

PP16 Patch Panel

Hardware Reference



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Table of Contents

PP16 Patch Panel

Mapping the Inputs and Outputs for Each Device	5
Mapping RA16BA I/O	6
Mapping RP2/RP2.1 I/O	6
Mapping RA8GA	7
Mapping PM2R I/O	7
Mapping SA8 Analog Outputs	8

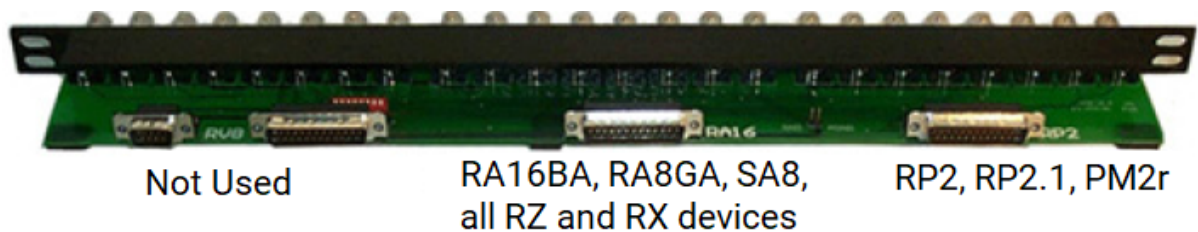
PP16 Patch Panel



The PP16 Patch Panel provides convenient BNC connections for easy access to the digital and analog inputs and outputs of a variety of System 3 devices. Originally designed for use with the RP2 Real-time Processor, RA16 Medusa Base Station, and RV8 Barracuda; the PP16 back edge is equipped with a nine pin and three 25-pin connectors, which have been marked with the corresponding device label.

To connect the PP16 to a device:

Connect the male end of the 25-pin ribbon cable to the desired module and connect the female end to the correct PP16 input according to the following table.



PP16 Device Connectors

PP16 Device Connectors and supported devices:

RA16 25 Pin	RP2 25 Pin
RA16BA • RA8GA • SA8 RX5 • RX6 • RX7 • RX8 RZ2 • RZ5 • RZ5P • RZ5D • RZ6 • RZ10x	RP2 • RP2.1 • PM2R

Mapping the Inputs and Outputs for Each Device

Each device has a unique input and output configuration. The table below shows the configuration of the BNC connectors.

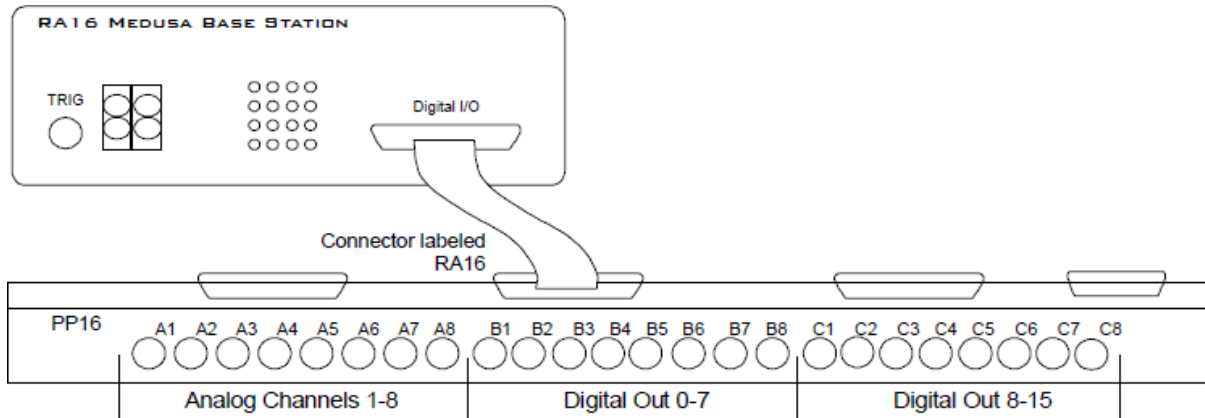
Device & Connector	A1-A8	B1-B8	C1-C8
RP2 / RP2.1 Digital I/O Connector	Digital Inputs Bits 0-7	Digital Outputs Bits 0-7	C1=3.3 V (max 1 mA)
RA16BA Analog/Digital I/O Connector	Analog Outputs Channels 1-8	Digital Outputs Bits 0-7	Digital Outputs Bits 8-15
RA8GA Analog I/O Connector	Analog Input Channels 1-8	Not Used	Not Used
PM2R Signal Out Connector	Analog Output Channels 0-7	Analog Output Channels 8-15	Not Used
SA8 Power Outputs Connector	Analog Output Channels 1-8	Analog Output Signal and Ground: Channels 1-4	Analog Output Signal and Ground: Channels 5-8

The PP16 can also be used with the RX and RZ devices, however, the **PP24 Patch Panel** is recommended.

Device & Connector	A1 - A8	B1 - B8	C1 - C8
RZ5, RZ5D, RZ5P, RZ6, RZ10x Digital I/O Connector	Digital I/O Port C Bits 0-7	Digital I/O Port A Bits 0-7	Digital I/O Port B Bits 0-7
RZ2 Digital I/O Connector	Digital I/O Port C Bits 0-7	Digital I/O Port A Bits 0-7	Digital I/O Port B Bits 0-7
RX5, RX6, RX7, RX8 Digital I/O Connector	Bit Addressable Digital I/O Bits 0-7	Digital I/O Byte A Bits 0-7	Digital I/O Byte B Bits 8-15
RX5, RX7 Multi I/O Connector	Analog Outputs A2, A4, A6, A8 = Channels 1-4 A1, A3, A5, A7 = Not Used	Digital I/O Byte C Bits 16-23	Digital I/O Byte D Bits 24-31
RX8 Analog I/O Connector	Analog I/O Block A Channels 1-8	Analog I/O Block B Channels 9-16	Analog Output Block C Channels 17-24

Mapping RA16BA I/O

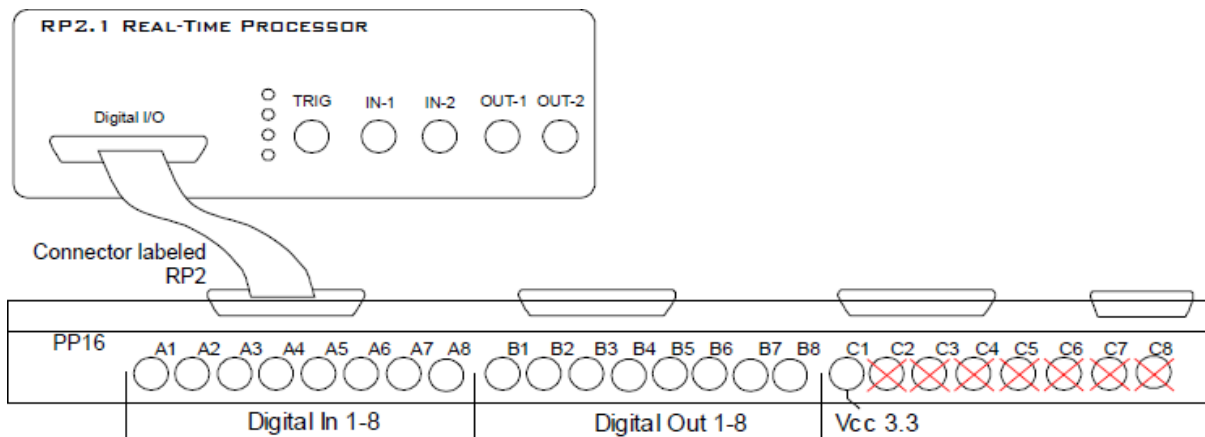
The diagram below maps the RA16BA Digital I/O connection to the PP16.



RA16BA to PP16 Connection Diagram

Mapping RP2/RP2.1 I/O

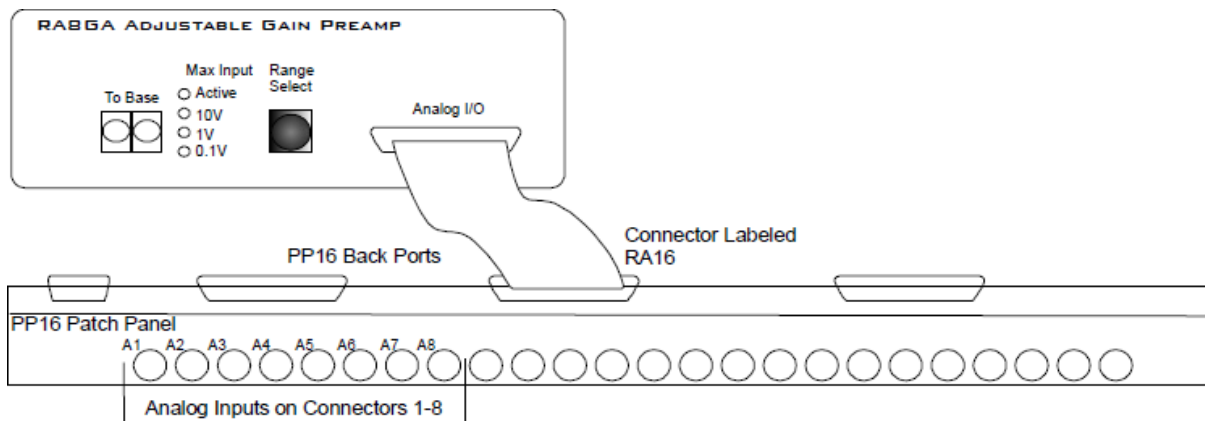
The diagram below maps the RP2 Digital I/O connection to the PP16. The last seven BNC connectors are not used. BNC C1 maps to VCC 3.3.



RP2.1 to PP16 Connection Diagram

Mapping RA8GA

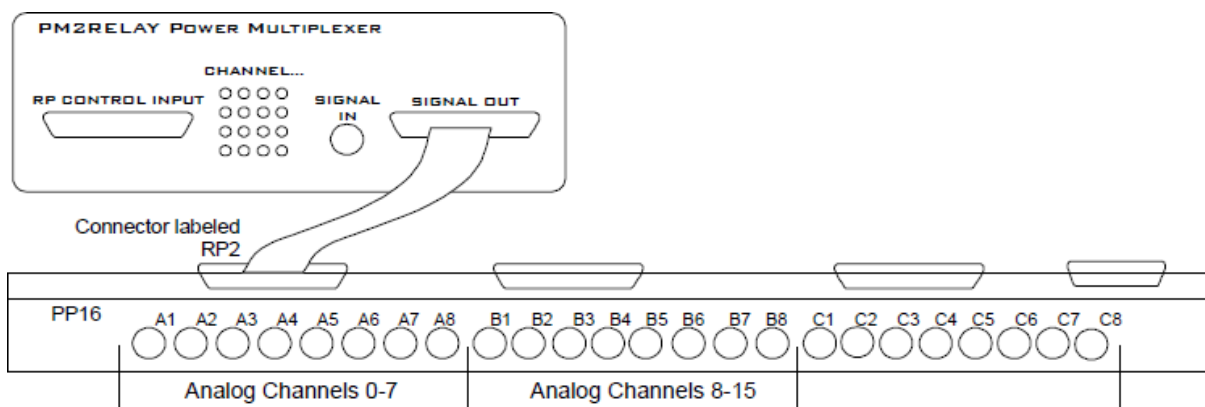
A PP16 patch panel can be used to simplify connection to the preamplifier's analog inputs. A ribbon cable can be connected from the RA8GA Analog I/O connector to the RA16 connector on the back of the PP16 allowing acquisition of signals via the first eight BNC connectors on the front of the PP16.



RA8GA to PP16 Connection Diagram

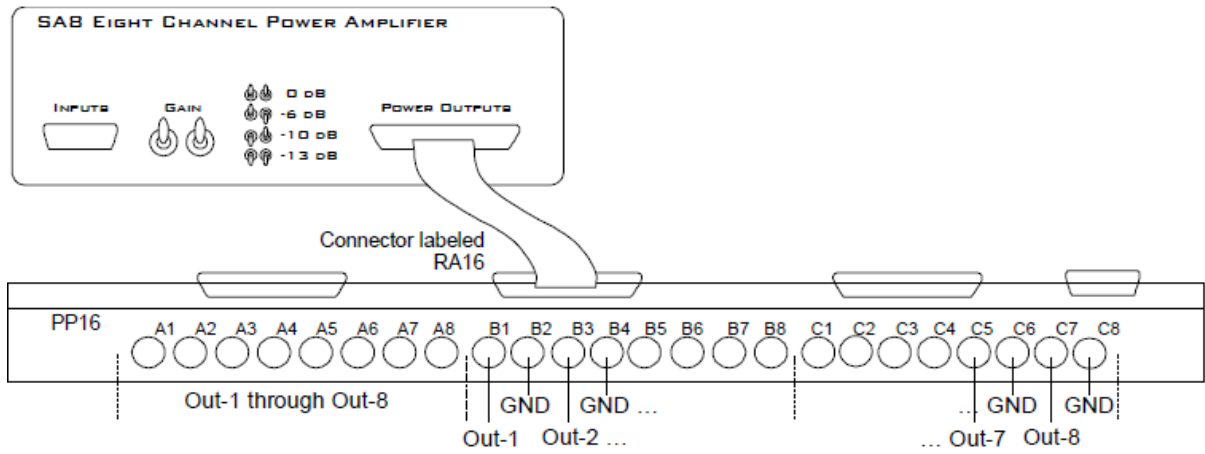
Mapping PM2R I/O

The diagram below maps the PM2R signal out connection to the PP16.



PM2R to PP16 Connection Diagram

Mapping SA8 Analog Outputs



SA8 to PP16 Connection Diagram