

SEQ-1 SEVEN BAND EQUALIZER

INTRODUCTION

These instructions contain the specifications and information necessary to install, operate, and maintain the SEQ-1, Seven Band Equalizer, manufactured by Clarity, 1111 Industry Avenue, Roanoke, VA 24013.

SPECIFICATIONS

Features

- 7 active filters
- Modified 1 octave equalization
- ± 12 dB boost or cut
- Constant Q equalization
- Rocker-type power switch
- Power "ON" indicator
- Bypass switch to remove EQ from circuit (slide type)
- High impedance output
- Line output

Nominal Specifications

- Type of Inputs:
 - Hi impedance 10K ohms (unbalanced)
 - Stereo HiZ 10K ohms (unbalanced)
- Type of Outputs: Line (balanced)
 - Hi impedance 10K ohms (unbalanced)
- Frequency Response: 35 Hz -20 kHz ± 1 dB
- Distortion: $< 0.3\%$
- Frequency Centers: Band 1 = 60 Hz
2 = 200 Hz
3 = 560 Hz
4 = 1100 Hz
5 = 2200 Hz
6 = 4500 Hz
7 = 10000 Hz

Power Requirements

- -24 VDC
- 150 mA

Dimensions

- 8.6"W x 3.5"H x 5.5"D
(21.8cm W x 8.9cm H x 14.0cm D)

Environment

- Temperature: 0 to 50 Degrees C
- Humidity: 0-85% non-precipitating

OPERATION

The SEQ-1 is used to boost or attenuate specific frequencies to improve voice intelligibility or attenuate frequencies to help reduce feedback. The unit can also be used to modify the frequency response of speakers.

A "POWER" switch, "POWER" indicating LED, 7 slide controls (1 for each of the bands), and "EQ" bypass switch are located on the front of the unit. The frequencies boost/cut (1 to 12 dB), are modified with each filter's slide control. The manual "EQ" bypass switch allows comparison of before equalization, and after effect, in the area being equalized. All frequency adjustments are bypassed when the "EQ IN/OUT" switch is in the "OUT" position.

INSTALLATION

The SEQ-1 was designed for shelf or rack mounting (two units can be mounted side by side in a 19" equipment rack - rack mounting requires the SEQ-RMK rack mount kit).

Connections are accomplished utilizing (3) phono jacks (2 input, 1 output) and/or (9) screw terminals. Only qualified service personnel should install the SEQ-1. See Figures 1 and 2 for actual connections. All connections should be made and double checked before DC power is supplied to the unit.

TECHNICAL ASSISTANCE

When trouble is reported, verify that DC power is being supplied to the unit and there are no shorts or grounds on cabling. Assistance in troubleshooting is available from the factory. When calling, you should have a VOM and a telephone test set available and be calling from the job site. Call (540) 427-3505 and ask for Technical Support.

CLARITY maintains service facilities in Roanoke, VA. Should repairs be necessary, attach a tag to the unit clearly stating company name, address, phone number, contact person, and the nature of the problem. Send the unit to:

**Repair and Return Dept.
Clarity
5614 Hollins Road
Roanoke, VA 24019**

LIMITED WARRANTY

Clarity warrants its products to be free from defects in materials and workmanship under conditions of normal use and service for a period of one year from the date of shipment. The obligation under this warranty shall be limited to the replacement, repair or refund of any such defective device within the warranty period, provided that:

1. Inspection by Clarity indicates the validity of the claim;
2. The defect is not the result of damage, misuse, or negligence after the original shipment;
3. The product has not been in any way repaired by others and that factory sealed units are unopened (A service charge plus parts and labor will be applied to units defaced or physically damaged);
4. Freight charges for the return of products to Clarity are prepaid;
5. All units "out of warranty" are subject to a service charge. The service charge will cover minor repairs (Major repairs will be subject to additional charges for parts and labor).

This warranty is in lieu of and excludes all other warranties expressed or implied, and in no event shall Clarity be liable for any anticipated profits, consequential damages, loss of time or other losses incurred by the buyer in connection with the purchase, operation or use of the product.

This warranty specifically excludes damage incurred in shipment. In the event a product is received in damaged condition, the carrier should be notified immediately. Claims for such damage should be filed with the carrier involved in accordance with the F.O.B. point.

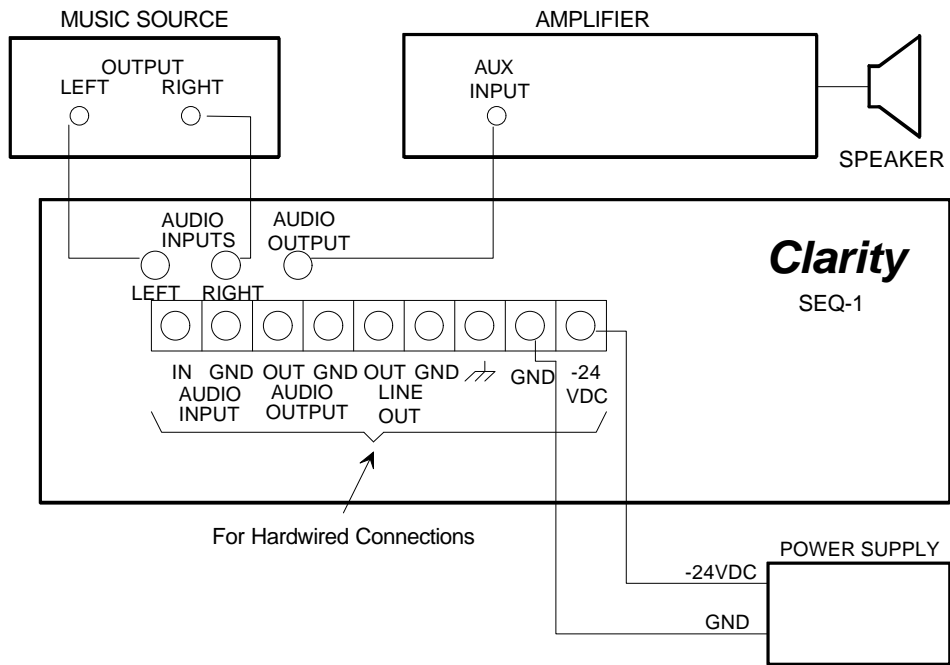


FIGURE 1 - MUSIC SOURCE CONNECTIONS

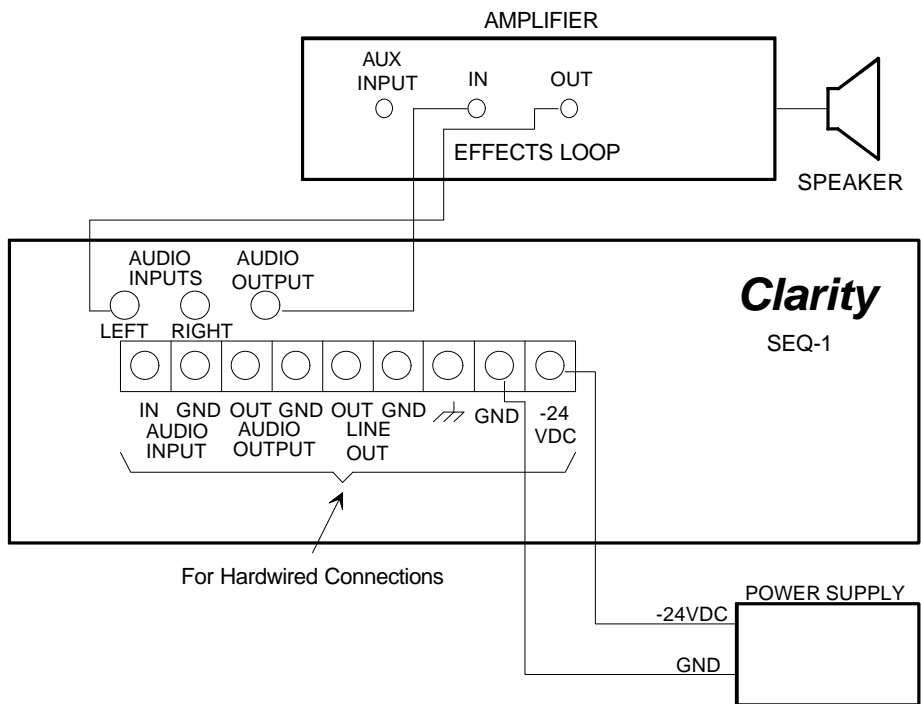


FIGURE 2 - EFFECTS LOOP CONNECTIONS