

# PD-DAP SD-SDI Digital Audio Processor

The PD-DAP is a modular SD digital audio processor. It is used in 1RU or 2RU PANDORA platform. Dynamic audio processing including compression, limit, expansion, enhancement and gain control is available for audio signals associated with the SD-SDI inputs.

The module supports 1 program input and provides 2 program outputs. Audio signals associated with the program input can dynamically and fully controlled. By-pass protection is supported on the program input so that the program can be output without any interruption. Auto cable equalizing is up to 492 ft (150 m).

An RJ-45 connector is provided for control of dedicated control panel remotely. Audio signals associated in program input can be monitored. A programmable GPI interface is provided to trigger bypass protection. Additionally, control of PD-MASTER application is supported.

## SPECIFICATIONS

Specifications are subject to change without notice.

### DIGITAL VIDEO INPUT

Signal Format.....SMPTE 259M-C, 270 Mbps  
 525/625 component  
 Signal Standards.....SMPTE 272M  
 Connector.....BNC (x1)  
 Impedance.....75 Ω  
 Return Loss.....18 dB @ 270 MHz  
 Cable EQ.....<492 ft (150 m)  
 Belden 1694A cable or equivalent

### DIGITAL VIDEO OUTPUT

Signal Format.....SMPTE 259M-C, 270 Mbps  
 525/625 component  
 Connector.....BNC (x2)  
 Impedance.....75 Ω  
 Return Loss.....18 dB @ 270 MHz  
 Amplitude.....800 mVp-p ±10%  
 Rise/Fall Time.....700 ps, 20%-80% of amplitude  
 Overshoot.....<10% of amplitude  
 Jitter.....<0.2UI

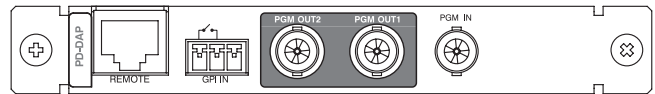
### DIGITAL AUDIO OUTPUT

Signal Format.....AES3  
 Connector.....RJ-45  
 Impedance.....110 Ω  
 Level.....5 Vp-p ±10%

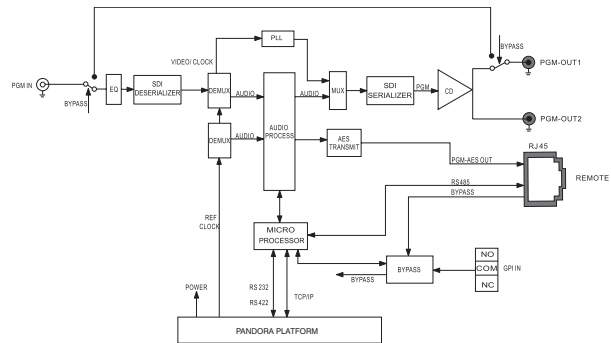
## KEY FEATURES AND BENEFITS

- Extracts RMS characteristics of audio signals
- Provides dynamic control of audio signals associated in SD inputs, including compression, limit, expansion, enhancement and gain adjustment
- Auto cable equalizing up to 492 ft (150 m)
- By-pass protection
- Supports control of remote control panel
- Supports GPI input

## BACK MODULE



## BLOCK DIAGRAM



## PERFORMANCE

Gain Adjustment Range.....-20 dB ~ +20 dB  
 Compress Ratio.....1:1 ~ ∞:1  
 Compress Threshold.....-44 dBFS ~ -4dBFS  
 Expansion Threshold.....-60 dBFS ~ -20 dBFS  
 Attack Time.....0.1 ms ~ 500 ms  
 Release Time.....20 ms ~ 5 s, Compression & Expansion  
 Noise Threshold.....-70 dBFS ~ -44 dBFS  
 Enhancement Threshold.....-44 dBFS ~ -10 dBFS

## ELECTRICAL

Power Consumption.....5 W

## ENVIRONMENTAL

Operating Temperature.....32° ~ 104° F (0° ~ 40° C)  
 Relative Humidity.....10% ~ 90%