

AFR-7814C
Audio DA Mounting Frame
USER'S MANUAL

AFR-7814C • Audio DA Mounting Frame – User Manual

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Company Address



Ross Video Limited
8 John Street
Iroquois, Ontario, K0E 1K0
Canada

Ross Video Incorporated
P.O. Box 880
Ogdensburg, New York
USA 13669-0880

General Business Office: (+1) 613 • 652 • 4886

Fax: (+1) 613 • 652 • 4425

Customer Service: (+1) 613 • 652 • 4886

E-mail (Customer Support): tech-support@hq.rossvideo.com

E-mail (General Information): solutions@rossvideo.com

Website: <http://www.rossvideo.com>

After hours emergency: (+1) 613 • 652 • 4886, ext. 333

READ THIS FIRST!

Save Time and Avoid Damage!

We realize that you will want to start installing your new equipment right away. But, you will save time and avoid costly damage by taking a few moments to review the following helpful information before you proceed.

1. Installation and Cable Connections

Before turning the power on, consult the "Installation" section of this manual to obtain specific advice about cable connections, switch settings and jumper configurations.

2. Operation

See the "Operation" section for proper use of your new equipment.

3. Calibration

All Ross Video Terminal Equipment is factory calibrated. Adjustment of sealed calibration components or any repairs to this unit, are to be performed by an authorized Ross Video technician. Unauthorized repairs will void your Warranty.

In Case of Problems

If you encounter any problems with the installation of this unit, please call our Customer Service Department at (613) 652-4886, 24 hours a day, 7 days a week.

Advice is available, without charge, for the life of this equipment, not just for the warranty period.

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 12 amplifier modules and 2 power supplies.

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 a 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

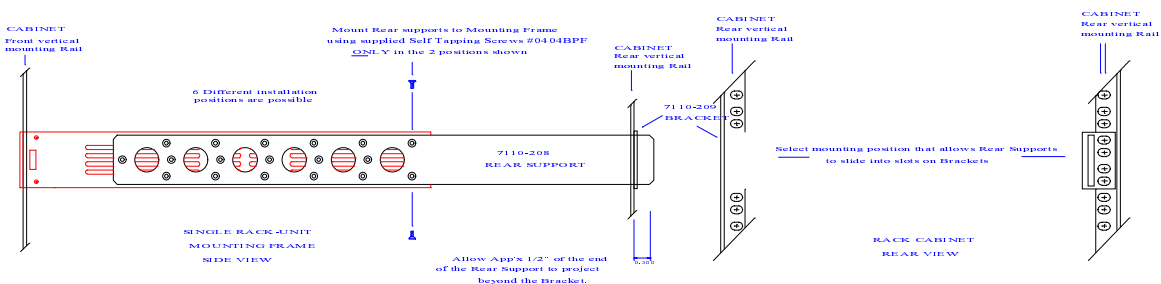
*Leitch is a trademark of Leitch Technology Corporation.

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.

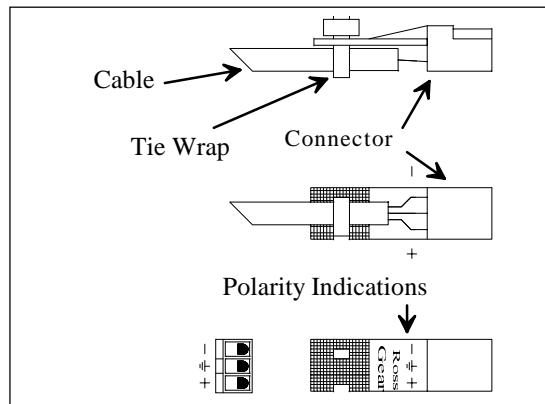
3. Power Supply PS-7813

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.

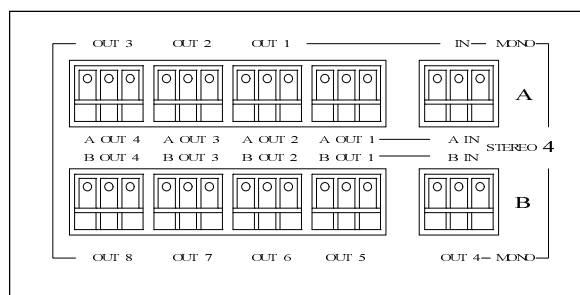
4. Audio Input and Output Cables

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 outline 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 85-250 V, 50/60 Hz
	Input Power 60 W
	Output Voltage ± 21.0 V
	Output Current 10 A
	Output power 42 W
	Line Regulation 350 mV change over full input range
	Output ripple < 60 mV pp
<i>For safety reasons, Ross power supplies do not fit into rack frames of other manufacturers.</i>	
Rack Frame Mechanical	Height 3 1/2" (88 mm)
	Width 19" (483 mm)
	Depth 13" (330 mm)
	Weight, average for all amplifiers installed: approx. 13 lbs. (5.9 kg)
Environmental	Temperature Equipment is designed to operate in ambient temperature ranges from 0° C to 50° C
	Humidity < 95% non condensing

Ordering Information

AFR-7814C	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 installed in all two-rack unit frames if required. One User's manual is supplied with each frame.

AFR-7814C Audio DA Mounting Frame

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

AFR-7814C 1R/U 4 CARD AUDIO DA FRAME PCB
7814A-011
Bill Of Materials

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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

Ross Gear Terminal Equipment • Warranty and Repair Policy

This **Ross Gear Terminal Equipment** product is warranted to be free of any defect with respect to performance, quality, reliability and workmanship for a period of **FIVE (5)** years from the date of shipment from our factory.

In the event that your **Ross Gear** product proves to be defective in any way during this warranty period, we will gladly repair or replace this piece of equipment with a unit of equal or superior performance characteristics.

Should you find that this **Ross Gear** product has failed after your warranty period has expired, we will repair your defective piece of equipment for as long as suitable replacement components are available. You, the owner, will bear any labour and/or component costs incurred in the repair or refurbishment of said equipment, beyond the **FIVE (5)** year warranty period.

Should your **Ross Gear** product be of our **Digital Terminal Equipment** product line, a power supply, or carries any surface mount devices, proves to be defective, we would ask that your piece of equipment be repaired by an authorized **Ross Video Limited** factory representative. Any attempt to repair this product by anyone other than an authorized **Ross Video Limited** factory representative, will void your warranty.

If this is a manual for a **Ross Gear** product of our **Digital Terminal Equipment** product line, a power supply, or piece of equipment which carries surface mount devices, you will find it provides all pertinent information for the safe installation and operation of your Ross Gear product.

If this is a manual for a **Ross Gear** product from our **Analog Terminal Equipment** product line, you will find it provides all pertinent information for the safe installation and operation of your **Ross Gear** product. Included in this manual if this product does not carry any surface mount devices, you will also find schematics, bills of materials and layout drawings. These are provided for your convenience, should you find it necessary to perform discretionary field repair or modifications to your **Ross Gear** product.

Ross Video Limited reserves the right to assess any modifications or repairs made by you and decide whether they fall within warranty limitations, should you decide to return your **Ross Gear** product for repair.

In no event shall **Ross Video Limited** be liable for direct, indirect, special, incidental, or consequential damages (including loss of profits) incurred by the use of this product. Implied warranties are expressly limited to the duration of this warranty.

In Case of Problems:

Should any problem arise with your **Ross Gear Terminal Equipment Product**, please contact our **Customer Service Department** at **613-652-4886**, 24 hours a day, 7 days a week.

A Return Material Authorization number (RMA) will be issued to you, as well as specific shipping instructions, should you wish our factory to repair your **Ross Gear** product. A temporary replacement, if required, will be made available for a nominal charge. Any shipping costs incurred, will be the responsibility of you, the customer. All products shipped to you from **Ross Video Limited**, will be shipped collect.

Ross Gear Terminal Equipment product advice is available without charge for the life of this equipment, not just the warranty period.