

ML3000
seal No.
C $\underbrace{}_{\text {Made in the ukby }}$ ALLEN\&HEATH

CHANNEL INPUT XLR input for mic or line level signals. Pin 2 hot. Phantom power is fed to pins 2 and 3 through 6 k 8 series resistors when the front panel +48 V switch is pressed.

A
WARNING: Do not connect unbalanced sources or cables to the XLR inputs when phantom power is selected. To avoid loud clicks always turn the channel off by pressing the MUTE switch when switching +48 V on or off and when plugging or unplugging microphones.

INSERT TRS jack socket for combined insert send and return. Tip $=$ send, ring $=$ return, sleeve $=$ ground. The insert is post-HPF and pre-EQ. Use this to insert line level processors such as compressors into the channel signal path. The channel signal is interrupted when you plug into the INSERT socket. With nothing plugged in the signal is passed through switching contacts in the socket.

DIRECT OUT TRS jack providing the post-fade channel signal as standard. You can reconfigure the output as pre-fader or as post-fader with the AUX 1 send control as a level trim by repositioning internal jumper links. The output is 0 dBu ground compensated line level for connection to balanced or unbalanced equipment.

ST1-4 IN. Each provides two balanced stereo inputs on TRS jacks. These can be selected independently or mixed together into the stereo channel. They accept line level signals such as $C D$, 2-track players and effects processors.

MAIN OUTPUTS. Line level balanced XLR outputs for the Auxes 1-8, Groups 1-4, Matrix 1-4, L, R and C main mix. Pin 2 hot. These outputs can provide up to +23 dBu maximum and are suited to driving line level equipment operating at nominal 0 dBu or +4 dBu . The C output is available as the engineers wedge monitor feed when the front panel mode switch is selected.

Note: The GRP and AUX signals always remain on their respective connectors regardless of the setting of the front panel REVERSE switches.

OUTPUT INSERTS. Each of the L,R,C, Matrix 1-4 and 8 small fader paths has a pre master fader insert point. These are TRS jack sockets for combined insert send and return. Tip = send, ring = return, sleeve = ground. Insert line level processors such as compressors, limiters, delays and so on into the output signal paths. The output signal is interrupted when you plug into the INSERT socket. With nothing plugged in the signal is passed through switching contacts in the socket.

Note: Fader paths 1-4 may be Group or Aux depending on the position of the front panel mode switches. This lets you use inserts 1-4 for groups or auxes according to your application.

DC POWER IN A heavy duty 10-pin connector with locking ring connects to the console power supply unit. A chassis ground terminal post is provided for situations requiring earth strapping between equipment.

WARNING: Use only the DC power cable type as provided with the console. Refer to the power supply user guide.


MATRIX 1-4 EXT INPUT OdBu line level balanced TRS jacks to connect external signals into the matrix. Each matrix has its own input. There are no level trims for these inputs.

LOCAL MONITOR OUT Impedance balanced stereo monitor output on TRS jacks. These can connect to a stereo amplifier/speaker system for local monitoring.

2-TRACK IN / OUT Line level TRS jacks to connect to a 2-track recorder such as MiniDisc, tape or DAT. Connect OUT to the recorder input, and IN to the recorder output. The connections are balanced. Link ring (cold) to sleeve (ground) when connecting to unbalanced equipment.

TB/OSC OUT Impedance balanced TRS line level output providing talkback, 1 kHz oscillator or pink noise when selected. Use this to patch the test signal into console channels or other equipment.

MIDI Two standard opto-isolated 5-pin sockets for MIDI IN and OUT. The small slide switch selects either the MIDI or RS232 connection. For normal console operation it is recommended that the switch is set to MIDI. The power up boot routine is quicker in this position than RS232.

RS232 9-pin D-connector to connect to the serial port of a PC for loading new console operating software, archiving the settings or controlling the snapshot memories. To enable RS232 set the slide switch to the RS232 position. Set it to the MIDI position when RS232 is not needed.

LAMP 4-pin XLR for plugging in a gooseneck lamp to illuminate the control surface. Three lamp sockets are provided along the back of the meterpod. The right angled Littlite type is recommended. The 4 -pin XLR prevents any confusion with the 3 -pin audio connections.

SYS-LINK EXPANDER OPTION The console is provided with blanking plates fitted as standard. The ML3000 Sys-Link option kit is available from Allen \& Heath. It is fitted by removing the base, blanking plates, and plugging in the circuit cards provided. Fitting instructions come with the kit.
Two pairs of 37 -pin and a pair of 9-pin D-connector sockets allow two consoles to connect together as master and slave to expand the number of channels in the mix. These provide access to all the mix busses and P/AFL system. They are balanced and operate at -2 dBu line level.

Two ML3000 consoles may be linked as master/slave. Alternatively the ML3000 may be connected as a slave to an ML4000 or ML5000 console.

Two 37 -way audio and one 9 -way logic cables are required. The audio outputs of the slave console plug into the master audio inputs. The slave console SLAVE logic connector plugs into the master console MASTER logic connector.

The Sys-Link connections conform to the Allen \& Heath Sys-Link II standard. You can connect to a console fitted with Sys-Link I using special adapter cables. Contact Allen \& Heath for details.

Refer to the Sys-Link fitting instructions for further details on this option.


PIN $2=$ HOT


