

P4DMS Excalibur Calibration Procedure (Main board FCS P4DMS_EX_029_24)

Initial unity level setting:

- 1- Set Ratio, Threshold and Gain to zero and Blend to 100% wet on both channels.
- 2- Set timing to RMS being sure no other timing switch is engaged.
- 3- Make sure Feedback and External SC are not engaged.
- 4- Put compressor in SE I/O mode on both channels.
- 5- Apply a 0 dB / 1 kHz tone to the left TS input.
- 6- Measure the signal at the left TS output connector.
- 7- Adjust the Gain trim (R105) at the left VCA section so output matches input.
- 8- Repeat for right channel using Gain trim (R101).

Balanced output unity level calibration:

- 1- Set Ratio, Threshold and Gain to zero on both channels.
- 2- Set timing to RMS being sure no other timing switch is engaged.
- 3- Make sure Feedback and External SC are not engaged.
- 4- Make sure compressor is not in SE I/O mode.
- 5- Apply a +4 dB / 1 kHz tone to the left XLR input.
- 6- Measure the signal at the left XLR output connector.
- 7- Adjust the Gain trim at the left balanced I/O section located in the left side of the compressor so output matches input. The left gain trim is closest to the front panel.
- 8- Repeat for right channel using the gain trim closest to the rear panel.

Detector calibration:

- 1- Make sure compressor is not linked by releasing the TPS Link switch
- 2- Connect a DMM to the Cal and Zero test points on the left channel of the main board.
- 3- Turn Ratio fully clockwise
- 4- 1 Apply a +4 dB / 1 kHz tone to the left XLR input.
- 5- Adjust the MONO Detector trim (R107) on the left channel until it reads -120 mV DC.

- 6- Connect a DMM to the Cal and Zero test points on the right channel of the main board.
- 7- Turn Ratio fully clockwise
- 8- 1 Apply a +4 dB / 1 kHz tone to the left XLR input.
- 9- Adjust the MONO Detector trim (R103) on the right channel until it reads -120 mV DC.
- 10- Put the compressor in linked stereo mode by depressing the TPS Link switch.
- 11- Connect a DMM to the Cal and Zero test points on the left channel of the main board.
- 12- Turn Ratio fully clockwise on the left channel
- 13- 1 Apply a +4 dB / 1 kHz tone to the left XLR input.
- 14- Adjust the STEREO Detector trim (R106) on the left channel until it reads -120 mV DC on the left Cal and Zero test points.
- 15- 1 Apply a +4 dB / 1 kHz tone to the right XLR input.

16- Adjust the STEREO Detector trim (R102) on the right channel until it reads -120 mV DC on the left Cal and Zero test points.

Note that these STEREO detector adjustments are measured on the LEFT Cal and Zero testpoints since we are doing stereo calibration which is controlled by the left channel.