

## PPM Drive Cards

Drive cards suitable for use with Sifam peak programme meters. Single-channel cards will mount directly on to the rear studs of single meters and have mounting slots to match meter studs between 25.4mm (1") and 38.1mm (1.5"). The dual-channel 704 card is designed specifically to fit the type-74 twin-movement meter. Cards are supplied calibrated in accordance with BS5428 part 9 1981.

## General Specification

**Indicating instrument:** 1mA 600 ohms PPM movement conforming to BS5428 type 2A (1 to 7) PPM or 2B (-12dB to +12dB).  
Accuracy as follows:

Meter Indication	Input Level (dB)	Maximum Error (dB)
1	-12	± 0.5
2	-8	± 0.3
3	-4	± 0.3
4	0	0
5	+4	± 0.3
6	+8	± 0.3
7	+12	± 0.3

**Frequency response:** 30Hz to 16kHz ±0.3dB

**Dynamic response:** measured by applying tone bursts at 5kHz at an amplitude which would read +8dB if continuous.

Burst Width (ms)	Type 2A Indication	Type 2B Indication	Tolerance (dB)
100	6	+8	± 0.5
10	5.5	+6	± 0.5
5	5	+4	± 0.75
1.5	3.75	-1	± 1.0
0.5 (10kHz)	1.75	-9	± 2.0

## PPM 301 – Single unit drive card (BAL I/P dual supply rail)

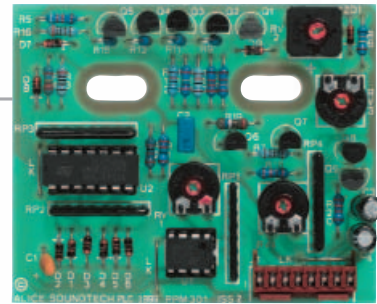
Balanced input drive card to BS spec. with overmod. PPM6 LED drive capability.

**Size:** 60 x 75 x 20mm.

**Power requirements:** dual-rail DC in the ±9V to ±18 V range. Current 20mA.

**Connector:** 8-pin Molex stake (mating connector supplied).

**Sensitivity:** factory-aligned for 0dB to read PPM4 but adjustable in the range -8dB to +10dB



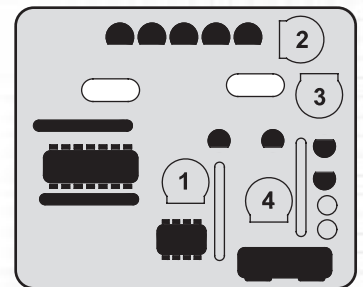
### Connections J1:

1. Audio +
2. Audio -
3. Slow mode + (470µF between pins 3 and 8)
4. Second meter + (requires 4k7 in series)
5. LED +
6. +VE (9V to 18V)
7. -VE (9V to 18V)
8. GND/LED -

### Alignment:

The following information gives test input level, adjustment pot and required meter reading.

1. Input 0dB adjust RV1 for meter reading of 4
  2. Input -8dB adjust RV3 for meter reading of 2
  3. Input +8dB adjust RV2 for meter reading of 6
  4. Adjustment RV4 for LED threshold
- Check all points and repeat if necessary.



## PPM 304 – Single unit drive card (BAL I/P single supply rail)

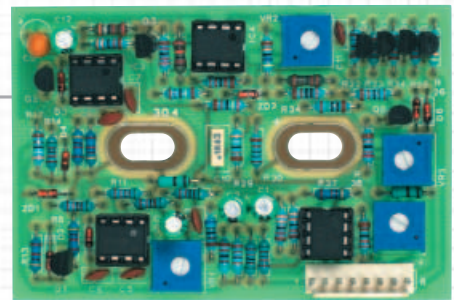
Balanced input drive card to BS spec. with overmod. PPM6 LED drive capability.

**Size:** 54 x 81 x 20mm.

**Power requirements:** single-rail DC in the range +14V to +36V. Current 15mA.

**Connector:** 8-pin Molex stake (mating connector supplied).

**Sensitivity:** factory-aligned for 0dB to read PPM4 but adjustable in the range -3dB to +10dB



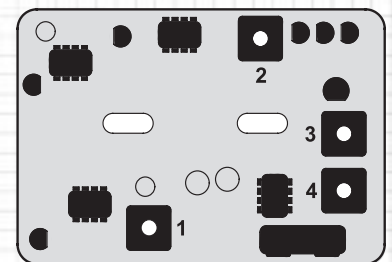
### Connections J1:

1. Audio +
2. Audio -
3. GND/LED -
4. LED +
5. +VE (14 V to 36V)
6. Second meter + (requires 5k6 in series)
7. Slow mode + (470µF between pins 7 and 8)
8. Second meter GND

### Alignment:

The following information gives test input level, adjustment pot and required meter reading.

1. No signal adjust RV2 for Bottom End Mark
  2. -8dB adjust RV1 for meter reading of 2
  3. +8dB adjust RV3 for meter reading of 6
  4. Adjustment RV4 for LED threshold
- Check all points and repeat if necessary.



All units are factory calibrated for 0dB to read PPM4 and do not normally require further alignment. N.B. Before commencing any alignment, adjust mechanical zero on meter movement.

## PPM 306 – Single unit drive card (UNBAL I/P dual supply rail)

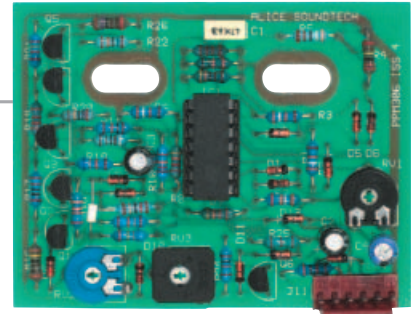
Unbalanced input drive card to BS spec.

**Size:** 69 x 56 x 20mm.

**Power requirements:** dual-rail DC in the range  $\pm 9V$  to  $\pm 18V$ . Current 15mA.

**Connector:** 6-pin Molex stake (mating connector supplied).

**Sensitivity:** factory-aligned for 0dB to read PPM4 but adjustable in the range -6dB to +10dB



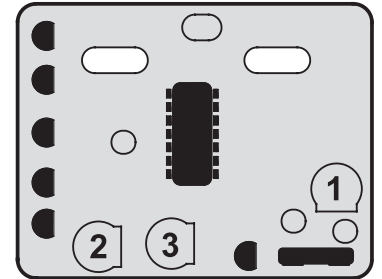
### Connections J1:

1. Second meter + (requires 4k7 in series)
2. Slow mode + (470 $\mu$ F between pins 2 and 6)
3. +VE (9V to 18V)
4. -VE (9V to 18V)
5. Audio
6. GND

### Alignment:

The following information gives test input level, adjustment pot and required meter reading.

1. 0dB adjust RV1 for meter reading of 4
  2. -8dB adjust RV3 for meter reading of 2
  3. +8dB adjust RV2 for meter reading of 6
- Check all points and repeat if necessary.



## PPM 704 – Dual unit drive card (BAL I/P dual supply rail)

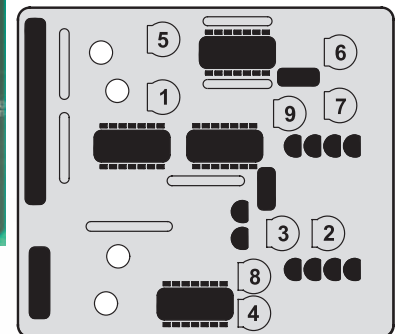
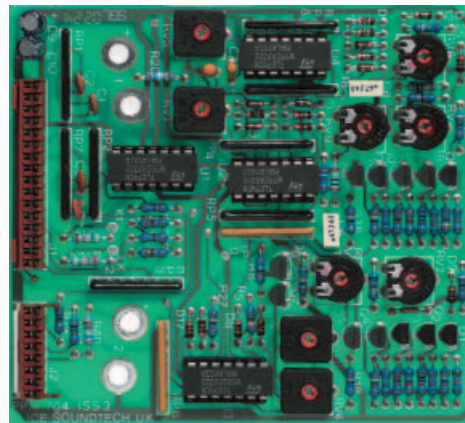
Dual-balanced input drive card to BS spec. Provides metering of Left and Right, Sum & Difference and Sum & Difference +20dB selectable by an external switch (not supplied). Capable of driving two individually adjustable PPM6 LEDs.

**Size:** 100 x 92 x 20mm.

**Power requirements:** dual-rail DC in the range  $\pm 9V$  to  $\pm 18V$ . Current 40mA.

**Connector:** 8- and 16-pin Molex stake (mating connectors supplied).

**Sensitivity:** factory-aligned for 0dB to read PPM4 but adjustable to in the range -6dB to +10dB



### Connections J1:

1. +VE (9V to 18V)
2. GND
3. -VE (9V to 18V)
4. Left audio +
5. Left audio -
6. GND
7. Right audio +
8. Right audio -
9. GND
10. Switch A wiper
11. Switch A POS 1
12. Switch A POS 2 & 3
13. Switch B wiper
14. Switch B POS 1 (normal)
15. Switch B POS 2 (Sum & Diff)
16. Switch B POS 3 (Sum & Diff +20dB)

### Connections J2:

1. Second meter common
  2. Second meter left +
  3. Second meter right +
  4. Slow mode left +
  5. Slow mode right +
  6. LED left +
  7. LED right +
  8. LEDS -
- Slow mode requires 470 $\mu$ F between pins 4 and 1 and 470 $\mu$ F between pins 5 and 1. Second meter requires 4k7 series resistor.
- SUM & DIFFERENCE LEVELS CAN BE TO BBC SPECIFICATION  $L \pm R / \sqrt{2}$  OR ILR SPEC  $L \pm R / 2$
- PLEASE SPECIFY WHEN ORDERING

### Alignment:

The following information gives test input level, adjustment pot and required meter reading.

**If RED/SUM/LEFT METER, the following adjustments are required:**

1. 0dB adjust RV1 for meter reading of 4
  2. +8dB adjust RV2 for meter reading of 6
  3. -8dB adjust RV3 for meter reading of 2
  4. Adjust RV4 for LED threshold
- Check all points and repeat if necessary.

**If GREEN/DIFF/RIGHT METER, the following adjustments are required:**

1. 0dB adjust RV5 for meter reading of 4
2. +8dB adjust RV6 for meter reading of 6
3. -8dB adjust RV7 for meter reading of 2
4. Adjust RV8 for LED threshold

All units are factory calibrated for 0dB to read PPM4 and do not normally require further alignment. N.B. Before commencing any alignment, adjust mechanical zero on meter movement.