3 INPUT X 6 OUTPUT HEADPHONE AMPLIFIER DESCRIPTION

The PRE99-1215 Headphone Amp provides six headphone output ports from three balanced stereo inputs (HOST, CO-HOST, GUEST).

Rear panel switches S1-7 and S1-8 allow the input sensitivity of the HOST and CO-HOST inputs to be set to +4 dBu for fixed sources or -8 dBu for volume controlled sources (+4 dBu @ fader maximum, 16 dB in-hand gain). The GUEST input can be driven from a +4 dBu fixed output source only.

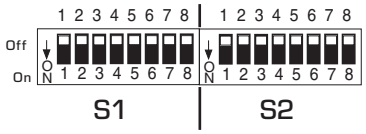
The six stereo output ports (OUTPUT 1 - OUTPUT 6) are 0 dBu nominal unbalanced signals which directly drive any impedance headphones. Each output port connects to a Headphone Panel (PRE99-1214-x) using a standard straight-thru CAT5 data cable that carries the stereo headphone audio as well as volume control voltage from either a 10k linear fader (PRE99-1191), which plugs into a Jack Panel (PRE99-1214-1, or -2), or a 10k linear rotary pot on a combined Jack and Level Control Panel (PRE99-1214-3, -4).

OUTPUT 1 can be fed from either the HOST or GUEST input. OUTPUT 2 – OUTPUT 6 can be individually fed from either the CO-HOST or GUEST input. Rear panel switches S1-1 thru S1-6 provide source selection. If a source is driven from a volume controlled output (HOST, CO-HOST only) or the output volume is controlled by using a conventional audio potentiometer, rear panel switches S2-1 thru S2-6 individually fix the gain of each output to provide 0 dBu for a nominal input.

Rear panel switches S2-7 and S2-8 apply offsets of -8, -16, or -24 dB to all GUEST outputs, reducing the level for inexperienced users.

Page 2 shows a typical application for the 3x6 Headphone Amplifier and the PRE99-1215 specifications.

REAR PANEL DIP SWITCHES

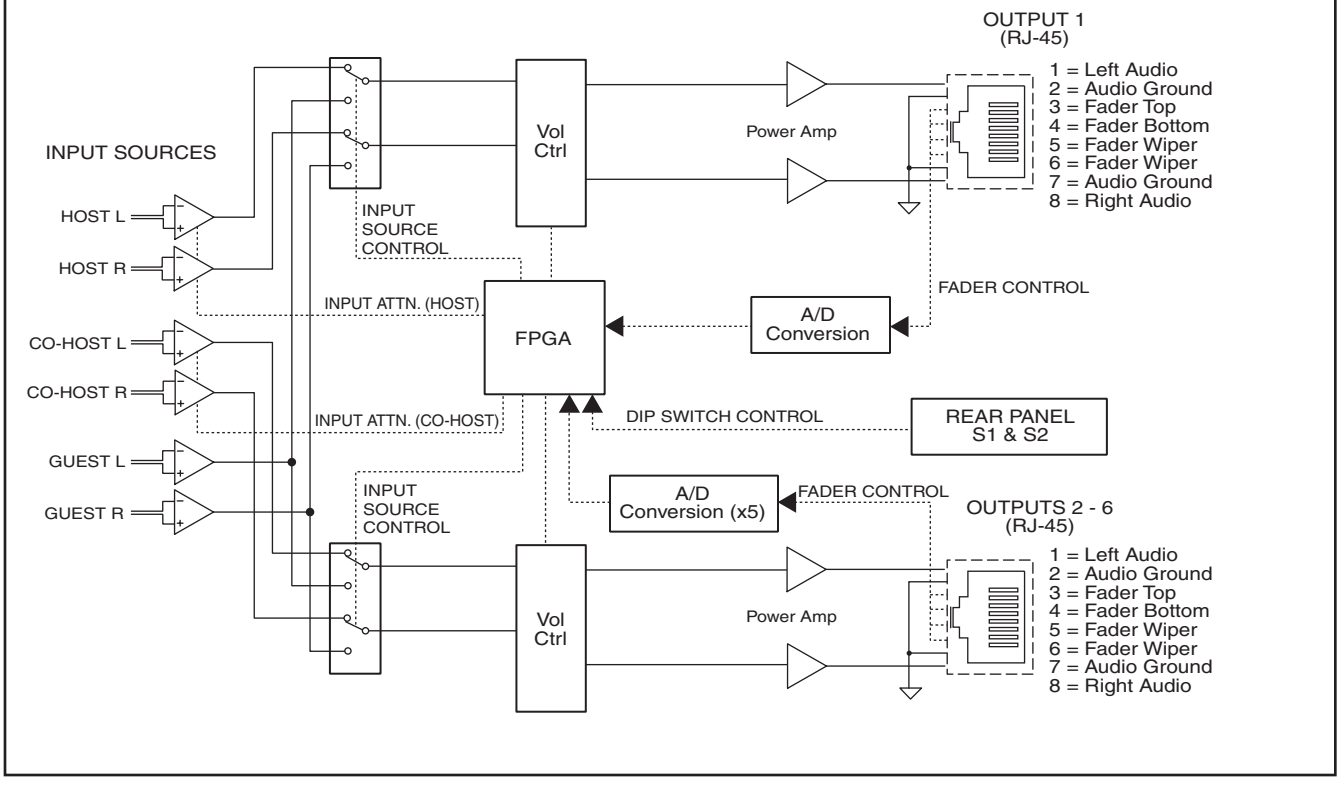


Switch S1	Off	On
1 - Amp 1 Source	Host	Guest
2 - Amp 2 Source	Co-Host	Guest
3 - Amp 3 Source	Co-Host	Guest
4 - Amp 4 Source	Co-Host	Guest
5 - Amp 5 Source	Co-Host	Guest
6 - Amp 6 Source	Co-Host	Guest
7 - Input Level: Host	+4 dBu	-8dBu
8 - Input Level: Co-Host	+4 dBu	-8dBu

Switch S2	Off	On
1 - Amp 1 Level Ctrl	Fader	Fixed
2 - Amp 2 Level Ctrl	Fader	Fixed
3 - Amp 3 Level Ctrl	Fader	Fixed
4 - Amp 4 Level Ctrl	Fader	Fixed
5 - Amp 5 Level Ctrl	Fader	Fixed
6 - Amp 6 Level Ctrl	Fader	Fixed
7 - Guest Offset "A"	0 dBu	16dBu
8 - Guest Offset "B"	0 dBu	8 dBu

(24 dB Offset with both A & B set on)

3x6 HEADPHONE AMP BLOCK DIAGRAM



THIS DOCUMENT APPLIES TO PRE99-1215

TITLE: INSTRUCTION SHEET, 3x6 HEADPHONE AMPLIFIER AND HP CONTROL PANELS

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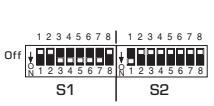
TYPICAL HEADPHONE AMPLIFIER CONNECTIONS AND SWITCH SETTINGS

In this example, the Host is also the board operator. The HOST level is controlled by the Console Control Room Headphone fader (thus S2-1 is set to ON). Since the HOST source is a -8dBu volume controlled output, S1-7 is also set to ON.

There is one CO-HOST (S1-2 set to OFF) and four GUEST positions (S1-3 thru S1-6 set to ON). Each of these positions has a level control, thus the CO-HOST and GUEST outputs are all set for level-controlled operation (S2-2 thru S2-6 are set to OFF). The CO-HOST comes from a fixed +4dBu output, so S1-8 is set to OFF.

Since the CO-HOST and GUEST 1 positions are primary, Headphone Faders are shown. The other Guest positions (GUEST 2, 3, and 4) use the PRE99-1214-3 or -4 panels which utilize a rotary potentiometer volume control.

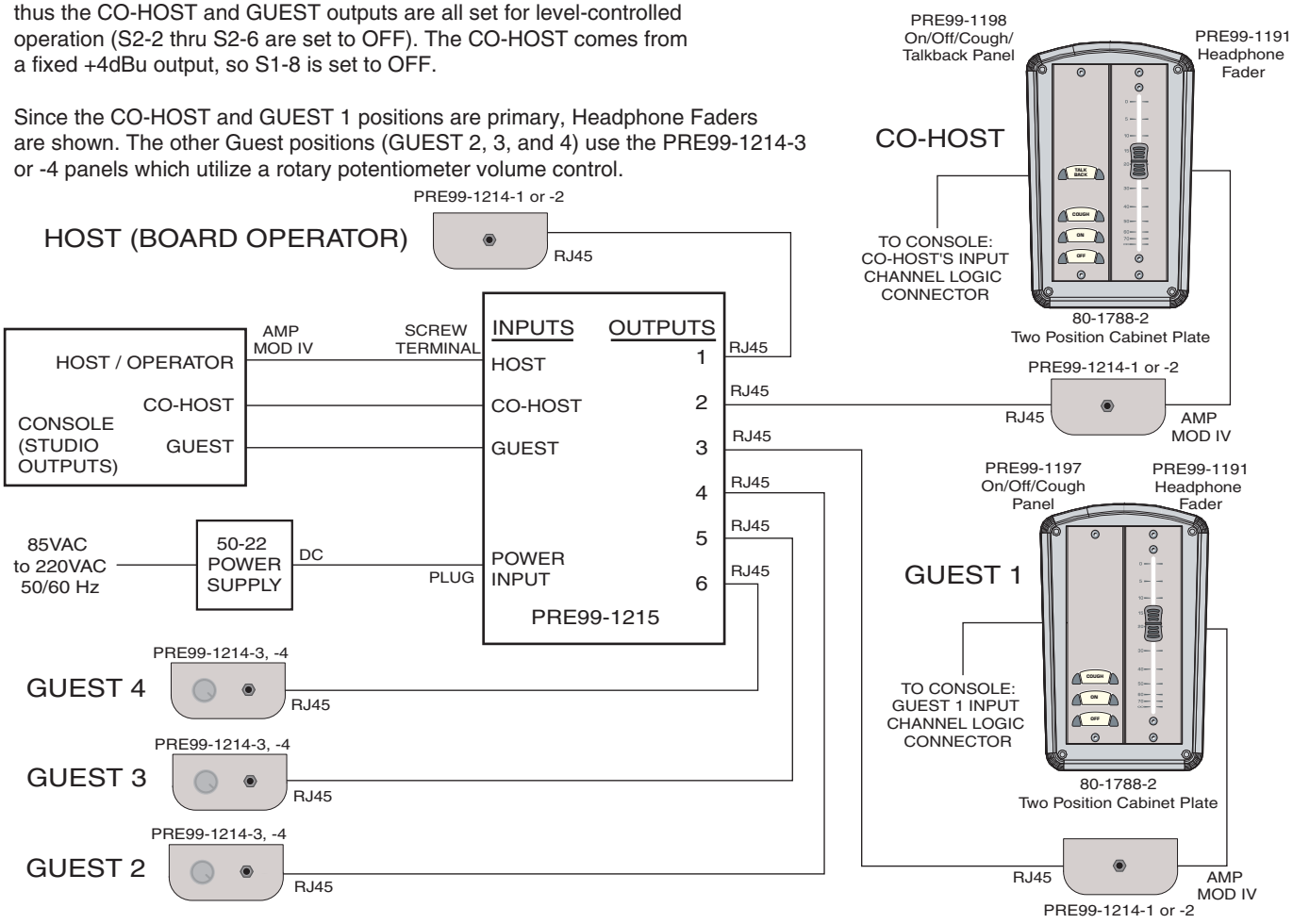
REAR PANEL DIP SWITCH SETTINGS FOR THIS EXAMPLE



Switch S1	Off	On
1 - Amp 1 Source	Host	Guest
2 - Amp 2 Source	Co-Host	Guest
3 - Amp 3 Source	Co-Host	Guest
4 - Amp 4 Source	Co-Host	Guest
5 - Amp 5 Source	Co-Host	Guest
6 - Amp 6 Source	Co-Host	Guest
7 - Input Level: Host	+4 dBu	-8dBu
8 - Input Level: Co-Host	+4 dBu	-8dBu

Switch S2	Off	On
1 - Amp 1 Level Ctrl	Fader	Fixed
2 - Amp 2 Level Ctrl	Fader	Fixed
3 - Amp 3 Level Ctrl	Fader	Fixed
4 - Amp 4 Level Ctrl	Fader	Fixed
5 - Amp 5 Level Ctrl	Fader	Fixed
6 - Amp 6 Level Ctrl	Fader	Fixed
7 - Guest Offset "A"	0 dBu	16dBu
8 - Guest Offset "B"	0 dBu	8 dBu

(24 dB Offset with both A & B set on)



SPECIFICATIONS

GENERAL
Size: 1.75" x 19.0" x 7.25" Cabinet or rack (1RU) mounting
Weight: 3 lb
Power Supply: PRE50-22 "line-lump" with multi-pin connector
Supply Voltages: +5 and 615 VDC
AC Input: 85 - 220 VAC, 50/60 Hz

INPUTS
Type: 3 active inputs (balanced/unbalanced): Host, Co-Host, Guest
Connectors: plug-in screw terminal (Weco 110)
Nominal Impedence: 17k ohm
Nominal Levels: +4 dBu (Guest), +4 dBu or -8 dBu (Host & Co-Host)
Maximum Input Signal Level: +21 dBu (using +4 dBu setting)
Overall Gain Range: Off to +24 dB (using -8 dBu input setting), +12 dB (using +4 dBu setting), no load

OUTPUTS
Connectors: RJ-45 jacks x6 (connect to PRE99-1214-x panels)
Output Impedence: 50 ohms
Headphone Impedence Range: 8 to 600 ohms
Power Output, single channel driven:
392 mW into 32 ohms, 379 mW into 100 ohms,126 mW into 600 ohms
Power Output, all six channels driven:
374 mW into 32 ohms, 379 mW into 100 ohms,126 mW into 600 ohms
Frequency Response: 3 - 60kHz, +0/-3 dB (unity gain)
THD + Noise: 0.0033% (378 mW into 100 ohms,1 kHz, 22 kHz BW, unity gain)
<0.05% (378 mW into 100 ohms, 20 - 20 kHz, 80 kHz BW, unity gain)
Signal-to-Noise Ratio: -93 dB (22kHz bandwidth, unity gain)
Output Signal Source: selected thru rear panel multiswitches
Output Level Control: Fixed or fader-controlled through PRE99-1214-x panels

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