



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



IMPORTANT! FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:

WATER AND MOISTURE: Appliance should not be used near water (near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

POWER SOURCES: The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

GROUNDING OR POLARIZATION: Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

POWER CORD PROTECTION: Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

SERVICING: The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

FUSING: If your unit is equipped with a fuse receptacle, replace only with the same type fuse. Refer to replacement text on the unit for correct fuse type.

SAFETY INSTRUCTIONS (EUROPEAN)

The conductors in the AC power cord are colored in accordance with the following code.

GREEN & YELLOW—Earth BLUE—Neutral BROWN—Live

U.K. MAIN PLUG WARNING: A molded main plug that has been cut off from the cord is unsafe. NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAIN PLUG INTO A POWER SOCKET.

LIMITED WARRANTY

Your Carvin product is guaranteed against failure for 1 YEAR unless otherwise stated. Carvin will service and supply all parts at no charge to the customer providing the unit is under warranty. Shipping costs are the responsibility of the customer. CARVIN DOES NOT PAY FOR PARTS OR SERVICING OTHER THAN OUR OWN. A COPY OF THE ORIGINAL INVOICE IS REQUIRED TO VERIFY YOUR WARRANTY. Carvin assumes no responsibility for horn drivers or speakers damaged by this unit. This warranty does not cover, and no liability is assumed, for damage due to: natural disasters, accidents, abuse, loss of parts, lack of reasonable care, incorrect use, or failure to follow instructions. This warranty is in lieu of all other warranties, expressed or implied. No representative or person is authorized to represent or assume for Carvin any liability in connection with the sale or servicing of Carvin products. CARVIN SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

When RETURNING merchandise to the factory, you may call for a return authorization number. Describe in writing each problem. If your unit is out of warranty, you will be charged the current FLAT RATE for parts and labor to bring your unit up to factory specifications.

MAINTAINING YOUR EQUIPMENT

Avoid spilling liquids or allowing any other foreign matter inside the unit. The panel of your unit can be wiped from time to time with a dry or slightly damp cloth in order to remove dust and bring back the new look. As with all pro gear, avoid prolonged use in caustic environments (salt air). When used in such an environment, be sure the mixer is adequately protected by a cover.

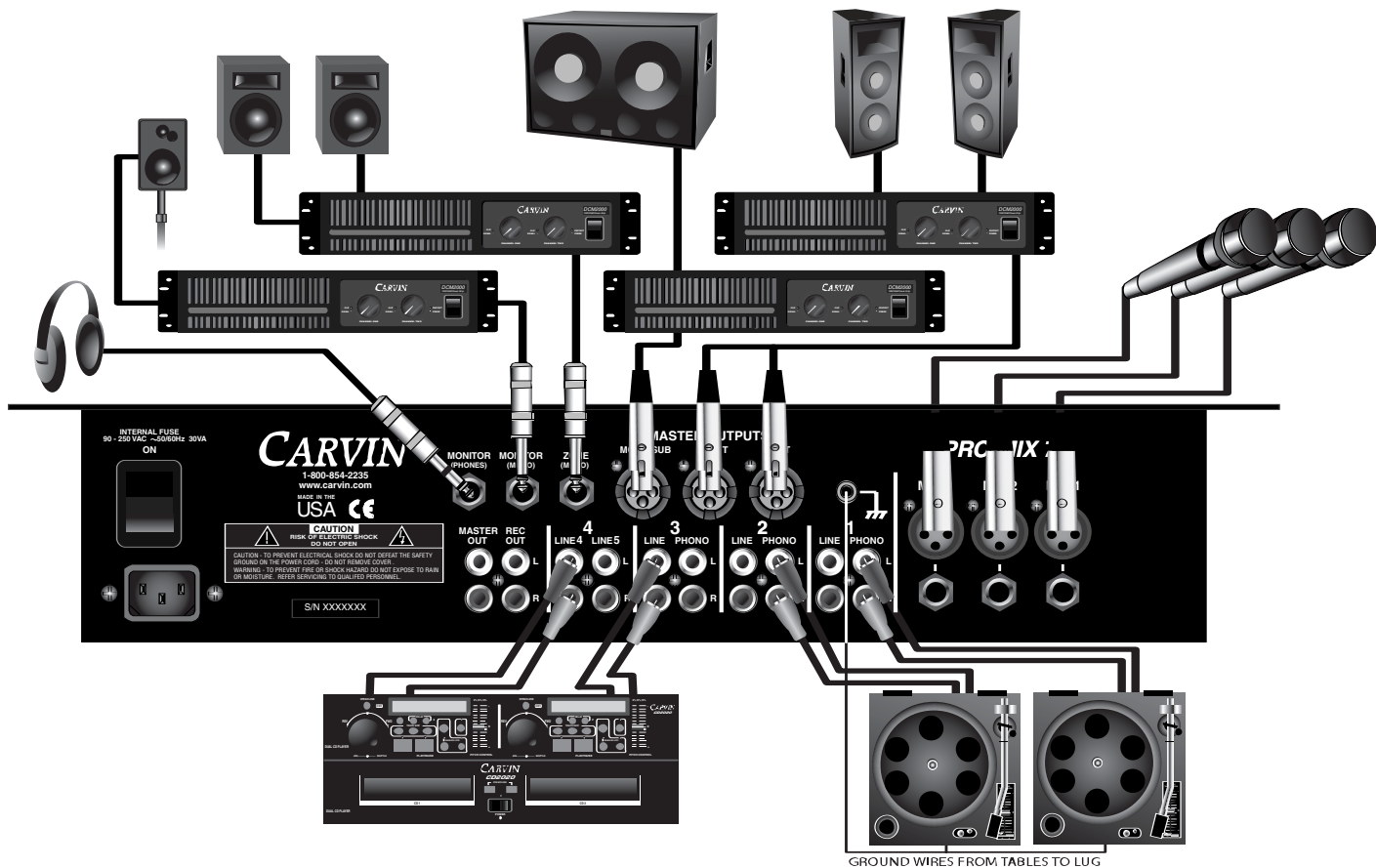


CAUTION

RISK OF ELECTRIC SHOCK

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL! THIS UNIT CONTAINS HIGH VOLTAGE INSIDE!

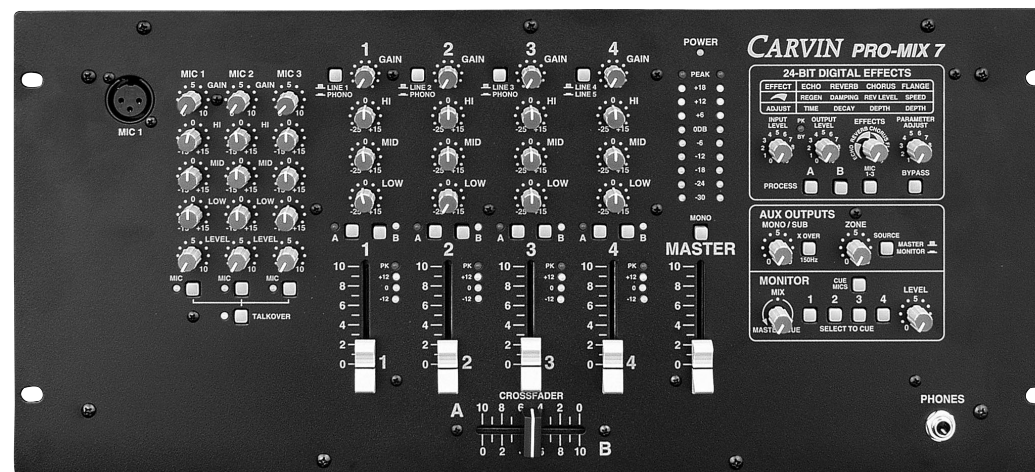
PRO-MIX 7 DJ MIXER SETUP



CARVIN ENGINEERING DATA

PRO-MIX 7 DJ MIXER

OPERATING MANUAL



The **PRO-MIX-7** is designed for the DJ who requires professional mixing with the flexibility of 7 channels plus sound effects. High-end electronics feature ultra low noise circuitry and **SMT** construction giving a crystal clear transparent sound that rivals our larger consoles offering a notch of performance above the typical DJ mixer.

FEATURES:

- 4 stereo channels with transform switches for any combination of 3 vinyl and 5 CD/line inputs
- 3 Mic channels for vocals and other sources with **TALKOVER** feature
- Active **LO, MID and HI EQs** on each channel are set at 80, 750 and 11.5 k Hz
- 25 dB **EQ** cuts on the 4 main channels
- Input **GAIN** controls on each channel prevent overloading
- 4 segment metering for each main channel, plus 10 segment **MASTER** metering
- Each of the four main channels are assignable to either side of the **A/B CROSSFADER**
- **24-BIT** effects with **Reverb, Echo, Chorus and Flange** are assignable to either side of the **A/B CROSSFADER** or 3 **MIC** channels, with bypass switch. All parameters are easily changed for rate, damping, decay, depth, time and regeneration.

AUX OUTPUTS include a separate **ZONE** for **MASTER** or **MONITOR** mix, and a **MONO** output which can be switched into a **SUBWOOFER** output utilizing an internal 150 Hz, 18 dB per octave crossover. Both outputs have separate level controls.

The **MONITOR** control center takes it's input from the **MONITOR MIX** control for critical listening of the **MASTER** output and **CUE** monitoring from any of the 4 **MAIN** or 3 **MIC** channels. The **MONITOR LEVEL** control drives the powerful built in headphone amp, delivering high volume levels to all 3 headphone outputs.

SUPERB SOUND is derived from the extremely low distortion, high "Headroom" design. A state-of-the art, low noise, balanced **XLR** mic preamp for each channel features a common mode rejection of better than 78 dB, which means that any possible noise that may come over your cables is virtually eliminated. Even the balanced **XLR** output connectors guard your system from cable noise. Distortion is nearly non-existent with **THD** below .01%, which guarantees the purity of your sound. Hear the difference - your sound will not seem "sterile" or "processed". It will be dynamically open and transparent just like it was meant to be!

EASY TO USE Everything is logically laid out making the **PRO-MIX 7** simple to use, which helps to eliminate operator error.

24-Bit STEREO DSP EFFECTS The effects processor with **256 EFFECTS**, include reverbs, choruses, flanging and echoes, with parameters fully adjustable for; damping, decay, depth, speed, regeneration and time.

ACTIVE 3 BAND CHANNEL EQ Provides easy adjustment for the tone you want. The **LO** frequency controls starts at 20 Hz and continues through 80 Hz for adding solid non-flabby bass. A simple adjustment with the **MID** band, gives you the best sound for vocals or guitar in the very important 750Hz frequency range. The 11.5k Hz **HI** treble control adds sparkle to your top-end without adding harshness. Both the **LOW** and **HI** are "shelving", which means they are effective from 20Hz up to 20k Hz.

ENGINEERED TO LAST Every **PRO-MIX 7** mixer incorporates a rugged reinforced steel chassis. Hidden deep in the heart of these mixers is the "SMT" Surface Mount Technology construction that utilizes surface mounted components to prevent parts from shaking or vibrating loose. Sealed controls and switches guard against the outside elements while heavy-duty connectors provide a positive connection to your cables. Fire retardant **FR-4** military spec. circuit cards feature double-sided copper construction to guard against noise and radio frequencies (RF). Precision 1% tolerances guarantee that your settings will be accurate every time. The **PRO-MIX 7** is professionally made in the USA for years of service!

RECEIVING INSPECTION—read before getting started

INSPECT YOUR UNIT FOR ANY DAMAGE which may have occurred during shipping. If any damage is found, please notify the shipping company and **CARVIN** immediately. **SAVE THE CARTON & ALL PACKING MATERIALS.** In the event you have to re-ship your unit, always use the original carton and packing material. This will provide the best possible protection during shipment. **CARVIN** and the shipping company are not liable for any damage caused by improper packing. **SAVE YOUR INVOICE.** It will be required for warranty service if needed in the future. **SHIPMENT SHORTAGE.** If you find items missing, they may have been shipped separately. Please allow several days for the rest of your order to arrive before inquiring. **RECORD THE SERIAL NUMBER** on the enclosed warranty card for your records. Keep your portion of the card and return the portion with your name and comments to us.

USA customers register online at: www.carvin.com/registration

All other countries register online at: www.carvinworld.com/registration

PRO-MIX 7 SPECIFICATIONS:

FREQUENCY RESPONSE:	Mic or Line Inputs: 20 to 20k Hz, +26dB XLR bal, +20dB RCA unbal
OUTPUT:	Less than .01% at nominal levels
TOTAL HARMONIC DISTORTION:	150 ohm source: -117dBu
EQUIVALENT INPUT NOISE:	3 equalized RIAA PHONO RCA inputs, with ground terminal
INPUTS:	5 LINE RCA inputs
	3 MIC inputs: balanced XLR and 1/4" jacks
	balanced XLR, 2 pair RCA jacks
MASTER:	balanced XLR
MONO/SUB:	balanced 1/4" jack
ZONE:	1/4" jack, stereo
PHONES:	1/4" jacks, 1 stereo, 1 mono
MONITOR:	-90dBu Master Out
OUTPUT NOISE:	Adjacent ch's: -60db at 1KHz
CROSSTALK:	-78db at 1KHz
COMMON MODE REJECTION:	LOW: 80Hz
CHANNEL EQ 3-BAND ACTIVE:	MID: 750Hz
	HI: 11.5KHz
POWER REQ.:	90 to 250 VAC 50-60Hz, internal switching power supply
SIZE AND WEIGHT:	19" x 8.5" x 3.5" D. (5U rack mount) Wt. 15 lbs.



PRO-MIX 7 DJ MIXER CONTROLS

QUICK START UP

If you're like most new owners, you're probably in a hurry to plug your mixer in and use it. Here are some brief instructions to get you going quickly. With the mixer unplugged and the unit turned off, complete the following procedures:

A. CONNECTING AC POWER TO YOUR MIXER

- Be sure to plug your mixer into the proper voltage for your country, either **120V-60Hz** or **240V-50Hz**. The Pro-Mix 7 accepts both voltages listed.
- Use only a grounded (3 prong) power outlet to prevent a shock hazard. This gives the quietest grounding for your mixer.

B. CONNECTING INPUTS TO YOUR MIXER

- The RCA Phono inputs are for turntables ONLY!
- For CD players and similar devices, use the **RCA LINE** inputs. Connecting other inputs will sound distorted.
- For balanced microphones, use a shielded cable and plug into the **XLR MIC** inputs.

C. TURNING YOUR MIXER ON

- Set all channel and master **LEVEL** controls to their **OFF** positions
- Set all **HI**, **MID**, and **LOW** controls to their **center** "flat - no boost or cut" position.
- Turn the mixer on by the rear **POWER SWITCH** and watch for the front **POWER LED** to come on. Your mixer is now ready to operate by turning the levels up.

MIC CHANNEL

1. MIC GAIN CONTROL: The mic **GAIN** control adjusts the level of the signal from the **XLR** and **1/4" MIC** input jacks. With the **MIC LEVEL** and **MASTER** controls at "5" and the **MIC SWITCH** "IN", turn the **GAIN** control clockwise until the master **METERS** read about "0dB". For an average microphone, start with the **GAIN** at "5" and increase. For other inputs such as a keyboard or sampler, start with the **GAIN** at "2". If the sound becomes distorted or fuzzy, reduce this level until a clear signal is heard. When this control is adjusted properly, it usually won't need to be adjusted for the remainder of the performance.

2. MIC TONE CONTROLS: Each **MIC** channel is equipped with three tone controls: **HI**, **MID**, and **LOW**. These are active **EQ** circuits that will boost or cut certain frequencies of the **MIC** input by +or -15dB. The **HI** control effects treble frequencies, peaking at 11.5kHz. The **MID** control effects mid-band frequencies, centered at 750Hz. The **LOW** control adjusts bass frequencies, peaking at 80Hz.

3. MIC LEVEL CONTROL: This control adjusts the level of the mic for mixing to the main output.

4. MIC ON SWITCH and LED: Pushing this switch to the "IN" position will activate the **MIC** channel, allowing it to be heard at the **MASTER** outputs. A lit **LED** shows the channel is active.

5. TALKOVER SWITCH and LED: Pushing this switch to the "IN" position lowers the level of music from main channels 1-4, but leaves the microphone levels at normal. This will allow the **MICS** to be heard over the music while making announcements, etc. A lit **LED** shows that **TALKOVER** is active.

MAIN CHANNELS

6. LINE/PHONO SWITCH: This switch selects one of two RCA inputs for the channel. It is also known as a "TRANSFORM" switch. The "OUT" position selects the corresponding **LINE** input on channels 1-4. The "IN" position selects the corresponding **PHONO** input on channels 1-3, and **LINE 5** input on channel 4.

7. GAIN CONTROL: For main channels 1-4 The channel **GAIN** control adjusts the level of the signal from the selected **LINE** or **PHONO** input. If the sound becomes distorted or fuzzy, reduce this level until a clear signal is heard. When this control is adjusted properly, it usually won't need to be adjusted for the remainder of the performance. (see also #11)

8. CHANNEL TONE CONTROLS: Each of the main channels are equipped with specialized tone controls: **HI**, **MID**, and **LOW**. These are active **EQ** circuits that will boost +15dB or cut -25dB. The accelerated cut of -25dB allows you to "TURN DOWN" certain elements of a music track until they are nearly inaudible. The **HI** control peaks 11.5kHz, affecting elements such as cymbals and bells. The **MID** control is centered at 750Hz and affects elements such as vocals and guitars. The **LOW** control peaks at 80Hz and affects the **BASS** elements of the music track. If unusual distortion is heard while adjusting the tone controls, check the channel **LED METER**, and reduce the **GAIN** level until the sound is clear and the **PK LED** does not light.

9. A/B CROSSFADER ASSIGNMENT SWITCHES AND LEDs: These switches select on which side of the **CROSSFADER** a channel will be active. To hear a channel at the **MAIN OUTPUT**, select **A** or **B** and slide the **CROSSFADER** to the appropriate side. The "A" and "B" **LEDs** indicate a channel has been assigned. (see also #12.)

10. CHANNEL FADER: These faders allow a mix level to be set for a channel before the signal goes to the **CROSSFADER**.

11. CHANNEL METER: A Four **LED** meter measures the signal level of the channel before the **CROSSFADER** and after the **CHANNEL FADER**.

- -12 dB indicates a signal is present
- 0 dB indicates a good signal level
- +12 dB indicates a very strong signal
- PK indicates distortion is present

If the red **PK LED** lights up, reduce the level at the **GAIN** control.

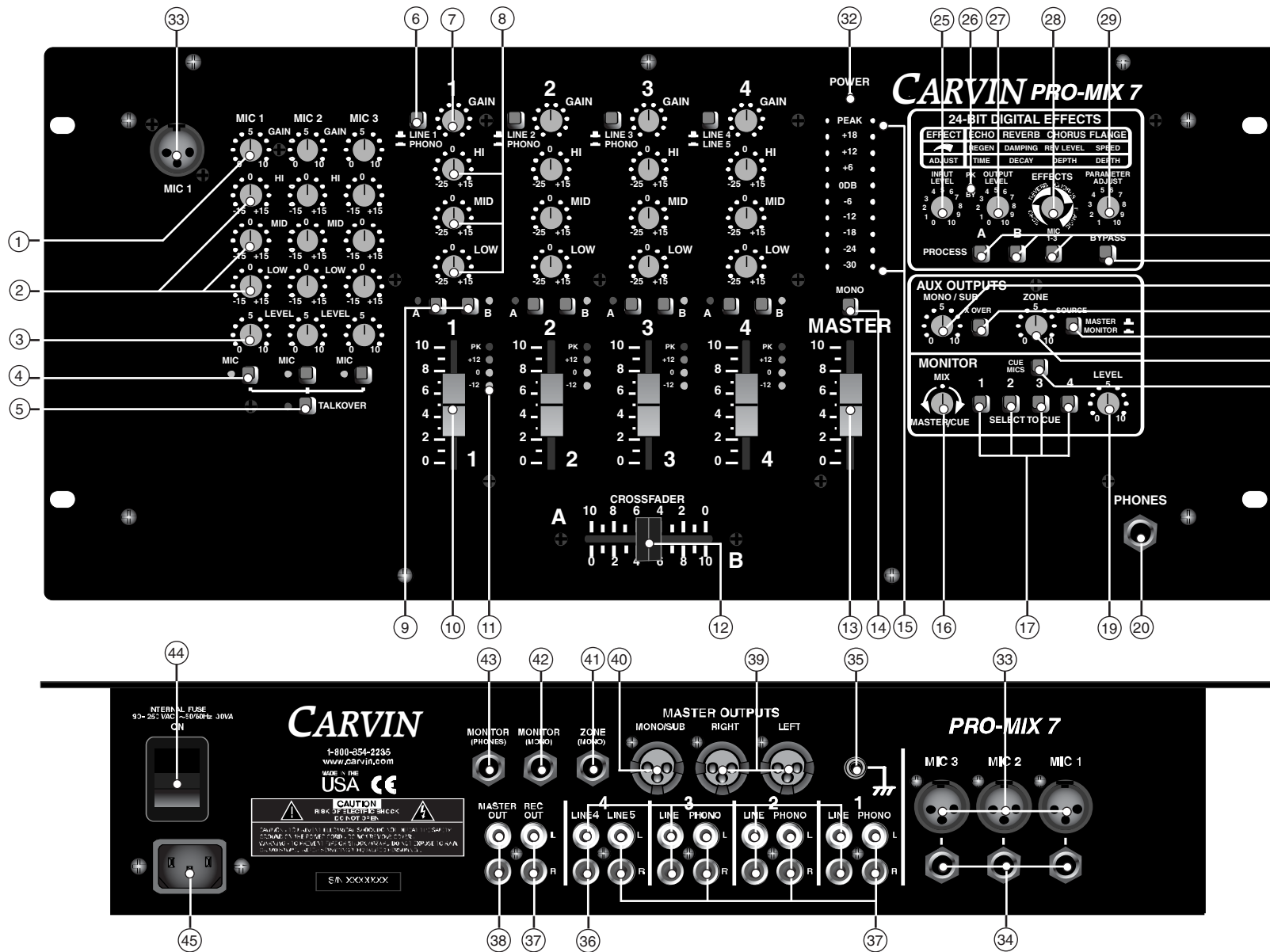
12. CROSSFADER: The **CROSSFADER** adjusts the mix of signal levels between "A" assigned channels and "B" assigned channels, before they go to the **MASTER** fader. (see #9) It can be used to transition from one song to the next, or to blend sources during a performance. When the crossfader is pushed all the way to the left "A" side, only channels with a lit "A" **LED** will be heard. Moving the **CROSSFADER** toward the center gradually blends together both "A" and "B" channels. When the **CROSSFADER** is pushed all the way to the right "B" side, only channels with a lit "B" **LED** will be heard. The **CROSSFADER** also adjusts signals going to the **DIGITAL EFFECTS** inputs **A** and **B** (see #30). The **CROSSFADER** does not affect the level of the **MIC** channels.

13. MASTER FADER: The **MASTER** fader adjusts the overall output level of the mixer.

The level is changed at the following output jacks:

- **RCA MASTER OUT**

- **RCA REC OUT**
- **XLR MASTER OUTPUTS L/R**
- **XLR MASTER OUTPUT MONO/SUB (before MONO/SUB level control)**
- **1/4" ZONE output -(MASTER selected as SOURCE, before ZONE level)**
- **MONITOR and PHONES output (MASTER mix only, before MONITOR LEVEL)**



14. MONO SWITCH: The **MONO** switch combines the right and left elements of the stereo signal. All **LEFT** and **RIGHT** output signals will be identical. This feature is useful when filling larger areas with music or when a stereo image is not necessary.

15. MASTER METER LEDs: This group of **LEDs** is a 10 segment, 6dB resolution meter that monitors the **LEFT** and **RIGHT MASTER OUTPUT** levels.

Be aware that some power amp/speaker systems, depending on how they are set, will be at **FULL VOLUME** when a "0dB" level is reached. To prevent an accidental overload of such a system, you may want to reduce all input **GAIN** controls to compensate.

MONITOR SECTION

16. MONITOR MIX CONTROL: The mix control adjusts the blend of what is heard at the monitor outputs. When turned fully to the left, only the **MASTER** mix is heard. When turned fully to the right, only the **CUES** from the chan-

nels are heard. (see 17. & 18.) Any ratio of **MASTER** output and **CUE** listening can be set by using this control.

17. CUE (1-4) SWITCHES: When pressed **IN**, these switches allow you to listen to a source in the **MONITOR** outputs without hearing it at the **MAIN OUTPUTS**. This will allow you to set levels or find tracks before a channel is assigned to the **A** or **B** side of the **CROSSFADER**.

output (#40), allowing only frequencies below 150 Hz to pass through for subwoofer applications. When used to run a **SUBWOOFER** (with power amp), this allows more efficient use of power, resulting in a "tighter" sounding bass response from the **SUBWOOFER**.

23. ZONE SOURCE SWITCH: When in the **OUT** position, the **ZONE** output is the same as the **MASTER** output. This is useful when you need to control the volume of music in a separate area. Set the **ZONE LEVEL** to a desired volume and further control with the **MASTER FADER**. When pressed **IN**, the **ZONE** jack becomes a separate output from the **MONITOR** section. The output level is **NOT** affected by the **MONITOR LEVEL** control. Ideal when an independent level control is needed for driving a control room amp and speaker.

24. ZONE LEVEL CONTROL: Adjusts the output level going to the balanced **ZONE 1/4"** jack (#41).

DIGITAL EFFECTS

25. INPUT LEVEL CONTROL: Adjusts the level of signal going to the processor.

26. PK / BYPASS LED: If the **LED** consistently flashes, it means the **INPUT LEVEL** to the processor is set too high, causing distorted effects. Reduce the **INPUT LEVEL** until the **LED** lights only occasionally or not at all. A solid **LED** indicates the processor is in **bypass** mode and no effects will be heard.

27. OUTPUT LEVEL: Adjusts the volume of the effects heard.

28. EFFECT SELECTOR: To set the effects, turn the **SELECT** control to one of four effect categories: **ECHO**, **REVERB**, **CHORUS** or **FLANGE**. Turning the **SELECT** control within one of the four effects regions will vary the intensity of each effect by changing the: Regeneration of the **DELAY**, the high-frequency **DAMPING** of the **REVERB**, the **REVERB LEVEL** in the **CHORUS**, or the **SPEED** of the **FLANGE**.

29. PARAMETER ADJUSTS: The **PARAMETER** control changes the following on each effect: **TIME** of **DELAY**, **DECAY** length of the **REVERB**, **DEPTH** of the **CHORUS**, or **DEPTH** of the **FLANGE**.

30. PROCESS SWITCHES (A, B, MICS 1-3): These switches select which sources will be effected by the processor. Pressing the **A** (or **B**) switch **IN** allows only signals from the **A** (or **B**) side of the **CROSSFADER** to be processed. Pressing the **MICS 1-3** switch allows **MIC** inputs to be processed. Stunning effects can be produced when manipulating the **CROSSFADER** or **PROCESS** switches. A momentary burst

of sound will allow echo repeats or reverb tails to continue after the original signal is removed.

31. BYPASS SWITCH: Turns off all effects as soon as the switch is pressed in. The **PK/BY LED** lights when in **bypass** mode.

32. POWER LED: Indicates the mixer is **ON**.

REAR PANEL

33. XLR MIC INPUT CONNECTORS: These balanced **MIC** inputs are for connecting microphones that use **XLR** connections. An additional **MIC 1** input **XLR** is located on the top panel for easy access and gooseneck mics.

34. 1/4" MIC INPUT JACKS: These input are for connecting balanced and unbalanced microphones and other sources such as drum machines etc.

35. GROUND LUG: Connect the ground wire from your turntables here.

36. RCA LINE INPUTS (1-5): Use these inputs for stereo sources such as **CD**, **MP3**, **MiniDisc**, **DAT**, or other mixers.

37. RCA PHONO INPUTS (1-3): Use these inputs for **TURNTABLES ONLY**. Other inputs will sound distorted and may cause damage. These inputs feature **RIAA** equalization filters, which is a standard for turntables.

38. MASTER OUT & REC OUT: Two **RCA** outputs for connecting to power amps, other mixers or recorders using **RCA** connectors.

39. RIGHT & LEFT MASTER OUTPUT BALANCED XLR CONNECTORS: Use these connectors whenever possible to connect to power amps or other mixers. The result is a 6dB hotter signal with the noise cancellation of a balanced connection. Adjust output level at the **MASTER** fader. (see #13.)

40. MONO/SUB BALANCED XLR CONNECTOR: For connecting to Mono systems or to a **SUBWOOFER AMP** (see #22). Level is set at the **MONO/SUB** level control and further adjusted at the **MASTER FADER**.

41. ZONE 1/4" OUTPUT JACK: A mono balanced (or unbalanced) output from the **ZONE** source. Using a balanced (stereo) 1/4" cable will take advantage of the noise cancellation of balanced 1/4" inputs on the power amp. Recommended for long cable runs between the mixer and amp.

42. MONITOR 1/4" OUTPUT JACK (MONO): Featuring a high output headphone amp, this jack is typically used for Mono headphones. It may also be used to drive a power amp for the control room speaker.

43. MONITOR 1/4" OUTPUT JACK (PHONES): Connect **STEREO** headphones here on the top panel or both. Features a high output stereo headphone amp.

44. POWER SWITCH: Flip to the **ON** (up) position to power up the mixer.

45. AC POWER RECEPTACLE: A detachable **AC** cable is included. This mixer features a low-noise switching power supply that will run on any **AC** voltage from 90 to 255 VAC, 50-60Hz.