



## **GEQ 131/ 131LF** Single Channel 31 Band Graphic Equalizer



### **GEQ 215/215LF** 2 Channel 15 Band Graphic Equalizer



## **GEQ 231** 2 Channel 31 Band Graphic Equalizer

## **OWNER'S MANUAL**





#### **Congratulations!**

You have just purchased one of the finest graphic equalizers on the market today. This EQ was developed using the expertise of professional sound engineers and working musicians. You will find your new NADY AUDIO EQ has superior performance and greater flexibility than any other graphic equalizer in its price range.

Read this manual carefully to get the most out of your new EQ. Thanks for selecting NADY AUDIO for your choice in graphic equalizers.

Date of Purchase
Dealer's Name
City
StateZip
Model#
Serial #

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**FEATURES** 

#### GEQ 131/131LF

**Single Channel 31 Band Graphic Equalizers** 

# GEQ 131LF

#### GEO 215/215LF

2 Channel 15 Band Graphic Equalizers



#### **GEQ 231**

2 Channel 31 Band Graphic Equalizer



### **Graphic Equalizer GEO Series**

- GEQ 131: 1 Channel, Single Rack Space, 31-1/3rd Octave Bands
- GEQ 131LF: 1 Channel, Double Rack Space, 31-1/3rd Octave Bands, Long Throw Faders (60mm travel)
- GEQ 215: 2 Channel, Single Rack Space, 15-2/3rd Octave Bands Each Channel
- GEQ 215LF: 2 Channel, Double Rack Space, 15-2/3rd Octave Bands Each Channel, Long Throw Faders (60mm travel)
- GEQ 231: 2 Channel, Double Rack Space, 31—1/3rd Octave **Bands Each Channel**
- Active balanced (XLR and 1/4" TRS) and unbalanced (RCA) input/output connectors
- Constant Q bandwidth from each filter with a 3% center frequency accuracy
- Parallel filter design for minimal phase distortion
- Ultra low-noise circuitry
- Variable low-cut and low pass filters, 12dB/octave (GEQ 131/ 131LF/GEQ 231), switchable filters (GEQ 215LF)
- Selectable range 6dB or 12dB
- Variable input level control
- Equalizer ON/OFF bypass switch
- Peak (overload threshold) LED
- Internal power supply with AC input and selectable line voltage (110-240VAC, 50/60Hz)
- · Ground lift switch
- Power off automatic bypass function





An equilateral triangle enclosing a lightening 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.



#### INSTALLATION

To ensure years of enjoyment from your NADY AU-DIO graphic equalizer, please read and understand this manual thoroughly before using the unit.

These five equalizer models are each designed for mounting in a standard 19" equipment rack or one of the many rack type portable cases available on the market. The units are either single rack (1.75") or double rack (3.5") as noted. All five models are 8.66 inches deep.

Install the equalizer in a rack with the rack screws provided. Route the A.C. power cord to a convenient power outlet away from audio lines. The unit may be turned on and off from the front panel power switch or a master equipment power switch. Since the unit draws a relatively small amount of current during idle, the unit may be left on continuously. NADY AUDIO equalizers do not generate an unduly large amount of heat and do not need to be specially ventilated or cooled. The units should not be subjected, however, to high heat environments.

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.

#### **Input/Output Connections**

The 1/4" phone jack, RCA jack, and XLR connector inputs and outputs can be used for balanced and unbalanced connections. CAUTION: Using more than one connector at a time for the INPUT/OUTPUT pair could unbalance balanced lines, cause phase cancellation, short a conductor to ground, or cause damage to the other equipment connected to the equalizer.

For balanced connection, wire the connectors as follows:

For unbalanced operation, wire the connectors as follows:



Paralleling inputs and outputs may be accomplished by using any of the 3 connectors.

Note: The 1/4" TRS are normally used for this function.

#### **Power Connection**

Each of these five NADY AUDIO graphic equalizers is designed for operation from 120-240 volts, 50-60 Hz AC supplies. Power requirements for electrical equipment differ from area to area. In new installations and portable sound systems, or any situation in which the AC power is in question, it is wise to confirm the voltage and select the appropriate line voltage switch before connecting the instrument to power sources.

Check to see that the unit is set to the voltage for your area by referring to the table 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.



If the voltage selector is not set for your area: Confirm that the power cord is not plugged into a wall outlet. Move the voltage selector switch with a small screwdriver so that the marker is set to the voltage for your area.

#### Precautions

#### Protecting yourself from electric shock:

- Never touch the plug with wet hands.
- Always pull out by the plug and never the cord.
- Only let a qualified professional repair the equipment. An unauthorized person might touch the internal parts and receive a serious electric shock.
- Never allow a child to put anything, especially metal, into the equipment.

#### Protecting your NADY AUDIO Graphic Equalizer:

- Use only a household AC power source. Never use a DC power source.
- If water is spilled on or in the unit, unplug it and call for service.
- Make sure that the equipment is well ventilated and away from direct sunlight
- Avoid damage to the internal circuits and the external surface by keeping the unit away from sources of high heat.
- Avoid using spray type insecticide or solvents near the equipment. It can damage the finish an might ignite suddenly
- To avoid damaging the finish, never use denatured alcohol, paint thinner or other similar chemicals to clean 6 the equipment.
- Place the unit on a flat and solid surface or in a rack.
- To enjoy your NADY AUDIO graphic equalizer for a long time, please read this owner's manual thoroughly.

#### **Signal Levels**

Signal levels from -18dBu to +18dBu are considered normal. Do not directly connect microphones into the equalizers. Microphones require a pre amp.

#### **Chassis Grounding**

NADY AUDIO equalizers are equipped with a rear panel ground lift switch. If, after setting up your system, the system exhibits excessive hum or buzzing, the problem may be that there is a ground incompatibility between your equalizer the other equipment in the same system. There are several combinations that can be attempted. Note: ALWAYS TURN YOUR AMPLIFIERS DOWN BEFORE CHANGING YOUR GROUNDS AROUND. Try different combinations of lifting grounds with the ground lift switches or make sure all chassis are connected to earth ground, either through the A.C. power cord ground or by the front panel rack mount screws. Before starting to equalize your sound system there is some information you should know and procedures you should follow:

- These NADY AUDIO equalizers are equipped with a BYPASS switch with an LED indicator. If you disable the BYPASS switch, the LED will turn off and all equalization settings will be restored. In bypass mode, the audio signal will flow through at unity gain.
- Use the range selection switch to select between a 6db or 12dB level adjust range. The dual color range LED will indicate green for 6dB and red for 12dB.
- The input level control allows adjustment between OFF (center detent) and +/-6dB. Note: The unit is equipped with a red overload LED, which illuminates when the signal reaches 5dB prior to clipping. It is normal for the overload LED to flash occasionally, but if the overload LED is on steady you must readjust the level control. Below are some tips to follow while doing the initial set-up.
- 1. Set channel levels to the center detent (0dB-unity gain) on the front panel.
- 2. Enable the BYPASS switch (Note: The red LED is ON).
- 3. Set all slide controls to the center detent or 0dB (unity gain) position.
- 4. Select the 6dB range switch (green LED ON).
- 5. Apply signal to the system.
- 6. Disable the BYPASS switch, red LED OFF.
- 7. If the CLIP (overload) LED is on you must turn down the level control.
- 8. You may now start equalizing your system.
- 9. Switch the range switch to 12dB (red LED is lit) if the 6dB range does not provide sufficient gain.