



CB Electronics TMC-1-IMon Monitor Remote

Use with the TMC-1 Reference

Provisional





Contents

IMon..... Error! Bookmark not defined.

 TMC-1-IMon User guide3

 TMC-1-IMon gain Structure.....3

Metering Cue Sends4

Stereo input to cue sends.....4

Monitoring Cue Sends4

Bass Extension.....4

 GPO-3.....4

 XPand Surround Bass Expansion.....4

Surround Switching5

 5.15

HD15 Connector (Labeled X-Mon)5

Talkback Microphone and Headphone.....5

 Internal Talkback Microphone.....5

 Talkback and Sate Routing6

 Headphone Jack.....6

 Listen Back Microphones.....6

Connecting the TMC-1 to I-Mon7

 RJ45 Breakout card.....7

I-Mon Metering7

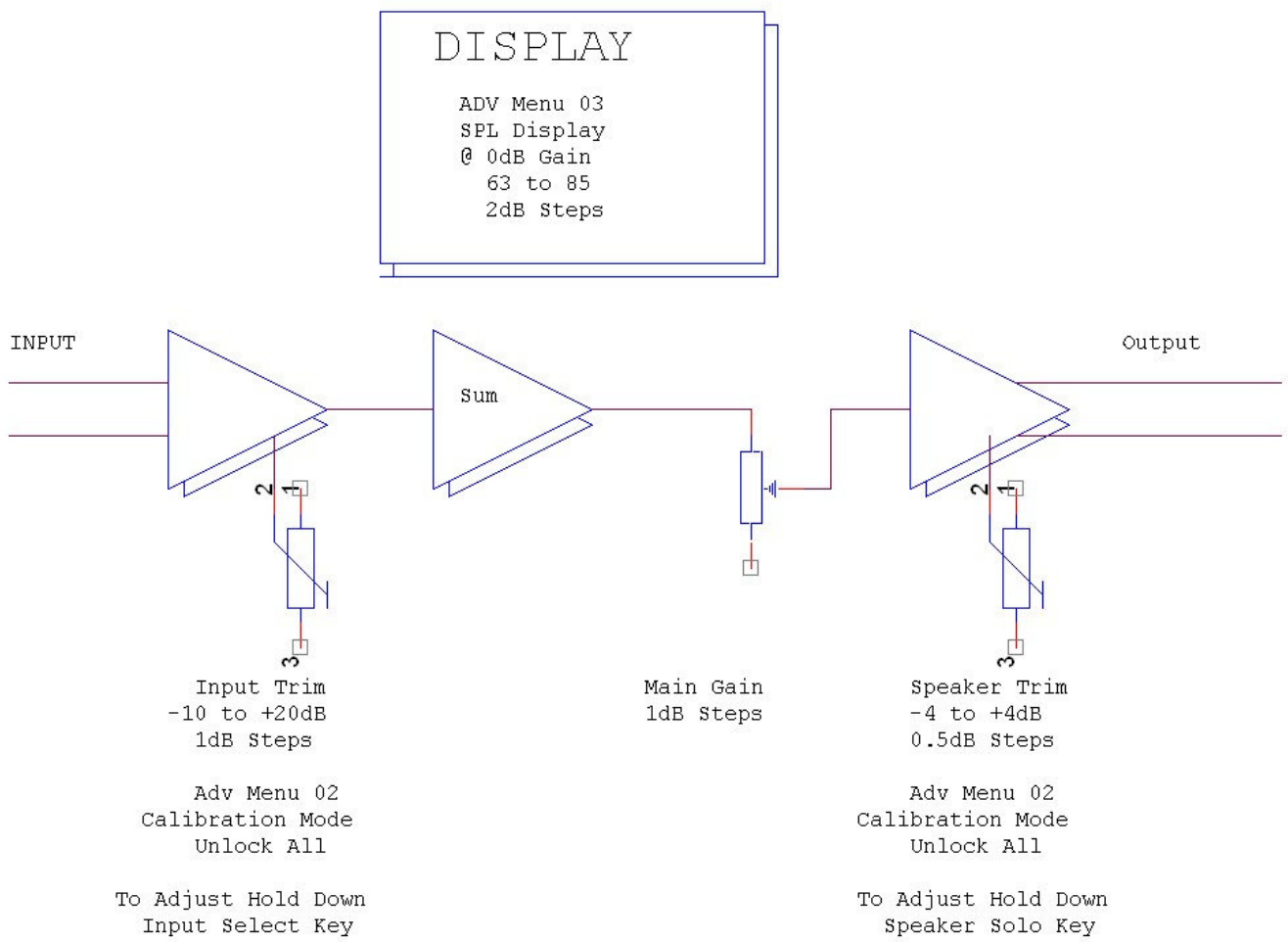
I-Mon Block Diagram8

IMon

TMC-1-IMon User guide

This document only describes connection details and setup considerations when using I-Mon and should be used with the TMC-1 User guide.

TMC-1-IMon gain Structure





Metering Cue Sends

The I-Mon allows for metering of the SLS and H/P Monitor send only, use the [Meter Cues] user key to access.

Stereo input to cue sends

Apart from the Link to the Monitor output there is no provision on the I-Mon to route a stereo input independently to the cue sends. One option is to parallel Cue input 3 with Stereo input 3 and name Cue input 3 appropriately.

Monitoring Cue Sends

There is no provision on the I-Mon to monitor the cue sends. One option would be to connect a Cue output to a stereo input and label the input appropriately.

Bass Extension

The I-Mon provides to separate bass extension options:

Bass-X Sum the Left and Right and Centre Outputs and route to the S/W(LFE) output via a Low Pass Filter.

Surr-X Sum the Surrounds and route to the S/W(LFE) output via a Low Pass Filter.

GPO-3

One of our customers used the GPO-3 Output to enable and disable the Bass extension on his Speakers. He used TMC-1-Win/mac to rename the GPO-3 Indication to Bass-X

XPand Surround Bass Expansion

XPand has built in Summing and filtering for Surround Bass extension



Surround Switching

The I-Mon will switch the source of the rear surround speakers when 5.1 is selected. The TMC-1 provides a level trim for the Left and Right surround when monitoring 5.1 to allow for the extra speakers.

5.1

You can set a trim to reduce the surround gain when the Rear Speakers are added to the surround.

You can assign a GPO to be active when 5.1 is selected and use this to drive a relay to switch the rear speakers to the side.

HD15 Connector (Labeled X-Mon)

The I-Mon is connected to the TMC-1-IMon via a DCC VGA cable, a 7 Meter cable is supplied as standard and extra long cables are available to order. Alternatively a pair RJ45 breakout boards are available with two 0.5 meter DCC VGA cables..

Talkback Microphone and Headphone

The TMC-1 provides a analogue Talkback Microphone with preamp and Headphone connection which are connected to the HD15 connector.

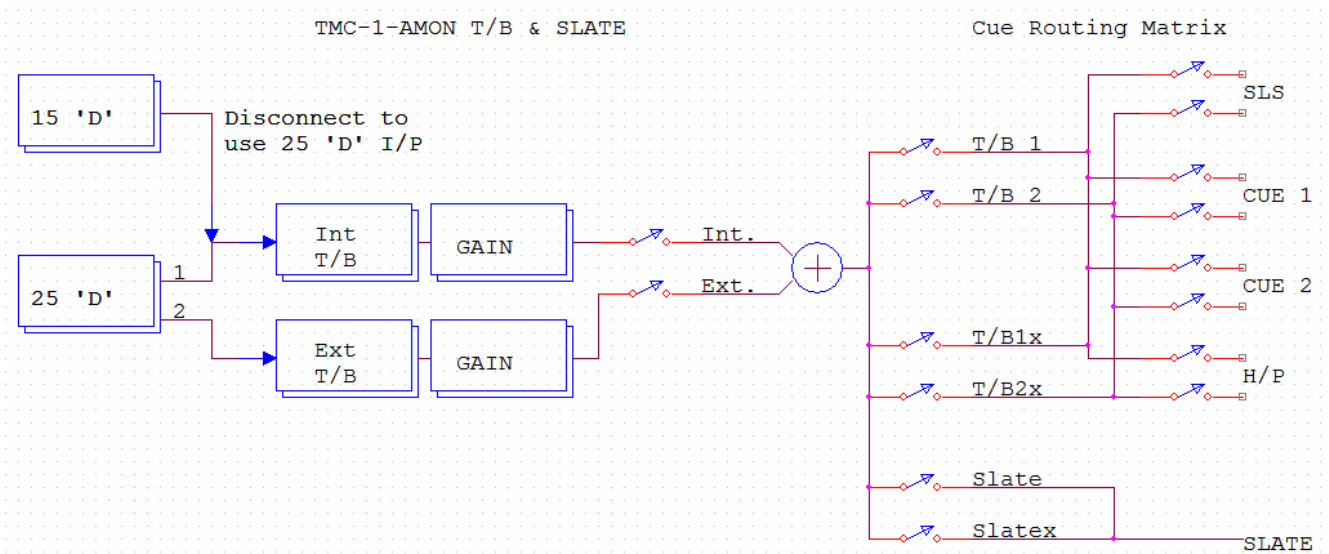
Internal Talkback Microphone

An electret microphone and amplifier is provided in the TMC-1, normally connected to the internal microphone. A 3.5mm Jack on the rear is provided to that a suitable external "Laptop Microphone" may be used. The microphone output is on the HP15 pin "Xmon" connector and may be configured with a balanced or unbalanced output.

When using the TMC-1 microphone with the switches on the TMC-1 the mechanical coupling causes a click on turn off. There are a number of solutions to this

- 1) Use an external switch connected to the GPIO input on the TMC-1
- 2) Connect an external Mic to the 3.5mm jack on the rear of the TMC-1 or directly to the I-Mon
- 3) Use the Auto-mute commands to disable the Talkback on entering Play and/or Record.

Talkback and Sate Routing



Headphone Jack

The headphone jack is connected directly to the 15 pin "XMon" connector. The input is unbalanced with two ground returns.

Listen Back Microphones

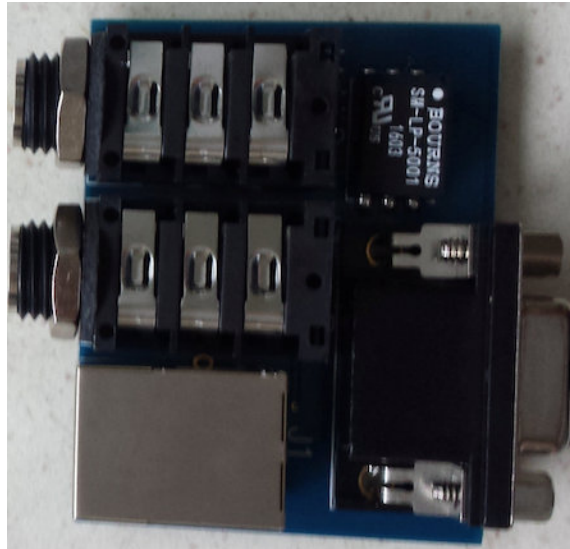
Use Omni-directional microphones for Listen back, PZM or Boundary effect microphones should work well.

Connecting the TMC-1 to I-Mon

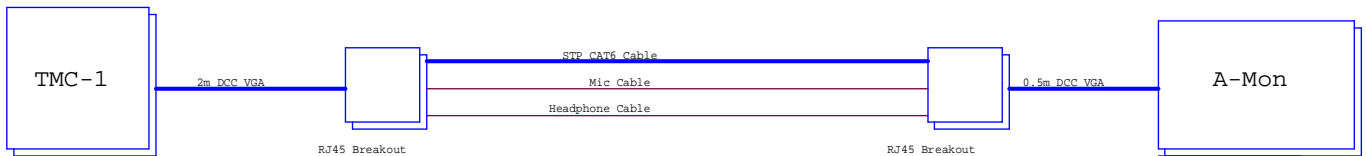
Connecting the TMC-1 to XMon using a long DDC VGA Cable

RJ45 Breakout card

A pair of RJ45 breakout boards can be ordered for use with I-Mon



Connecting the TMC-1 to the I-Mon using a pair of RJ45 breakout boxes



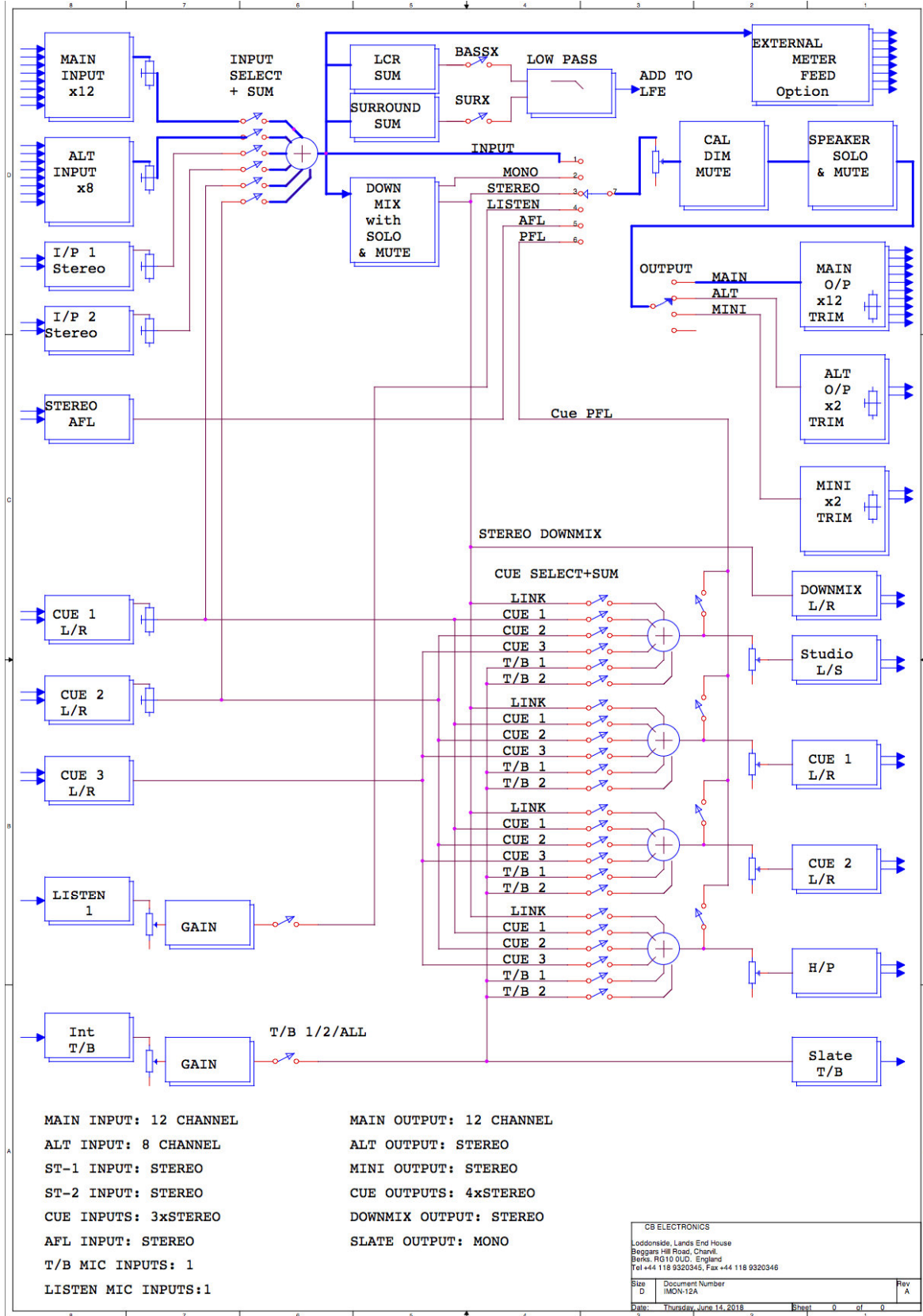
I-Mon Metering

The default setting provides 5dB of analogue headroom above the digital clip point when set in this mode (I-Mon clips at approximately +24dBm).

The I-Mon updates a channel every 2.5mSec, all channels are updated in 20mSec.



I-Mon Block Diagram





Factory Default Settings

The factory default settings of the TMC-1 I-Mon controller are as follows:

Main Gain Section +4dB gain.

Speaker Trim -4dB

Overall gain 0dB

Speaker trim range is restricted to +/- 4dB

Input makeup gain +20dB to -10dB

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TMC-1-IMon Monitor Controller

CB Electronics
Loddonside, Lands End House
Beggars Hill Road
Charvil
Berkshire RG10 0UD
Tel: +44 (0)118 9320345
Fax: +44 (0)118 9320346
Email: support@colinbroad.com
Tech Support: +44 (0)118 9320345
Web: www.colinbroad.com