencer	Super8 Sound Nizo Silencer
Sync Recorder	Super8 Sound Philips 2209
Camera/Recorder Sync Cable	PC2209
Microphone	SONY ECM-18 with MPDIN adapter
Monitor Headphones	HP with HPDIN adapter
Camera Pod	Canon Chestpod

### Location Unit 3

Sync Camera/Recorder	Kodak Supermatic 200 (XL, single system)
Microphone	SONY ECM-18
Camera Pod	Canon Chestpod

### Studio Unit

Fullcoat Recorder	Super8 Sound Recorder
Resolver Cables	RCSKP, RC2209
Audio Resolver Cable	ARCDIN
Graphic Equalizer	BSR/Metrotec FEW-2

### Editing Unit 1

Editing Bench	Super8 Sound Editing Bench S8SEB2
Splicers	Guillotine tape splicer, Hahnel SD8 cement splicer

### Editing Unit 2

Single and Double-System Editing Bench	Super8 Sound S8SEB2-1
Splicers	Guillotine tape splicer, Hahnel SD8 cement splicer

### Projection Unit

Sync Projector	Super8 Sound DoubleBand Projector, PhotoStart
Audio Transfer Cable	DIN2MINI

*Super8 Sound Film School System A ..... FSSYSA*

# Super8 Sound Systems

## Super8 Sound Film School System B

This is a system for a large class of 20 to 40 students divided into four to six sections. Two of the section assistants should be trained as sound specialists, and supervise all resolving, mixes, and transfers to stripe.

### Location Unit 1

Sync Camera  
Camera Silencer  
Crystal Control  
Sync Recorder  
Microphone  
Tripod

Super8 Sound Sync Nizo 801  
Super8 Sound Nizo Silencer  
Super8 Sound XTALN  
Super8 Sound Recorder  
SONY ECM-250  
Miller Fluid Head Tripod

### Location Unit 2

Sync Camera  
Sync Recorder  
Camera/Recorder Sync Cable  
Microphone  
  
Monitor Headphones  
Camera Pod

Super8 Sound Sync Canon 814E  
Super8 Sound Uher CR134  
PCU134  
SONY ECM-18 with MPU134  
adapter  
HP with HPU134 adapter  
Canon Chestpod

### Location Unit 3

Sync Camera  
Sync Recorder  
Camera/Recorder Sync Cable  
Microphone  
Monitor Headphones  
Chestpod

Super8 Sound Sync Canon 814E  
Super8 Sound Scipio Cassette  
PCSKP  
SONY ECM-18 with MPDIN adapter  
HP with HPDIN adapter  
Canon Chestpod

### Location Unit 4

Sync Camera  
Sync Recorder  
Camera/Recorder Sync Cable  
Microphone  
Monitor Headphones  
Fishpole Boom  
  
Camera Pod

Super8 Sound Sync Canon 814E  
Super8 Sound Scipio  
PCSKP  
SONY ECM-18 with MPDIN adapter  
HP with **HPDIN** adapter  
Super8 SoundBoom with Shock  
Mount  
Canon Chestpod

### Location Unit 5

Sync Camera/Recorder  
Microphone  
Tripod

Kodak Supermatic 200  
SONY ECM-18  
Miller Super 8 Fluid Head

### Studio Unit 1

Fullcoat Recorder  
Graphic Equalizer  
Sync Resolver Cables  
Audio Resolver Cables

Super8 Sound Recorder  
BSR/Metrotec FEW-3  
RCSKP, RCU134  
ARCDIN

### Studio Unit 2

Fullcoat Recorder  
Graphic Equalizer  
Resolver Cables

Super8 Sound Recorder  
BSR/Metrotec FEW-2  
RCRCA

### Editing Unit 1

Editing Bench  
Splicers

Super8 Sound S8SEB3\*  
Guillotine tape splicer,  
Hahnel SD8 cement splicer

### Editing Unit 2

Single and Double-System  
Editing Bench  
Splicers

Super8 Sound S8SEB2-1  
Guillotine tape splicer,  
Hahnel SD8 cement splicer

### Editing Unit 3

Horizontal Editing Table  
Splicers

MKM Industries Model 824  
Guillotine tape splicer,  
Hahnel SD8 cement splicer

### Projection Unit 1

Sync Projector  
  
Audio Transfer Cable

Super8 Sound DoubleBand  
Projector, PhotoStart  
DIN2MIN I

### Projection Unit 2

Sync Projector  
  
Audio Transfer Cable  
Audio Resolver Cable

Super8 Sound Elmo ST1200M with  
Hi-Fi or auditorium lens,  
PhotoStart  
MINIMINI  
**MINIMINI**

*\*Available Late Summer, 1975*

*Super8 Sound Film School System B ..... FSSYSB*

## Super8 Sound TV News System

This System has two editing options; fast single-system cutting, or direct transfer of the Super 8 original to two-inch quad for videotape editing. The Canadian Broadcasting Corporation Super 8 study group recommends the latter approach where the video equipment is available. The system is easily expanded for low-budget local TV feature production to include double-system editing by the addition of a Super8 Sound Recorder.

### Location Unit

Single System Camera  
Microphone

Beaulieu 5008S  
SONY ECM-250 with MPDIN  
adapter

Lavalier Microphone  
Monitor Headphones

SONY ECM-16  
HP high impedance with HPSMP  
adapter

Camera Pod

Canon Chestpod

### Studio Unit

Sound on fullcoat is not desirable for fast news program preparation.

### Editing Unit

Single and Double-System  
Editing Bench  
Splicer

Super8 Sound S8SEB2-1  
Guillotine tape splicer

### Projection Unit

Telecine Projector

Kodak TVM100A

### Optional Additions to System

Film Videoplayer  
Fullcoat Recorder  
Film Processor

Kodak VP-1  
Super8 Sound Recorder  
Kodak Supermatic Processor

*Super8 Sound TV News System ..... TVSYS*

# Super8 Sound Systems

## Super8 Sound 16mm System

This is a Super 8 original system calculated to provide the filmmaker with the maximum quality 16mm print for medium-scale distribution. The DS8 camera was selected to provide maximum image stability, and because there is a wide selection of emulsions available in the DS8 format. This System has the option of shooting 16mm original for critical scenes (using a rented 16mm pilotone camera). The sound equipment is compatible with the standard 60Hz pilotone. Original 16mm footage should be integrated with the Super 8 blow-up at the interpositive stage, on 16mm editing equipment.

Final edited sound can be transferred to quarter-inch pilotone on a rented Nagra, or directly to 16mm optical negative stock, using the Super8 Sound Recorder in AC line sync. Conformed original should be blown to a 16mm internegative or interpositive on liquid-gate equipment like that at Colburn Labs in Chicago.

### Location Unit

Sync Camera	Cinema Pathe DS8 (60Hz pilotone or 1/F sync)
Sync Recorder	Super8 Sound XSD Recorder (Pilotone sync Dolby cassette)
Sync Cable	CPXSD
Microphone	SONY ECM-250
Fishpole Boom	Super8 SoundBoom with Shock Mount
Camera Pod	Canon Chestpod

### Studio Unit

Fullcoat Recorder	Super8 Sound Recorder
Graphic Equalizer	BSR/Metrotec FEW-2
Resolver Cable	RCRCA
Audio Resolver Cable	RCAM IN I

### Editing Unit

Editing Bench	Super8 Sound Editing Bench S8SEB2
Splicers	Guillotine tape splicer, Hahnel SD8 cement splicer

### Projection Unit

Sync Projector	Super8 Sound DoubleBand Projector
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*Super8 Sound 16mm System ..... 16SYS*

## Super8 Sound Leacock System

This System is a unit-for-unit replacement for the MIT/Leacock System, the original Super 8 double-system sync production system. It has certain extra capabilities that are presently available which Professor Leacock probably would have included if he were designing the system today. These include double-system video transfer capability using the modified Kodak Videoplayer, and sync rollback during double-system screenings using the Super8 Sound DoubleBand Projector.

### Location Unit

Sync Camera	Super8 Sound Nizo Professional
Camera Silencer	Super8 Sound Nizo Silencer
Crystal Camera Control	Super8 Sound XTALN
Crystal Cassette Recorder	Super8 Sound XSD Recorder
Microphone	SONY ECM-250
Fishpole Boom	Super8 SoundBoom with Shock Mount
Monitor Headphones	HP
Camera Pod	Canon Chestpod

### Studio Unit

Fullcoat Recorder (Transfer Deck)	Super8 Sound Recorder
Graphic Equalizer	BSR/Metrotec FEW-3
Audio Cable	RCAM IN I

### Editing Unit

Horizontal Editing Table	MKM Industries Model 824
Splicers	Guillotine tape splicer, Hahne! SD8 cement splicer

### Projection Unit

Sync Projector	Super8 Sound DoubleBand Projector, PhotoStart
Audio Transfer Cable	DIN2M INI

### Optional Additions to System

Film Videoplayer Super8 Sound Sync Kodak VP-1

*Super8 Sound Leacock System ..... LEASYS*

## Super8 Sound Video/Stereo System

A major release format for Super 8 production is videotape, and any of the Super8 Sound Systems can be a video production system simply by adding a **Video Unit**. This System takes special advantage of the stereophonic sound capability of today's principal video format, the 3/4" U-Matic Cassette. Future video formats such as the videodisc are also likely to be stereophonic. It may therefore be worthwhile to record location sound, especially musical events, in stereo to anticipate future re-release of the production. The stereo location unit of course is entirely compatible with our non-stereo studio, editing and projection units.

This System has a stereo sync location recorder, a stereophonic fullcoat recorder, and a stereo editing bench. Note that it is not technically possible to record stereo sound using two fullcoat recorders. To preserve the proper phase relationship, both stereo channels must be recorded on the same strand of fullcoat.

### Location Unit

Sync Camera	Beaulieu 4008ZM2*
Sync Recorder	Uher CR134*
Sync Cable	ERLSON4 with ERL/U134 adapter
Microphones	SONY ECM-250 (21 with MPU134S adapter)

\*Camera/Recorder pair have crystal control capability.

### Studio Unit

Fullcoat Recorder	Super8 Sound Laboratory Recorder with Stereo Heads, Stereo Preamp**
Graphic Equalizer	BSR/Metrotec FEW-2
Mixer	SONY MX-14

### Editing Unit

Editing Bench	Super8 Sound S8SEB2-S (with Stereo Head)**
Splicers	Guillotine tape splicer, Hahnel SD8 cement splicer

### Projection Unit (Normal release is 3/4" U-Matic Video Cassette)

Stereo Super8 Sync Projector	Super8 Sound Sync Heurtier ST42, PhotoStart
Audio Transfer Cable	DIN2MINI

### Video Unit

Film/Video Transfer Unit	Super8 Sound Sync Kodak Videoplayer VP-1 (synchronizes with Super8 Sound Lab Recorder for stereo sound transfer)
Video Cassette Recorder	SONY VO-1800
TV Monitor	SONY Trinitron CMV-12

\*\*Available Fall, 1975

*Super8 Sound Video/Stereo System ..... VIDSYS*

# Super8 Sound Systems

## Special Function Units

### Minimum Double-System Location Unit With Projector

This Unit depends on a laboratory, school or rental house for compatible sound-studio and editing equipment. The filmmaker owns his own sync location rig and sound projector, the only items he needs away from the film department or lab. He can film year-round, and can show his films at any time.

Of course the same minimal double-system functions can be achieved with other double-system sync cameras ranging up to \$1250 list price, and with other sync recorders ranging up to \$378.

#### Location Unit

Sync Camera	Super8 Sound Sync GAF ST/802
Sync Recorder	Super8 Sound Scipio Cassette
Camera/Recorder Sync Cable	PCSKP
Microphone	SONY ECM-18 with MPDIN adapter
Monitor Headphones	HP with HPDIN adapter
Camera Pod	Canon Chestpod

#### Projection Unit

Sync Projector	Super8 Sound Sync Kodak Ektasound 245
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**Recommended Building-Up Options:** Add an Economy Editing Bench, then a Super8 Sound Recorder, an Equalizer, then a motorization for the Bench.

*Super8 Sound Minimum Double-System Unit . . MDSUNIT*

### Semi-Editable Single-System Unit

This Unit is fully compatible with professional double-system editing since sound can be transferred to fullcoat on the Super8 Sound Recorder. See the Super8 Sound Single/Double-System for further information.

This is the least expensive semi-editable Super 8 production system. Sound must be edited simultaneously with picture (you can't insert a cutaway while the sound continues). Sound is edited at a different point than the picture because of the 18-frame advance (this causes lips to flap with no sound, and sound with no corresponding picture).

#### Location Unit

Sync Camera/Recorder	Kodak Supermatic 200
Microphone	SONY ECM-18
Camera Pod	Canon Chestpod

#### Studio Unit

None needed

#### Editing Unit

Single-system viewer (with sound reader)	Elmo 912
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#### Projection Unit

Sync Projector	Super8 Sound Sync Kodak Ektasound 245
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*Super8 Sound Single-System Unit ..... SSUNIT*

### Super8 Sound Crystal Sync Location Unit

The basic objective of crystal sync is to eliminate the sync cable connection between cameraman and soundman. Beyond that, it is the only way to have multiple cameras and recorders running in sync with each other. Multiple cameras often are necessary to film a one-shot unrepeatable performance, e.g. a concert, sporting event, or important interview. Super8 Sound offers nine crystal sync cameras and five crystal recorders. Those listed here are the least expensive.

#### Location Unit

Sync Camera	Super8 Sound Sync Nizo S480 with Crystal Camera Control (XTALN)
Sync Recorder	Super8 Sound Scipio with Crystal Sync Generator 24 (XG24S)
Microphone	SONY ECM-18 with MPDIN adapter
Headphones	HP with <b>HPDIN</b> adapter
Camera Pod	Canon Chestpod
Sync Cable	None required

*Super8 Sound Crystal Location Unit ..... XTLUNIT*

### Super8 Sound Mini Location Unit

This Unit is a minimum size and weight location package. The total sync sound location package can be fitted into a small attache case.

#### Mini Location Unit

Sync Camera	Super8 Sound Sync Nizo 156XL
Sync Recorder	Uher CR134 Sync Cassette PCU134
Sync Cable	
Microphone	SONY ECM-16 Tieclip
Camera Pod	Canon Chestpod

*Super8 Sound Mini Location Unit ..... MINUNIT*

### Super8 Sound Lab Transfer Unit

This Unit is recommended to 16mm cinema sound labs who are adding Super 8 sync sound services. It includes a capability for sync transfers to Super 8 fullcoat from 1/F sync pulse cassettes, from pilotone sync pulse cassettes (including AC synchronous transfers to 16mm fullcoat), and from Ektasound single-system stripe to Super 8 fullcoat. It also includes transfers from Super 8 fullcoat to magnetic edge stripe, to 16mm fullcoat magnetic film, and to 16mm optical negative tracks.

#### Lab/Studio Unit

Fullcoat Recorder	Super8 Sound Laboratory Recorder
1/F Cassette Recorder	Super8 Sound Sync Uher CR134
Pilotone Cassette Recorder	Super8 Sound XSD Recorder
Pilotone Resolver	Super8 Sound XSD Resolver
Sync Projector	Super8 Sound Sync Elmo ST1200M
Cables	MINIMINI, RCRCA, RCAMINI

*\*Available Fall, 1975*

*Super8 Sound Lab Transfer Unit ..... LABUNIT*

### Super8 Sound Mixing Studio Unit

This special purpose unit utilizes the 4-channel quarter-inch tape recorder as an inexpensive multi-track recorder for sync film work. It depends on the Super8 Sound Recorder's pilotone output and its ability to synchronize itself to a pilotone signal on one of the four tracks. Detailed instructions for preparing A, B, and C sync tracks on quarter-inch tape and mixing back to a fullcoat composite master track will be found in the Super8 Sound Recorder User's Manual, Part I II, section H.

#### Mixing Studio Unit

Fullcoat Recorder	Super8 Sound Recorder
Multitrack Recorder	SONY TC788-4 with Synchro-track
Graphic Equalizer	BSR/Metrotec FEW-4
Mixer	SONY MX-14
Sync Resolver Cables	RCRCA
Audio Resolver Cables	RCAMINI
Amplifier	Marantz 1030 Stereo Console Amplifier
Speakers	Smaller Adverts

*Super8 Sound Mixing Studio Unit ..... MIXUNIT*





# Super8 Sound Cables

One of the most difficult aspects of sound film production to master is the proper identification and use of cables — sync cables, audio cables, microphone cables, lighting cables, extension cables, electrical cables, adapter cables, etc. In this section we have tried to name our proprietary cables as simply as possible. For example, the sync cable from a PC camera sync socket to the Super8 Sound Recorder is known as PCS8SR. Most cables are designated by one or both of their terminations. Some functional cables are named by function — resolver (sync) cables are called RCXXX, the audio cable used during resolving is called ARCXXX, etc. Where we are simply using an existing cable we have tried to use the manufacturer's original designation or a simple generic code.

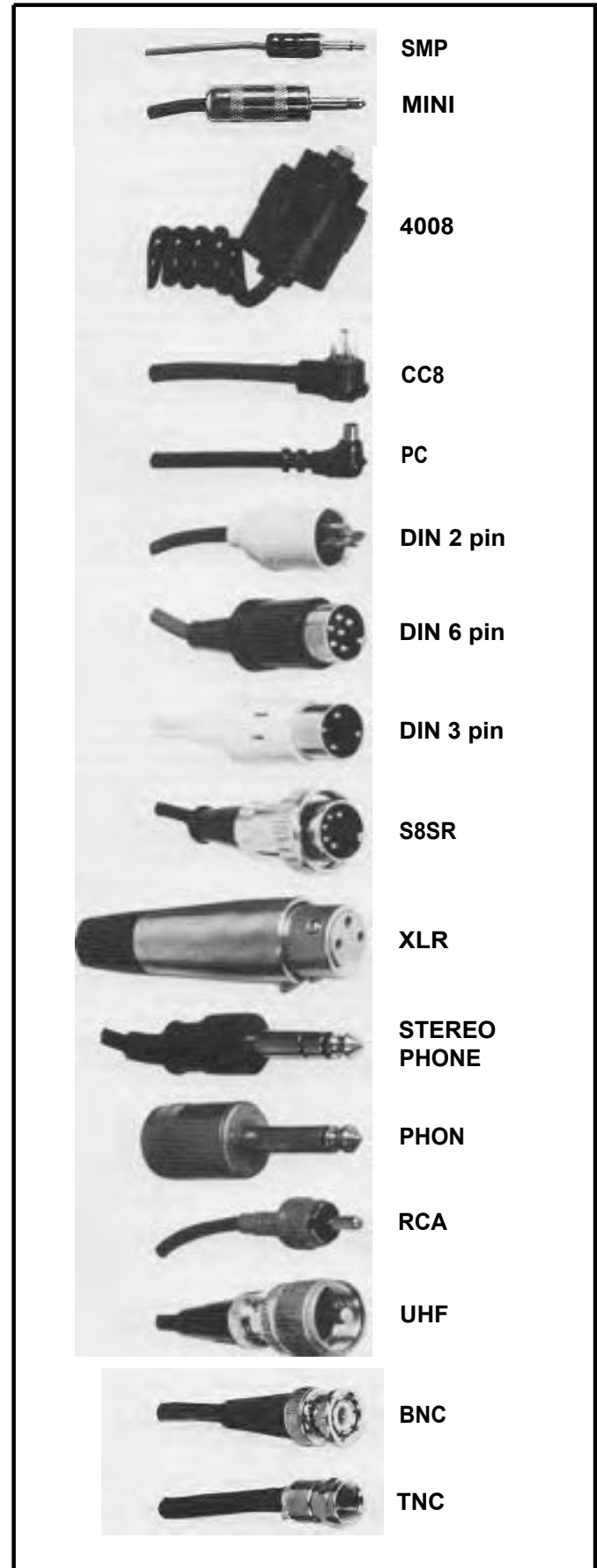
## Review of Cable Connector Types in Use

### 1/F Sync Camera Connectors

Camera sync cables connect a camera to the Super8 Sound Recorder and transmit sync information which allows the Super8 Sound Recorder to match the camera speed frame for frame. Other cables can connect the camera to a sync tape recorder and transmit the sync signal to be recorded on a separate (sync) track of the tape. The sync output from most 1/F (once-per-frame) sync cameras is a 1/F switch closure. A few cameras have a 1/F voltage pulse (1000Hz tone burst). See the Super8 Sound Sync Cameras section of the Super8 Sound Catalog for information as to the type of sync signal and output connector for your particular camera.

Note that the 1/F switch closure must be converted into a voltage pulse if it is to be recorded as a sync track on magnetic tape. Special voltage-pulse-generating circuitry is built into the 1/F switch cables for Super8 Sound's Scipio, Philips 2209, and Uher CR134 sync recorders.

- PC      The PC (an abbreviation for Prontor connector) electronic flash socket. This produces a 1/F switch closure. Most Super 8 cameras have this connector.
- CC8     An 8-pin miniature DIN socket that generates a 1/F sync voltage pulse and has tape recorder start/stop circuitry. Nizo cameras.
- PC8     The same socket as CC8, but no voltage, just a 1/F switch closure. Bauer cameras.
- 4008, 5008     The sync contact switch (Erlson) for Beaulieu 4008 and 5008 cameras, as modified by Hervic for U.S. use to provide a 1/F switch closure.
- MINI    A miniphone jack used in some Optasound conversions, Bolex cameras, and Professional Camera Repair sync conversions. Produces a 1/F switch closure.
- SMP     A subminiphone jack used in most Optasound camera conversions. 1/F switch closure.
- CC9     The 9-pin special socket used only on the Leicina cameras. 1/F switch closure and tape recorder start/stop.
- CP      A special 4-pin Tuchel socket used only on the Cinema Pathe cameras.
- ELMO A    A special locking socket used only on Elmo cameras.
- PCN     A special locking PC socket used only on Nikon cameras.



# Super8 Sound Cables

## Pilotone Sync Camera Connectors

The sync output from pilotone cameras is a 60Hz continuous sinusoidal wave (50Hz in Europe). It varies in voltage from camera to camera — typically lying between .4V and 4V rms.

PI LB4, The Beaulieu pilotone generator for 4008 and 5008 PI LB5 cameras. These generators screw into the Beaulieu cameras, and are fitted with BNC connectors (see below).

TUC The most widely used camera sync socket for pilotone is a standard 5-pin Tuchel socket, e.g. Nizo 800P Professional, Arri S, Arri BL, Bolex.

XLR Another common 16mm and 35mm camera pilotone socket is a locking Cannon (XLR) connector, e.g. Eclair NPR.

BNC Beaulieu R16B, and the Super 8 Beaulieus use this bayonet-type connector.

## 1/F Sync Recorder Connectors

Sync resolver cables connect the Super8 Sound Recorder to a sync tape recorder, which has a prerecorded sync signal on one channel. This signal can be either a continuous 60Hz tone, or a once-per-frame digital pulse or burst. The Super8 Sound Recorder will match its speed to the sync signal (which is a record of the original camera speed) frame for frame. This process of matching up sprocket holes of magnetic film to correspond frame-for-frame to the pulses of a sync track on magnetic tape is called "resolving".

The other track of the sync tape recorder contains the audio, which is connected to the AUX input of the Super8 Sound Recorder by an Audio Resolver Cable as described below.

The sync socket of the Super8 Sound Recorder is a 5-pin 180° DIN female with lock ring. Resolver cables for transfers to the Super8 Sound Recorder are designated "RC", e.g. RC2209 for the Philips 2209.

The sync output sockets of the most common sync tape recorders are briefly summarized here.

- SKP The Super8 Sound Scipio uses a 6-pin DIN 240° socket. Sync on pin 2, ground on pin 3.
- 2209 The Super8 Sound Philips 2209 also uses the 6-pin DIN 240° socket, but sync is now on pin 6, ground on pin 3.
- U134 The Super8 Sound Uher CR134 (and the older identical Uher 124) uses a 7-pin DIN socket of which 5 pins are in the standard 180° DIN pattern. Sync is on pin 3, ground on pin 2 (both standard).

## Pilotone Sync Recorder Connectors

TUC The most common type of sync socket on pilotone recorders is a 6-pin Tuchel connector (240° pattern similar to the 240° DIN).

RCA The Super8 Sound XSD Recorder, and most stereophonic quarter-inch tape recorders used for sync work, use an RCA phono jack for sync output.

## Sync Projector Connectors

Sync projectors have a 1/F switch closure. Super8 Sound Projector Sync Modification Kits have a cable with a DIN male plug connector (180° 5-pin) suitable for connection to the sync socket of the Super8 Sound Recorder. Super8 Sound Sync Projectors supplied by Super8 Sound, and PKITs installed by Super8 Sound, have a miniphone jack. A DIN2MIN I sync cable is used to connect the Sync Projector to the Super8 Sound Recorder. This cable is supplied with all Super8 Sound Sync Projectors.

## Sync Cables

### 1/F Sync Camera Cables

Cables with an asterisk are special order items. Allow six weeks for delivery. Others are normally in stock.

PC to Super8 Sound Recorder .....	PC85SR
PC to Scipio .....	PC8SKP
PC to Philips 2209 .....	PC2209
PC to Uher CR134 .....	PCU134
CC8 to Super8 Sound Recorder .....	CC85SR
CC8 to Scipio .....	CC8SKP
CC8 to Philips 2209 .....	CC82209
CC8 to Uher CR134 .....	CC8U134
CC8 to Scipio with recorder start/stop .....	CC8SKPS
CC8 to Philips 2209 with recorder start/stop .....	CC82209S
PC8 to Super8 Sound Recorder .....	PC85SR*
PC8 to Scipio .....	PC8SKP*
PC8 to Philips 2209 .....	PC82209*
PC8 to Uher CR134 .....	PC8U134*
Beaulieu 4008ZM2, 4008M3 to Super8 Sound Recorder .....	40085SR
Beaulieu 5008S to Super8 Sound Recorder .....	50085SR

To adapt the Beaulieu 1/F cables above for use with the Scipio, Philips 2209, or Uher CR134, use the 1/F Adapter Cables listed below.

Miniphone plug to Super8 Sound Recorder .....	MINI8SR
Miniphone plug to Scipio .....	MINISKP
Miniphone plug to Philips 2209 .....	MINI2209
Miniphone plug to Uher CR134 .....	MINIU134
Subminiphone plug to Super8 Sound Recorder .....	SMPS8SR
Subminiphone plug to Scipio .....	SMPSKP
Subminiphone plug to Philips 2209 .....	SMP2209
Subminiphone plug to Uher CR134 .....	SMPU134
Leicina cameras to Super8 Sound Recorder .....	CC95SR*
Leicina cameras to Scipio .....	CC9SKP*
Leicina cameras to Philips 2209 .....	CC92209*
Leicina cameras to Uher CR134 .....	CC9U134*
Cinema Pathe to Super8 Sound Recorder .....	CPS8SR*
Cinema Pathe to Scipio .....	CPSKP*
Cinema Pathe to Philips 2209 .....	CP2209*
Cinema Pathe to Uher CR134 .....	CPU134*
Elmo cameras to Super8 Sound Recorder .....	ELMOS8SR*
Elmo cameras to Scipio .....	ELMOSKP*
Elmo cameras to Philips 2209 .....	ELMO2209*
Elmo cameras to Uher CR134 .....	ELMOU134*
Nikon cameras to Super8 Sound Recorder .....	PCNS8SR*
Nikon cameras to Scipio .....	PCNSKP*
Nikon cameras to Philips 2209 .....	PCN2209*
Nikon cameras to Uher CR134 .....	PCNU134*
Unconnected sync cable (use with any 1/F switch) for Super8 Sound Recorder .....	UCSBSR

# Super8 Sound Cables

## 1/F Sync Adapter Cables

These adapters allow use of the Super8 Sound Recorder 1/F switch cables (e.g. 4008S8SR, PCS8SR), including extension cables, with our three cassette recorders.

To adapt 1/F S8SR cable to Scipio .....	SKPA
To adapt 1/F S8SR cable to Philips 2209 .....	2209A
To adapt 1/F S8SR cable to Uher CR134 .....	U134A

## Pilotone Sync Camera Cables

BNC Pilotone to Super8 Sound Recorder .....	BNC8SR
BNC Pilotone to XSD Recorder .....	BNCXSD
Tuchel Pilotone to Super8 Sound Recorder .....	TUCS8SR
Tuchel Pilotone to XSD Recorder .....	TUCXSD
XLR (Cannon) Pilotone to Super8 Sound Recorder .....	XLRS8SR
XLR (Cannon) to XSD Recorder .....	XL RXSD
Cinema Pa the to XSD Recorder .....	CPXSD

## Sync Extension Cables

Some of these are 1/F sync extensions only (2-wire cables), others are full extensions of the Super8 Sound Recorder sync socket (5-wire). The coiled cord versions stretch to 6 times their coiled length.

12-foot camera 1/F sync extension (2-wire) .....	EC12
25-foot camera 1/F sync extension (2-wire) . . . . .	EC25
25-foot (4-ft-coiled) camera 1/F extension (2-wire) .....	ECC25
6-foot S8SR sync socket extension .....	DINDIN6

## 1/F Sync Resolver Cables

Resolver Cable for Super8 Sound Recorder	
from Scipio .....	RCSKP
from Philips 2209 .....	RC2209
from Uher CR134 and Uher 124 .....	RCU 134
from Elmo Cinematic Sound CR-1 .....	RCELMO*
from Farnell Tandberg .....	RCFT*

## Pilotone Sync Resolver Cables

Resolver Cable for Super8 Sound Recorder	
from Super8 Sound XSD Recorder .....	DIN2RCA
from Nagra IV .....	RCNIV*
Adapt S8SR sync socket to 4 RCA jacks .....	DIN4RCA

Many of the older sync recorders provide only a weak pilotone signal output (less than 1mV). These signals must be boosted by an extra stage of preamplification before they can be fed into the Super8 Sound Recorder. Two cables are required, one from the pilotone recorder to the preamp (RCA phono input), and one from the preamp (RCA phono output) to the Super8 Sound Recorder. If you have an amplifier with a magnetic cartridge or tape head input, it can probably be used. Super8 Sound sells a battery-operated preamp, and a cable that connects the preamp to the Super8 Sound Recorder.

Resolver Cable for Super8 Sound Recorder	
from Arrivox Tandberg, Nagra III, Tandberg	
11P, and Uher 1000N, 1200, to preamp . . . . .	TUCRCA
from Stellavox .....	RCS TEL *
Preamp for weak sync signals .....	PREAMP
Resolver cable from preamp to S8SR .....	DIN2RCA

## Multiple Recorder Resolver Cables

These cables allow up to six Super8 Sound Recorders to synchronize with a single 1/F contact-switch signal (e.g. a sync projector). Each cable has a locking 5-pin DIN female connector (like the Super8 Sound Recorder sync socket) and a number of 5-pin DIN males. Use for multiple track sound mix with picture.

Two-recorder Resolver Cable .....	MRC2
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Three-recorder Resolver Cable .....	MR C3
Four-recorder Resolver Cable .....	MRC4
Five-recorder Resolver Cable .....	MRC5
Six-recorder Resolver Cable .....	MRC6

## Sync Projector Cables

Super8 Sound Sync Projectors usually come supplied with sync cables (DIN2MINI). Owners of the sync Elmo ST1200 also require this cable.

Super8 Sound Sync Projector Cable .....	DIN2MINI
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# Audio Cables

## Audio Resolver Cables

The Sync Resolver Cables above carry the sync signal from a sync tape recorder or a sync sound projector to the sync socket of the Super8 Sound Recorder. The audio signal is carried by the Audio Resolver Cables listed here. They connect to the AUX (miniphone) input of the Super8 Sound Recorder. We strongly recommend the use of an equalizer during resolving. To connect to an equalizer you should buy a miniphone-to-RCA phono adapter (MPRCA). You also need an RCAMINI cable to connect the equalizer to the Super8 Sound Recorder AUX input.

Sync sound can also be resolved to fullcoat from the magnetic edge stripe of a single-system film. The sync signal is carried by the sync cable included with all sync projectors sold by Super8 Sound, the audio by the audio resolver cables listed below. *An equalizer is essential.*

Audio Resolver Cable for Super8 Sound Recorder	
from Scipio, Philips 2209, Stellavox, Uher CR134 .....	ARCDIN
from Uher CR134 (Stereo) .....	ARCU134
from Arrivox-Tandberg, Nagra III, Nagra IV,	
Uher 1000N, 1200. ....	ARCBAN
— from Tandberg 11P, Farnell-Tandberg,	
Elmo Cinematic Sound, Fuji Puls-Sync .....	ARCMINI
— from all Eumigs, Bolex SP8, SP80 Special,	
SM80, Silma Bivox D-Lux .....	DIN2MINI
from Elmo ST1200, Sanyo 600 .....	MINIMINI
— from Kodak Ektasound 245, Supermatic 70.	
— from Kodak TVM100A .....	MINIXLR
— from Bolex SM8 (and other projectors	
with only a 2-pin DIN output) .....	ARCSPKR
— Adapter, to connect Audio Resolver Cables	
to RCA inputs of an equalizer .....	MPRCA
— Cable from equalizer to Super8 Sound Recorder .....	RCAMINI

## Audio Transfer Cables

While Audio Resolver Cables carry sound to fullcoat, Audio Transfer Cables carry sound from fullcoat, to a magnetic edge stripe for example, or to a sync tape recorder for a safe copy of an important track. Use an RCAMINI cable if the first step of the transfer is to an equalizer. If the transfer is from a final mixed master composite track, equalization is not generally needed.

Audio Transfer Cable from Super8 Sound Recorder	
— to all Eumigs, Bolex SP80 Special, SP8, SM80,	
Silma Bivox D-Lux .....	DIN2MINI
— to Elmo ST1200, Sanyo 600 .....	MINIMINI
— to Kodak Ektasound 245, Supermatic 70,	
TVM100A, Bolex SM8 .....	RCAMINI
— to most quarter-inch tape recorders .....	RCAMINI

# Super8 Sound Cables

## Audio and Adapter Cables

Miniplug to RCA plug (6 ft.) .....	RCAMINI
RCA phono plug to RCA phono plug (6 ft.) .....	RCA RCA
RCA phono plug to X" phono plug .....	RCAPHON
RCA stereo to RCA stereo (6 ft.) .....	RCA2RCA
Miniplug to Minijack (15 ft.) .....	EC5M
Miniplug to Minijack (30 ft.) .....	ECOM
Y-adapter — two RCA jacks to one RCA plug .....	Y RCA
Y-adapter — two Minijacks to one Miniplug .....	YMINI
Adapt miniphone microphone plug for use with European recorders (Scipio, Philips 2209) .....	MPDIN
Adapt miniphone to fit RCA inputs .....	MPRCA
Adapt miniphone to fit 1/4" phone inputs (e.g. EBAMP) .	MPPHON
Adapt miniphone microphone plug for use with Uher CR134 .....	MPU134
Adapt 2 miniphones for use with Uher CR134 stereo . .	MPU134S
Adapt stereo headphones for monitor use with miniphone monitor output (Super8 Sound Recorder) .	HPMINI
Adapt stereo headphones for monitor use with 2-pin DIN speaker output (Scipio, 2209) .....	HPDIN
Adapt stereo headphones for use with Uher CR134. .	HPU134
Adapt stereo headphones for use with Beaulieu 5008S •	HPSMP
Adapt Cannon XLR microphone plug for use with miniphone mic input (Super8 Sound Recorder) .	XL RMINI
Adapt Cannon XLR microphone plug for use with a DIN mic input (Scipio, 2209, Beaulieu 5008S) .....	XLRDIN
Adapt Cannon XLR microphone plug for use with a 1/4" phone input (XSD Recorder) .....	XLRPHON

## Video Cables

Kodak Videoplayer to SONY VCR or to SONY Monitor. .	BNCUHF
SONY VCR to SONY Monitor (UHF to UHF), 5 ft. . .	UHFUHF5
Kodak Videoplayer VP-1, RF output to 75ohm monitor input .....	TNCTNC

## Suggestions for Cable Use

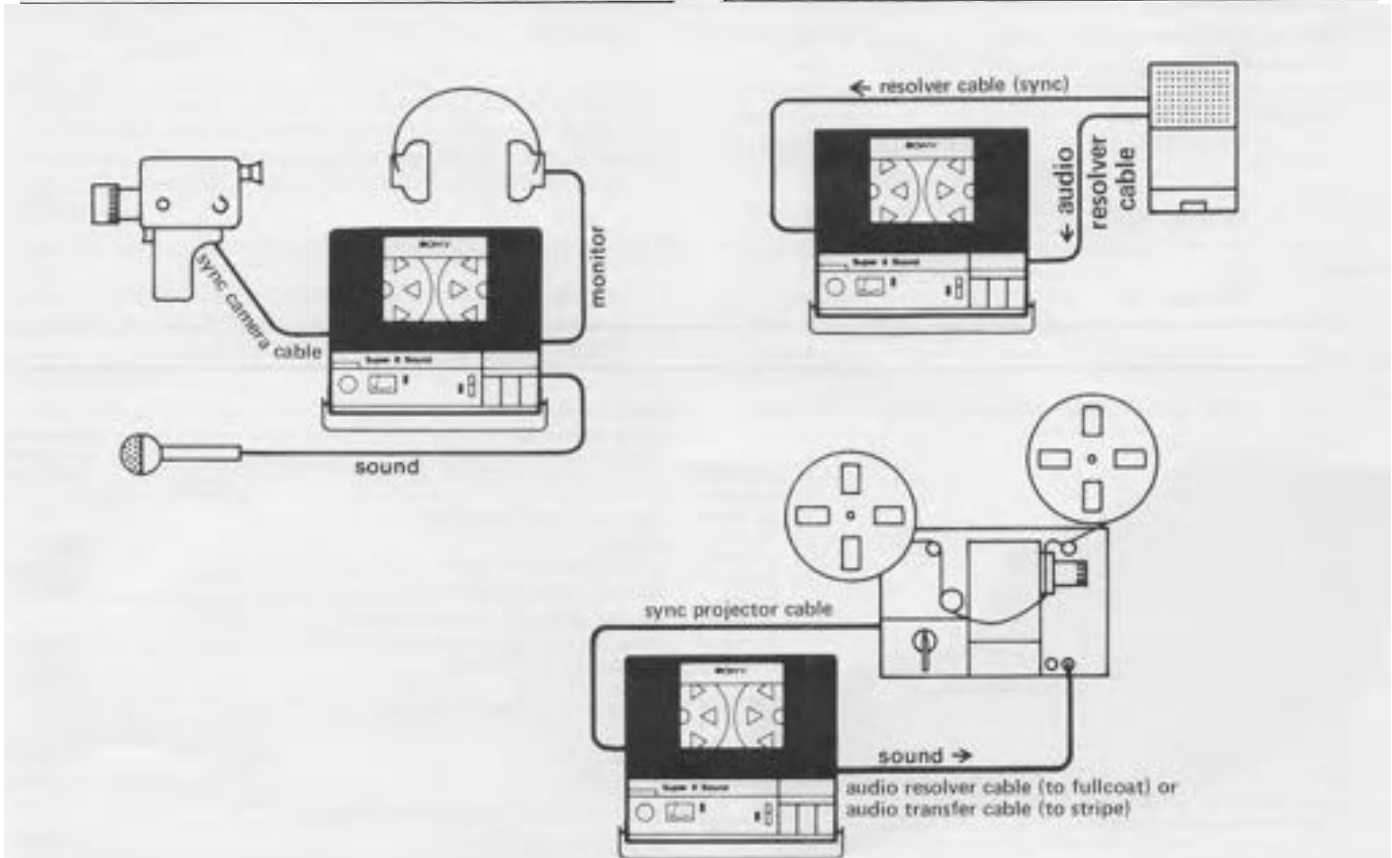
Once you have mastered the names and appearances of the essential cables for your requirements, you must learn to use cables properly. Here are a few tips and suggestions.

- On location, always gaffer tape cables into place. Tape connections between cables and adapters, and tape cables to tripod legs, tables, etc.
- For mobile shots, strain relieve all cables by tying a knot in the cable around the recorder handle and the chestpod. If something pulls on the cable, it will pull on the knot, and not on the connector.
- Mark similar-looking cables with fold-over pressure sensitive labels to distinguish their functions.
- Keep related cables together in large plastic Mini-Grip bags, and label or mark the bag.
- When storing cables, coil them up neatly and wrap around one turn of 3/4" masking tape to hold them in a coil.
- Learn to use a volt-ohmmeter to check cable continuity, and to use a soldering iron to repair a faulty cable. These tools, cablestrippers, and solder should be carried on location.
- In the studio, tape cables down to table surfaces, or use cable clips, to keep them orderly and identifiable quickly when you need to make changes.

## Cable Clips

These are snap-in clips with pressure sensitive adhesive backs. Stick them anywhere and dress the cable neatly through the clip.

Cable Clips (1 dozen) .....	CCLIPS
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# Film, Fullcoat, Etc.

## Super 8 Films

All our film is Eastman Kodak. Our minimum film order is by the carton, usually 20 rolls or cartridges. Super 8 film comes in six different configurations: 50 foot silent cartridges (#464), 50 foot sound cartridges (#594), 100 foot Double Super 8 rolls (#580), 400 foot Double Super 8 on a core (#604), 200 foot silent cartridges, and 200 foot sound cartridges.

We provide here a brief summary of the characteristics of Eastman Kodak films presently available in the Super 8 format. If and when Super8 Sound handles a significant volume of Super 8 film, we may be in a position to place special orders for important emulsions not presently available, e.g. ECO in Super 8 cartridges, or the new color negative 7247 in Double Super 8.

Type of Film		Type of Color Balance	Filter/ASA Film Speed							
			Daylight 3400° K	Photo Flood 3200° K	Tungsten 50' Silent	594 50' Sound	289 200' Silent	288 200' Sound	580 100' DS	604 400' DS
KMA	Kodachrome 40	A 3400° K	85/25 none/40	82A/32	X	X			X	
EMA	Ektachrome 40	A 3400° K	85/25 none/40	not rec.	X					
ELA	Ektachrome 160	A 3400° K	85/100 none/160	82A/125	X	X				
EG	Ektachrome Type G (Indoor/Outdoor)	G any light	none/60 none/160	none/160	X					
EFB	Ektachrome EF (7242)	B 3200° K	85B/80 81A/100	none/125	X			X	X	
ECO	Ektachrome Commercial (7252)	B 3200° K	<b>85B/16 81A/100</b>	none/25					X	X
ESM	Ektachrome SM (7244)	B 3200° K	85/100 81A/125	none/160	X	X	X	X		
PXR	Plus X Reversal 7276		—/60	—/40	X				X	
TXR	Tri X Reversal 7278		—/200	—/160	X				X	
4XR	4X Reversal 7277		—/400	—/320	X				X	

All films, color and B/W, are reversal films.

### 50 foot Silent Cartridges

Kodachrome 40	KMA464
Ektachrome 40	EMA464
Ektachrome 160	ELA464
Ektachrome 160 type G	EG464
Ektachrome EF (7242)	EFB464
Ektachrome SM (7244)	ESM464
Plus-X Reversal (7276)	PXR464
Tri-X Reversal (7278)	TXR464
4-X Reversal (7277)	4X R464

### 50 foot Sound Cartridges

Kodachrome 40	KMA594
Ektachrome 160	ELA594
Ektachrome EF (7242)	EFB594
Ektachrome SM (7244)	ESM594

Kodak Processing Mailers — prepaid for 50 ft silent or sound cartridges ..... PK59

### 200 foot Sound Cartridges

Kodachrome 40	KMA200S
Ektachrome EF (7242)	EFB200S
Ektachrome SM (7244)	ESM200S

### 200 foot Silent Cartridges

Kodachrome 40	KMA200
Ektachrome EF (7242)	EFB200
Ektachrome SM (7244)	ESM200

### Double Super 8 — 100 foot Rolls

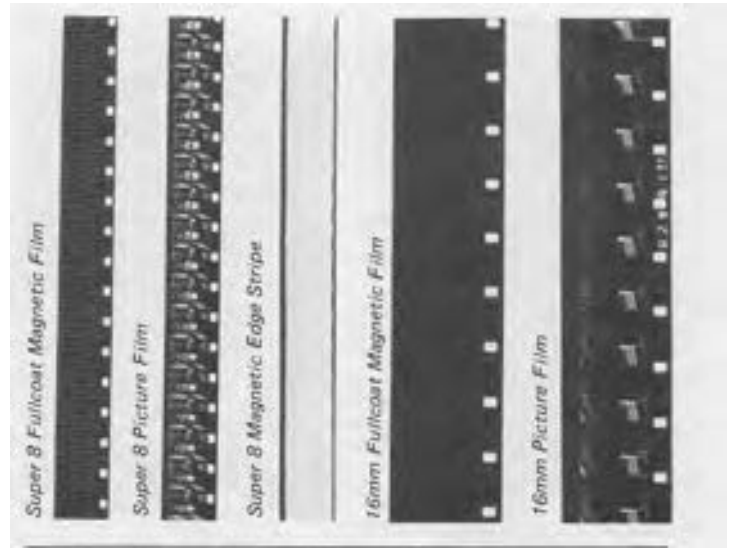
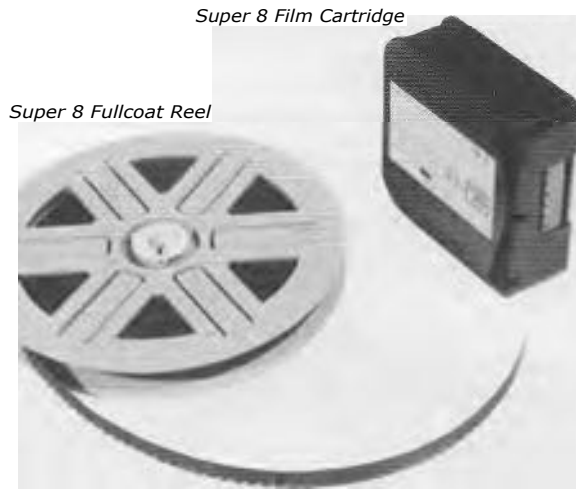
Ektachrome Commercial, ECO (7252)	SP580J
Ektachrome EF (7242)	EFB580
Kodachrome 40	KMA580
Kodachrome 40 with prestripe	KMA556
Plus-X (7276)	PXR580
Tri-X (7278)	TXR580
4-X (7277)	4XR580

### 200 foot Single-strand with Mag Stripe

Ektachrome EF (7242)	S0240
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400' rolls are available on special order — minimum purchase, 9600 feet.

# Film, Fullcoat, Etc.



## Super 8 Fullcoat Magnetic Film

Our fullcoat is a 3.3 mil thick magnetic film with a polyester base from Pyral in France. We now stock large quantities of fullcoat, and offer a volume discount schedule.

Technical Specifications: Pyral Super 8 magnetic film

Thickness:	Base	75um
	Coating	14um
	Overall	89um
Width:		7.975 ± 0.040mm
Perforation pitch:		4.235 ± 0.010mm
Climatic Extremes:		
	Temperature	-40 to +60 °C
	Humidity	0 to 90 % Rel. Hum.
Intrinsic Coercivity:		25 x 10 <sup>3</sup> Aim
Remanent Induction:		0.092 Wb/m <sup>2</sup>

Our 380 foot reel of fullcoat (115 meters, 19 minutes running time) is supplied on an auto-threading Super 8 reel (5" diameter) in a plastic case, with a quarter-inch hub adapter. This is the maximum amount that fits the Super8 Sound Recorder.

380 foot reel fullcoat ..... FCP19

Our 1200 foot reel of fullcoat (365 meters, 1 hour) is supplied on a 10 1/2" 8mm reel with a 5/16" center hole. It must be respooled onto 5" reels for use with the Super8 Sound Recorder.

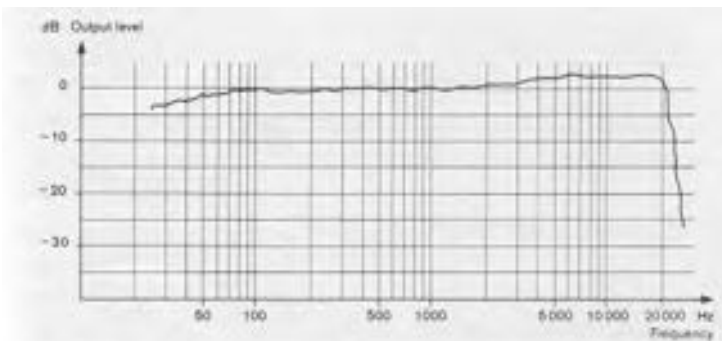
1200 foot reel fullcoat ..... FCP60

## Super 8 Leaders

We offer several kinds of leader: white, black (opaque for A & B rolling), color, black sound-stripped, and reduction prints of SMPTE Universal Leader (with or without stripe). Sections of colored leader serve as a visual cue during assembly of multiple picture strands or sound tracks. For plugging blank sections of the sound track during editing, we suggest short reels (remnants) of fullcoat magnetic film. These remnants are also useful as opaque leader, especially for use with the Super8 Sound PhotoStart. See the Editing Accessories section of Super8 Sound Catalog, or the Super8 Sound Recorder User's Manual, for an explanation.

The SMPTE Leader should be placed at the head of your film, and brought into sync with a beep tone at the head of your magnetic track on the editing bench. When you do the transfers to edge-stripped prints, the beep tone should be heard exactly at frame "2" of the SMPTE leader.

Kodak White Leader (7985), 5 50-foot rolls .....	WL579-5
Kodak White Leader (7985), 1000-foot roll .....	WL584
Kodak Sound Leader (8985), 5 50 foot rolls .....	SL576-5
Kodak B/W Opaque, 1000-foot roll .....	L0584
Criterion Black Opaque, 1000-foot roll .....	CR1584
Kodak Green Leader, 950-foot roll .....	LG584
Kodak Blue Leader, 1200-foot roll .....	LM584
SMPTE Universal Leader, 12 leaders on a 50-foot reel. . .	LMSMPTE
SMPTE Universal Leader with prestripe, 12 leaders on a 50-foot reel .....	LSMPTES
Fullcoat Remnants, 5 x 100' on 50' reels .....	FCP5-5



Super 8 Fullcoat Magnetic Film Frequency Response



## Super 8 Sound Inc.

95 Harvey Street, Cambridge, Mass. 02140

# Film, Fullcoat, Etc.

## Empty Super 8 Reels

In addition to auto-threading reels in 200', 400', and 600' sizes, we also offer 800' and 1200' Super 8 reels. Note that a 200' reel takes 200' of acetate base (5.8 mil) film, but nearly 400' of polyester base (3.3 mil) fullcoat magnetic film.

Kodak 3" 50' reel .....	REEL3
Bonum 5" 200' reel, plastic case .....	REEL5
Bonum 7" 400' reel, plastic case .....	REEL7
Bonum 8" 600' reel, plastic case .....	REELS
Bolex 9" 800' reel .....	REEL9
Elmo 10 1/2" 1200' reel (metal) .....	REEL10
Kodak 1200' reel (metal) .....	REEL K
Kodak 1200' reel can (metal, holds 2 reels) .....	CAN 1200
Kodak 50 ft. Supermatic Cassette (no reel) .....	KCASSA
Kodak 100 ft. Supermatic Cassette .....	KCASSB
Kodak 200 ft. Supermatic Cassette .....	KCASSC
Kodak 400 ft. Supermatic Cassette .....	KCASSD

Reel Hub Adapters — Super 8 to 5/16" (1 dozen) . HUBADAPT

## 8mm Split Reels

Split 8mm reels are available, on special order, in 800' and 1200' sizes. These reels fit a standard 5/16" keyed rewind shaft.

800' 8mm Split Reel.....	SREEL8
1200' 8mm Split Reel .....	SREEL 12

## Batteries

Just as battery operation is one of the great advantages of Super 8 sync filmmaking, dead batteries are frequently the greatest disadvantage. Always carry spare batteries for

everything. We sell only alkaline (Mallory Duracell) and rechargeable NiCad batteries (GE Permacell). Batteries must be ordered in increments of the set quantity listed below. The light duty NiCads have 5 hours operation, and the heavy duty 15 hours operation, before recharging.

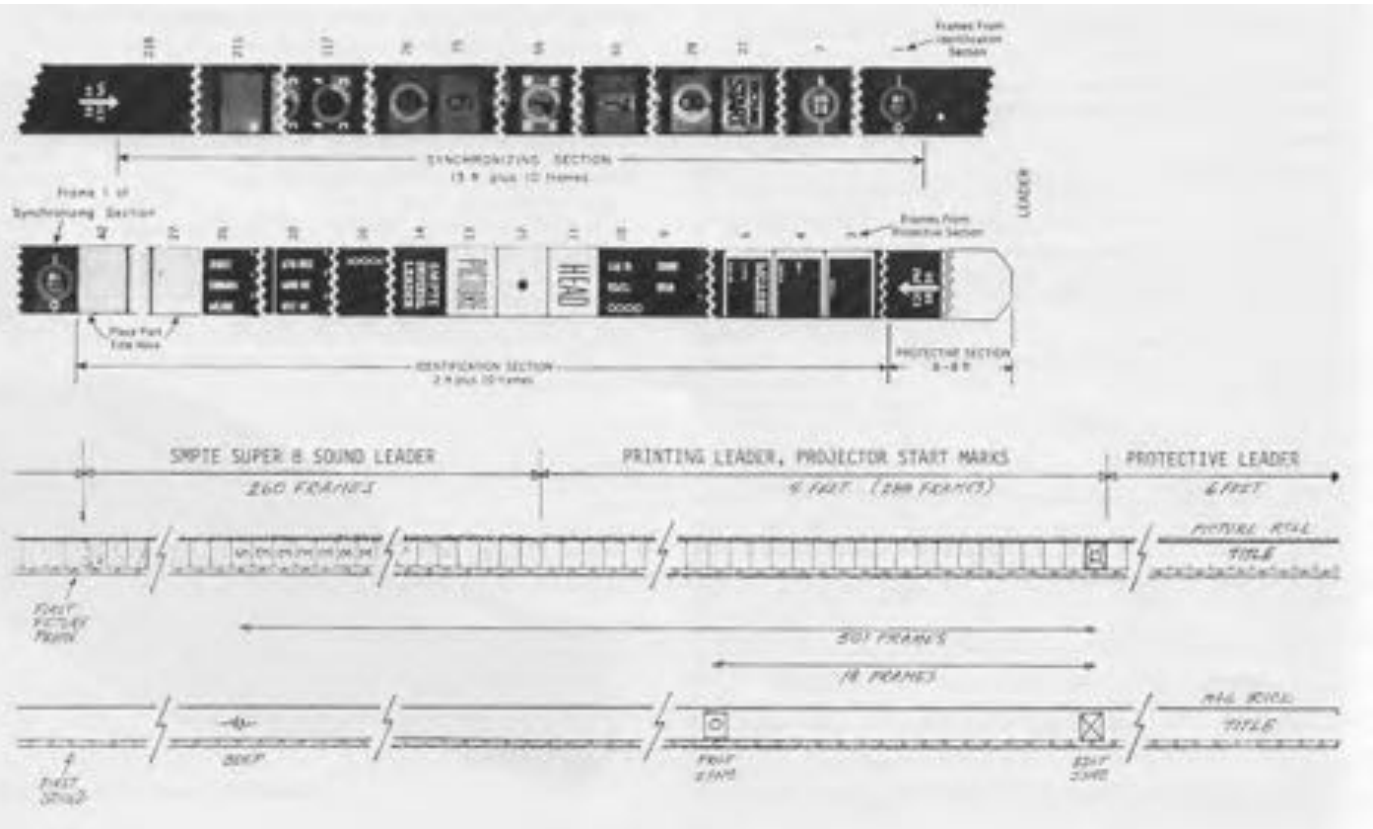
AA cells — for cameras, microphones (set 4) .....	AABATT
C cells — for cassette recorders (set 4) .....	CBATT
D cells — for Superb Sound Recorder, XSD Recorder (set 4) .....	DBATT
9V cell (set 2) .....	9VBATT
MS76 cell — for ECM-16 (set 2) .....	MS76
NiCad (light duty) D cells (set 4) .....	NICADL
NiCad (heavy duty) D cells (set 4) .....	NICADH
NiCad Recharging Unit (1100) .....	NICBC
PX625 cell — for Nizo exposure meters (set 2) .....	PX625

## Cassette Tapes

Standard cassette tapes and low-noise tapes can be used on any of our cassette recorders. The chromium-dioxide and ferri-chrome tapes need the extra bias current available only on the XSD Recorder. Remember that 1/F sync tapes can be used in one direction only. We recommend that you punch out the B-side record protection tab on a new cassette before using it. Always bulk erase used cassettes to erase both audio and sync signals. All our cassette tapes are SONY brand. Order in increments of 12 cassettes

Standard 45 minute cassette (12) .....	C45
Standard 60 minutes cassette (12) .....	C60
Standard 90 minute cassette (12) .....	C90
Standard 120 minute cassette (12) .....	C120
Low noise 60 minute cassette (12) .....	UHFC60
Low noise 90 minute cassette (12) .....	UHFC90
Low noise 120 minute cassette (12) .....	UHFC120
Chromium dioxide 60 minute cassette (12) .....	CR060
Chromium dioxide 90 minute cassette (12) .....	CR090
Ferri-Chrome 60 minute cassette (12) .....	FECR60

## SMPTÉ Leader



# Super8 Sound Publications

A variety of filmmaking textbooks and periodicals are now available, and in the near future we expect several more that will specialize in Super 8. Publications from Super8 Sound are very equipment-oriented; they tend to be "what-with" books rather than "how-to" books. Filmmakers, and beginning Super 8 filmmakers especially, should own a number of good texts and reference books, and regularly subscribe to filmmaking journals. The best way to learn filmmaking is to apprentice yourself to a craftsman; if you don't know one, buy these books and the equipment and become a craftsman yourself.



## Equipment Books

### The Super8 Sound Catalog

The most comprehensive listing of Super 8 sync sound production equipment in existence. 72 pages illustrated.

*Super8 Sound Catalog* ..... CATALOG

### Reference Book Super 8

A looseleaf compilation of the latest sync sound product information — manufacturers' literature, much of it full-color technical brochures, on the latest cameras, recorders, projectors, editing equipment, etc. About 500 pages; in a 3-ring binder so you can keep it updated.

*Reference Book Super 8* ..... REFBOOK

### Super8 Sound Recorder User's Manual

A 28-page illustrated guide to Super 8 fullcoat sync filmmaking techniques. Location, studio, and laboratory applications of the Super8 Sound Recorder are described in detail. Theory of operation and six technical appendices.

*Super8 Sound Recorder User's Manual* ..... USERS

## Textbooks

### Making Movies, by Lee R. Bobker with Louise Marinis

Bobker has had a great deal of commercial film production experience, and he's passed on many of the technical, economic, and human details that make professional productions possible. 304 pages, beautifully illustrated. Harcourt.

*Making Movies* ..... BOBKER

S8S# LIPTON?

S8S# LIPTON8



### Independent Filmmaking, by Lenny Lipton

Lipton is independent, and it shows in his strong radical writing style. This book is jammed with the nitty-gritty of doing it all yourself. If you're going to read only one book, etc. .... Profusely illustrated. Straight Arrow Books.

*Independent Filmmaking* ..... LIPTON?

### The Super 8 Book, by Lenny Lipton

Lipton has boiled down his wisdom into half the length of his 16mm book, and concentrated on the new tools that make professional Super 8 production a possibility. His newfound addiction to the single-system camera and 18fps shows, but he teaches you double-system editing, too. Lots of illustrations. Straight Arrow Books.

*The Super 8 Book* ..... LIPTON8

### Introduction to Cinematography, by John Mercer

Mercer's book is a filmmaking course on paper. Easy-to-understand blackboard diagrams explain many of the vagaries of subjects like lighting, 180° rule, etc. 198 pages, illustrated. Stipes Publishing Company.

*Introduction to Cinematography* ..... MERCER



S8S# REFBOOK



# Superb Sound Publications

Guide to Filmmaking,  
by Ed Pincus with Jairus Lincoln

This is the least expensive and largest selling "how to" book that takes you through all the stages of film production. Although it was written when Bell & Howell Filmosound 8 was the only Super 8 sync system, everything said here about 16mm is now true of Super 8. 256 pages, illustrated, paperback. Signet.

*Guide to Filmmaking* ..... PINCUS

Handbook of Super 8 Production, by Gunther Hoos and Mark Mikolas

This Professional Handbook of Super 8 Film Production is based on the experiences of a number of producers now working in Super 8. It covers: Pre-production — film stocks, magnetic film, single-system and double-system cameras, lighting, directing as it pertains to Super 8, etc.; Post-production — lab sources, splicing, editing single-system and double-system, videotape, sync sound transfers, mixing multiple sound tracks, release formats; Special techniques — animation, titling, and special effects. This is the first book prepared by professionals for everyone using Super 8 as a serious communications tool. About 250 pages, heavily illustrated. United Business Publications.

*Handbook of Super 8 Production* ..... HANDBOOK

Basic Production Techniques for Motion Pictures, Eastman Kodak

Very brief and very basic material aimed at the filmmaker in industry, education, government, etc.

*Basic Production Techniques, etc* ..... KODP18

*Super 8 Journals*



## Magazines

American Cinematographer

Mostly 35mm feature film production, and 16mm equipment-oriented articles, with occasional Super 8. Published by A.S.C., this is the best known international journal of cinematography.

Filmmaker's Newsletter

A strong 16mm filmmaking identification, with occasional 35mm. Regular Super 8 department, with technical articles on Super 8 equipment.

Movie Maker

Once the most popular English-language amateur film magazine, and promoter of diverse British amateur 1/F sync pulse systems.

Super-8 Filmmaker

The largest circulation film magazine in the world. This is the magazine where most new developments in Super 8 appear first. Must reading. Technical level has been somewhat low, as the main audience has been the home moviemaker, but it now has professional level staff columnists.

SMPTE Journal

Highest-level technical articles on equipment, and engineering practices.

Today's Filmmaker

Articles tend to be vague and about film in general and with occasional specific details about equipment or techniques.

## Special Pamphlets

Draft Standards for Super 8 Sync Sound

Current report of the SMPTE ad hoc committee on Super 8 sync sound.

*Draft Standards for Super 8 Sync Sound* ..... STAND

Report on Super 8 Sync Sound Techniques

A survey of camera-recorder, recorder-projector, and recorder-recorder sync methods in use in Super 8.

*Report on Super 8 Sync Sound Techniques* ..... REPORT

Glossary of Sync Sound Super 8 Terms

Definition of technical terms.

*Glossary of Sync Sound Super 8 Terms* ..... GLOSSARY

Preparing Super 8 Leaders

Recommendations for marking leaders, projection leaders (SMPTE), and printing leaders (ACL) for Super 8

*Preparing Super 8 Leaders* ..... LEADERS

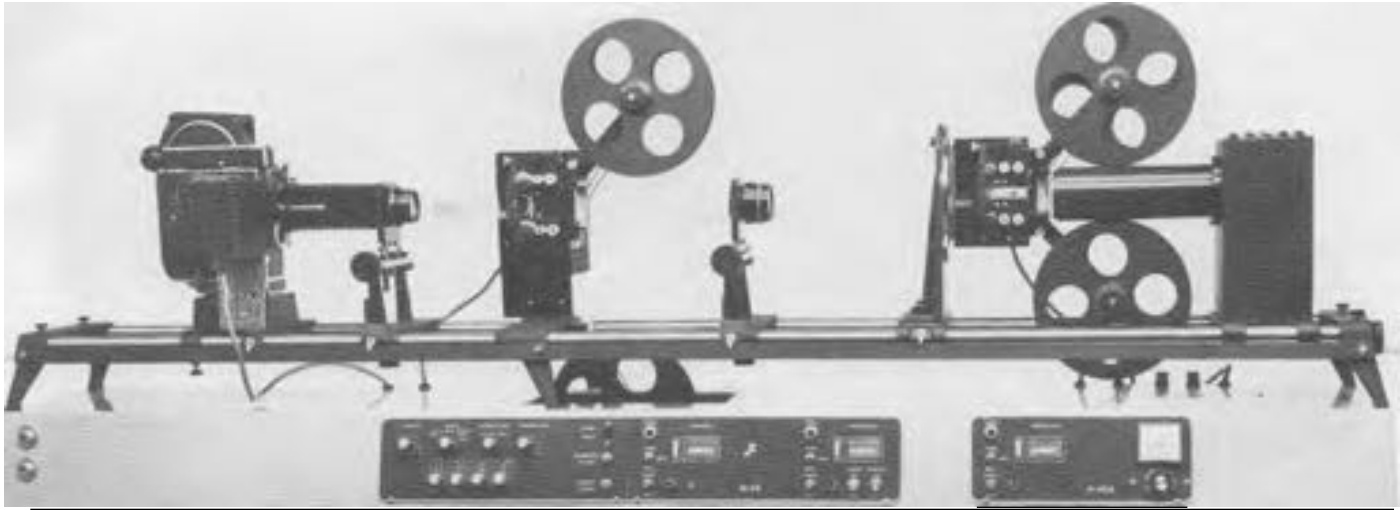
Super 8 Manufacturers List

This is an informal listing of all the manufacturers of Super 8-related equipment, with addresses

*Listing of Super 8 Manufacturers* ..... S8LIST

# Et Cetera

J-K Optical Printer



## Super 8 Printers

A wide variety of printers is available for Super 8. We concentrate here on the less expensive models, and on those that are capable of handling Super 8 single-strand original film. The large motion picture laboratories have much more sophisticated printers, with features such as the liquid immersion gate that masks any scratches in the original stock, color additive lamphouses, continuous optical reduction, etc. These labs produce Super 8 films primarily as reduction prints from 16mm originals. For these reasons, you should not expect the printers listed here to produce the quality that can be achieved by working with a professional lab. This is especially true of a lab that has made the extra effort needed to work with Super 8 originals (e.g. Colburn Labs in Chicago, Newsfilm Labs in Los Angeles, Kin-O-Lux in New York, and Bellevue Pathe in Toronto).

### Acme Mini-Printer

The Acme Mini-Printer Model 5800 is a lab-quality low-cost optical printer with four basic modes of operation: 1) single-strand Super 8 original to a Double Super 8 print; 2) single-strand Super 8 original blow-up to a 16mm print; 3) 16mm reduction to a Double Super 8 print; and 4) 16mm original to a 16mm print. The projector section accepts 1000 feet of original film and the camera section accepts a 1200 foot magazine loaded with 16mm film or 16mm film perforated Super 8 (1-4) — "Double Super 8". See the Film, Fullcoat, Etc. section of the Superb Sound Catalog for details on available Double Super 8 stocks. Camera and Projector sections both run in forward or reverse. Freeze frame/Stop motion. The lens system includes filter holders for color and density correction, and a variable shutter allows fades and dissolves. Daylight operation. Complete with 103mm Eastman Ektar lens for 1-1 printing and 89mm Eastman Ektar lens for reduction and blow-ups.

Acme Mini-Printer Model 5800..... *ACMEMINI*

### J-K Optical Printer

J-K Camera Engineering is perhaps best known in Super 8 for

their Double Super 8 conversions of the Bolex H8 Rex 3 and Rex 4 cameras. However, optical printers are their principal product. These are camera/projector/lens systems mounted on an optical bench, allowing continuous adjustment of position of the three elements. Blow-ups of up to 4-to-1 and reduction of down to 1-to-4 are possible. An aerial-image version is available, with one projector imaging onto the gate of a second projector. The second projector can carry a traveling matte for shadow titles, split-screen composite images, compound zoom, etc. Projectors and cameras are advanced by an electronic sequencing system that permits step printing or stretch printing — converting 18fps to 24fps for example. The camera can be fitted with a 400 foot magazine. Projectors have 400 foot capacity.

Please write for further information directly to J-K Camera Engineering, Dept. S8S, 5701 San Leandro St., Oakland, CA 94601.

### L & F Cine Printer

This truly inexpensive contact printer operates in a darkroom to duplicate Super 8 single-strand originals. Copies can be made on single-strand Super 8 stock or Double Super 8 — 16mm perforated Super 8 (1-4). 400 foot reel capacity. Motorized, 25 feet per minute, automatic take-up. Stainless steel gate. Filter receptacle. Variable light source.

L & F Cine Printer ..... *LFCINE*

### Takita Printers

For professional laboratories requiring additive color correction, scene-to-scene automatic timing, liquid gate, double-image lenses for single pass multiple printing, etc. we can supply Takita Optical Printers, distributed in the U.S. by Cinecraft, International, Dept. S8S, 11 Caesar Place, Moonachie, NJ 07074. Write us for a catalog of the complete Takita line of Optical Printers, Contact Step Printers, and Continuous Contact Printers.

Takita Brochure ..... *TAKITA*

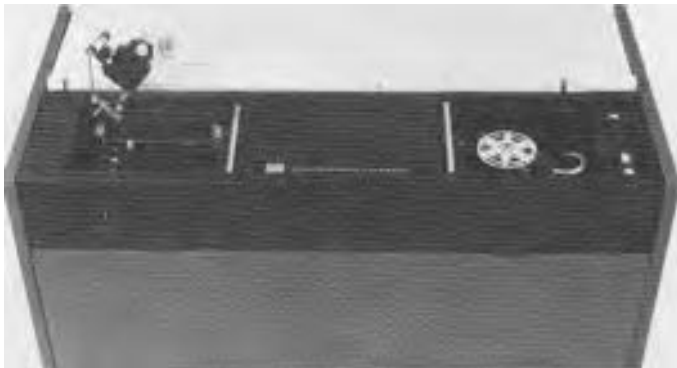
# Et Cetera



*Acme Mini Printer*

## Super 8 Processing Equipment

Super8 Sound does not sell processing equipment at the present time. The major companies that build 16mm processors (Houston Photo Products, Jamieson Film Co., and the HF Division of Technology, Inc.) now offer machines that can be modified for Super 8 use. Some offer special Super 8 models, e.g. Jamieson's Compac Model S (cost about \$12,500). These machines are of course limited to processing Ektachrome stocks.



*Kodak Supermatic 8 Processor*

### Kodak Supermatic 8 Processor

The most notable Super 8 processor, however, is the new Supermatic 8 processor from Eastman Kodak. It is fully automatic, requiring only daylight loading of the Super 8 cartridge (50 foot, 200 foot, and special 400 foot cartridges). The processed film, ready to project, emerges 13 1/2 minutes later. The machine needs only sources of water and electricity, and a drain. Chemicals are added from prepared packages, and the processor automatically maintains chemistry quality. When chemicals are exhausted, the machine disposes of them, cleans itself, and calls for new chemicals before it will restart.

The Supermatic 8 processor can at present process only a single emulsion, the new Kodak SM7244, which is available in 50 foot and 200 foot silent and sound cartridges. The price of the Supermatic 8 processor is \$12,500. About 10-20 Super 8 cartridges per day will amortize such a capital outlay, over a few year period, by comparison with commercial processing costs.

Although the main application for the processor will probably be TV News, it would also be of great value to film schools, who could get to see student films fifteen minutes after shooting, for rapid classroom criticism of exercises. Such a short time rivals the instant playback feature of video equipment in its immediacy.

See the Super8 Sound's Manufacturers' Address List if you want to contact processor manufacturers directly.

## Other Products and Services

### SMPTE Test Films

SMPTE has prepared five important test films for Super 8 equipment — four sound test films on Super 8 fullcoat and a projector registration test film (picture only). These test films make possible critical adjustment of Super 8 projectors and sound reproducers for maximum performance. The following test films are available.

Azimuth Test Film (50 ft.), Flutter Test Film (50 ft.), Signal Level Test Film (50 ft.), Multifrequency Test Film (50 ft.), and Projector Registration Test Film (50 or 100 ft.).

Please write directly to the Test Film Department, SMPTE, 862 Scarsdale Ave., Scarsdale, NY 10583. We would appreciate it if you mention the Super8 Sound Catalog as your source of information.

---

### Super8 Sound Rental Program

We now have a rental program for the Super8 Sound Recorder, our Sync Cassette Recorders, Crystal Camera Control and Crystal Sync Generators, Silencers, and DoubleBand Projector. A special mixing package of multiple Super8 Sound Recorders, and a special portable version of the Super8 Sound Editing Bench are available. Horizontal Editing Tables are available in our Cambridge studios, and are available in special cases for long term rentals or leases. Filmmakers who have not established a rental program credit account, must put up a substantial deposit in the form of a certified check, Master Charge, or BankAmericard charge. Rental units may not be purchased. If you are interested in a particular product, you must return it and buy a new one. A fraction of the rental charge will be applied to the new purchase price. Send for the Super8 Sound Rental Brochure for details.

*Super8 Sound Rental Brochure* ..... RENTAL

### Super8 Sound Studio Services

Super8 Sound has a limited number of studio services for filmmakers working in Super 8. Equalized transfers to Super 8 fullcoat (resolving) from cassette sync tapes; Multiple sync track mixes to composite master fullcoat track; and master-track to release-print magnetic edge stripe transfers. Use of original single-system films for transfer of sound to fullcoat magnetic film is only at the customer's risk, and customers should retain a safe copy of all materials sent to Super8 Sound. The intention of these services is to expand the capability of filmmakers who are already working in double-system Super 8, and who own or have access to fullcoat editing equipment. Send for a listing of Super8 Sound Studio Services, and see the Video section of the Super8 Sound Catalog for Super 8 Video Transfer Services.

*Super8 Sound Studio Services* ..... STUDIO

### Sync Sound Filmmaking Seminars and Workshops

In addition to consulting with filmmakers on an individual basis, Gunther Hoos and Mark Mikolas of New York's well-known Super 8 Film Group are now teaching one-day workshop/seminars in Super 8. Only five persons are enrolled for each session, and the topics covered include: equipment selection — cameras, recorders, editing equipment, projectors, studio equipment, etc.; editing techniques on vertical benches and horizontal tables; mixing multiple sync tracks; release media — Super 8 contact-printing, internegatives and double-rank 16mm, and blow-ups, both negative and positive;

transfers to video — 3/4" videocassette, 1", and 2" quad broadcast quality; lab services available — stocks, prices, etc.; information sources — catalogs, reference books, etc.

Please write directly to the Super 8 Film Group, Dept. S8S, 37 West 20th Street., New York, NY 10011, (212) 989-0043.

In Cambridge the Super 8 Workshop is a 6-12 week class in the basics of sync sound filmmaking, taught by Hal Freeman and others formerly on the staff of the Orson Welles Film School. Each weekly session concentrates on a technique area: Camera; Exposure and Lighting; Cutting Picture for Continuity; Editing a Sound Track; Lip Sync Location Filming. At the end of the 6 weeks, students are asked to script, budget, and jointly produce a finished film or films with the instructors' supervision. Write Super8 Sound for an application form and brochure.

*Super 8 Workshop in Cambridge* ..... WORKSHOP

### Manufacturers Address List

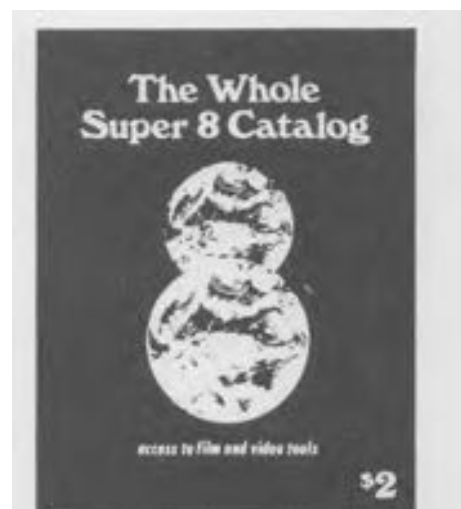
Several of the items in this and other sections are not available directly from Super8 Sound. Addresses for all the manufacturers mentioned (and many others) will be found in our Manufacturers Address List.

*Listing of Super 8 Industry Manufacturers* ..... S8LIST

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Some of our customers think of it as "The Whole Super 8 Catalog", but it's really called the "Super8 Sound Catalog".

# Professional Super 8

Professional Super 8 began with the introduction of Super 8 fullcoat magnetic film and the development of a versatile sync fullcoat recorder that is compatible with all sync signals, and serves the multiple functions of location recorder, laboratory resolver, sound studio dubber, and transfer recorder. The Super8 Sound Recorder was called "the most important addition to the Super 8 scene" by American Cinematographer in their review "Professional Super 8 at Photokina '74". The Super8 Sound Recorder brings to Super 8 all the straightforward double-system editing techniques of 16mm and 35mm filmmaking, since fullcoat magnetic film is easily cut frame-for-frame alongside picture film.

Since the pioneering work of the research groups in Cambridge, Mass. who introduced Super 8 fullcoat and developed the Super8 Sound Recorder, two key technical developments have further widened the professional applications of Super 8.

- The first was the development by Beaulieu in Paris of a professional sound-on-film Super 8 camera utilizing the same Super 8 sound cartridge that has revolutionized home movie making.
- The second was the development by Kodak in Rochester of an inexpensive flying-spot-scanner device that converts Super 8 sound films into full-color broadcast video signals. Super 8 has suddenly become the lowest-cost video production medium.

Every production and post-production technique of professional filmmaking can now be accomplished in Super 8 at a cost averaging one-fifth the capital cost of 16mm equipment. The Super8 Sound Catalog lists every necessary tool — sync cameras, sync fullcoat recorders, sync cassette recorders, crystal-sync location equipment, camera-quieting silencers, multiple-track sync recorders, inexpensive motorized editing benches, elegant horizontal editing tables, double-band interlock projectors, as well as single-system Super 8 cameras and the new technology of "Super 8 Video".

With all these developments, isn't it time you got into Super 8?

And if you're already using Super 8 as a silent film — **Isn't It Time You Got Into Sync?**

## Super 8 Sound, Inc.

95 Harvey Street, Cambridge, Mass. 02140

(617) 876-5876

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