SOUND CITY



OWNERS MANUAL

SC 20[™]

Welcome to Sound City®!

Congratulations and thank you for choosing Sound City® Amplification.

The Sound City SC20 tube combo is the perfectly executed gigging and recording amplifier. The SC20s compact size and uncomplicated control set belies its expansive tonal range and versatility. Within its classic, understated exterior lies an ultra-versatile sonic platform that delivers pedal friendly performance as easily as it does dynamic plug and play expression.

With 20 plus-watts of ultra-responsive power driving a custom 12" Sound City Power Speaker, you'll find yourself in command of the legendary Sound City dynamics that helped launch the bigsound revolution in 1967. The SC20s sparking tonal palette comes courtesy of a matched pair of Mullard 6V6 power tubes, producing a rich natural sustain, topped off with the instantly recognizable tube-driven Accutronics reverb.

Cranking up the volume pushes the power tubes into blissfull overdrive. Simply stated, you'll find the full-bodied performance of the Sound City SC20 tube combo to be without peer, regardless of size and power.

FEATURES

- ▶ 20 Watts
- Special design 12" 50W 8Ω Sound City® Power Speaker
- ► Control Panel: Input, Normal Volume, Brilliant Volume, Treble, Middle, Bass, Reverb
- ► Tube driven Accutronics 3-spring reverb
- Power Tubes: Mullard 6V6 Matched Pair
- ▶ Preamp Tubes: V1 12AX7 Tung-Sol, V2, V3 12AX7A Ruby Selected, V4, V5 12AT7 Ruby Selected
- Speaker outputs: Dual Parallel 8Ω
- ► Size: W 20-1/2" x H 16-3/4" x D 8-3/8" (52 cm x 42.5 cm x 21 cm)
- ► Weight: 35 lbs (16 kg)

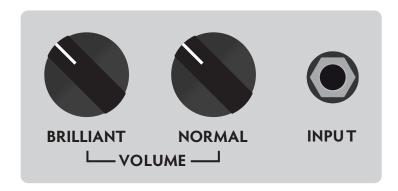
IMPORTANT SAFETY INSTRUCTIONS

igwedge This symbol advises the user to read all accompanying literature for safe operation of the unit.

- ▶ Read, retain, and follow all instructions. Heed all warnings.
- Only connect the power supply cord to an earth grounded AC receptacle in accordance with the voltage and frequency ratings listed under the AC input on the rear panel of this product.
- ▶ WARNING: To prevent damage, fire or shock hazard, do not expose this unit to rain or moisture.
- WARNING: Tubes get hot. Do not reach into back of amp unless the tubes are cool.
- ▶ Unplug the power supply cord before cleaning the unit exterior (use a damp cloth only). Wait until the unit is completely dry before reconnecting it to power.
- ▶ Maintain at least 12 inches (30 cm) of unobstructed air space behind the unit to allow for proper ventilation and cooling of the unit.
- ▶ This product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
- ▶ This product may be equipped with a polarized plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of this plug.
- ▶ Protect the power supply cord from being pinched or abraded.
- ▶ The power supply cord of this product should be unplugged from the outlet when left unused for a long period of time, or during electrical storms.
- ▶ This product should be serviced by qualified service personnel when: the power supply cord or the plug has been damaged; or objects have fallen, or liquid has been spilled onto the product; or the product has been exposed to rain; or the product does not appear to operate normally or exhibits a marked change in performance; or the product has been dropped, or the enclosure damaged.
- Do not drip nor splash liquids, nor place liquid filled containers on the unit.
- ► CAUTION: No user serviceable parts inside, refer servicing to qualified personnel only.
- ► SOUND CITY® amplifiers and loudspeaker systems are capable of producing very high sound pressure levels which may cause temporary or permanent hearing damage. Use care when setting and adjusting volume levels during use.
- ▶ Hazardous voltages may be present within the chassis even with the power switch off and power cord connected. Therefore, disconnect the power cord from the rear panel power inlet before servicing. The power inlet must remain readily operable.

IT ALL STARTS HERE

The Input Sensitivity of an amplifier, commonly referred to as gain, determines how much overdrive and sustain your guitar will produce. Tonal balance determines how the amp will respond to your playing style and sound with a particular guitar. Like all amplifiers, the SC20 combo has tone and volume controls. Understanding the unique interactive nature of these features will give you total control over tonal balance, gain and power amplifier distortion. The NORMAL/BRILLIANT configuration is the key to dialing in the SC20 sound and volume to your specific requirements.



The NORMAL and BRILLIANT volume controls set the input stage and power amp gain amount as you rotate the knobs clockwise.

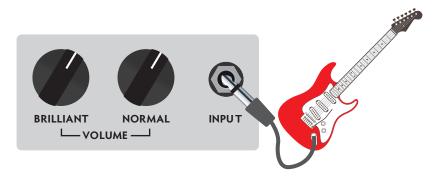
The NORMAL volume feeds a full range gain stage the delivers deep low end and a subtle top end sparkle. As you increase the volume, the tonal balance develops a fatter smoother character. This stage is ideal for dialing in a big dynamic punch that cleans up nicely when backing off on the guitar volume.

The BRILLIANT volume feeds a somewhat hotter gain stage with a rolled off low end and a pronounced midrange emphasis. As the gain is increased, the tonal balance is shifts from upper mid emphasis to a lower mid emphasis with a noticeable onset of preamp distortion. This will produce a thick meaty tone. The forward top end voicing of this stage allows you to turn down the tone control on your guitar for a sweet sustaining "Woman Tone" vibe.

The internally "jumpered" input allows you to blend the NORMAL and BRILLIANT voicings.

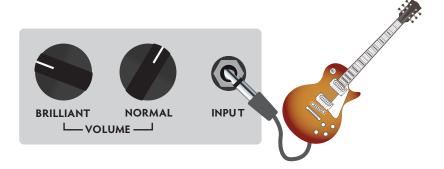
Different combinations of NORMAL and BRILLIANT volume control settings will have a dramatic effect on the response of the amplifier and the personality of your instrument. Once you get familiar with the action of these controls and you'll be amazed at how easy it is to make any guitar sound mellow, fat, soulful or aggressive.

TRY THESE BASIC SETTINGS SUGGESTIONS AS A STARTING POINT



For guitars with single coils

When using single coil pickups, push the brilliant volume more than the normal volume.



For guitars with humbuckers

When using humbucking pickups with enhanced midrange output, push the normal volume more than the brilliant volume.

The Sound City power amp section is noticeably different than the typical amplifier you're probably used to, and this is important in understanding how to unlock the beast within.

Start with setting the BRILLIANT and NORMAL volumes for your desired tonal balance The lower the levels, the cleaner the amp will sound, the higher the levels, the louder and more overdriven the amp will become as you begin to push the output stage into saturation. Either volume control will drive the amp into saturation/ overdrive.

As you will see, by experimenting with combinations of settings you can cover an awful lot of tonal territory before you even begin to start thinking about tone control settings. See page 9 for sample settings.

SOUND CITY® SC20 FUNCTIONS



FRONT PANEL, RIGHT TO LEFT

1. INPUT – This input sends the signal of your guitar to both the NORMAL volume and BRILLIANT volume.

PREAMP GAIN / VOLUME SECTION

- 2. NORMAL VOLUME Sets the volume of the normal gain stage. This first gain control also serves as a tone shaping control, counter-clockwise for crisp and articulate, clockwise for thick and saturated.
- 3. BRILLIANT VOLUME Sets the volume of the brilliant gain stage. This first gain control also serves as a tone shaping control, counter-clockwise for clean and bright, clockwise for snappy and mid focused.

EOUALIZATION SECTION - Passive / Interactive tone controls.

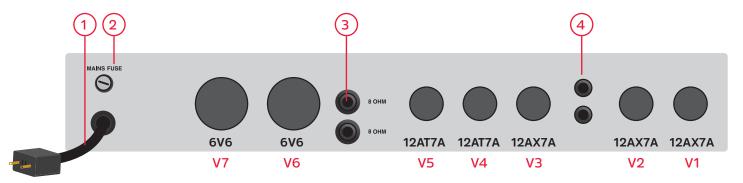
- 4. TREBLE Passive High frequency equalization.
- 5. MIDDLE Passive Mid frequency equalization.
- 6. BASS Passive low frequency equalization.

POWER AMP RESPONSE SECTION

7. REVERB – Controls the tube-driven 3-spring reverb.

AC POWER / STANDBY

8. MAINS – Switches main AC power on or off (down is "on"). There is no standby switch. Allow a minute or two for tubes to warm up.



REAR PANEL, LEFT TO RIGHT

1. AC MAINS – Connect to a grounded outlet in accordance with the voltage and frequency specified on the rear panel of your amplifier.

riangle Use only the factory supplied cord set or a UL approved equivalent type.

2. MAINS FUSE – Protects the amplifier from electrical faults. Replace only with type and rating specified on the rear panel of your amplifier.

Marning! Replace only with same fuse type and rating.

3. SPEAKER OUTPUTS - There are two parallel speaker output jacks: 8 ohms. The factory supplied speaker is 8 ohms.

MARNING: Do not handle speaker plugs when tubes are hot. Do not reach into back of amplifier when tubes are hot.

4. REVERB JACKS – The 3-spring reverb connects here.

Tube locations from right to left (looking at the back of the amp)

Tube types are factory selected for superior performance, consistent tone quality and reliability. While substituting other brands may not cause damage to the amplifier this may affect amplifier performance in unpredictable ways. For best performance, replace only with factory recommended tubes. Warning! Substituting other tube types is not recommended.

Factory recommended tubes are listed under each location.

Tube No.	Factory Fitted Tubes	Function / Comments
V1 (shielded tube)	12AX7A Tung-Sol	Gain Stage 1: Normal and Brilliant Input
	12AX7WB Sovtek	Use in place of Tung-Sol for smoother top end and less upper mids
	12AX7 China Selected	Use in place of WB if more gain is required
V2 (shielded tube)	12AX7A/7025 China	Gain Stage 2: Tone Control Driver
V3 (shielded tube)	12AX7A/7025 China	Gain Stage 3: Phase Inverter Buffer
V4 (shielded tube)	12AT7A/China	Reverb Driver
V5 (shielded tube)	12AT7A/China	Phase Inverter
V6 - V7	6V6 Mullard	Power Tubes

SPEAKER INFORMATION

The new Sound City Power F50G speaker is specially engineered for the SC20 Combo. It is designed to reproduce low notes with unusually good control for a combo of this size. The top end is smooth and open sounding, which not only enhances the clean sound, but helps extend the range and ambience of the reverb system. When pushed hard, the speaker rolls smoothly into distortion and this contributes to the rich harmonic structure of the overdrive.

The F50G is an 8 ohm speaker and is conservatively rated at 50 watts, meaning it can actually withstand a much higher peak power when called upon to do so.

Every speaker requires a nominal break-in period before it achieves its intended performance and this is true of the F50G. For best results, simply play the way you play and let the speaker break in according to your playing style and volume preference.

THE SC20 REVERB

Each player has a different idea about how reverb should respond. The SC20 reverb is tube driven and the 3-spring unit is specially suited for this amplifier and speaker combination.

At first you may find the reverb control to be a bit sensitive. The reverb system is designed to produce a clear ambient sound regardless of playing volume. A normal reverb setting at bedroom volume will be around 10 to 12 o'clock, while at gigging volume, you will probably set it at around 9 to 10 o'clock.

SOUND SETTING EXAMPLES

Mississippi Queen



Crossroads



For Les Paul style guitars

All Right Now



Scuttle Buttin



Day Of The Eagle





Little Wing / Freedom



Little Wing For strat in middle/ bridge Pick up setting Freedom For strat at bridge

pickup setting

TROUBLESHOOTING GUIDE

WON'T TURN ON

- 1. Make sure AC cord is securely connected at both ends.
- 2. Verify the power source with something you know works.
- 3. Check the mains fuse, and replace if necessary. If it blows again, refer to qualified service personnel.

NO SOUND

- 1. Check input cable.
- 2. Make sure the channel volumes are turned up.
- 3. Check speaker cable to see if it is disconnected or shorted.
- 4. Check for a blown speaker.
- 5. Look at the preamp and power tubes to see if they are lighting up.

RUNNING HOT

- 1. Make sure that the unit has adequate ventilation.
- 2. Make sure that the speaker is plugged in the correct output jack.
- 3. Power tubes may be drawing excessive current (refer to qualified service personnel).

DISTORTION

- 1. Check the impedance setting.
- 2. Check the speaker cable for shorts.
- 3. Check the speaker.
- 4. Check the signal level at other devices in the signal path.
- 5. Power tubes may be weak (refer to qualified service personnel).

BLOWING MAINS FUSE

1. Bad power tube or other internal power supply component (refer to qualified service personnel).

SPECIFICATIONS

MODEL: SC20 Combo MODEL NUMBER: SC20C POWER REQUIREMENT: 100W POWER OUTPUT:

20W RMS @ 5% THD, 1kHz sine into 8Ω

INPUT IMPEDANCE: 470KΩ OUTPUT IMPEDANCE: 80

FUSE: **100V UNITS: MAINS** F2.5A. 250V. **120V UNITS:** T2A, 250V.

220V-240V UNITS: F1A, 250V. **DIMENSIONS:**

HEIGHT: 16 ³/₄ in (42.5 cm) **WIDTH:** 20 ½ in (52 cm) **DEPTH:** 8 % in (21 cm) WEIGHT: 35 lb (16 kg)



Product specifications are subject to change without notice.



Certificate of Compliance

Restriction of the use of Hazardous Substances (RoHS)

We certify that all of our products (exceptions see listed below) are compliant with the European Union Directive 2002/95/EC for the Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS).

No Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr+6), PBB or PBDE is intentionally added to these devices. Any trace impurities of these substances contained in the parts are below the RoHS specified threshold levels.

All information provided in this Certificate of Compliance is accurate to the best of our knowledge as of the date this Certification was issued.

Certificate of Compliance

Registration, Evaluation, Authorization and Restriction of chemicals (REACh)

We declare that all of our products are compliant with European Union Directive EC1907/206 for the Registration, Evaluation, Authorization and Restriction of chemicals (REACh), and contain none or less than 0.1% of the chemicals listed as hazardous chemicals in the REACh regulation. All information provided in this Certificate of Compliance is accurate to the best of our knowledge as of the date this Certification was issued.

Declaration of Conformity

EMC and Low Voltage Directive (CE)

Product Name: SC20 Combo

Model Number: SC20C

This is to certify that the product listed above complies with the following European Union Council Directives and Standards relating to electromagnetic compatibility (EMC Directive 89/336/EEC) and the low voltage Directive (73/23/EEC).

This declaration of conformity of the European Communities is the result of an examination carried out by Electromagnetic Engineering Services, Inc. in accordance with European Standards EN 50081-1, EN 50082-1 and EN 60065 for low voltage, as laid down in Article 10 of the EMC Directive.

Group Eleven, LLC. 6850 Vineland Ave. Unit P North Hollywood, CA 91605 USA

SOUND CITY

Subject to the obligations and exclusions found below, this product is warranted by Sound City Amplification, LLC., (herein SCA) against manufacturing defects in materials and workmanship for the period of Five (5) Years from the date of purchase, with the exception of the tubes, fuses and speakers where applicable, which carry a 90 day warranty.

The warranty period commences on the date of purchase by the original user. Performance under this warranty must be obtained at one of the following: an SCA Authorized Service Station, by returning the unit to the SCA factory with prior written authorization, or (in countries outside of the United States) by a representative SCA distributor.

Obligations

- 1. This warranty will be honored only on the presentation of the original proof of purchase.
- 2. Transportation of the product to and from an authorized SCA service outlet is the responsibility of the user. Units sent directly to the SCA factory for warranty repairs must be authorized by SCA and shipped prepaid.

Exclusions

- 1. This warranty shall not cover adjustment of consumer-operated controls as explained in the appropriate instruction manual, or products that have been altered or have missing, or defaced serial numbers.
- 2. This warranty shall not apply to the appearance of accessory items including but not limited to, cabinets, cabinet parts, or knobs.
- 3. This warranty does not apply to uncrating, setup, installation, or the removal and reinstallation of products for repair.
- 4. This warranty shall not apply to repair or replacements necessitated by any cause beyond the control of SCA including, but not limited to, any malfunction, defects, or failure caused by or resulting from unauthorized service or parts, damaged or broken tubes, incorrect line voltage, improper maintenance, modification or repair by the user, abuse misuse, neglect, accident, fire, flood, or other Acts of God.
- 5. Responsibility for the repair of any SCA product sold outside of U.S. boundaries is borne by the SCA representative in that particular country or territory. Also, the warranty term and conditions may be different from those stated above. Please contact the SCA distributor or dealer in your country for more information.

The foregoing is in lieu of all other expressed warranties, and SCA does not authorize any party to assume for it any other obligation or liability. In no event shall SCA be liable for special or consequential damages arising from the use of this product, or for any delay in the performance of this warranty due to causes beyond our control. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of consequential damages, so the above limitations on implied warranty and consequential damages may not apply to you. This warranty gives you specific legal rights. You may have other rights that vary from state to state.

WARRANTY REGISTRATION

U.S. and Canadian residents may register their Sound City product(s) online at www.soundcityamp.com by selecting and completing the Warranty Registration form. All other international residents please contact the authorized distributor your Fryette product was purchased from. For a list of international distributors please visit www.soundcityamp.com

SOUND CITY AMPLIFICATION, LLC
C/O GROUP ELEVEN, LLC
6850 VINELAND AVE. UNIT P
NORTH HOLLYWOOD, CA 91605
TEL (818) 980-2800 FAX (818) 980-2802 www.SoundCityAmp.com

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