



TECHNICAL DATA SHEET

CANFORD PPM DRIVE CARD

58-322 CANFORD PPM DRIVE CARD STEREO

This PPM drive card incorporates a micro controller to control the PPM characteristics and can be run from either a single or dual rail power supply and be driven from either balanced or unbalanced sources. Two peak LED's illuminate at PPM 6, if fitted.

Default operation is dual channel L/R metering but external single pole switches can be added to select M&S, M&S+20 and BBC mode.

MODE Switch Functions:

	Red Meter	Green Meter
MS OPEN	Input L	Input R
MS only	(L+R)/2	(L-R)/2
MS,MS20	(L+R)/2	10(L-R)/2
MS,BBC	(L+R)/2	(L-R)/2
MS,BBC,MS20	(L+R)/2	10(L-R)/2

Provision has been made for external meters/meter and PPM SLOW mode.

(For all wiring details see "Connections".) Observe handling precautions for ESD sensitive devices at all times. Frequency response has a roll-off above 16kHz.

CONNECTIONS

(Refer to wiring diagrams at end of Technical Specification section).

For optimal EMC performance, care must be taken with appropriate shielding of external connections and with grounding/routing of signal and control cables. Ideally, the assembled meters should be housed in screened cases and power supply common should be earthed as close as possible to the PCB. Ferrite rings may be used to improve performance in sensitive areas. In particular, any long cables to remote control switches and external meter should be via earthed screened cable. Ceramic de-coupling capacitors may be connected close to the PCB in necessary.

POWER SUPPLIES

Power can be dual or single supply (see specification). Single 12-30VDC at 50mA is recommended as the ground plane is then 0V. This gives improvements in the EMC performance of the unit. Dual 6V to 15V DC at 50mA is also an option.

CALIBRATION

Calibration of the drive is factory set to PPM4 at 0dBu. When fitting the meter to the card it may be necessary to adjust pot RV3, "METER L" and pot RV4, "METER R", to compensate for the meter tolerance on both Left and Right meters respectively. After applying 1kHz tone at 0dBu, adjust RV3 and/or RV4 to align the pointer(s) with PPM 4. RV1, "GAIN L" and RV2, "GAIN R", should not need adjustment but the user may wish to alter the reference level for systems which are not at 0dBu.

TECHNICAL SPECIFICATION

Indicating meter required to:	IEC268-10
Input signal:	0dBu (+/- 3dBu)
Resolution of meter drive circuitry:	8 bit
Resolution of rectifier:	10 bit @+14dBu level
Input impedance:	100kΩ (per leg) balanced
Frequency response:	20 - 16000Hz
Power supply requirements:	12-30V DC or 6V to 15V DC @ 50mA
Dimensions:	85 x 88mm
Weight:	60g



PIN LAYOUTS

PL1

- 1 Left Signal +ve
- 2 Left Signal -ve
- 3 Common
- 4 Right Signal +ve
- 5 Right Signal -ve
- 6 Common
- 7 Power Supply +ve
- 8 Power Supply 0V/-ve

PL1

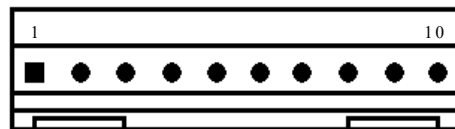


Connector viewed from component side

PL2

- 1 Mode Select MS
- 2 Mode Select BBC
- 3 Mode Select MS20 (S plus 20dB gain)
- 4 Slow Mode Switch (both channels)
- 5 Peak LED (L or M Signal) : red needle
- 6 Peak LED (R or S Signal) : green needle
- 7 Mode/Peak LED (common)
- 8 External Meter (common) -ve
- 9 External Meter (red) +ve
- 10 External Meter (green) +ve

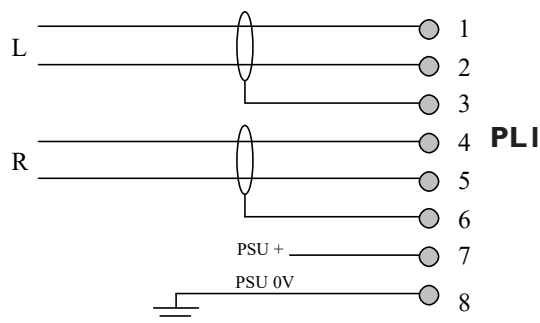
PL2



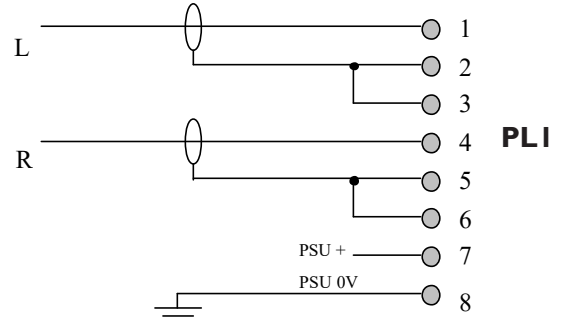
Connector viewed from component side

PL1 WIRING

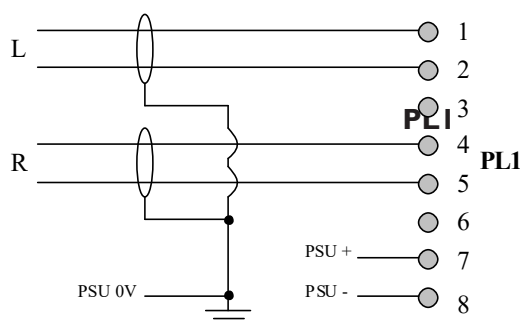
Balanced Input, Single Rail power



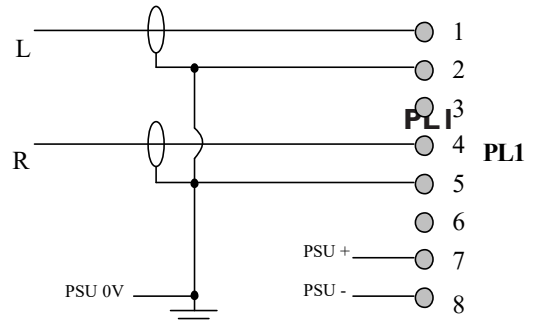
Un-balanced Input, Single Rail power



Balanced Input, Dual Rail power

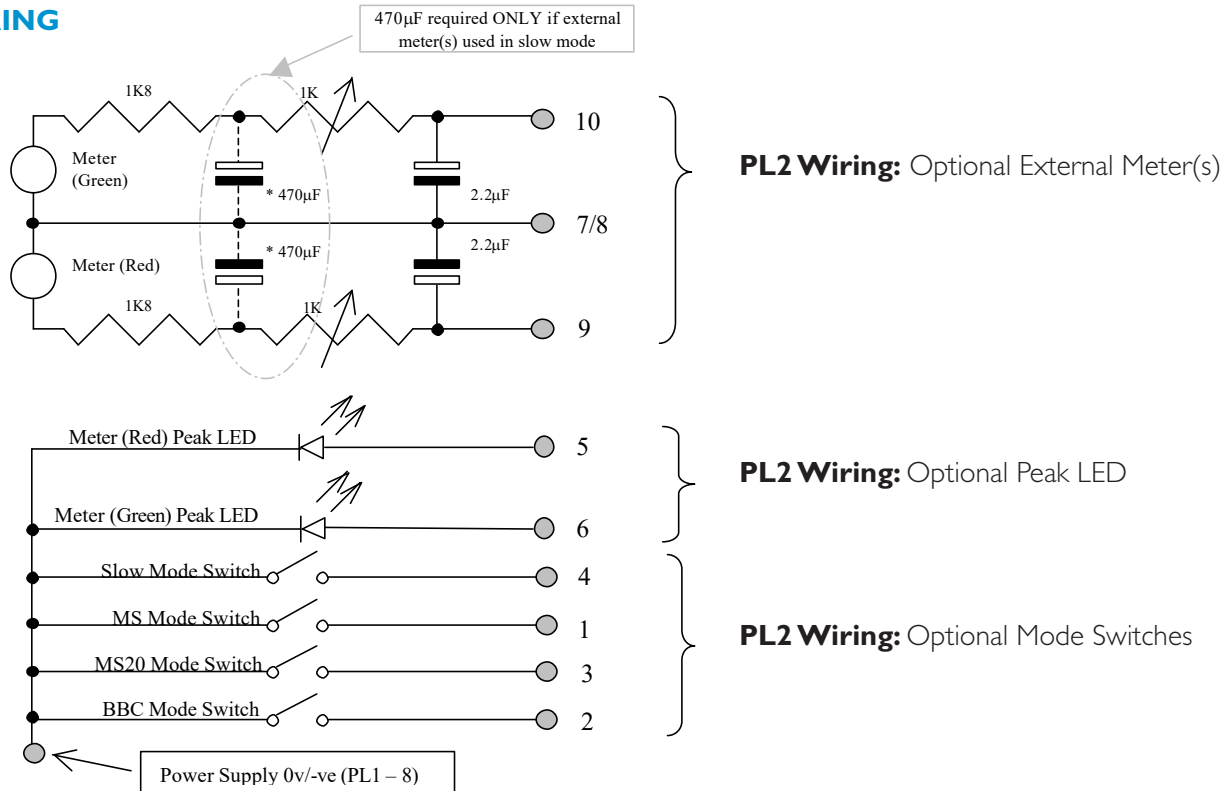


Un-balanced Input, Dual Rail power





PL2 WIRING



COMPONENT LAYOUT

