AFR-7812C
Audio Mounting Frame
USER'S MANUAL

Introduction

The design of the mounting frame will more than satisfy the most demanding network considerations. The frame is visually attractive and incorporates advanced ventilation and cooling engineering. The mounting frame holds 2 amplifier modules and 2 power supply.

The frame door is completely removable to provide convenient access in any rack installation position.

The terminal connectors are of a new smaller pluggable design which allows for individual wiring of each cable prior to connection to the frame. It is important to refer to the table on the rear of the frame to determine the proper connections for the Mono or Stereo amplifiers.

Features

- Accommodates 12 amplifiers in 2 rack unit
- Aluminum construction for increased heat dissipation
- Individual pluggable audio connectors
- Removable frame door for accessibility
- Optional module extender for servicing
- Power switch and fuse is accessible from front of the rack frame
- *PowerLock* cord retainer mechanism guards against accidental power loss
- 5-year transferable warranty
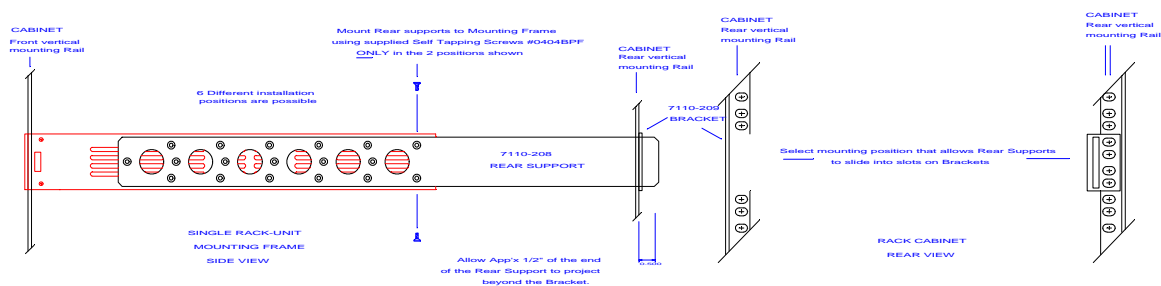- Ross frames also accept Leitch* analog audio products

    *Leitch is a trademark of Leitch Technology Corporation.

Installation

1. Mechanical

The frame mounts in the rack cabinet by means of four screws through the front mounting flanges. This should normally be sufficient to carry the load, including weight of cables. In some cases, (mobile trucks, etc.) it may be desirable to also support the rear of the frame. Rear support brackets (Ross part # FSB-7110) are available for a nominal cost.

To Install the support brackets:

A) The rear support bars can be attached to the Ross frame in six possible positions. See the illustration. Choose the position that suits the cabinet depth and will give approximately a 1/2 inch projection beyond the previously mounted bracket. Using four screw per bracket as shown in the illustration, attach both bars.

B) Mount the Ross frame to the front rails of the rack cabinet using rack screws.

C) At the rear of the cabinet, slide the bracket slots over the rear of the support bars and secure to the cabinet rear rails with rack screws.

2. Ventilation

This frame has been specially engineered to minimize internal heat buildup and thus improve module reliability. However, it is best to install a blank panel above and below the frame for improved air flow. In situations where this much rack space is not available, no more than two frames are to be stacked without a blank panel above and below the pair.
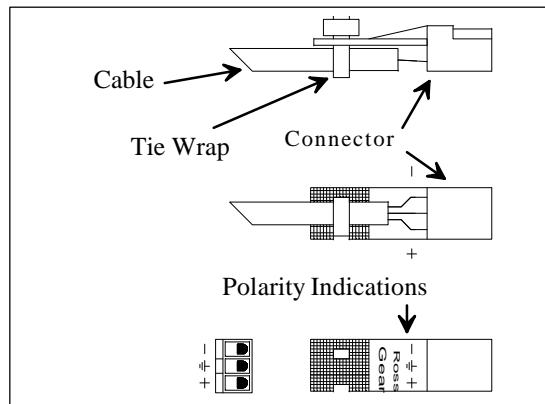
3. Power Supply PS-7813

The AFR-7812C frame uses a single 21 volt PS 7813 power supply. Turning the power supply off before inserting or removing it from the frame will ensure longer connector life.
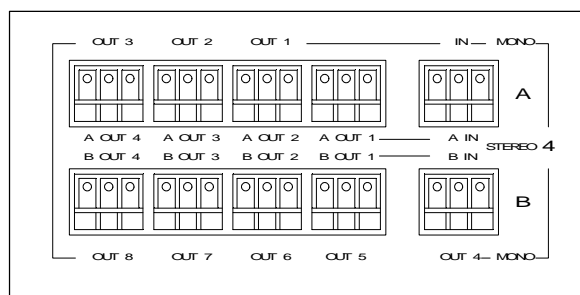
4. Audio Input and Output Cables

The frame uses a new, three-pin, pluggable audio connector. This connector allows each individual audio input and output connection to be wired prior to connection to the frame.

Wire the external cables to the pluggable terminal block connectors as outlined in the diagram below. Please note that standard practice dictates, that to avoid ground loop problems, cable grounds should be connected to output plugs only.

Once the cables have been wired, install the connectors according to the illustration below.

The frame's mating terminals are marked for both the 8-output mono and the 4-output stereo amplifiers.

5. PCB Designation Label

A PCB Designation Label Sheet with adhesive backing has been inserted inside the back cover of each owner's manual.

To use, use scissors or a sharp knife to cut out two strips from the page. For all occupied frame slots write the amplifier type, signal source or function and amplifier number if applicable. Peel off the backing paper and stick the label to the frame according to the sketch on the label sheet. Please see the example illustrated below. (Please Note* The template at the rear of this manual should be copied and kept on file in the event that the PCB Label insert is lost.)

Specifications

Power Supplies	Input Voltage 85-250V, 50/60 Hz
	Input Power 60 Watts
	Output Voltage ±21.0V
	Output Current 1.0A
	Output power 42 W
	Line Regulation 350mV change over full input range
	Output ripple < 60 mVpp
For safety reasons, Ross power supplies do not fit into rack frames of other manufacturers.	
Rack Frame Mechanical	Height $2^1/_2$" (884 mm)
	Width 19" (483mm)
	Depth 15.75" (395mm)
	Weight, average for all amplifiers installed: approx. 13 lbs. (5.9kg)
Environmental	Temperature Equipment is designed to operate in ambient temperature ranges from 0° C to 50° C
	Humidity <95% non condensing

Ordering Information

AFR-7812C	Video DA Mounting Frame (2 RU, Holds 12 amplifiers)
PS-7813	Universal Power Supply (85-250 volts)
EXT-7200	Extender Board
FSB-7110	Rear Support Brackets
CRB-7110	Card Retaining Bracket (for mobile installations)

Note: All Ross Video Limited terminal equipment frames include one power supply. A redundant power supply may be intalled in all two-rack unit frames, if required. One Owner's manual is supplied with each frame.

Bill of Materials
FRAME, 1 R.U., ANALOG AUDIO

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AFR-7814C 1R/U 4 CARD AUDIO DA FRAME PCB     Revised: June 17, 1998
7814A-011                                    Revision: 01
Bill Of Materials                            June 19, 1998 10:41:58 Page 1
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Item	Quantity	Reference	Part	DESCRIPTION	PART NUMBER
1	1	J15	NVCON 2P	NO VALUE,CONN,2P,3.5mm,45DEG,TERM	THL -------
2	5	MP1,MP2,MP3,MP4,MP5	NVTP	NO VALUE,TEST POINT	THL -------
3	1	J1	311-023	CONN,3P,PCB MNT,AC	THL 311-023
4	4	J2,J3,J4,J5	311-031	CONN,30P,0.156,PRESS FIT,PCB MNT	THL 311-031
5	1	J6	311-032	CONN,24P,PCB MNT,30P MOD	THL 311-032
6	40	J7 - J14	311-051	CONN,3P,3.5MM,TERM STRIP	THL 311-051
7	1	PCB	7814-011-01	1 R/U 4 CARD MOTHER --------------	PCB 7814-011-01
8	1	REAR PANEL	7814F-003	1 R/U 4 CARD MOTHER ------------ R	PNL 7814F-001
9	1	AC CLIP1	842-003	RETAINER,LINE/CORD A/C	842-003
10	1	MP1 LUG	910-007	TERMINAL,SOLDER LUG #4	910-007
11	2	WASHER1,WASHER2	960-032	WASHER,FIBRE,1/8ID,5/16OD,1/16T	960-032
12	3	MP1 WIRE,MP2 WIRE, MP3 WIRE	970-017	WIRE,18AWG,STRANDED CSA	970-017