

# NADY™ AUDIO

## OWNER'S MANUAL



# PRM-400

## 6 Channel Powered Mixer with Internal DSP Effects

# PRM-400

## 6-CHANNEL POWERED MIXER WITH INTERNAL DSP EFFECTS



Congratulations on your choice of powered mixers — you have purchased one of the finest compact mixing consoles on the market today. This unit was developed using the expertise of professional sound engineers and working musicians. You will find that your new NADY AUDIO PRM-400 has superior performance and greater flexibility than any other powered mixer in its price range. Please read this manual carefully to get the most out of your new unit.

Thanks for selecting NADY AUDIO as your choice in mixing consoles.

Date of Purchase \_\_\_\_\_

Dealer's Name \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Model # \_\_\_\_\_

Serial # \_\_\_\_\_

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# WARNING



An equilateral triangle enclosing a lightning flash/arrowhead symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure which may be of sufficient magnitude to constitute a risk of electric shock.



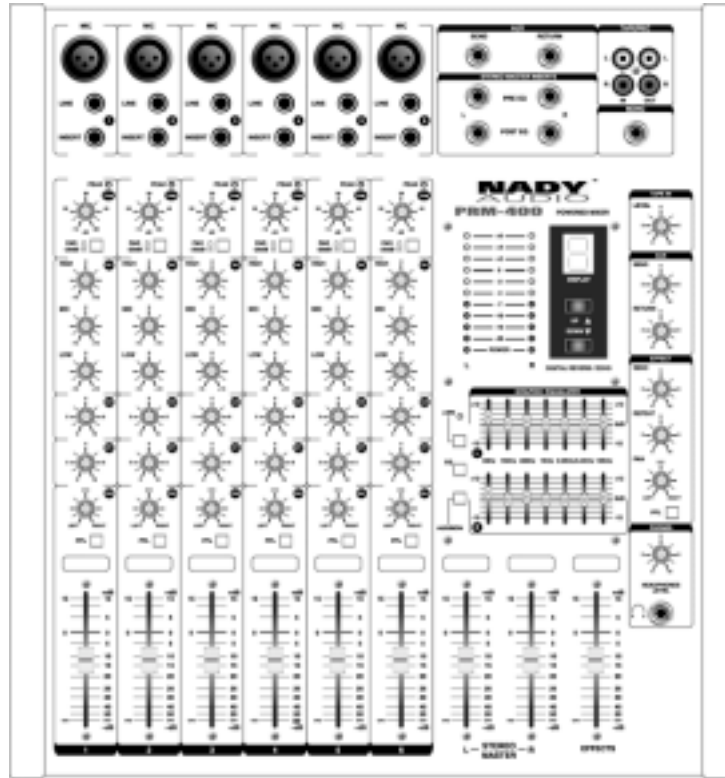
An equilateral triangle enclosing an exclamation point is intended to alert the user to the presence of important operating and service instructions in the literature enclosed with this unit.

## IMPORTANT SAFETY INSTRUCTIONS

When using this electronic device, basic precautions should always be taken, including the following:

1. Read all instructions before using the product.
2. Do not use this product near water (e.g., near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, etc.).
3. This product should be used only with a cart or stand that will keep it level and stable and prevent wobbling.
4. This product, in combination with headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be positioned so that proper ventilation is maintained.
6. The product should be located away from heat sources such as radiators, heat vents, or other devices (including amplifiers) that produce heat.
7. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product. Replace the fuse only with one of the specified type, size, and correct rating.
8. The power supply cord should: (1) be undamaged, (2) never share an outlet or extension cord with other devices so that the outlet's or extension cord's power rating is exceeded, and (3) never be left plugged into the outlet when not being used for a long period of time.
9. Care should be taken so that objects do not fall into, and liquids are not spilled through, the enclosure's openings.
10. The product should be serviced by qualified service personnel if:
  - A. The power supply cord or the plug has been damaged.
  - B. Objects have fallen into, or liquid has been spilled onto the product.
  - C. The product has been exposed to rain.
  - D. The product does not appear to operate normally or exhibits a marked change in performance.
  - E. The product has been dropped, or the enclosure damaged.
11. Do not attempt to service the product beyond what is described in the user maintenance instructions. All other servicing should be referred to qualified service personnel.

# FEATURES



The PRM-400 is compact desk console or rackmountable 200W/channel stereo powered mixer with 16 built-in selectable preset DSP echo and reverb effects and a comprehensive mixer section with extensive routing capability. The PRM-400 is a versatile audio tool that combines exceptional flexibility and performance, and is ideal for many small venue/live sound reinforcement applications.

- Superior audio performance with low noise and powerful, full-spectrum transparent audio and natural sounding selectable echo/reverb effects
- 6 mono balanced XLR mic and balanced 1/4" line inputs, trim controls and switchable 20dB pads, 3-band EQ's, Peak overload LEDs, Aux, Effects and Pan controls
- Aux/Monitor switch allows the PRM-400 to be used as either a stereo main (FOH) or a mono main and monitors powered mixer
- Stereo power amplifier delivers 200W/side @ 4 Ohms. Fan-cooled, bipolar amplifier design for longest life and maximum reliability.
- Dual 7-band master graphic EQ (with bypass switch) can be used in stereo or mono for main and monitor EQ
- Aux Send and Aux Return with Aux Send and Aux Return controls
- Six 1/4" TRS inserts allow independent connection of effects devices for each mono channel
- Stereo Master inserts with Pre EQ and Post EQ 1/4" TRS jacks
- 60 mm faders on all channels and master L/R and Effect bus mix for precise level control
- High quality sealed pots with center detents (EQ, EFF, PAN)
- Tape In and Record Out RCA jacks with Tape level control
- Built-in DSP (Digital Sound Processor) for ECHO (REVERB) with 16 selectable preset level and echo intervals and separate Repeat control, Effects Return and both individual channel and master mix Effects Send controls, master Effects fader, separate effects PFL monitoring, and numeric LED display
- Headphone output with separate volume adjust
- PFL control for each channel allows headphone monitoring independent of channel volume
- Switchable global 48V phantom power
- Dual 10-segment LED meter for L/R main and PFL
- Erasable area above all faders for notations
- Internal AC supply with 115/230V select switch
- Road-tough all steel construction. Rack ears supplied.
- Dimensions & Weight: 16" x 17" x 6" (406 x 432 x 152 mm), 27.8 lbs (12.6 Kg)

# INSTALLATION

To ensure years of enjoyment from your **NADY AUDIO PRM-400** powered mixer console, please read this manual thoroughly before using the unit.

## 1. INSPECTION

Your NADY AUDIO PRM-400 was carefully packed at the factory in packaging designed to protect the units in shipment. Before installing and using your unit, carefully examine the packaging and all contents for any signs of physical damage that may have occurred in transit.

*[Please note: Nady Systems is not responsible for shipping damage. If your unit is damaged, do not return to Nady, but notify your dealer and the shipping company (if shipped to you) immediately to make a claim. Such claims must be made by the consignee in a timely manner.]*

## 2. RACK MOUNTING

Enclosed in the shipping box you will find a rackmount kit. If you want to make your PRM-400 a rack mixer, remove the screws from the side panels and use them to attach the rack ears.

*(Note: The rack ears are supplied as "left" and "right" and must be attached as such.)*

## 3. SETUP AND OPERATION

Parts of the unit can become very warm during use. This is normal during operation. Care should be taken to ensure that there is enough space around the unit for cooling (at least 12" or 30cm). Do not place the PRM-400 on high temperature devices such as power amplifiers, etc., or the unit may overheat in operation. Also, do not place the unit on speakers as this may cause them to move and/or fall due to speaker vibrations.

Although the unit's chassis is shielded against radio frequency (RF) and electromagnetic interference (EMI), extremely high fields of RF and EMI should be avoided.

The PRM-400 has an internal power supply and is designed to operate from an external AC source. Power requirements for electrical equipment differ from area to area. Be sure to confirm that the voltage selected by the voltage selector switch on the back panel is proper for your area (120VAC/60 Hz or 230VAC/50Hz) per the information below:

Europe (except UK): 230V, 50Hz  
UK and Australia: 240V, 50Hz  
USA and Canada: 120V, 60 Hz  
For other areas, please check with local authorities.

When ready to operate, plug the AC cord into the power source. Make sure that the unit is turned off before connecting to the AC power source to avoid possible loud transients which can damage your speakers or your ears, especially when monitoring with headphones. Set the noted controls to the positions indicated below to further minimize the chance of undesired noise when first powering up your PRM-400 :

**LEVEL FADERS (11,27A,27B,28)** .....SET TO MINIMUM

**HI, MID & LOW EQ'S (6) AND PAN CONTROLS (9)**.....TURNED TO THE CENTER DETENT POSITION

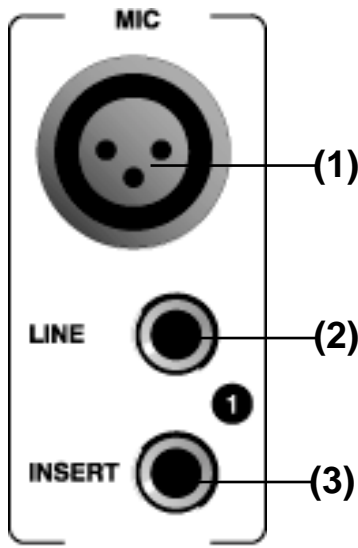
**AUX , EFF CONTROLS & PHONES LEVEL CONTROLS (7,8,36)** .....TURNED COMPLETELY COUNTERCLOCKWISE

ALL OTHER CONTROLS SHOULD ALSO BE TURNED COMPLETELY COUNTERCLOCKWISE.

Power up the unit as noted in **Power Connections, Indicators, and Switches** (Section 3e in **CONTROLS AND CONNECTIONS**).

# CONTROLS AND CONNECTIONS

## 1. CHANNEL INPUT SECTION



### (1) MIC INPUT

The Mic input is an electronically balanced XLR type designed to accept signals from any balanced low impedance (Low Z) microphone. To accommodate condenser microphones, this input is also equipped with +48VDC phantom power globally switchable to all XLR input jacks with the Phantom **Power switch (23)** on the master Section of the front panel. Dynamic or ribbon-type microphones do not require phantom powering. It will be necessary to

adjust the channel gain with the input **Trim control (4)** and/or **Pad switch (5)** to achieve a nominal operating level. The XLR jack is configured for: Pin1 = ground, Pin2 = positive (+), Pin3 = negative (-).

[Note: The Mic inputs are more sensitive than the Line inputs. Also, do not connect mics with the phantom power switched on, as indicated by the **Phantom Power On LED (24)** in the Master Section of the front panel. Never use unbalanced mic cables with the Phantom Power switched on. Never short the +48VDC to ground, as that can cause serious damage to your mixer. Also, turn down the **Stereo Master faders (27A, 27B)** to prevent possible sharp transient noise from damaging the speakers when turning the phantom power on or off.]

### (2) LINE INPUT

The Line input is designed to accept balanced or unbalanced line-level signals such as those from keyboards, drum machines, or samplers. There is enough gain available on the line input to accept even lower level signals, such as those from an unbalanced microphone or guitar output. Use the **Trim control (4)** and/or **Pad switch (5)** to adjust for the desired level. If a balanced signal is to be connected to the line input, then a 1/4" TRS (stereo) phone plug should be wired for: Tip = positive (+), Ring = negative (-), Sleeve = ground.

[Note: Only the Mic or the Line input of a given channel can be connected at one time. Never connect both simultaneously to the same channel.]

### (3) INSERT

All 6 channels are equipped with insert jacks to connect external signal processors such as compressors, noise reduction systems, or effects devices to the individual input channels. Insert points are useful for adding dynamic processing or equalization to a channel or the mix. Unlike reverbs, etc.,

which are usually added to the dry signal, dynamic processing is normally applied across an entire signal. Here an Aux Send would be inappropriate. Instead, the signal is intercepted somewhere along the channel, fed through the dynamics processor and/or EQ, then returned to the console at the same point where it left. The insert point is normalized, i.e., the signal is only interrupted when a plug is plugged into it. The insert jack is located post EQ in the channel and is configured as: Tip = send, Ring = return, Sleeve = ground. The Insert can also be used as a channel direct output by sending the signal from the ring. To use the Insert as a direct output, insert a 1/4" phone plug halfway into the Insert jack so the tip of the plug connects with the ring of the insert jack. The jack will click into place when the connection to the ring is made.

### (4) TRIM

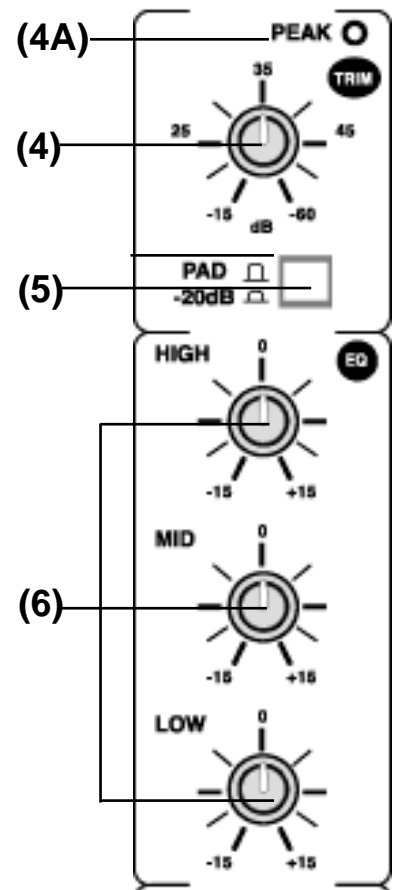
The trim control adjusts the input sensitivity (channel gain) of the Mic and Line inputs on the input channels. This control can be adjusted to accommodate input signals from a wide variety of sources, from the high outputs from keyboards or drum machines to the small signal outputs of microphones.

The trim control adjusts the input sensitivity from -20dB to -60dB with the -20dB **Pad switch (5)** in the OUT position, and -40dB to 0dB with the pad in the IN (button depressed) position.

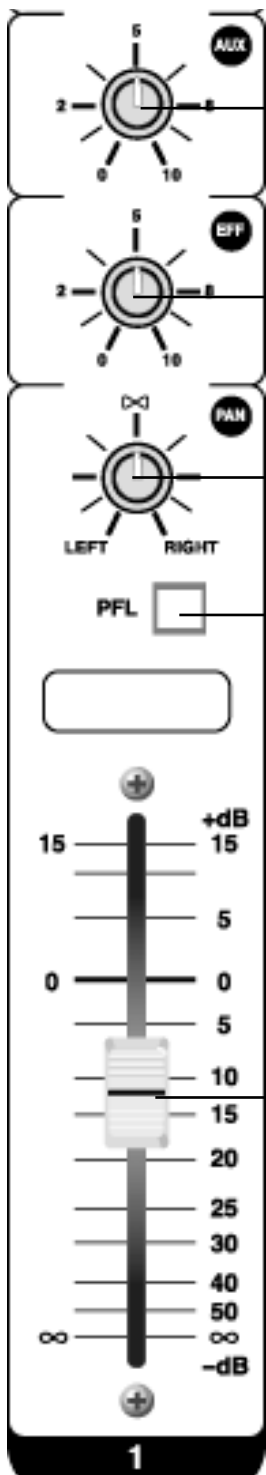
The best balance of S/N and dynamic range will be achieved if you adjust the TRIM control on each channel separately so that the **Peak Indicator LED (4A)** for that channel lights occasionally.

### (4A) PEAK LED INDICATOR

The Peak LED illuminates when a channel is going into overload. It detects the peak level after the EQ and will light at approximately 5dB before clipping to warn that the signal is approaching overload. You do not want the Peak LED to light except very intermittently during a take or a mix. If it does light persistently, reduce input gain with the **TRIM control (4)** or **PAD (5)**.



# CONTROLS AND CONNECTIONS



## (5) PAD

This control attenuates the input signal -20dB when set to the IN (button depressed) position.

## (6) EQUALIZER CONTROLS

All input channels are fitted with a three-band EQ. All three bands have up to 15 dB of cut and boost, with a center detent for "off". The frequency response is flat when all three EQ knobs are in the center detent position. The upper and lower shelving controls have their frequencies fixed at 12 kHz and 80 Hz respectively. The midrange control has a peaking response at 2.5KHz (Q fixed at 1 octave). The channel EQ is a valuable feature of the mixer as it allows the user to control the tonal characteristics of each instrument separately. For example, boosting the LOW can fatten the sound and add punch to the bass or drums; the MID control can be used to define the midrange or bring out the vocals; and adjusting the HIGH control can provide a crisp sounding high end. Another very important, yet often overlooked technique is to use the EQ to subtract from the mix. Cutting the HIGH control can reduce unwanted hiss during multi-track recording, while attenuating the MID or LOW can eliminate feedback in a live performance or clear up a muddy sounding mix. Cutting away the top and bottom, then pushing up the Gain is equivalent to mid range boost!

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The key to successful equalization is to avoid excess. Too much equalization on the input channels will result in a mix that is smeared together with nothing specifically defined. During rehearsals, experiment with the equalizer controls on various instruments, vocals and combinations of these mixed together to become familiar with various equalizer settings.

## (7) AUX (POST) SEND CONTROLS

The Aux send controls are mono and post-EQ and pre-fader and the signal level sent to the AUX bus will be unaffected by the channel fader setting. This configuration is ideal for almost all monitoring purposes, for example, for a separate stage monitor mix in live performances or a studio room monitor in recording applications, such as for a headphone cue system.

## (8) EFF (EFFECTS) CONTROLS

The EFF control are mono, post-EQ and pre-fader and the signal level sent to the EFFECTS bus will be unaffected by the channel fader setting. These controls adjust the level sent by each channel to the internal DSP (Digital Sound Processor). (See also **Digital Echo Effects Function and Operation**)

## (9) PAN

The Channel Pan positions the output of the channel in the stereo field of the main mix. Its constant-power design ensures there are no level discrepancies whether a signal is hard-panned, center-stage, or somewhere in between.

## (10) PFL SELECT SWITCH

The PFL (pre-fader listen) switch enables monitoring the signal of any channel(s) selected (button depressed) at nominal levels through the headphone output. The signal is post EQ and independent of channel fader position. Selecting the PFL never interrupts the main stereo out or the AUX sends.

## (11) CHANNEL FADER

The channel faders determine the output signal level to the Master Mix Left, Right busses. They offer a smooth logarithmic taper for optimum control of the signal, more often associated with much more expensive consoles.

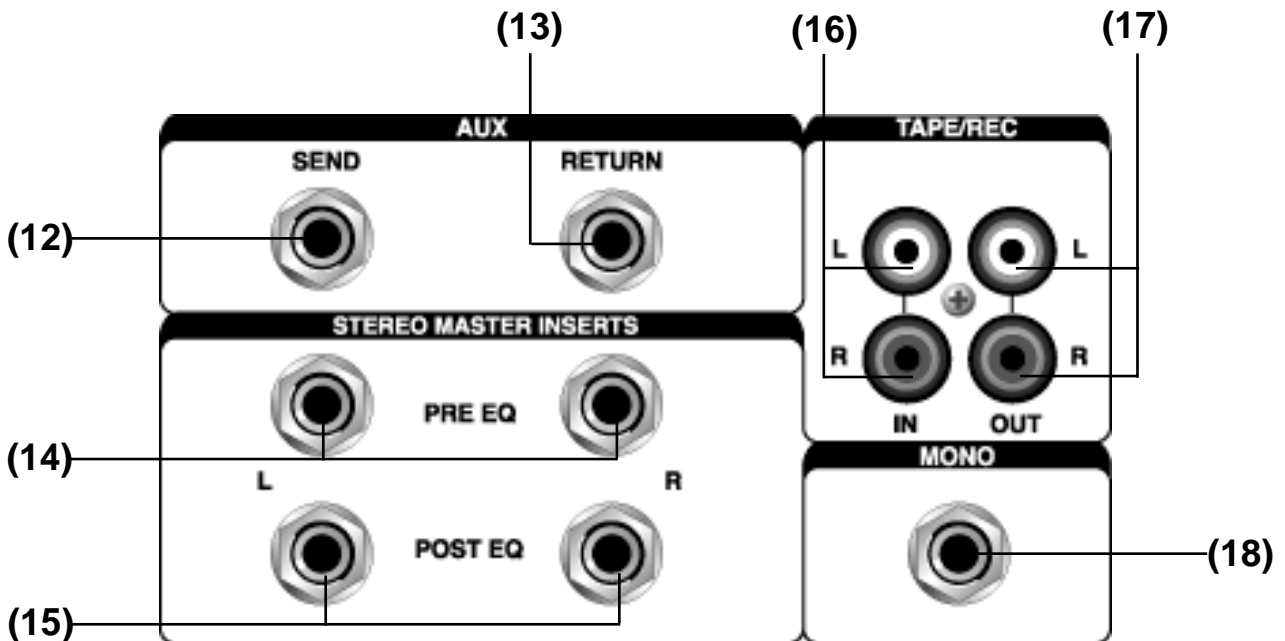
ance or clear up a muddy sounding mix. Cutting away the top and bottom, then pushing up the Gain is equivalent to mid range boost!

*[Note: Always reset a channel's input Gain (or external device's output level) after altering the amount of mixer equalization cut or boost applied.]*



# CONTROLS AND CONNECTIONS

## 2. MASTER SECTION



### a. AUX Send/Return Function and Operation

(13) AUX RETURN

(31) AUX RETURN CONTROL

The Aux Return jack enables a convenient input to the left and right Master Mix busses. If you connect a signal to the Return jack, the Aux Return will operate in mono and the signal will be routed to the **Aux Return Control (31)** and then mixed into the left and right Master Mix bus. The Aux Return is multi-functional. It may be used for returning the outputs of effect units such as Tape Returns from a multi-track recorder, or as extra instrument inputs such as from a MIDI keyboard.

(12) AUX SEND

(30) MASTER AUX SEND CONTROL

The Aux Send jack is the unbalanced output for the signals from the Aux bus. It is pre-fader. This signal can be sent to the input of an effects processor, multi-track recorder, or used for any other line-level auxiliary purpose, such as monitor feeds. The Aux Send level is adjusted by the channel **Aux Send controls (7)** and the Master **Aux Send control (30)**. When the **Aux/Mon switch (26)** is in the depressed IN position, the Aux send also functions as the mono output of the Master Right Channel bus. (See also **Master Mix Function and Operation** below)

### b. Master Mix Function and Operation

(42) MAIN SPEAKER OUTPUTS

(16) TAPE INPUTS

(29) TAPE IN LEVEL CONTROL

(17) REC OUTPUTS

(27A,27B) STEREO MASTER MIX FADERS

(19) LED OUTPUT METER DISPLAY

(22) 7 BAND MASTER MIX GRAPHIC EQUALIZER

(25) EQ BYPASS SWITCH

(26) AUX/MON SELECT SWITCH

(14) STEREO MASTER INSERTS-PRE EQ

(15) STEREO MASTER INSERTS-POST EQ

The final Master Mix is output directly to the **Main Speaker outputs (42)**. These L/R outputs provide 200W at 4 ohms for powering P.A. speakers rated for this power or more. Channel A and B parallel outputs allow multiple speaker setups. You can also access this Master Mix by utilizing the send function of the Stereo Master Inserts (see below). The **Record Out (17)** jacks output the Master Mix post-**Stereo Master faders (27A, 27B)** and are pre-**Master EQ (22)** and pre-**Stereo Master Inserts (14,15)**. These outputs are RCA jacks, and designed primarily for inputs to tape recorders, etc.

The output level routed to the Speaker outputs and REC outputs is determined ultimately by the setting of the **Stereo Master faders (27A, 27B)**. The Master Mix (signal on the L/R main busses) is the sum of the signals routed from all the channels and also the inputs from the EFFECTS and AUX busses and the **TAPE Input (16)**. The level input from the **Tape In (16)** is adjusted with the **Tape In Level control (29)**. The level of signal routed to the **Stereo Master faders (27A,27B)** from DAT, tape decks, CD players, etc., input to the **Tape Input (16)** is determined by the setting of the output volume control of the audio device being connected and the **Tape In Level Control (29)**, so care must be taken in adjusting these levels so as to achieve proper balance in the final mix and to prevent overload distortion. The 10-stage **LED Output Meter (19)** can be used to maintain proper levels in the master mix.



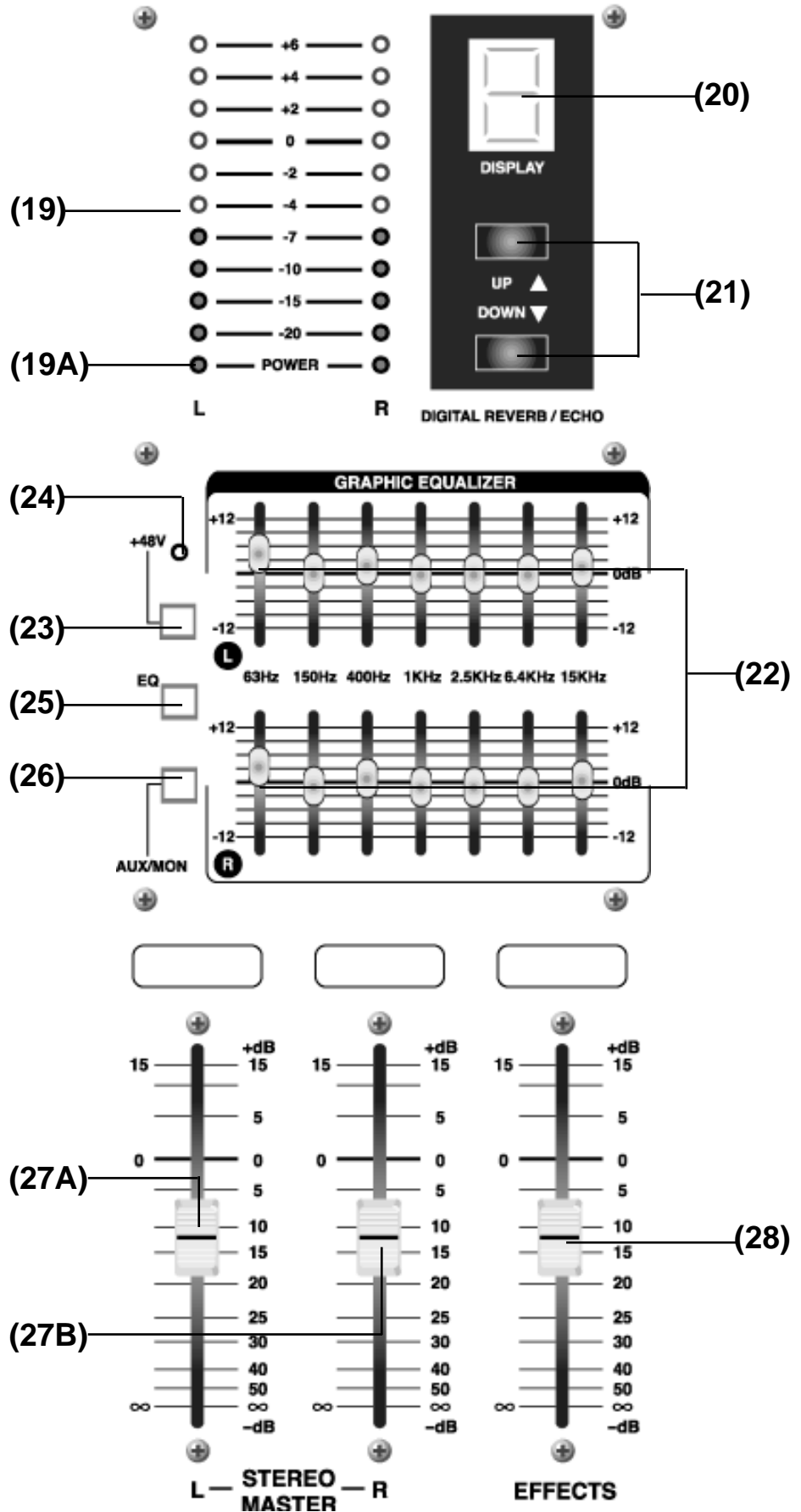
# CONTROLS AND CONNECTIONS

The PRM-400 is equipped with a 7-band **Stereo Graphic Equalizer (22)**, allowing final tonal adjustments on the Master Mix. This master EQ is post-**Stereo Master faders (27A,27B)** so you must exercise care in the proper use of these EQs for best overall sound [see also **INPUT SECTION, (6)** EQ above]. The **EQ Bypass switch (25)** can be used to add or eliminate the Stereo EQ from the Master Mix (button depressed=EQ bypassed).

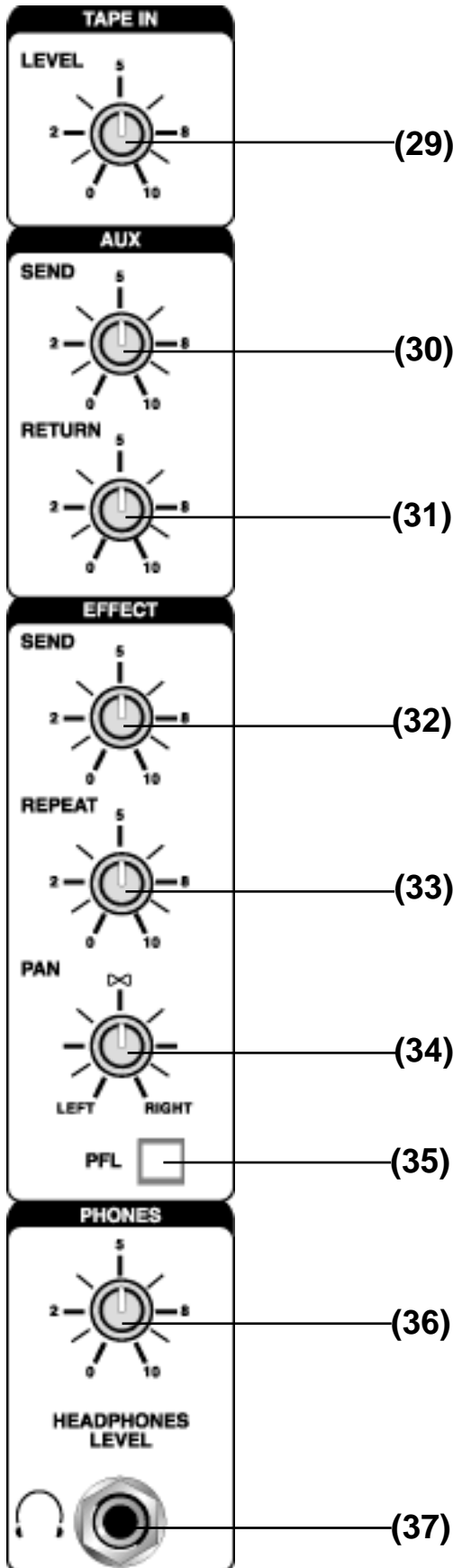
Further processing of the Master Mix can be done by utilizing the stereo **Master Inserts (14,15)**. The **PRE EQ insert (14)** inserts a signal from an outboard processor, as desired, between the **Stereo Master faders (27A,27B)** and the **Stereo Graphic Equalizer (22)**, while the **POST EQ insert(15)** inserts it POST EQ and before the PRM-400 internal power amp. The insert points are normalized, i.e., the signal is only interrupted when a jack is plugged into it. The insert jacks are configured as: Tip = send, Ring = return, Sleeve = ground.

The Inserts can also be used as Master Mix pre or post-EQ direct outputs by sending the signal from the ring. To use an insert as a direct output, insert a 1/4" phone plug halfway into the insert jack so the tip of the plug connects with the ring of the insert jack. The jack will click into place when the connection to the ring is made. Such outputs can thus serve as feeds for external amplifiers or recording devices, for example.

The **Aux/Mon Select switch (26)** can be used to switch between normal stereo L/R to dual mono operation, such as for powering separate mains and monitor speakers with the PRM-400. The UP position is for stereo operation as described above, and the DOWN (depressed) position enables dual mono operation as follows: The Left speaker output is a mono mix of both the Left and Right signals as controlled



# CONTROLS AND CONNECTIONS



by the Channel faders, and the Right speaker output is the signal controlled by the **Channel AUX controls (7)**. Therefore the Main speakers, for example, can be controlled by the individual **Channel faders (11)** and the **Left Master fader (27A)**, and the Monitor speakers by the **Channel AUX controls (7)** and the **Right Master fader (27B)**. In this mode, any **Master EQ (22)** or **Effects (8,28,32)** selected on the EFFECTS bus will be output on both the Left and Right Speaker outputs. The **Left and Right Master inserts (14,15)** operate individually on either channel as in normal stereo operation.

## c. Digital Echo Effects Function and Operation

- (20) EFFECTS DISPLAY
- (21) ECHO EFFECT SELECT BUTTONS
- (32) EFFECT SEND
- (33) EFFECT (ECHO) REPEAT
- (34) EFFECT PAN
- (35) EFFECT PFL
- (28) EFFECT FADER

The built-in DSP (Digital Sound Processor) offers 16 different preset level and echo intervals selectable by the Echo Effect **Select UP/DOWN buttons (21)**. Press either button to scroll in either direction through the 16 presets. The numeric **Effects Display (20)** will indicate which of the 16 effect presets has been selected. The DSP processes the signal on the EFFECTS bus, which is the sum of the 6 individual channel inputs controlled by the **EFF control (8)**. The **EFFECT SEND control (32)** adjusts the level of the signal on the EFFECTS bus fed to the DSP. The **EFFECT (ECHO) REPEAT control (33)** adjusts the number of repeats of the echo effect selected with the **UP/DOWN buttons (21)** and the **EFFECTS fader (28)** controls the signal level sent to the Master Mix busses. The output of the DSP is sent proportionately to the Left and Right Master Mix busses as adjusted by the **EFFECT PAN control (34)**. The **EFFECT PFL button (35)** can be depressed to monitor the **pre-EFFECTS fader (28)** DSP output through the **Monitor Headphones jack (37)**.

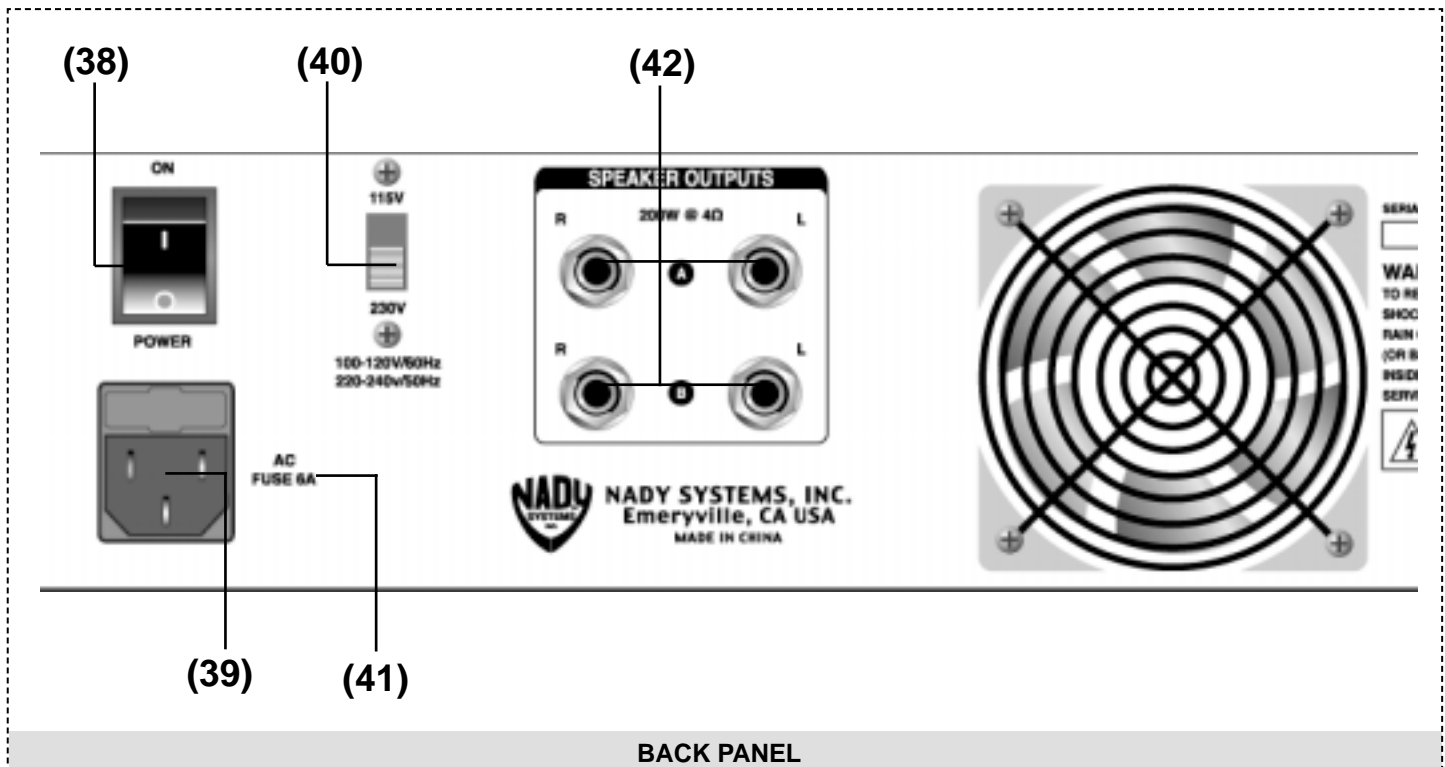
## d. Monitor Function and Operation

- (37) HEADPHONES OUTPUT
- (36) PHONES LEVEL CONTROL
- (18) MONO MONITOR OUTPUT

The PRM-400 allows you to monitor the Stereo Master Mix or any signals selected by the channel **PFL (10)** or **EFFECTS PFL (35)**. The signal level is adjusted with the **Phones Level control (36)** and routed to the **Headphones (37)** output. The **Phones Output (37)** will feed headphones and is a 1/4" TRS jack, wired: tip = left signal, ring = right signal, sleeve = ground. (Note: Use only headphones with an impedance >50Ω or you may experience some distortion.)

If desired, this output can also be connected instead to an amplifier and speakers for control room or stage monitoring. The **MONO Monitor Out Jack (18)** is another useful output which can be used to feed a signal to a monitor amp or other mixer. The signal on this output is taken from the AUX bus

# CONTROLS AND CONNECTIONS



and is pre the master **AUX send control (30)**. When the **AUX/MON switch (26)** button is depressed, this output serves as the monitor output for the Right bus (see also **Master Mix Function and Operation**).

#### e. Power Connection, Indicators, and Switches

- (39) AC POWER CORD
- (38) MAIN POWER SWITCH
- (40) 115/230VAC POWER SELECTOR SWITCH
- (19A) POWER ON LED INDICATORS
- (41) FUSE HOLDER

Check the power source for the voltage (115VAC or 230VAC) in your area and switch the **Power Selector switch (40)** to select the proper voltage. Once you have connected the **AC power cord (39)** to the AC power source, switch on your mixer with the **Power On switch (38)**. The **Power ON LED Indicators (19A)** will light up. Allow 1 minute after powering up for the system to reach equilibrium before setting input gains and other levels. You can leave the PRM-400 on all the time. It is conservatively designed, so heat build-up isn't a problem even in 24-hour-a-day operation. There's nothing that will burn out or get used up. Alternatively, you can just plug every unit in your total system into a **Nady Power Conditioner PCL-800/810/815** or a good quality power strip, for one-button turn-on.

The PRM-400 is fused for your (and its own) protection. If a fuse blows, disconnect the AC cord, and replace the fuse with a 6.0A (5x20mm, 250V) type, available at electronics stores or through your dealer. If the fuse blows continuously upon replacement, unplug the unit and refer to qualified personnel for servicing before further use.

- (23) PHANTOM POWER SWITCH
- (24) PHANTOM POWER ON LED INDICATOR

When using condenser mics, +48VDC can be switched globally on or off to the XLR mic inputs for all six channels (also see **INPUT SECTION, MIC INPUTS**). When this switch is in the "ON" position (button depressed), the **Phantom Power On LED Indicator (24)** will light, and +48VDC will be provided between pins 2 and 3 of all the Mic input XLR connectors. If you don't need phantom power, be sure to turn this switch to the "OFF" position.

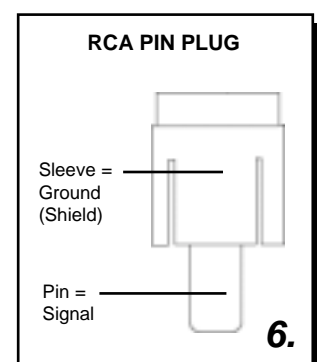
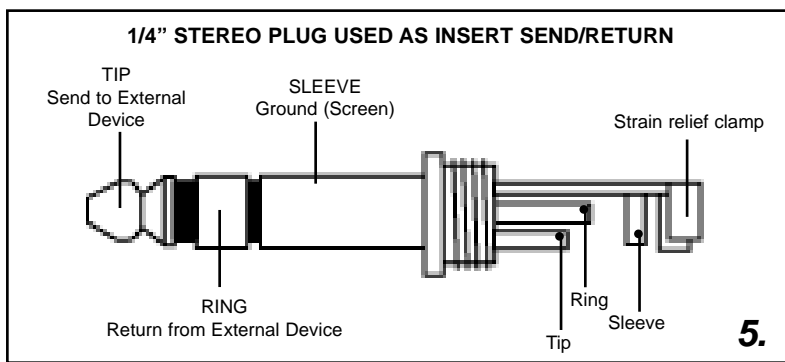
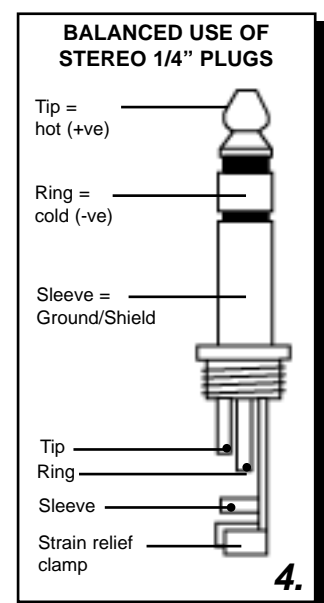
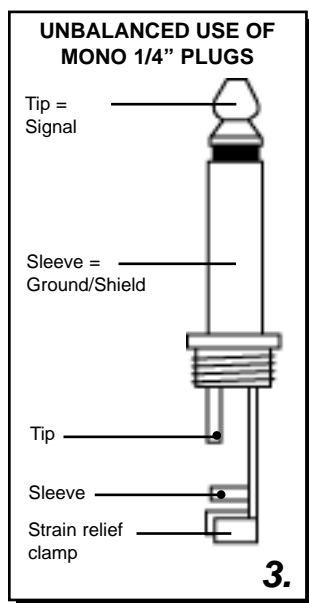
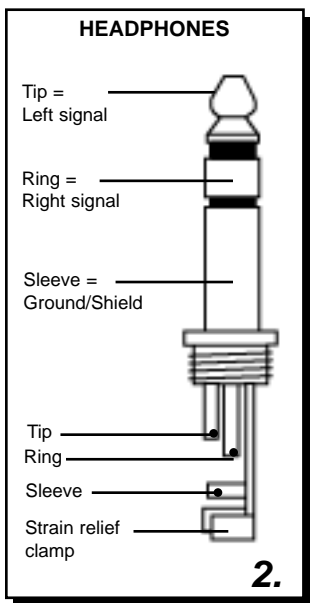
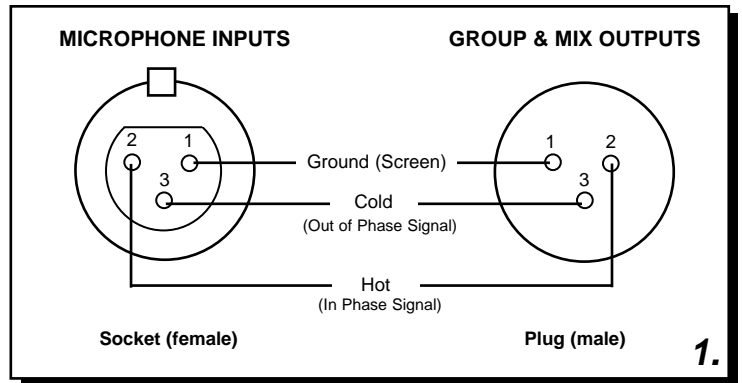
*[Note: It is safe to connect balanced dynamic mics or line level devices even if this switch is on, but connecting unbalanced devices or devices whose transformers are center-grounded will cause hum or malfunctions. Shorting the +48VDC can also damage your mixer. Also, turn down the **Stereo Master faders (27A, 27B)** to prevent possible sharp transient noise from damaging the speakers when turning the phantom power on or off.]*

# CONNECTIONS

This NADY AUDIO powered mixer uses 4 different types of audio connectors for the various input/output connections: (1) XLR balanced; (2) 1/4" TRS phone jacks for balanced, unbalanced, stereo, or in/out inserts; (3) 1/4" TS unbalanced; (4) RCA pin unbalanced

## Figures

1. *Balanced XLR input/output connections*
2. *Stereo headphone connection with 1/4" TRS plug*
3. *1/4" mono (TRS) plug used as unbalanced input/output*
4. *1/4" stereo (TRS) plug used as balanced input/output*
5. *1/4" TRS plug used as Insert Send/Return*
6. *RCA pin plug for unbalanced input/output*



# SPECIFICATIONS

## 1. POWER OUTPUTS (R.M.S)

200 Watts (35W + 35W) /4Ω x 2  
0.1% (T.H.D) @ 1KHz

## 2. TOTAL HARMONIC DISTORTION

Main Amp ≤ 0.05% @1KHz  
Mic Ch ~ Main Amp ≤ 0.1% @1KHz

## 3. FREQUENCY RESPONSE

± 3dB, 20Hz ~ 20KHz @ 1W/4Ω (Speaker Output)  
± 3dB, 20Hz ~ 20KHz @ +4dB/10Ω (Mixer Stereo Output)

## 4. INPUT LEVEL SENSITIVITY

MIC CH .....-60dBv  
LINE CH .....-40dBv  
TAPE IN .....-40dBv  
AUX RETURN .....-20dBv  
EFF SEND .....-20dBv  
EFF RETURN .....-20dBv

## 5. HUM & NOISE

≤ -80dB ("A" FILTER)

## 6. REMAINING NOISE

≤ -85dB ("A" FILTER)

## 7. INPUT CHANNEL EQUALIZATION

### MIC, LINE, & PHONO INPUTS:

EQ  
HIGH (Shelving) .....10KHz / ±15dB  
MID (Bell) .....2.5KHz / ±15dB  
LOW (Shelving) .....60Hz / ±15dB

## 8. MASTER MIX EQUALIZATION

7 band (63Hz, 150Hz, 400Hz, 1KHz, 2.5KHz, 6.4KHz, 15KHz) +/-12dB

## 9. HEADPHONE OUTPUTS

40mW x 2

## 10. PROTECTION

TURN ON MUTING ..... ~ 1 SEC  
TURN OFF MUTING .....INSTANT

## 11. VU METERS

10-segment LED x 2

## 12. PHANTOM POWER

+48VDC, globally selected

## 13. POWER REQUIREMENTS

Voltage Selectable .....115VAC/60Hz, 230VAC/50Hz

## 14. POWER CONSUMPTION

600W

## 15. FUSE

115VAC Operation .....6A, 5x20mm, 250V  
230VAC Operation .....3A, 5x20mm, 250V

## 16. DIMENSIONS (W x H X D)

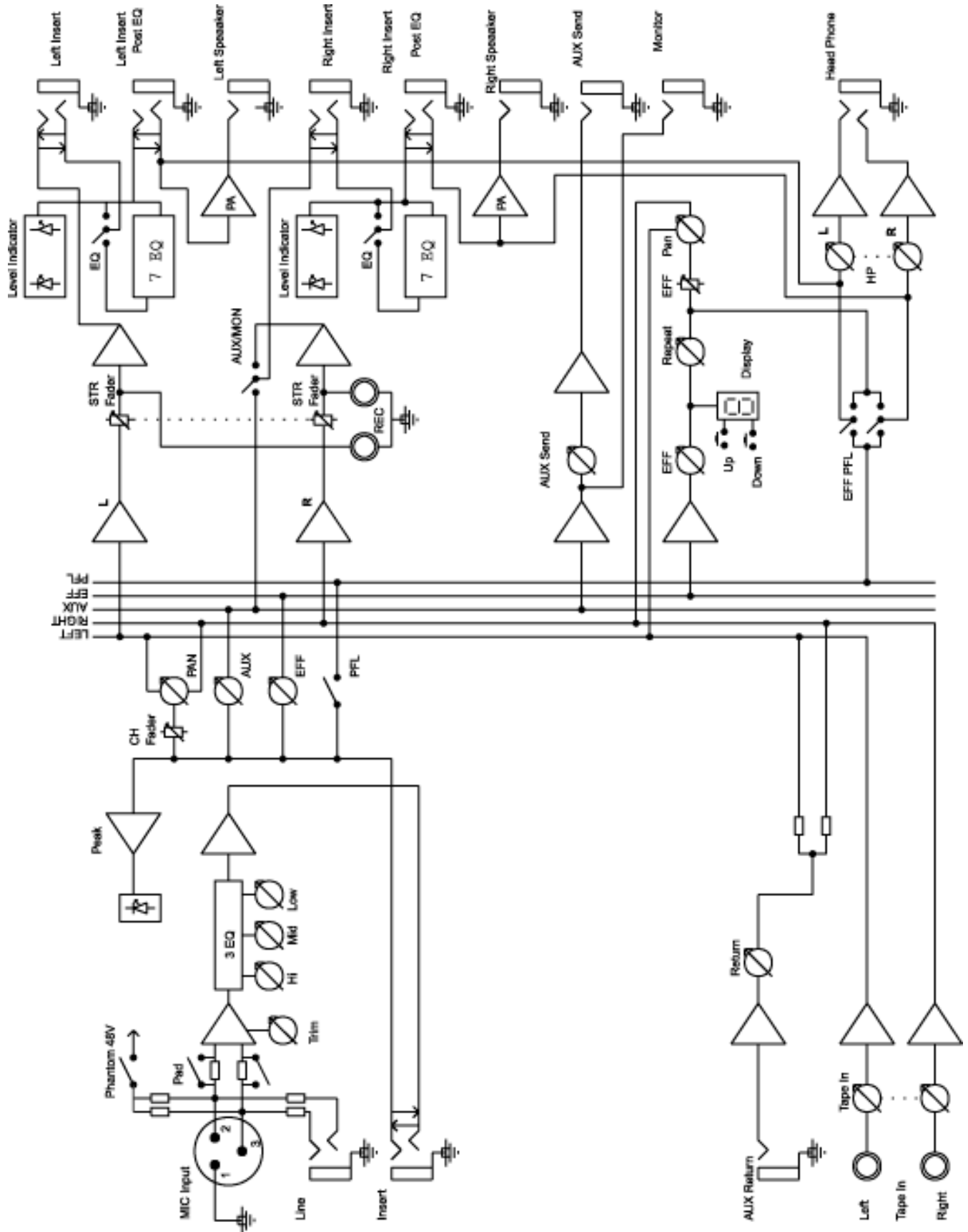
16" x 17" x 6" (406 x 432 x 152 mm)

## 17. WEIGHT

27.8 lbs (12.6 Kg)

*The specifications above are correct at the time of printing of this manual. For improvement purposes, all specifications for this unit, including design and appearance, are subject to change without prior notice.*

# BLOCK DIAGRAM





## **SERVICE FOR YOUR NADY AUDIO PRODUCT**

**(U.S.)** Should your NADY AUDIO product require service, please contact the Nady Service Department via telephone at (510) 652-2411, or e-mail at [service@nadywireless.com](mailto:service@nadywireless.com).

**(International)** For service, please contact the NADY AUDIO distributor in your country through the dealer from whom you purchased this product.

DO NOT ATTEMPT TO SERVICE THIS UNIT  
YOURSELF AS IT CAN BE DANGEROUS  
AND WILL ALSO VOID THE WARRANTY.



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