ASHLY

SYSTEM II Quick Reference Guide

Protēa Digital Audio Products

Protea Applications Chart		4.24G Settings		Slave Switch Settings *(Back Panel)*	
System Configuration	Data Connectors	Data Config Switch *(on back)*	Master/MIDI/RS232 *(UserPref)*	Switch "A" *(Baud Rate)*	Switch "B" *(Data Config)*
4.24G Only		Out	MIDI	-	-
Multiple 4.24G	(XLR or MIDI)	Out	Master on 1st	-	-
4.24G + Rem.	XLR	Out	MIDI	-	-
4.24G + Slav.	XLR	Out	Master	Out	Out
Slav. + Rem.	XLR	-	-	Out	Out
4.24G + Slav +	XLR	Out	MIDI	Out	Out
Remote	XLR	-	-	-	-
PC + 4.24G	RS-232	Out	RS-232	-	-
PC + 4.24G +	RS-232	In	RS-232	-	-
Slaves	XLR	-	-	In	Out
PC + 1 Slave	RS-232	-	-	In	Out
PC + Multiple	RS-232 to 1st	-	-	In	In On 1st
Slaves	XLR to Others	-	-	In	Out

Protea Audio Path Block Diagram

Signal Detector — Clip Detector

A/D → Delay → *Limiter → EQ → Shelves (Parametric Only) → HPF 24dB/oct → LPF 24dB/oct → *Limiter → D/A

Master Gain — Clip Buss — Clip Buss

Gain Reduction — Input / Output — Meter Display

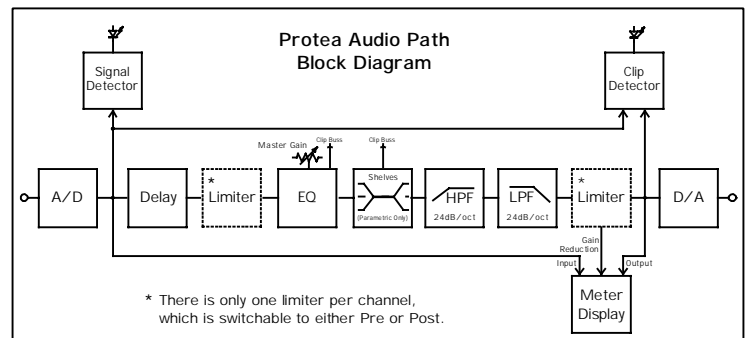* There is only one limiter per channel, which is switchable to either Pre or Post.
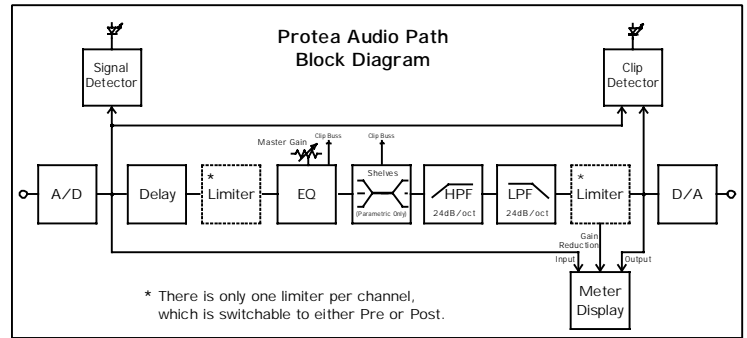
- 4.24G DSP Processor - functions as a stand-alone four channel DSP processor, Master in multi-unit system, or Slave in multi-unit system. Will work with Protea Remote Controller or PC control using Protea System Software.

- 4.24RD Remote Control - Connects to Main Unit or Protea Graphic "GS" Slave Unit through two XLR mic cables, up to 1000 feet. Note: XLR Pin 1 must NOT be connected to ground. 4.24RD does not control parametric slaves.

- 4.24GS and 2.24GS Graphic Slaves - four and two channel Graphic EQ units function under control of 4.24G main unit, 4.24RD remote control, or Protea System Software. Up to sixteen different channels can be addressed. Contact Closures can be used to recall up to six pre-defined scenes.

- 4.24PS and 2.24PS Parametric Slaves - four and two channel parametric EQ units can be controlled ONLY with Protea System Software, but scenes can be recalled using contact closures.

(See Troubleshooting Tips On Back)

- **Cables and Connectors** - **Remote** must connect to host through two XLR mic cables. **Multi-Channel Protea System** (main, remote, or slaves used together) must use XLR data connections, with the XLR Data Out of the last unit in the chain connecting to the XLR Data In of the first unit. **Protea System Software** - uses the COM port of the PC with the RS-232 connector on main or slaves. Additional slaves must connect to the first using XLR Data in and out. **Third Party MIDI Systems** - use MIDI in and MIDI Through jacks on Protea units.

- **Master/Slave Settings** - Master/Slave selection is only found in the UserPrefs Menu of each 4.24G main unit. Slave units are always logical Slaves and Software is always Master. See system configuration chart for application-specific settings.

- **RS-232/MIDI Select** - MIDI is the Protea communications protocol to other Protea devices, while RS-232 links with computers running Protea System Software. Be sure your 4.24G UserPrefs settings match the system configuration for your application.

- **Data Config and Baud Rate** - Model 4.24G has a Data Config Switch on the back panel. Protea Slave units have both Baud Rate (A) and Data Config (B) Switches on the back panel. Each must be set in accordance with the system configuration chart.

- **MIDI Channel Assignment** - Every Protea audio channel, or "local channel", has a user-defined MIDI Channel number 1-16. While the Data signal carried between multiple Protea units provides instructions for all 16 channels, individual local channel "ID" must be assigned by the user. In the 4.24G, this is done in the MIDI menu. In the slaves, recessed MIDI Channel switches assign a MIDI channel to a physical audio channel. Setting the channel to "0" allows the audio channel to continue functioning as-is, but removes it from any external control.

- **Protea Security Levels** - User access may be denied if security level is set to full or preset lockout.

- **Forgotten Password** - To display the current password in a 4.24G, turn the power on while holding both RECALL + ESC.

- **Factory Reset** - If a Protea unit fails to boot or behaves unpredictably, it may be necessary to do a factory reset. This **will erase all currently stored presets and UserPrefs,** so don't do this unless you have to. On model 4.24G main or 4.24RD remote, power the unit up while holding FLAT + ESC. The screen will indicate a factory reset is occurring. On slave units, switch BAUD RATE (A) OUT and DATA CONFIG (B) IN during power up, then after "f r" is displayed, set switches according to application.

- **Slave RS-232/Contact Closure Switch** - Due to space constraints, the same D-Sub 9-pin connector is used for both RS-232 and Contact Closure wiring, with a recessed switch selecting one or the other operating modes.