

FLT 22 Line Transformers

General Description

The Flex Series FLT 22 is a line level two channel balancing/isolation box, expandable to four channels as required. Each channel contains a low distortion, high level, wide bandwidth, nickel-core output transformer, with individual Common points.

The FLT 22 is an easy and convenient way to add output transformers to any line level equipment. The Inputs and Outputs may be configured as balanced or unbalanced as required. All channels are completely separate, including isolated Common points.

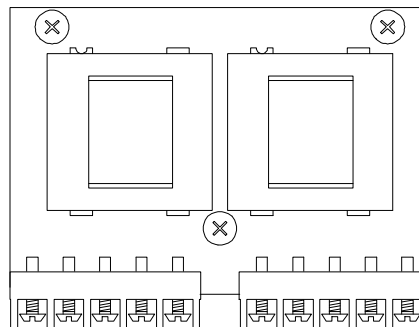
The FLT 22 is the quick and affordable answer to all jobs requiring output balancing or isolation transformers. The #6 terminal strips provide for maximum installation flexibility and cost savings.

Features

- **+24dBu LEVELS**
- **LOW DISTORTION**
- **WIDE BANDWIDTH**
- **NICKEL CORE "80" Ni**
- **2 INDEPENDENT CHANNELS**
- **EXPANDABLE TO 4 CHANNELS**
- **ISOLATED COMMONS**
- **TERMINAL STRIP I/O**
- **FLEX HR CHASSIS**
- **8 CHANNELS IN 1 RACK SPACE**

Option-44

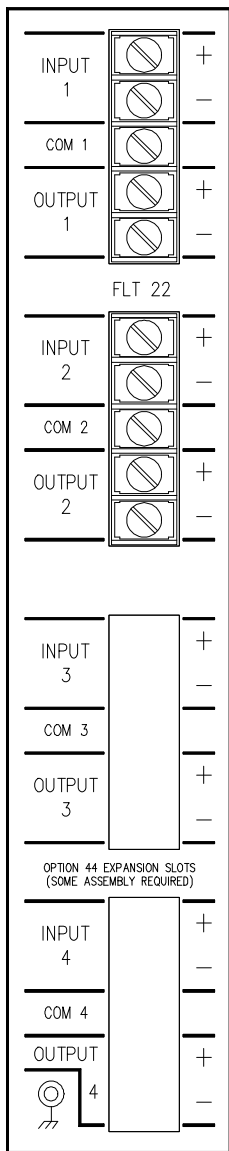
The Option-44 expands the FLT 22 into a four channel model. The Option-44 consists of a small printed circuit board with two additional line transformers and terminal strips soldered in place. Assembly is simple: remove the top cover, install the board in place, and secure with the supplied mounting screws. No soldering required; all you need is a #2 Phillips screwdriver. The Option 44 can also be used as an inexpensive transformer assembly without the FLT 22. When rack space is not available, the Option 44 can be attached almost anywhere using screws and standoffs.



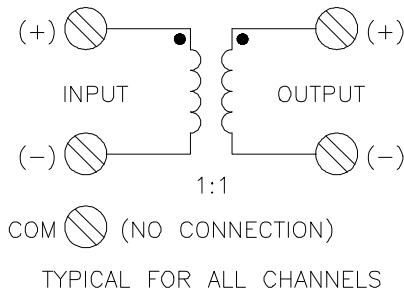
| Parameter | Specification | Limit | Units | Conditions/Comments |
|---|--------------------------|-------|-------|-------------------------|
| Construction | Nickel Core Bobbin Wound | | | Grade "80" Ni |
| Turns Ratio | 1:1 | | | Primary to Secondary |
| 40 Hz Max Output Level | +24 | 0.5dB | dBu | 1% THD Point |
| 20 Hz Max Output Level | +18.5 | 0.5dB | dBu | 1% THD Point |
| Load Loss | 0.5 | 0.1 | dB | |
| DC Resistance | 200 | 10% | Ohms | Primary & Secondary |
| Frequency Response | 20-20kHz | 0.1 | dB | +4dBu |
| Bandwidth | 60kHz | -3 | dB | Half Power Frequency |
| THD + Noise | less than .005 | .001 | % | +20dBu; 100 - 20kHz |
| | less than 0.15 | .05 | % | +20dBu; 30-100Hz |
| Option 44 Dimensions | 1.1"H x 3.8"W x 2.9"D | | | (2.8cm x 9.7cm x 7.4cm) |
| Shipping Weights | 5 lbs/1 lb (2.3/0.5kg) | | | FLT 22/Option 44 |
| 1. All specifications measured with 25 ohm source and 10k ohm load. | | | | |
| 2. 0dBu = 0.775 volts. | | | | |

LINE TRANSFORMERS

Rear Panel



Block Diagram



Application Information

The FLT 22 fills the need of adding output isolation balancing transformers to any line-level equipment. It is a convenient alternative to the expense and clutter of adding loose or in-line transformers. The following is a quick guideline for using the FLT 22.

Mounting

The FLT 22 is packaged in a standard Rane Flex chassis which is compatible with all HR products and accessories. When used with other Flex products, the FLT 22 may be mounted in the FVR 10 Vertical Rack. Alternatively, choose one of the horizontal mounting kits to mount one or two units side-by-side into a standard 19" rack. Note that two units equipped with OPTION-44s and mounted horizontally provide 8 channels of transformer output isolation in only one rack space.

Chassis Grounding

A tapped hole for a #6-32 screw is provided for chassis grounding purposes. Good practice dictates earth-grounding the FLT 22. If the grounding integrity of the rack screws is in doubt, then run a wire from this tapped hole to a known good ground.

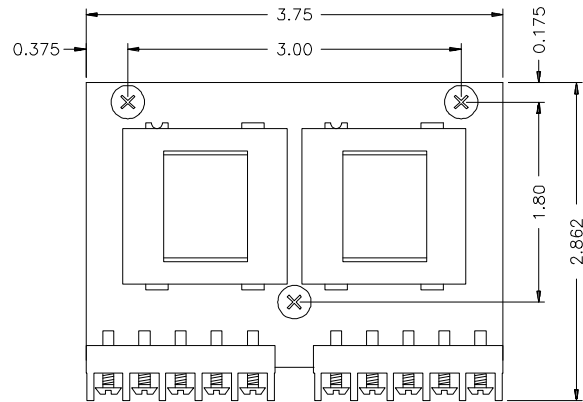
Wiring

No special instructions are necessary when wiring the FLT 22. Use high-quality wire and choose the grounding method appropriate for the application. A separate COMMON terminal is provided for each channel. This terminal has no

internal connection. It is provided strictly as a wiring convenience. Normally, this terminal is used for tying shields together, or connecting the (-) Input with the signal common or shield for unbalanced inputs and/or outputs. #6 terminals accept spades or bare wire.

Option 44

The Option 44 installs easily in the blank side of the FLT 22, thereby turning it into an FLT 44. Three screws are provided for internal mounting. Used as a stand alone unit in situations where another rack space is not available or for cost considerations. Screws and standoffs may be used to mount the circuit board to almost any surface.



OPTION 44 (FLT 22)

