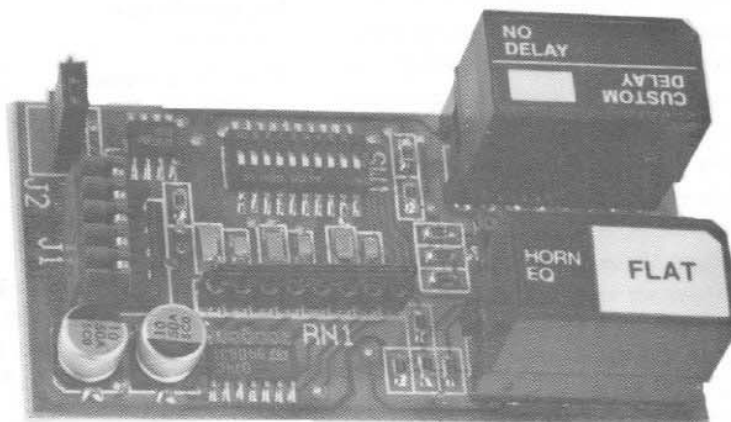




ITX-1

Electronic Frequency Dividing PCB

- 24 crossover frequencies
- 4th-order Linkwitz-Riley filter
- Optional EQ and delay modules
- Able to link multiple channels
- Simple to install

Description

InterActive Technology provides optional signal processing PCBs for use with all IT compatible amplifiers. Model ITX-1 is a single channel two-way active crossover designed to provide 24 crossover frequencies ranging from 50 Hz to 10,000 Hz.

The ITX-1 electronic frequency dividing PCB crossover frequencies are located on ISO one-third-octave centers. Crossover filter implementation provides fourth-order Linkwitz-Riley filter response with a stop band attenuation of 24 dB/octave.

The ITX-1 plugs directly into the five-pin header of an IT compatible signal input module. The PCB divides the signal into high-frequency and low-frequency portions according to the user defined frequency settings.

The user selects which portion is fed directly to the associated amplifier input channel. The other portion can be linked directly to another input channel eliminating the need for multiple filter PCBs.

Horn EQ submodules and low-frequency time delay submodules are available to plug into the ITX-1 module.

Standard ITX-1 electronic frequency dividing PCBs are supplied with "flat" equalizer and a "no delay" submodule. Optional submodules in the 9600 series and the EQ Series are available to properly equalize most all horn and compression driver combination for a flat response. Customizing delay times is accomplished by varying the resistor values of a 16-pin DIP socket designated RDL.

Architects' and Engineers' Specifications

The specified signal processing PCB shall provide frequency separation of a given input signal into a high-frequency and low-frequency two-way signal. Frequency separation shall be implemented with a fourth-order Linkwitz-Riley filter response. The PCB module shall be InterActive Technology compatible and provide means for attachment to a single channel of an IT

compatible signal input module.

The signal processor PCB shall provide user configuration of the crossover frequency between 50 Hz and 10,000 Hz. Crossover frequencies shall be located on ISO one-third-octave centers.

Provisions shall be provided on the PCB to allow the user to adjust the high-frequency gain. The user shall have the ability to select which frequency range is sent directly to the amplifier channel for which the PCB is attached. The PCB shall provide provisions to allow the user to send the non-directed frequency range to a differing amplifier channel.

The signal processing PCB shall provide the appropriate sockets to accept equalizer and time delay submodules. Each PCB shall be provided with a "flat" response equalizer submodule and a "no delay" submodule with provisions to adapt optional equalization. Each PCB module shall accept 9600 Series and EQ Series equalizer submodules.

The specified signal processing PCB shall be InterActive Technology model ITX-1.

ITX Electronic Frequency Dividing PCB

Uniform Limited Warranty Statement

InterActive Technology products are guaranteed against malfunction due to defects in materials or workmanship for a specified period, as noted in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our option) without charge. The product will be returned to the customer prepaid. **Exclusions and Limitations:** The Limited Warranty does not apply to: (a) exterior finish or appearance; (b) certain specific items described in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual; (c) malfunction resulting from use or operation of the product other than as specified in the product data sheet or owner's manual; (d) malfunction resulting from misuse or abuse of the product; or (e) malfunction occurring at any time after repairs have been made to the product by anyone other than EVI Audio Service or any of its authorized service representatives. **Obtaining Warranty Service:** To obtain warranty service, a customer must deliver the product, prepaid, to EVI Audio Service or any of its authorized service representatives together with proof of purchase of the product in the form of a bill of sale or receipted invoice. A list of authorized service representatives is available from EVI Audio Service at 10500 W. Reno Avenue,

Oklahoma City, OK 73127 (800-845-8727 or FAX 405-577-3274). **Incidental and Consequential Damages Excluded:** Product repair or replacement and return to the customer are the only remedies provided to the customer. InterActive Technology shall not be liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. **Other Rights:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Specifications

Input Impedance

15 kohms unbalanced

Output Source Impedance

<50 ohms

Maximum Input Level

+18 dBu
(ref. 0 dBu = 0.775 Vrms)

Minimum Load Impedance

2 kohms

Output Type

Unbalanced

Total Harmonic Distortion

<0.01% at 0 dBu output
over full bandwidth

Intermodulation Distortion (SMPTE)

<0.01% at 0 dBv output

Noise Floor

<-90 dBu

Dynamic Range

>108 dB

Power Requirements

± 15 V dc

Filter Type

4th-order Linkwitz-Riley

Channel Configuration

Monaural two-way

User Selectable Crossover Frequencies

50, 63, 80, 100, 125, 160, 200,
315, 400, 500, 630, 800, 1 k,
1.25 k, 1.6 k, 2 k, 2.5 k, 3.15 k,
4 k, 5 k, 6.3 k, 8 k, 10 k

Connector Type

J1 5-pin header, bottom entry

Pin 1 = input

Pin 2 = output

Pin 3 = ground

Pin 4 = +15 V dc

Pin 5 = -15 V dc

J2 3-pin header

Pin 1 = LF out

Pin 2 = select

Pin 3 = HF out

Dimensions

Length:

66 mm (2.6 in.)

Width:

34 mm (1.35 in.)

**InterActive
Technology**
Linked Component Control

600 Cecil Street, Buchanan, MI 49107
616/695-6831, Fax 616/695-1304