



TELEVISION AUDIO PRODUCTION CONSOLE

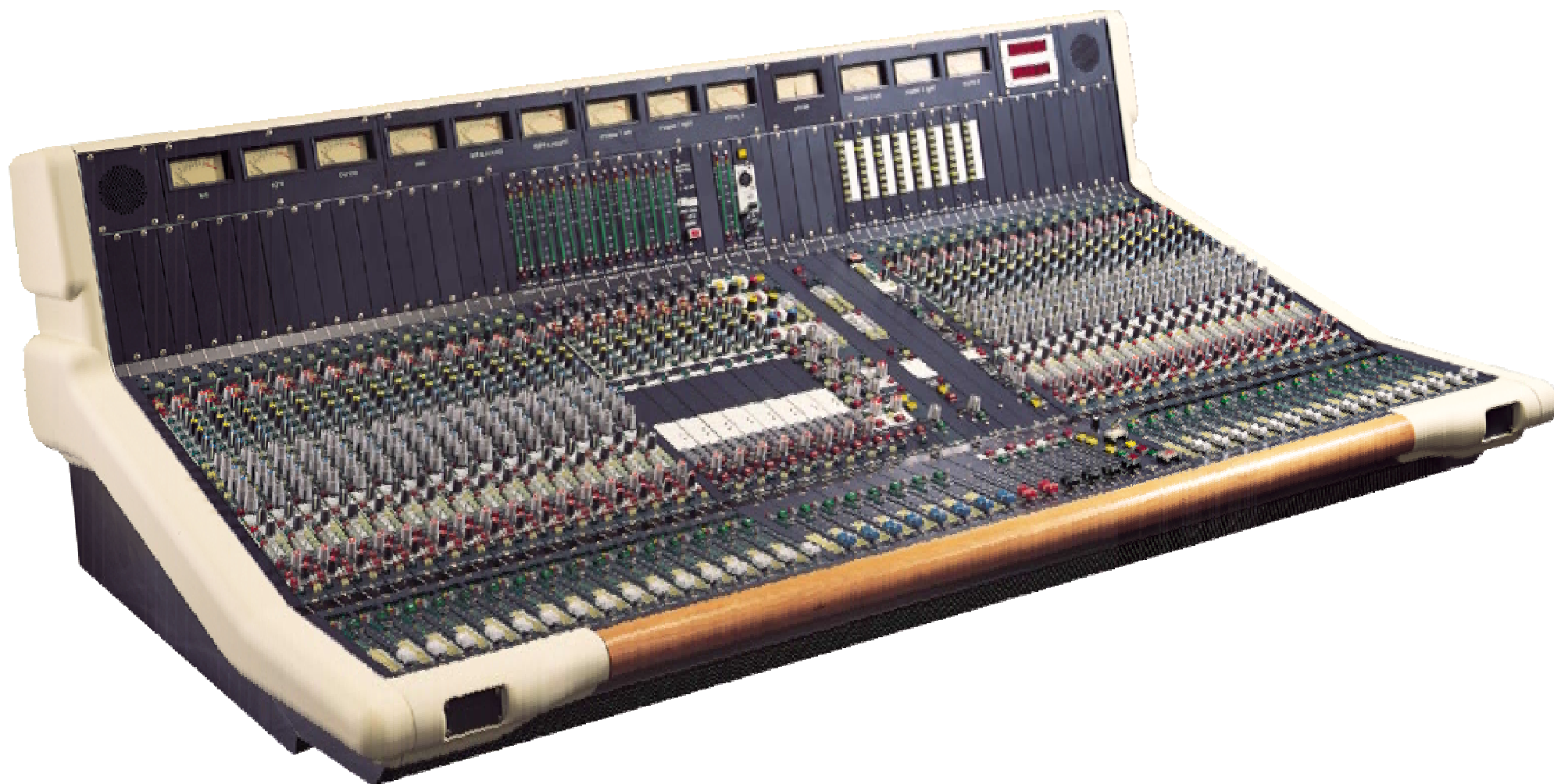


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Broadcast 2000

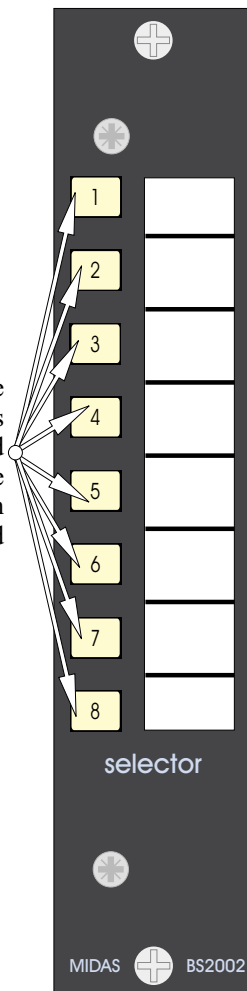


Midas BS2002 Midas BS2005 Mono and Stereo Input Pre-Selector

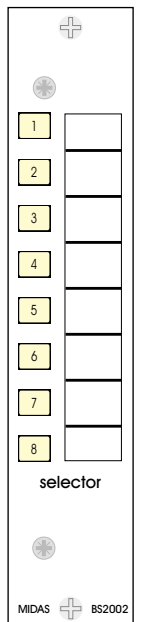
The optional 8 input (16 input - stereo) pre selector is split into two halves such that the first 4 inputs (8 inputs - stereo) are set up for mic inputs and the second set of 4 inputs (8 inputs - stereo) are set up for line inputs.

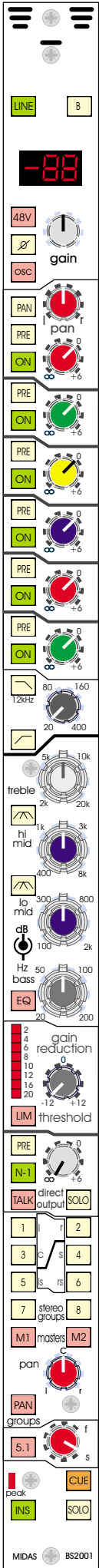
The 4 mic pre-selector inputs (8 mic - stereo) will route to the console via the main channel mic input -MIC A input-(LEFT MIC A and RIGHT MIC A - stereo) and the 4 line (8 line - stereo)pre-selector inputs will route to the console via the main channel line input -LINE A input (LEFT LINE A and RIGHT LINEA - stereo).

Switches 1 to 8 are used to recall the different pre-selector input paths; press pre-selector 1 and the input connected to pre-selector 1 will be routed to the channel input with the same gain settings that were last used and stored by the assistance system.



The digital assistance system stores an individual pre-amplifier set-up for each pre-selector input covering GAIN, PHASE and 48V (mic only).



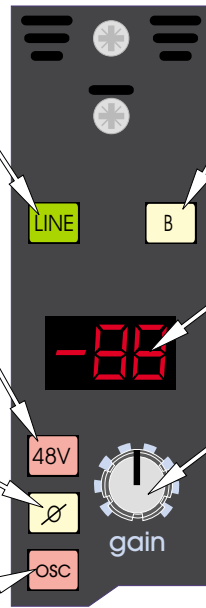


The LINE switch changes the channel input from mic to line. If a pre-selector is fitted the function is overridden by any active pre-selection and can only be operated manually when the console B input is selected.

The 48V phantom switch is used to connect power to the channel mic inputs only. This is suitable for condenser microphones or DI boxes etc.

The PHASE switch activates a 180 degrees phase change on both the mic and line inputs.

The OSC switch connects the channel input to derive signal from an internal bus which is fed from the oscillator section of the OSC - CUES module.



The B switch changes the channel input from A (mic or line) to B (mic or line). If a pre-selector is fitted it will automatically set the channel input to A when any pre-selection is made.

The 7 segment displays show the gain of the input pre-amplifier. The range is from -10dB to +70dB

The GAIN control adjusts the gain of the pre-amplifier over a range from -10dB to +70dB. Line gains (from -10dB to +10dB) are adjustable in 0.5 dB increments, low mic gains (from -6dB to +18dB) are adjustable in 1dB increments and high mic gains (from +18dB to +70dB) are adjustable in 2dB increments.

Midas BS2001 Mono Input Module

The AUX 1 PAN switch enables the aux 1 pan circuit so that it controls the placement of the input channel within the stereo aux 1 mix. When the PAN switch is disabled the stereo image follows the main channel pan control.

The AUX 1 PRE switch changes the channel signal that feeds the aux 1 mix from post fader to pre fader.

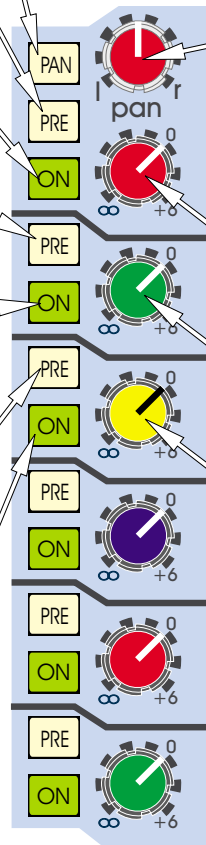
The AUX 1 ON switch connects the channel to the aux 1 mix via the LEVEL control.

The AUX 2 PRE switch changes the channel signal that feeds the aux 2 mix from post fader to pre fader.

The AUX 2 ON switch connects the channel to the stereo aux 2 mix via the LEVEL control. The stereo image follows the main channel pan control.

The AUX 3 to AUX 6 PRE switches change the signal feed to the mono aux mixes from post fader to pre fader.

The AUX 3 to AUX 6 ON switches connect the channel to the mono aux mixes via the LEVEL controls.



The AUX 1 PAN control defines the stereo placement of the input channel within the aux 1 mix and has a constant power law. i.e. 0dB at the centre position and +3dB at both extreme pan positions.

The AUX 1 LEVEL control gives continuous adjustment of the signal that feeds the aux 1 mix from +6dB to off.

The AUX 2 LEVEL control gives continuous adjustment of the signal that feeds the stereo aux 2 mix from +6dB to off.

The AUX 3 to AUX 6 LEVEL controls give continuous adjustment of the signal feed to the mono aux mixes from +6dB to off.

The LO PASS switch connects a fixed 12K filter (12dB/oct) into the channel signal path.

The HI PASS switch connects a swept filter (24dB/oct) into the channel signal path.

The hi mid WIDTH switch changes the filter bandwidth from 1.5 octaves to 0.33 octave.

The HI MID (dual concentric top) control gives continuous adjustment of boost and cut from + 15dB to - 15dB with a 0dB centre detent.

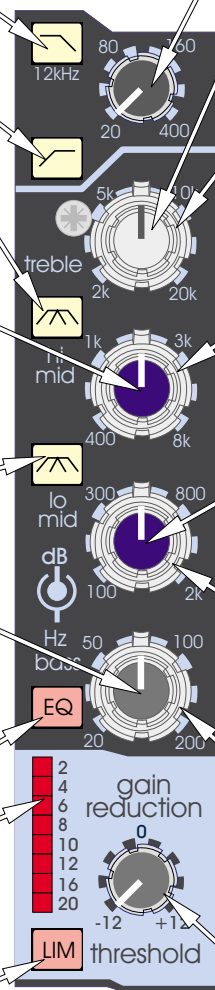
The lo mid WIDTH switch changes the filter bandwidth from 1.5 octaves to 0.33 octave.

The BASS (dual concentric top) control gives continuous adjustment of boost and cut from + 15dB to - 15dB with a 0dB centre detent.

The EQ switch connects the equaliser in the input channel signal path.

The GAIN REDUCTION METER indicates the amount of reduction that the limiter has applied to the channel signal. The range is from 0dB to 20dB.

The LIMITER switch connects the limiter into the channel signal path. The Compression ratio, Attack time and Release time are all fixed and optimised for typical speech signals.



The HI PASS FREQ control is continuously adjustable from 20Hz to 400Hz.

The TREBLE (dual concentric top) control gives continuous adjustment of boost and cut from + 15dB to - 15dB with a 0dB centre detent.

The treble FREQ. (dual concentric bottom) control gives continuous adjustment of the frequency range that the treble equaliser acts on from 2K to 20K. The treble equaliser has a shelving response.

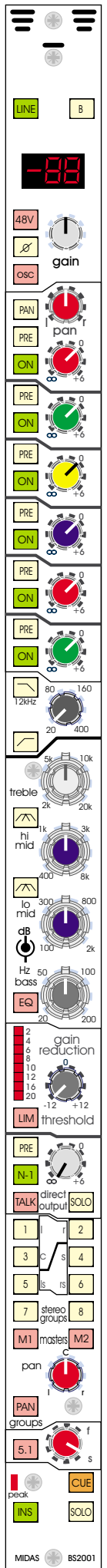
The hi mid FREQ. (dual concentric bottom) control gives continuous adjustment of the frequency range that the hi mid equaliser acts on from 400Hz to 8K.

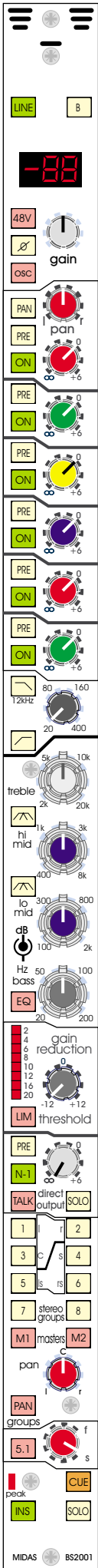
The LO MID (dual concentric top) control gives continuous adjustment of boost and cut from + 15dB to - 15dB with a 0dB centre detent.

The lo mid FREQ. (dual concentric bottom) control gives continuous adjustment of the frequency range that the lo mid equaliser acts on from 100Hz to 2K.

The bass FREQ. (dual concentric bottom) control gives continuous adjustment of the frequency range that the bass equaliser acts on from 20Hz to 200Hz. The bass equaliser has a shelving response.

The THRESHOLD control sets the maximum signal level that will pass through the channel without activating the limiter from 12dBu to +12dBu. All signal levels over the threshold will activate the limiter and their amplitude will be reduced.





The PRE FADE switch re configures the direct output to derive signal from the input channel pre fader.

The N-1 switch re configures the direct output to derive signal from the N-1 buss. This is a sum of all the active (routed to master 1) post fader input channels except the local channel.

The TALK switch re configures the direct output to derive signal from the talk back mic (in the meter bridge).

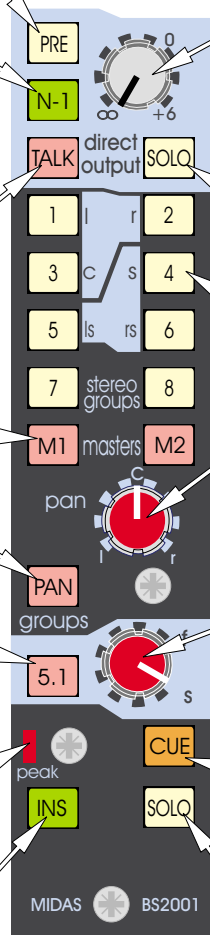
The M1 and M2 switches assign the channel to the stereo master outputs.

The PAN switch changes all group and master bus assignments to operate via the stereo pan pot.

The 5.1 switch changes the appropriate group bus assignments (1 to 6) to operate via the 5.1 pan pots. Other stereo pans remain un-affected.

The PEAK led indicates when the channel signal level is too high. The signal is monitored at all points within the signal path.

The INS switch connects the input insert return signal to the input channel. An internal option switch define the insert point position as post fader, pre fader or pre EQ.



The DIRECT output control gives continuous adjustment of the direct output level from + 6dB to off. The output is derived from the input channel post fader signal.

The direct SOLO switch connects the direct output to the solo busses.

The GROUP 1,2,3,4,5,6,7,8 switches assign the channel to the stereo audio groups.

The PAN (left/right) defaults to control the channel placement within the stereo mix outputs and has a constant power law. i.e. 0dB at the centre position and +3dB at both extreme pan positions.

The PAN (front/surround) controls the channel placement within the 5.1 group mix and operates with a constant power law in conjunction with the left right pan.

The CUE switch connects the channel pre fader, pre mute signal to stereo PFL bus which allows signal monitoring via the CUE speakers.

The SOLO switch connects the channel post fader, post pan, post mute signal to the stereo AFL bus which allows signal monitoring via the LOCAL MONITOR speakers.

Midas BS2003 Input VCA Fader

The READY led indicates the status of an external device which may be connected to the console via the tally lines.

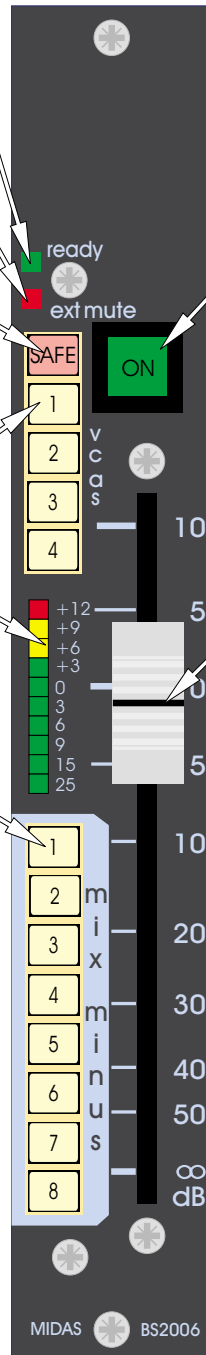
The EXT MUTE led indicates when the channel is being muted by an external source.

The SAFE switch disconnects the input channel from ALL forms of digital assistance or VCA control.

The VCA 1,2,3,4 switches assign the channel to the 4 VCA sub groups.

The METER monitors the peak signal level of the input channel pre fader.

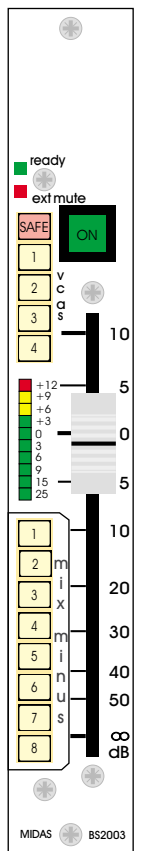
The MIX MINUS 1,2,3,4,5,6,7,8 switches de-assign the channel from any of the 8 mono mix minus audio busses.

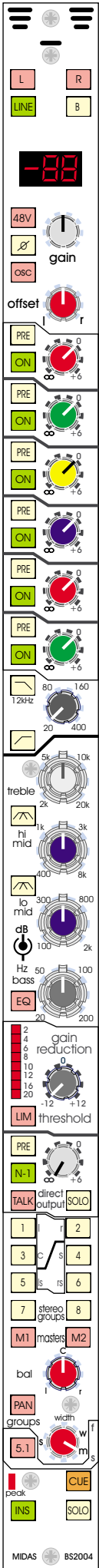


The ON switch activates (led illuminated), or mutes (led off) the input channel at all points except the insert send.

Note:- ON is activated by a combination of the switch status AND fader position. If the ON switch is pressed but the fader closed, the module will be primed, but not ON and the led will be illuminated at half brightness. As the fader is moved up from the closed position the channel status will change to ON and the led will illuminate at full brightness.

The VCA INPUT fader gives continuous adjustment of the input channel level from + 10dB to off.





Each channel strip has 8 inputs; LEFT MIC A, LEFT LINE A, LEFT MIC B, LEFT LINE B, RIGHT MIC A, RIGHT MIC B, RIGHT LINE A, RIGHT LINE B. If a pre-selector is fitted (option) it will be connected to the stereo MIC A and LINE A inputs.

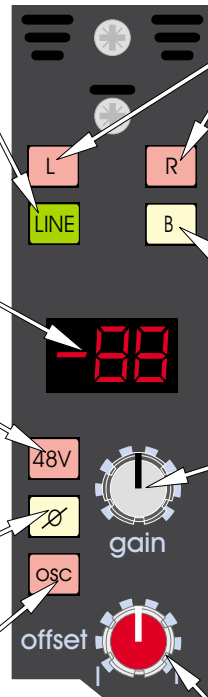
The LINE switch changes the channel inputs from mic to line. If a pre-selector is fitted the function is overridden by any active pre-selection and can only be operated manually when the console B inputs are selected.

The 7 segment displays show the gain of the input pre-amplifiers. The range is from -10dB to +70dB

The 48V phantom switch is used to connect power to the channel mic inputs only. This is suitable for condenser microphones or DI boxes etc.

The PHASE switch activates a 180 degrees phase change on both the mic and line inputs.

The OSC switch connects the channel inputs to derive signal from an internal bus which is fed from the oscillator section of the OSC - CUES module.



The LEFT switch connects left-hand signals to both sides of the module and the RIGHT switch connects the right-hand signal to both sides. LEFT + RIGHT = swap left hand and right hand signals.

The B switch changes the channel inputs from A (mic or line) to B (mic or line). If a pre-selector is fitted it will automatically set the channel inputs to A when any pre-selection is made.

The GAIN control adjusts the gain of the pre-amplifiers over a range from -10dB to +70dB. Line gains (from -10dB to +10dB) are adjustable in 0.5 dB increments, low mic gains (from -6dB to +18dB) are adjustable in 1dB increments and high mic gains (from +18dB to +70dB) are adjustable in 2dB increments.

The OFFSET PAN control fine tunes the gain of the left and right hand amplifiers so as to correct left right balance errors within the source material.

Midas BS2004 Stereo Input Module

The AUX 1 PRE switch changes the channel signals that feed the aux 1 mix from post fader to pre fader.

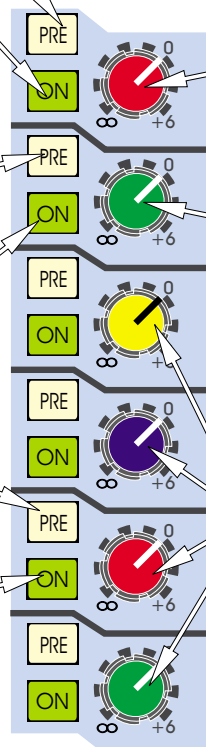
The AUX 1 ON switch connects the channel signals to the aux 1 mix via the LEVEL control. The stereo image follows the main channel balance control.

The AUX 2 PRE switch changes the channel signals that feed the aux 2 mix from post fader to pre fader.

The AUX 2 ON switch connects the channel signals to the stereo aux 2 mix via the LEVEL control. The stereo image follows the main channel balance control.

The AUX 3 to AUX 6 PRE switches change the signals feed to the mono aux mixes from post fader to pre fader.

The AUX 3 to AUX 6 LEVEL controls give continuous adjustment of the signal feed to the mono aux mixes from +6dB to off.



The AUX 1 LEVEL control gives continuous adjustment of the signals that feed the aux 1 mix from +6dB to off.

The AUX 2 LEVEL control gives continuous adjustment of the signals that feed the stereo aux 2 mix from +6dB to off.

The AUX 3 to AUX 6 ON switches connect the channel to the mono aux mixes via the LEVEL controls. Signals are derived from a sum of the channel left and right inputs.

The LO PASS switch connects a fixed 12K filter (12dB/oct) into the channel signal path.

The HI PASS switch connects a swept filter (24dB/oct) into the channel signal path.

The hi mid WIDTH switch changes the filter bandwidth from 1.5 octaves to 0.33 octave.

The HI MID (dual concentric top) control gives continuous adjustment of boost and cut from + 15dB to - 15dB with a 0dB centre detent.

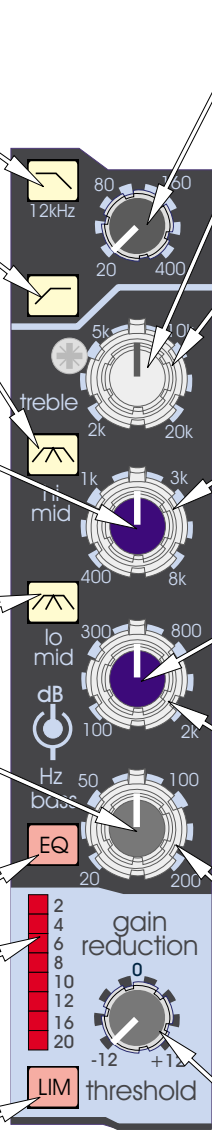
The lo mid WIDTH switch changes the filter bandwidth from 1.5 octaves to 0.33 octave.

The BASS (dual concentric top) control gives continuous adjustment of boost and cut from + 15dB to - 15dB with a 0dB centre detent.

The EQ switch connects the equaliser in the input channel signal path.

The GAIN REDUCTION METER indicates the amount of reduction that the limiter has applied to the channel signal. The range is from 0dB to 20dB.

The LIMITER switch connects the limiter into the channel signal path. The Compression ratio, Attack time and Release time are all fixed and optimised for typical speech signals.



The HI PASS FREQ control is continuously adjustable from 20Hz to 400Hz.

The TREBLE (dual concentric top) control gives continuous adjustment of boost and cut from + 15dB to - 15dB with a 0dB centre detent.

The treble FREQ. (dual concentric bottom) control gives continuous adjustment of the frequency range that the treble equaliser acts on from 2K to 20K. The treble equaliser has a shelving response.

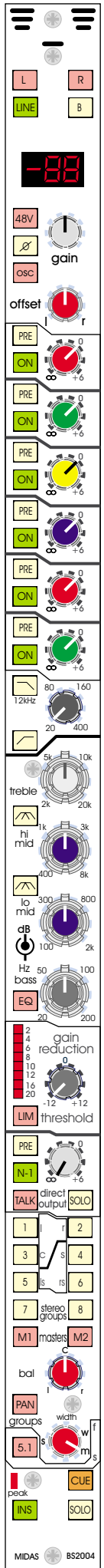
The hi mid FREQ. (dual concentric bottom) control gives continuous adjustment of the frequency range that the hi mid equaliser acts on from 400Hz to 8K.

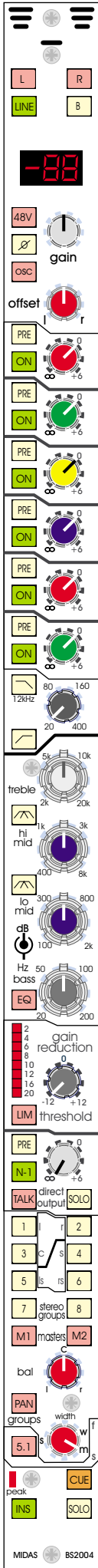
The LO MID (dual concentric top) control gives continuous adjustment of boost and cut from + 15dB to - 15dB with a 0dB centre detent.

The lo mid FREQ. (dual concentric bottom) control gives continuous adjustment of the frequency range that the lo mid equaliser acts on from 100Hz to 2K.

The bass FREQ. (dual concentric bottom) control gives continuous adjustment of the frequency range that the bass equaliser acts on from 20Hz to 200Hz. The bass equaliser has a shelving response.

The THRESHOLD control sets the maximum signal level that will pass through the channel without activating the limiter from 12dBu to +12dBu. All signal levels over the threshold will activate the limiter and their amplitude will be reduced.





The PRE FADE switch re configures the direct output to derive signal from the input channel pre fader.

The N-1 switch re configures the direct output to derive signal from the N-1 buss. This is a sum of all the active (routed to master 1) post fader input channels except the local channel.

The TALK switch re configures the direct output to derive signal from the talk back mic (in the meter bridge).

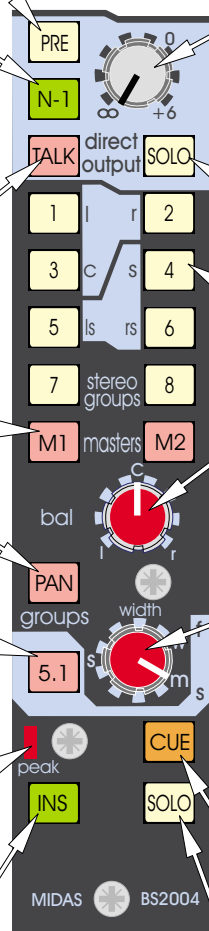
The M1 and M2 switches assign the channel to the stereo master outputs.

The PAN switch changes all group and master bus assignments to operate via the stereo pan pot.

The 5.1 switch changes the appropriate group bus assignments (1 to 6) to operate via the 5.1 pan pots. Other stereo pans remain un-affected.

The PEAK led indicates when the channel signal level is too high. The signal is monitored at all points within the signal path.

The INS switch connects the input insert return signal to the input channel. An internal option switch define the insert point position as post fader, pre fader or pre EQ.



The DIRECT output control gives continuous adjustment of the direct output level from + 6dB to off. The output is derived from the input channel post fader signal.

The direct SOLO switch connects the direct output to the solo busses.

The GROUP 1,2,3,4,5,6,7,8 switches assign the channel to the stereo audio groups.

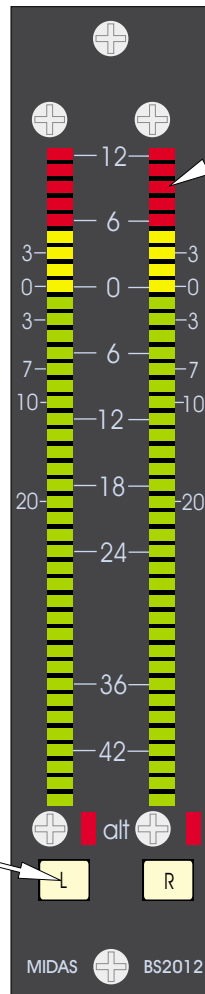
The PAN (left/right) defaults to control the channel placement within the stereo mix outputs and has a constant power law. i.e. 0dB at the centre position and +3dB at both extreme pan positions.

The WIDTH control gives continuous adjustment of the channel stereo image from mono through stereo to enhanced wide stereo. In 5.1 mode the width control changes to provide front/surround channel placement within the 5.1 group mix. It operates with a constant power law in conjunction with the left right balance.

The CUE switch connects the channel pre fader, pre mute signal to stereo PFL bus which allows signal monitoring via the CUE speakers.

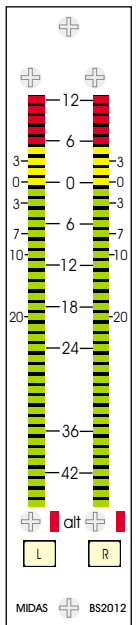
The SOLO switch connects the channel post fader, post pan, post mute signal to the stereo AFL bus which allows signal monitoring via the LOCAL MONITOR speakers.

Midas BS2012 Group Bar Graph Meter

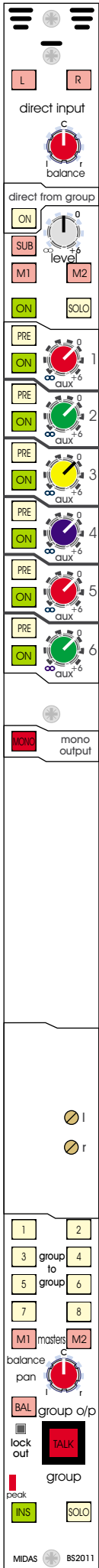


The METERS monitor the peak signal levels of the stereo group left and right outputs.

The ALTERNATE switch changes the meter source to an optional second source such as the group direct input.



Midas BS2011 Sub Group Module



The LEFT switch connects left-hand direct input signal to both sides of the stereo direct input and the RIGHT switch connects right-hand signal to both sides. LEFT + RIGHT = swap left hand and right hand signals.

The Direct From Group ON switch reconfigures the direct input to source signals from the sub group output. To prevent accidental feedback this control is interlocked with the SUB switch.

The SUB switch connects the direct input signals to the sub group mix via the direct LEVEL control.

The M1 switch connects the direct input signals to the master 1 bus via the direct LEVEL control.

The direct input ON switch activates (or mutes) the direct inputs.

The AUX 1 PRE switch changes the group signals that feed the aux 1 mix from post fader to pre fader.

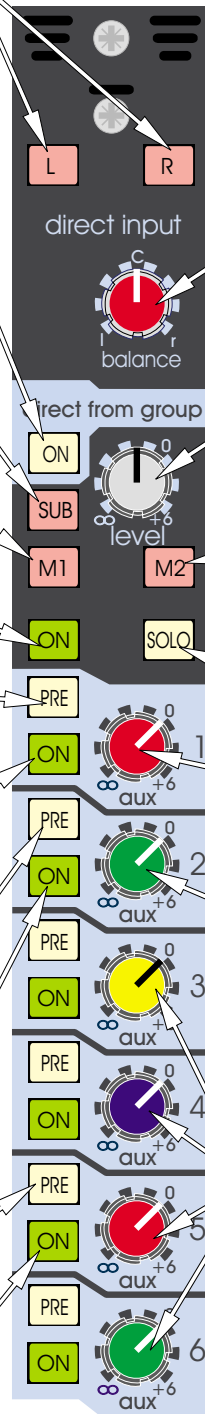
The AUX 1 ON switch connects the group signals to the aux 1 mix via the LEVEL control. The stereo image follows the main group balance control.

The AUX 2 PRE switch changes the group signals that feed the aux 2 mix from post fader to pre fader.

The AUX 2 ON switch connects the group signals to the stereo aux 2 mix via the LEVEL control. The stereo image follows the main group balance control.

The AUX 3 to AUX 6 PRE switches change the signals feed to the mono aux mixes from post fader to pre fader.

The AUX 3 to AUX 6 ON switches connect the group to the mono aux mixes via the LEVEL controls. Signals are derived from a sum of the group left and right channels.



The direct input BALANCE control fine tunes the left and right hand input levels so as to correct balance errors within the source material.

The direct input LEVEL control gives continuous adjustment of the signals that feed from the direct input from +6dB to off.

The M2 switch connects the direct input signals to the master 2 bus via the direct LEVEL control.

The direct input SOLO switch connects the direct signals to the solo busses.

The AUX 1 LEVEL control gives continuous adjustment of the signals that feed the aux 1 mix from +6dB to off.

The AUX 2 LEVEL control gives continuous adjustment of the signals that feed the stereo aux 2 mix from +6dB to off.

The AUX 3 to AUX 6 LEVEL controls give continuous adjustment of the signal feed to the mono aux mixes from +6dB to off.

MONO sums the left and right signals together to provide a mono source from the group module.



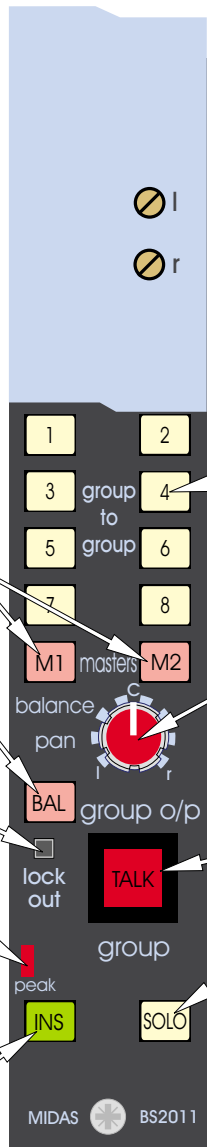
The M1 and M2 switches assign the group to the stereo master outputs.

The BALANCE switch changes all group and master bus assignments to operate via the stereo balance pot.

The LOCK OUT led indicates that the group talk switch has been locked out of operation.

The PEAK led indicates when the group signal levels are too high. The signals are monitored at all points within the signal path.

The INS switch connects the group insert return signals to the group. Internal switches select the insert to be pre or post fader.

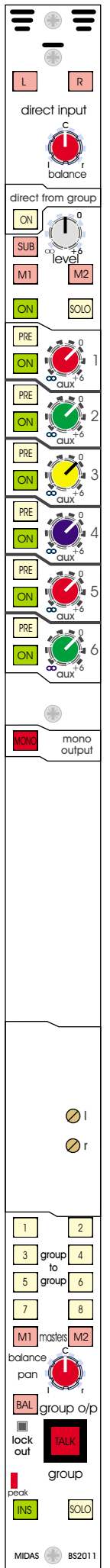


The GROUP 1,2,3,4,5,6,7,8 switches re-assign the group to other audio sub groups.

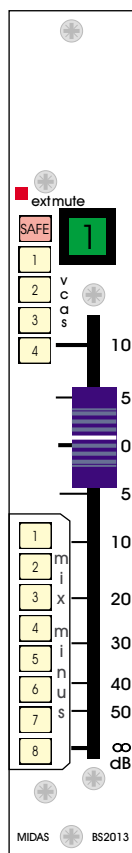
The BALANCE control adjusts the group placement within the stereo master outputs and has a constant power

The TALK switch connects the talk back microphone to the group output.

The SOLO switch connects the group post fader, post pan, post mute signals to the stereo AFL bus which allows signal monitoring via the LOCAL MONITOR speakers.



Midas BS2013 Group VCA Fader

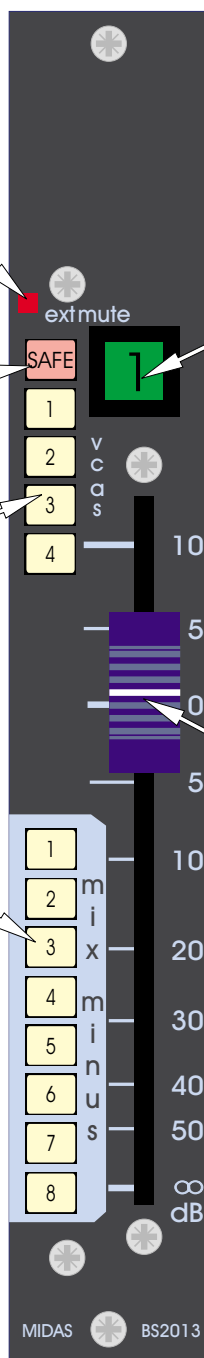


The EXT MUTE led indicates when the channel is being muted by an external source.

The SAFE switch disconnects the group from ALL forms of digital assistance or VCA control.

The VCA 1,2,3,4 switches assign the group to the 4 VCA sub groups.

The MIX MINUS 1,2,3,4,5,6,7,8 switches de-assign the group from any of the 8 mono mix minus audio busses.



The ON switch activates (led illuminated), or mutes (led off) the group at all points except the insert send and the direct input.

Note:- ON is activated by a combination of the switch status AND fader position. If the ON switch is pressed but the fader closed, the module will be primed, but not ON and the led will be illuminated at half brightness. As the fader is moved up from the closed position the channel status will change to ON and the led will illuminate at full brightness.

The GROUP VCA fader gives continuous adjustment of the group levels from +10dB to off.

Midas BS2021

Midas BS2022

Master Modules

The confidence to N-1 switch routes confidence signals to the N-1 outputs.

Note:- The master 2 module has a grand master link switch to the master 1 module in this position.



The SAFE switch disconnects the master module from ALL forms of digital assistance or VCA control.

The CONFIDENCE to all aux switch routes confidence signals to ALL aux outputs.

Note:- This is replaced by CONFIDENCE to all mix-minuses on the Master 2 module.

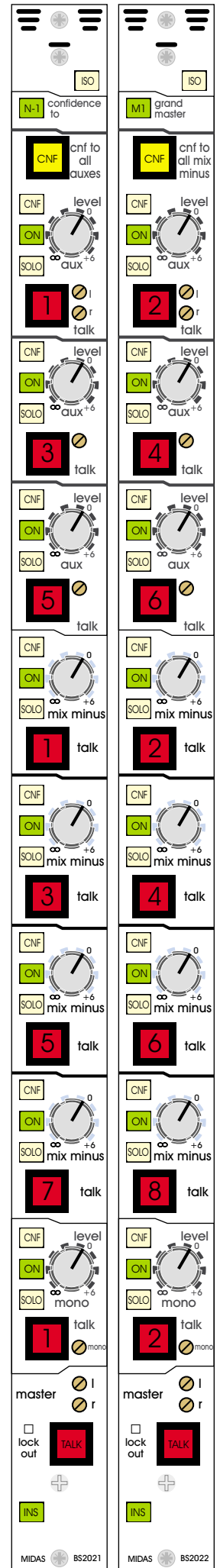
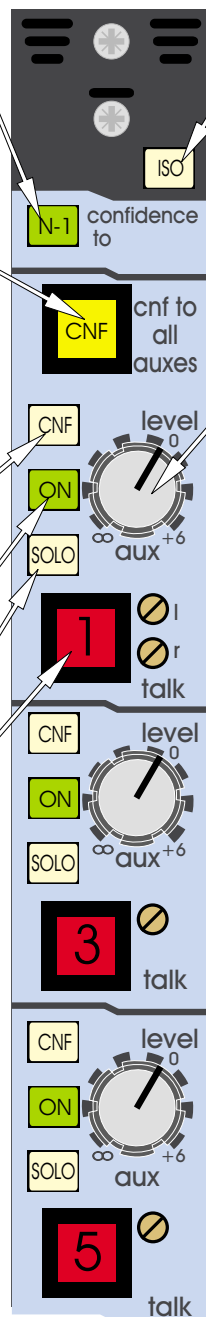


The CONFIDENCE to individual aux switch routes confidence signals to the aux output.

The aux ON switch activates (or mutes) the aux output.

The aux SOLO switch connects the aux signal to the solo busses.

The TALK switch connects the talk back microphone to the aux output.





The CONFIDENCE to mix minus switch routes confidence signals to the mix minus output.

The mix minus ON switch activates (or mutes) the mix minus output.

The mix minus SOLO switch connects the mix minus signal to the solo buses.

The TALK switch connects the talk back microphone to the mix minus output.

The PRE switch changes the mono master output to derive signal pre the stereo master fader.

The mono ON switch activates (or mutes) the mono output.

The mono SOLO switch connects the mono signal to the solo buses.

The TALK switch connects the talk back microphone to the mono output.

The LOCK OUT led indicates that the talk switches have been locked out of operation.

The INS switch connects the master insert return signals to the master signal path.

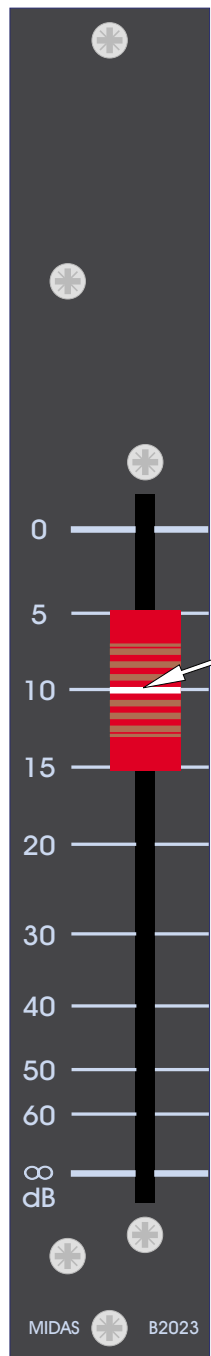


The mix minus LEVEL control gives continuous adjustment of the mix minus output from +6dB to off.

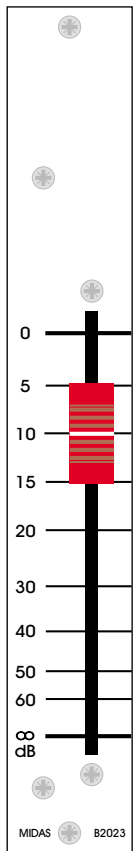
The mono LEVEL control gives continuous adjustment of the mono output from +6dB to off.

The TALK switch connects the talk back microphone to the master outputs.

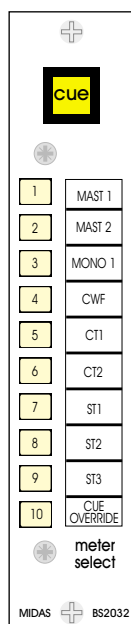
Midas BS2023 Master VCA Fader



The MASTER VCA fader gives continuous adjustment of the master levels from 0dB to off.



Midas BS2032 Monitor Meter Selector



The CUE meter warning indicator illuminates when ever the monitor meters have a cue overriding their normal selected source.

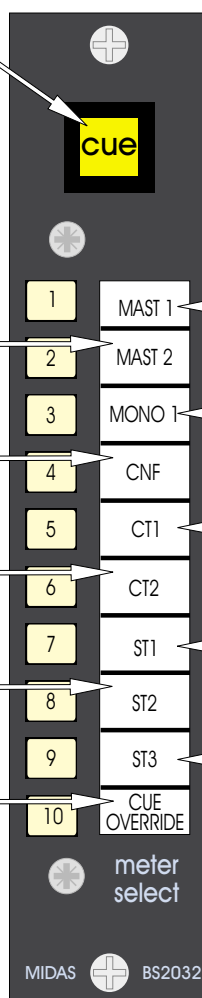
The MASTER 2 selector puts master 2 signals on to the monitor meters.

The CONFIDENCE selector puts confidence signals on to the monitor meters.

The CONTROL 2 selector puts control room 2 monitor signals on to the monitor meters.

The STUDIO 2 selector puts studio 2 monitor signals on to the monitor meters.

The CUE OVERRIDE switch allows the current monitor meter selection to be overridden by cue signals when ever a cue is active.



The MASTER 1 selector puts master 1 signals on to the monitor meters.

The MONO selector puts master 1 mono signals on to the monitor meters.

The CONTROL 1 selector puts control room 1 monitor signals on to the monitor meters.

The STUDIO 1 selector puts studio 1 monitor signals on to the monitor meters.

The STUDIO 3 selector puts studio 3 monitor signals on to the monitor meters.

STUDIO MONITOR MODULE
the ON AIR indicator shows which monitor areas are currently on air.



The SAFE switch disconnects the monitor module from ALL forms of digital assistance.

The SOLO indicator illuminates when any solo on the console is active, and enabled to the local monitor.

The external AIR switch routes external air signals to the monitor output.

The external 1 and 2 switches provide a means monitor two additional external sources.

INTERNAL SOURCES

The aux 1 to 6 switches route aux signals to the monitor output.

EXTERNAL SOURCES

The external 5.1 switch changes the routing of the three external inputs from stereo to 5.1.

The mix minus 1 to 8 switches route mix minus signals to the monitor output.

The 5.1 switch changes the group monitoring to operate in 5.1 mode.

The group 1 to 8 switches route group signals to the monitor output.

The mono 1 and 2 switches route the mono master signals to the monitor output.

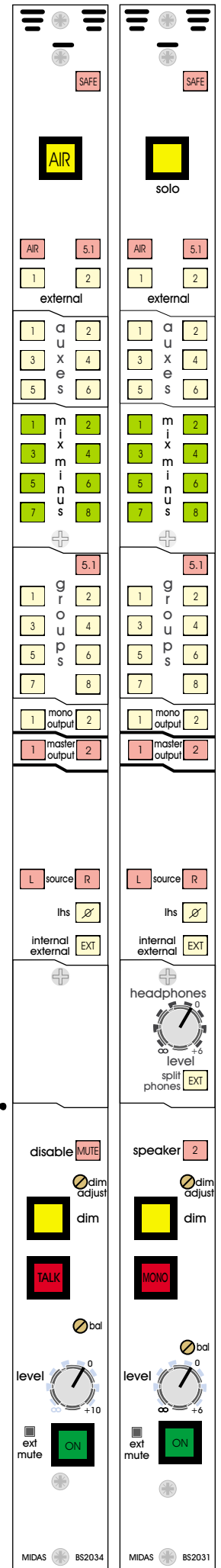
The stereo 1 and 2 switches route the stereo master signals to the monitor output.

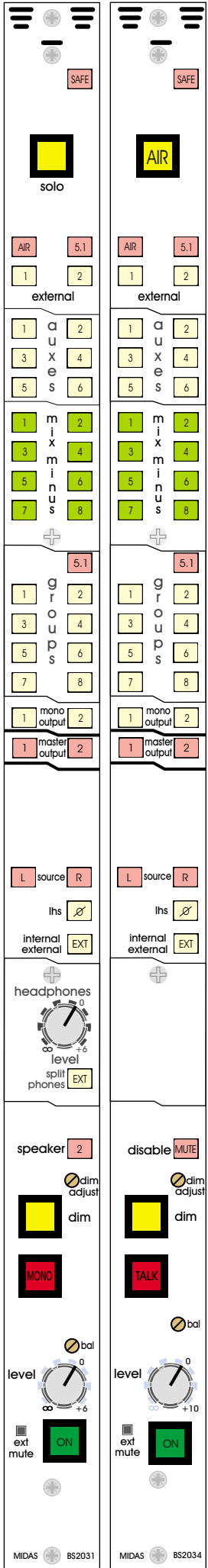
The L & R switch is used to change the monitor signal path to derive signals from the left and right side of a stereo source only. L + R = swap the left and right hand sources.

The PHASE switch inverts the phase of the left hand signal path only.

EXT switches the monitor signals to be derived from the selected external source as opposed to the default internal source selection.

Midas BS2031 Control Room Monitor Midas BS2034 Studio Monitor Modules





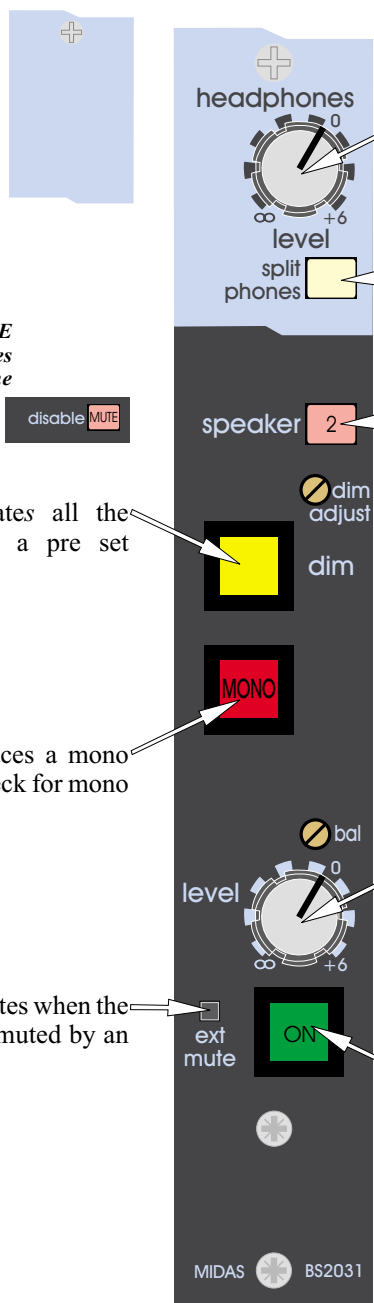
STUDIO MONITOR MODULE
there is no headphone level.

STUDIO MONITOR MODULE
the MUTE DISABLE overrides any external muting of the monitor signals.

The DIM switch attenuates all the monitor signal paths by a pre set amount.

The MONO switch produces a mono sum of stereo signals to check for mono compatibility.

The EXT MUTE led indicates when the monitor signals are being muted by an external source.



The headphone LEVEL give continuous adjustment of the headphone output level from +6dB to off.

The HEADPHONE SPLIT switch connects monitor signals to one ear piece and intercom signals on the other.

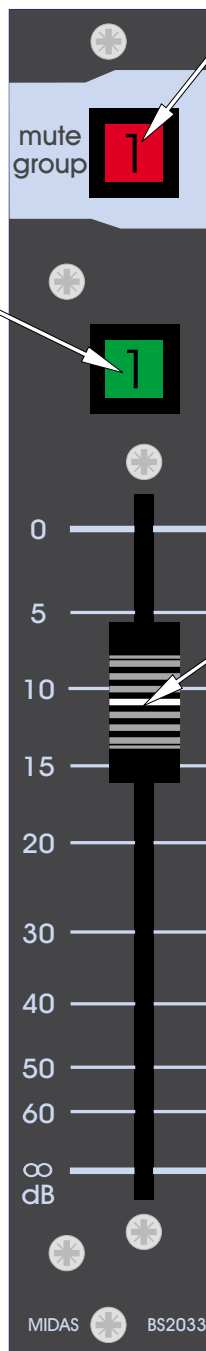
The speaker 2 switch changes the monitor output to route to the second set of monitor speakers.

The monitor LEVEL give continuous adjustment of the monitor output level from +6dB to off.

The ON switch activates or mutes the monitor signal outputs.

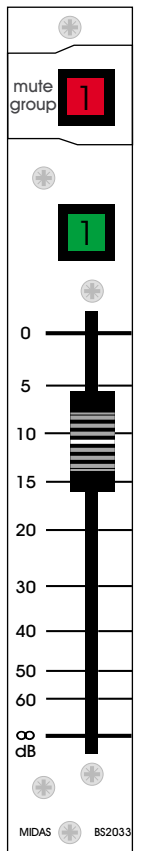
Midas BS2033 Mute Master and VCA Master Fader

The VCA ON 1 to 4 switches activate channel fader control from the VCA master faders on any assigned channels. Control signals from the master fader are added to the local channel fader control.



The MUTE GROUP 1 to 4 switches activate channel mutes and channel external mute led indicators on any assigned channels. The mute group assignments follow VCA assignment and operate in an "OR" ing mode. Input channels or groups that are muted by these mute groups can not be overridden by the local "on" switch.

The VCA MASTER fader gives continuous adjustment of any assigned channel levels from 0dB to off.



Midas BS2042 Talk Back Mic



The CUE indicator illuminates when any CUE or SOLO function is active on the console.

The TALKBACK XLR socket accepts balanced 150 Ohm microphone signals.

The talk back LEVEL gives continuous adjustment of the post limiter signals from +6dB to off.

The external talk back LEVEL gives continuous adjustment of the post limiter signals from +6dB to off.



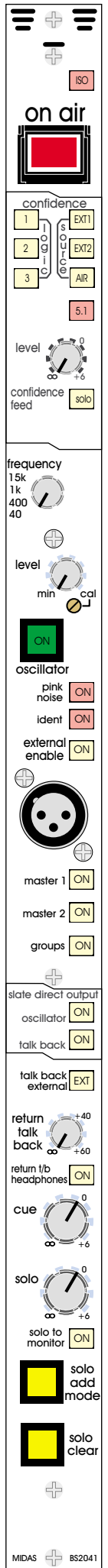
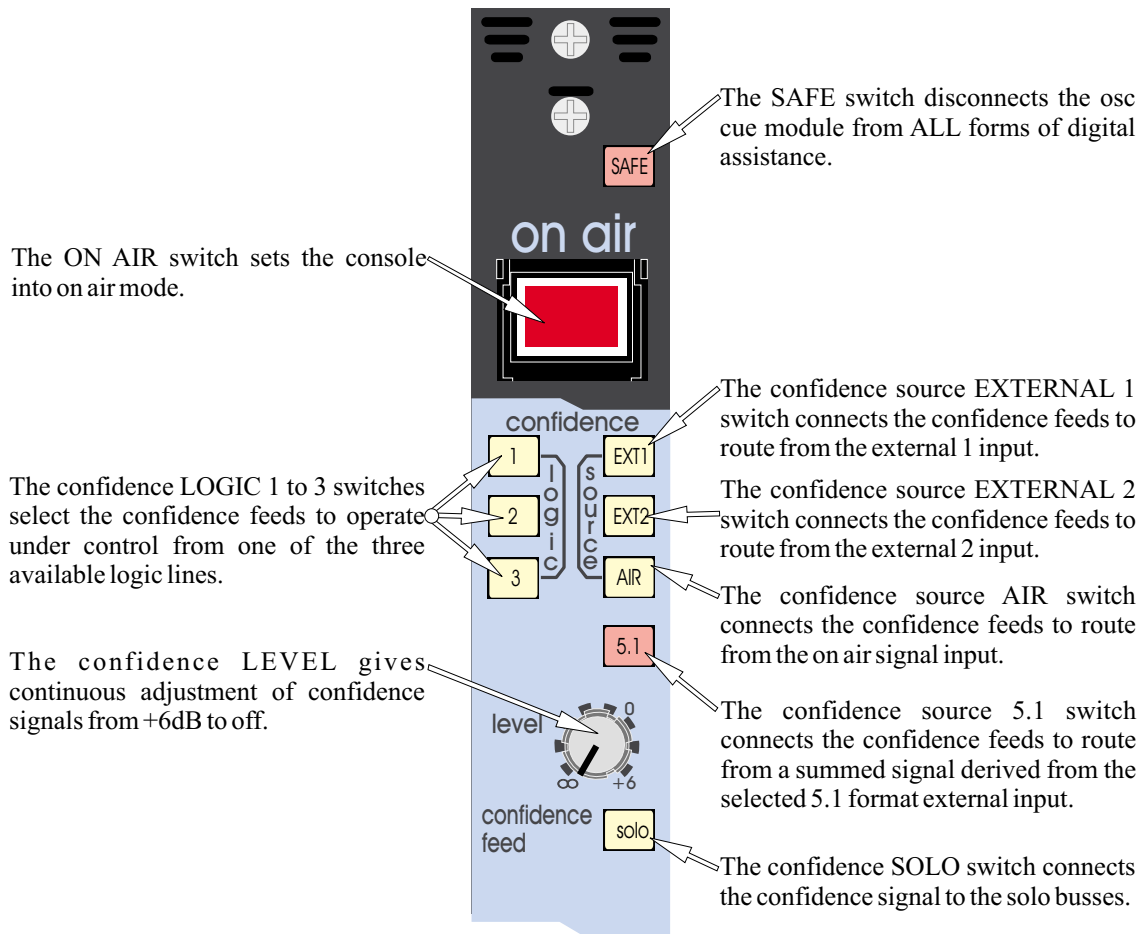
The ON AIR LOCK led shows that talk back can not be active due to the console on air status.

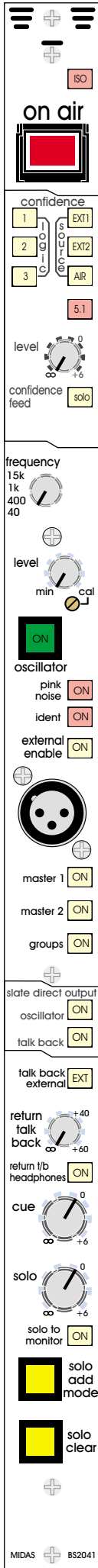
MIC GAIN preset adjustment.

MIC GAIN preset adjustment.

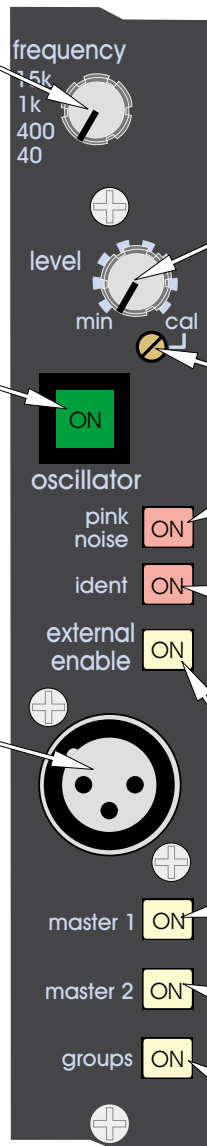
MIDAS BS2042

Midas BS2041 Osc / Cue Module





The FREQUENCY switch selects the oscillator frequency from 40, 400, 1000, 15000Hz.



The signal generator ON switch enables the signal generator circuits.

The oscillator LEVEL gives continuous adjustment of confidence signals from calibrated to off.

The CAL pre-set adjust the maximum oscillator signal level from -10dB to +10dB.

The pink noise ON switch changes the signal generator source from a sine wave to pink noise.

The RIGHT IDENT ON switch changes the oscillator to operate with amplitude modulation on the right channel only.

The EXTERNAL OSCILLATOR INPUT XLR accepts line level signals from external test equipment.

The ENABLE EXTERNAL ON switch overrides the internal oscillator replacing it with signals derived from the external oscillator input.

The slate M1 ON switch routes the signal generator signals to the master 1 outputs.

The slate M2 ON switch routes the signal generator signals to the master 2 outputs.

The slate GROUPS ON switch routes the signal generator signals to the group outputs.

The SLATE TALK BACK ON switch routes the talk back mic to all input module direct outputs.

The SLATE OSCILLATOR ON switch routes the oscillator to all input module direct outputs.

The talk back EXT switch routes talk back mic signals to the talk external output.

The return talk back LEVEL adjusts the return talk back mic amplifier gain from 0dB to +60dB.

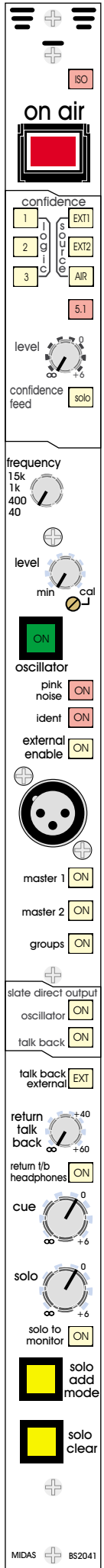
The return talk back HEADPHONES ON switch changes routing of the return talk back signals from the cue speakers to the headphones.

The cue LEVEL gives continuous adjustment of the cue signals from +6dB to off.

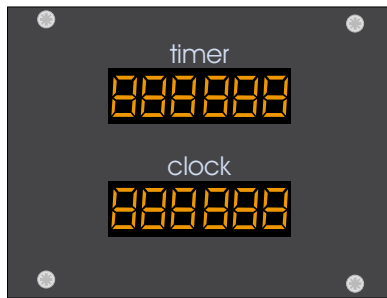
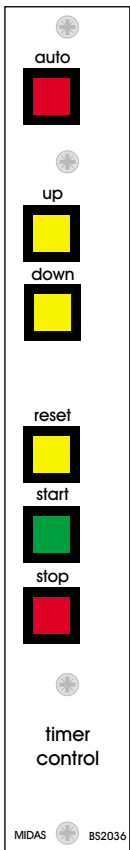
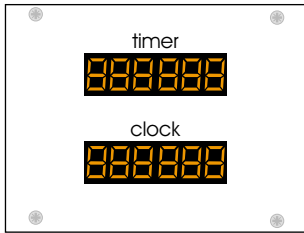
The solo LEVEL gives continuous adjustment of the solo signals from +6dB to off.

The SOLO ADD switch allows multiple channel access to the solo busses. When the solo add mode is off the action of pressing a solo switch will cancel any other active solo.

The SOLO ON / CLEAR switch and indicator has two functions; it illuminates when any solo switch is active and when pressed it clears any active solo switches.



Timer / Clock & Midas BS2026 Timer Control



The AUTO switch sets the timer to automatic mode.

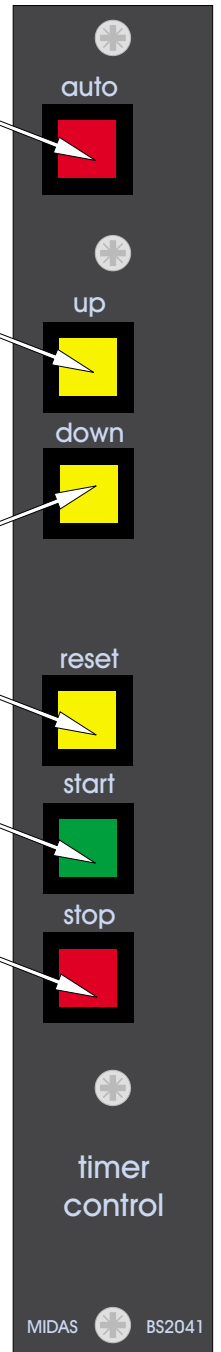
The UP switch increments the timer up.

The DOWN switch increments the timer down.

The RESET switch returns the timer to zero.

The START switch starts the timer.

The STOP switch stops the timer.



Midas BS2043 Digital Assistance Module



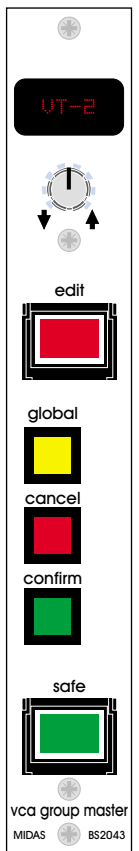
The ENCODER is used in conjunction with the display (above) to navigate through the assistance menus. Pressing the encoder shaft will select a menu entry.

The EDIT switch sets the console into edit mode. This allows access to the consoles initial set-up options and is not intended for normal use during transmission.

The GLOBAL switch allows some functions on the console to be set globally to save time switching each individual channel.

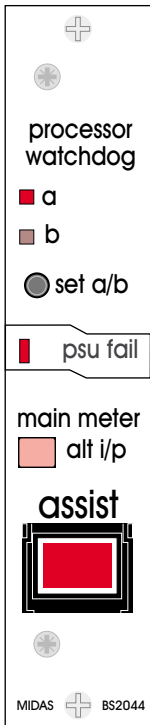
The CANCEL and CONFIRM switches are used to navigate the assistance menus and set some of the global commands.

The SAFE switch disconnects the VCA group master from ALL forms of digital assistance.



Midas BS2044

Watchdog Assistance

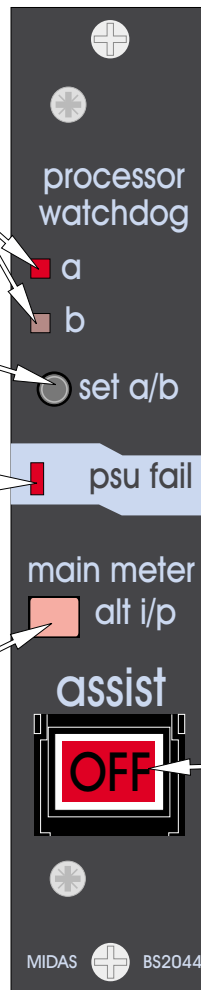


A dual redundancy microprocessor system operates all major functions. A & B indicators show the status of the two processors GREEN = OK and RED= FAULT.

The SET A/B switch allows the active processor to be changed in the event of a failure.

Power supplies are dual redundant to reduce the risk of console failure. The PSU FAIL indicates that one of the console power supplies has developed a fault and should be checked.

Meters can monitor an alternative set of source signals

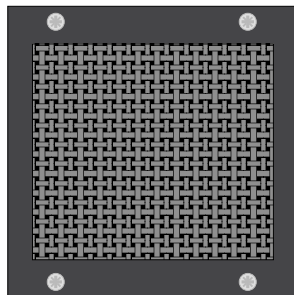
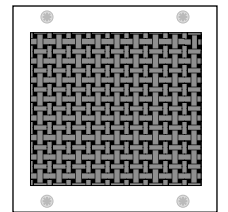


Turns the digital assistance off.

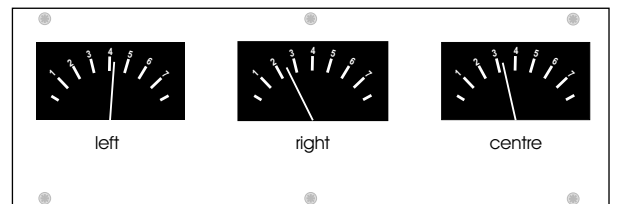
Cue Speaker & Meters



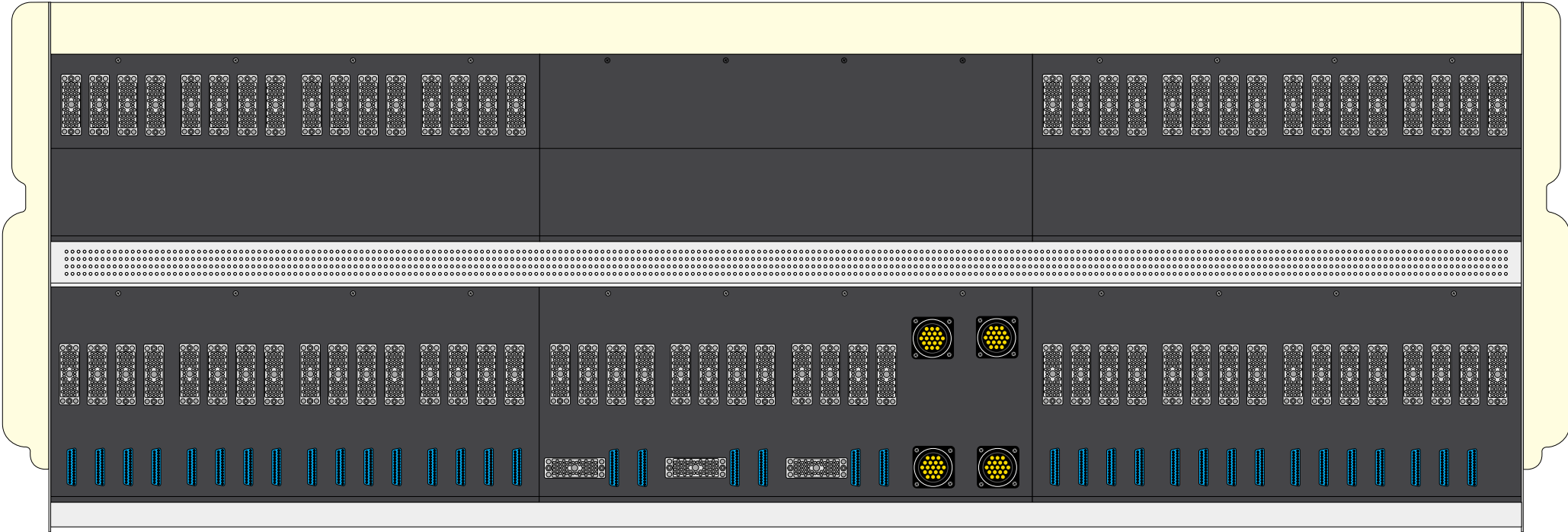
BBC meters
VU meters
or other types



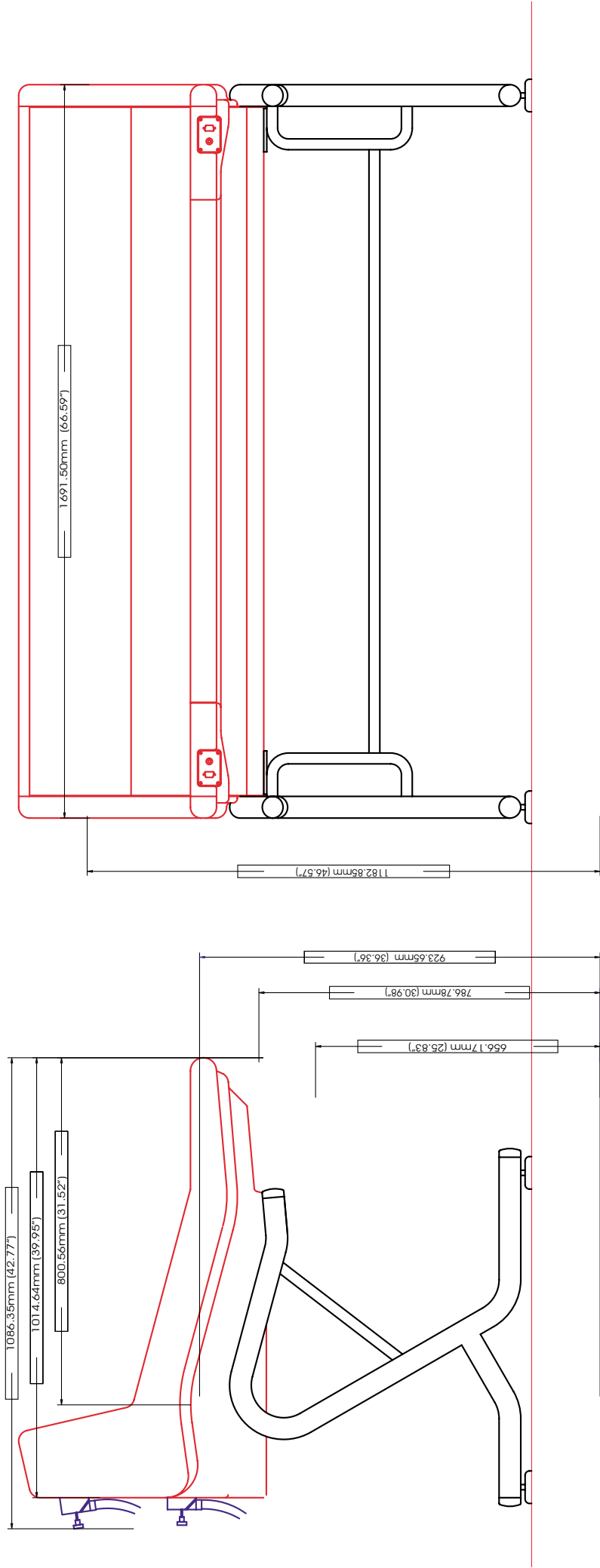
Cue speaker

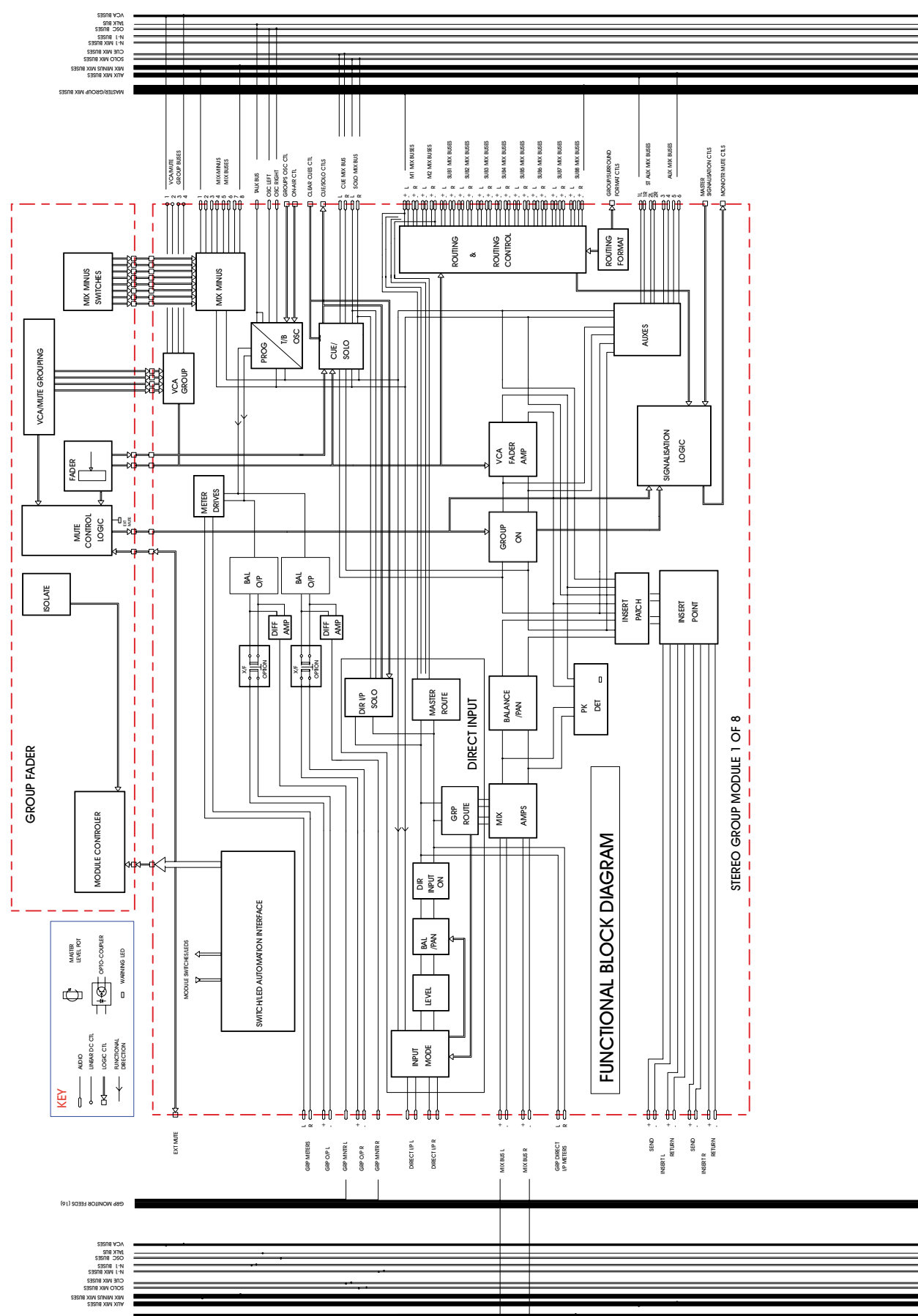


Broadcast 2000 Rear Panel



Broadcast 2000 Measurements





GROUP FADER

FUNCTIONAL BLOCK DIAGRAM

STEREO GROUP MODULE 1 OF 8

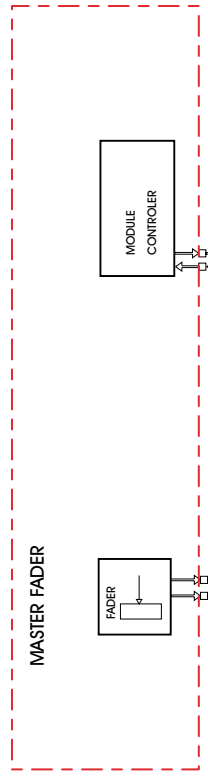
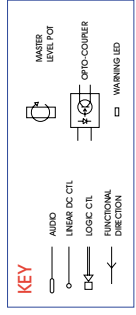
KEY

- AUDIO
- UNBAL DC CTL
- LOGIC CTL
- FUNCTIONAL DIRECTION
- MUTE LEVEL POT
- OPTO-COMPLER
- WORKING LED

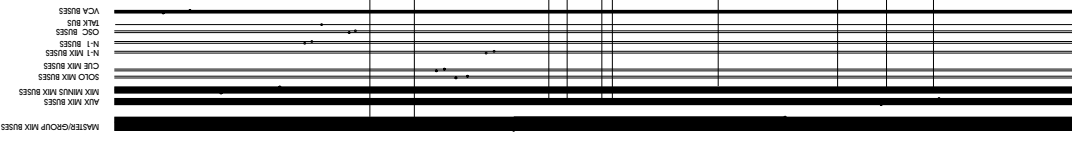
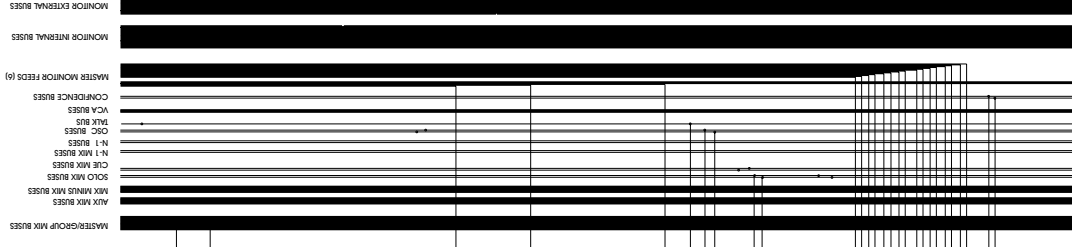
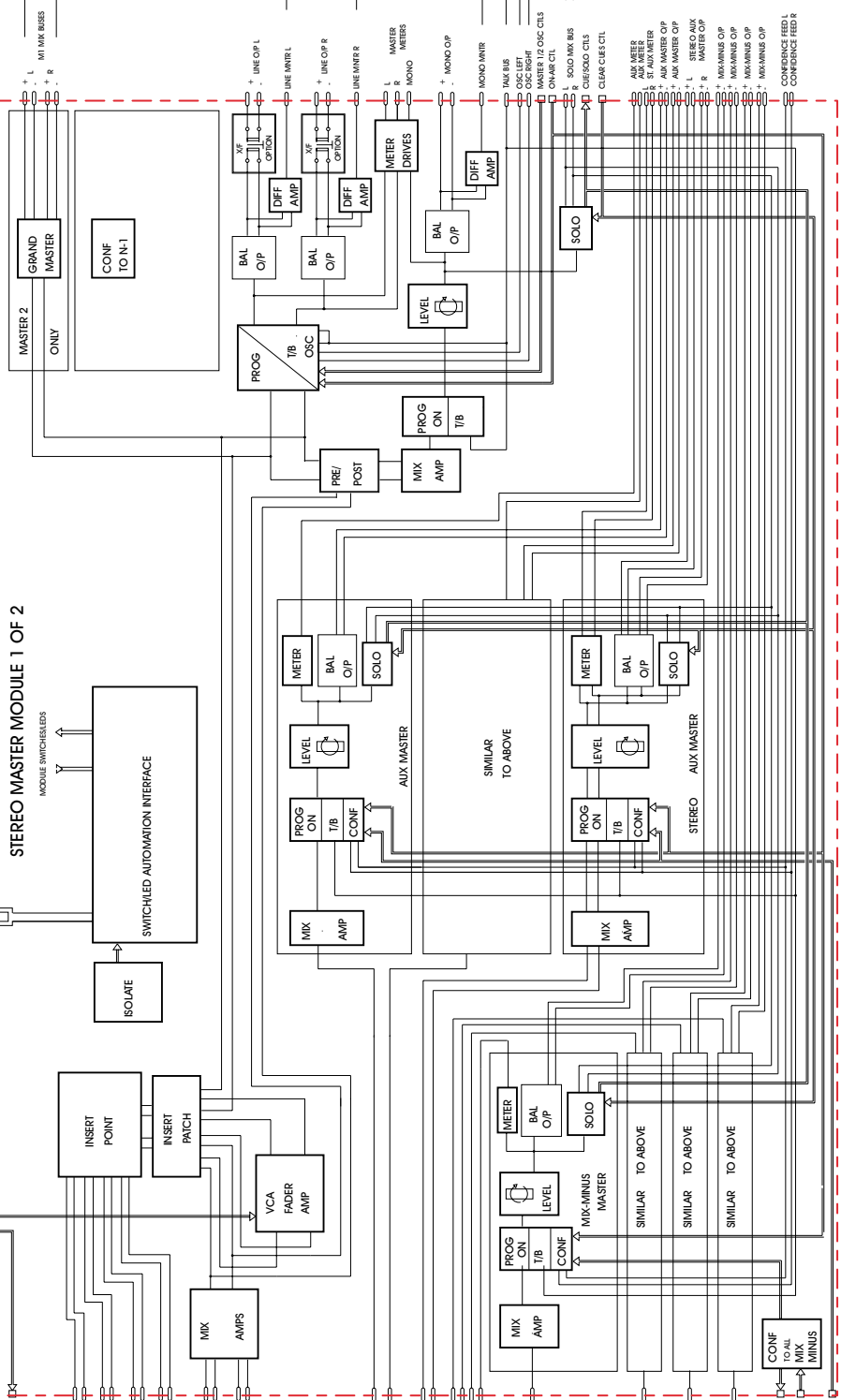
MASTER/GRP MIX BUSES
MIX BUSES
N-1 MIX BUSES
N MIX BUSES
SOLO MIX BUSES
CLM MIX BUSES
CUE MIX BUSES
MTR MIX BUSES
MONITOR FEEDS (1-8)

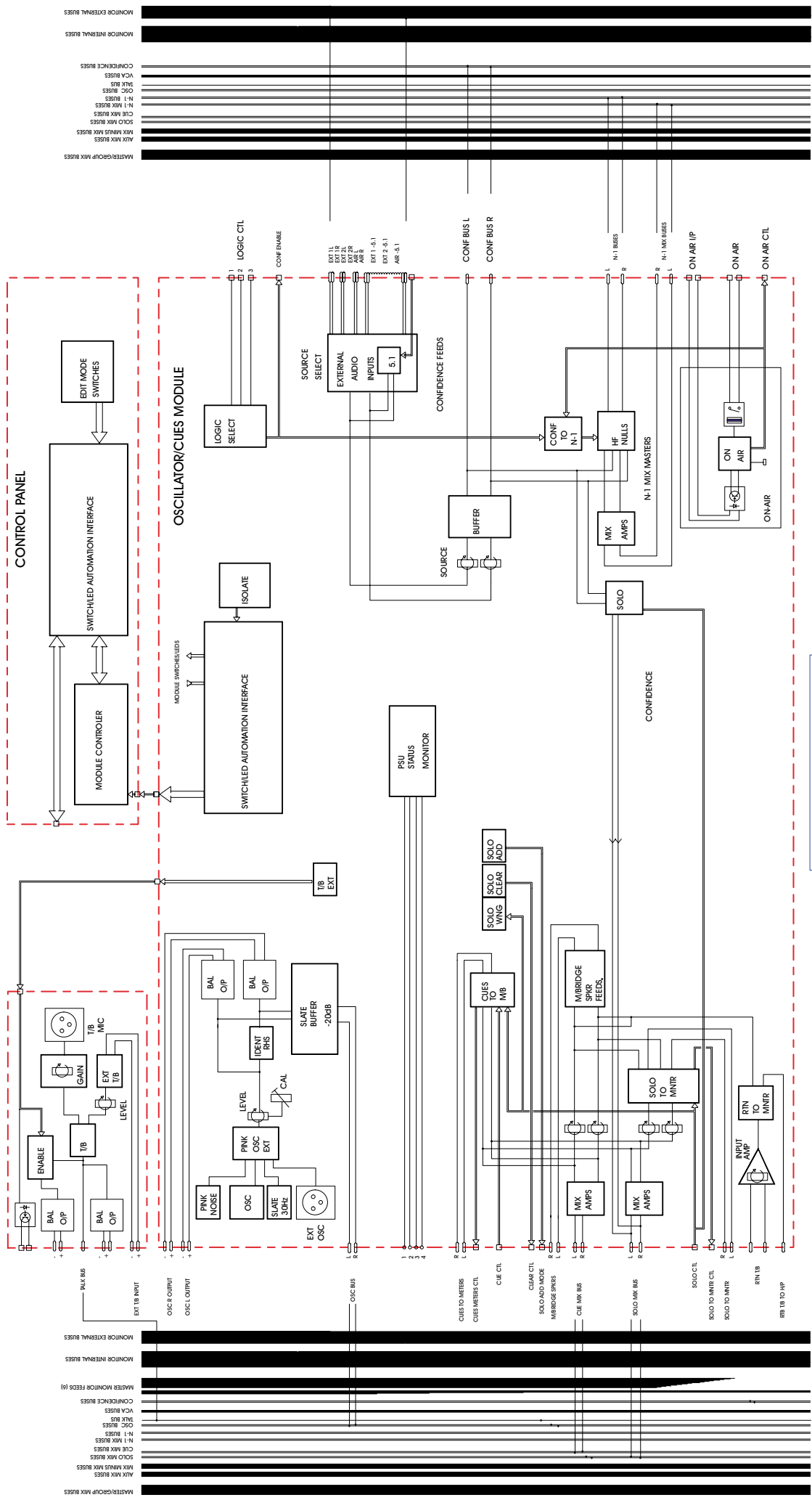
MASTER/GRP MIX BUSES
MIX BUSES
N-1 MIX BUSES
N MIX BUSES
SOLO MIX BUSES
CLM MIX BUSES
CUE MIX BUSES
MTR MIX BUSES
MONITOR FEEDS (1-8)

FUNCTIONAL BLOCK DIAGRAM



STEREO MASTER MODULE 1 OF 2



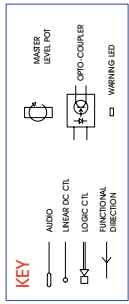


CONTROL PANEL



OSCILLATOR/CUES MODULE

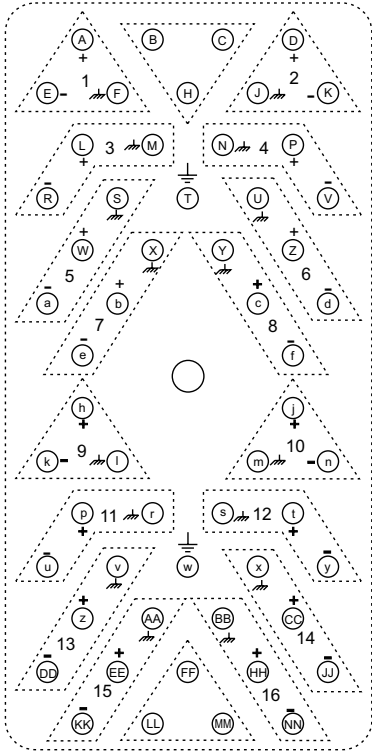
CONFIDENCE

FUNCTIONAL BLOCK DIAGRAM



Broadcast 2000 56 Way Edac Connector Details

 = Individual Screens  = Overall Screen

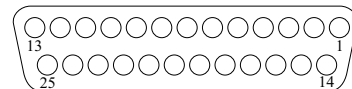


<u>INPUTS</u>	<u>GROUPS</u>	<u>MASTERS</u> (IDC)
1 Insert Send Left	1 Insert Send Left	1 Insert Send Left 7+8
2 Insert Return Right	2 Insert Return Right	2 Insert Return Right 9+10
3 Insert Return Left	3 Insert Return Left	3 Insert Return Left 5+6
4 Insert Send Right	4 Insert Send Right	4 Insert Send Right 11+12
5 Direct O/P Left	5 Group O/P Left	5 Master O/P Left 3+4
6 Prod Send Right	6 Direct I/P Right	6
7 Direct O/P Right	7 Group O/P Right	7 Master O/P Right 1+2
8 Prod Send Left	8 Direct I/P Left	8 Mono O/P 15+16
9 Mic A Right	9 Insert Send Left	9 M/Minus O/P 7 (8) 7+8
10 Line B Right	10 Insert Return Right	10 Aux O/P 1(2) Left 9+10
11 Mic A Left	11 Insert Return Left	11 M/Minus O/P 5(6) 5+6
12 Line B Left	12 Insert Send Right	12 Aux O/P 1(2) Right 11+12
13 Mic B Right	13 Group O/P Left	13 M/Minus O/P 3(4) 3+4
14 Line A Right	14 Direct I/P Right	14 Aux O/P 3(4) 13+14
15 Mic B Left	15 Group O/P Right	15 M/Minus O/P 1(2) 1+2
16 Line A Left	16 Direct I/P Left	16 Aux O/P 5(6) 15+16

Odd
Even

<u>EXT MONITOR I/PS</u>	<u>EXT MONITOR I/PS</u>	<u>MONITOR SPEAKERS</u>	<u>STUDIO SPEAKERS</u>	<u>PRESELECTOR</u>
1 Ext 1 Right	1 Ext 2R/Front	9 SPKR 2L	1 Studio 2L	1 Mic 1L
2 Ext 2 Left	2 Ext 2L/S	10 Center	2 Studio 3R	2 Line 1L
3 Ext 1 Left	3 Ext 2L/Front	11 SPKR 2R	3 Studio 2R	3 Mic 1R
4 Ext 2 Right	4 Ext 2R/S	12 LFE	4 Studio 3L	4 Line 1R
5 Air Right	5 Ext 1 LFE	13 SPKR 1L	5 Studio 1L	5 Mic 2L
6 Air L/Front	6 Ext 2 Centre	14 L/S	6 Prodn Left	6 Line 2L
7 Air Left	7 Ext 1 Centre	15 SPKR 1R	7 Studio 1R	7 Mic 2R
8 Air R/Front	8 Ext 2 LFE	16 R/S	8 Prodn Right	8 Line 2R
9 Air LFE			9	9 Mic 3L
10 Ext 1 L/Front			10 Return T/B Input	10 Line 3L
11 Air Centret			11	11 Mic 3R
12 Ext 1 R/Front			12 Talk to Ext O/P	12 Line 3R
13 Air R/S			13	13 Mic 4L
14 Ext 1 L/S			14 OSC O/P Left	14 Line 4L
15 Air L/S			15 Prod T/B Input	15 Mic 4R
16 Ext 1 R/S			16 OSC O/P Right	16 Line 4R

Broadcast 2000 25 Way 'D' Connector Details



<u>INPUTS</u>	(IDC)	<u>GROUPS</u>	(IDC)	<u>STUDIO LOGIC 1</u>	(IDC)	<u>STUDIO LOGIC 2</u>	(IDC)
1 Mic A Open #2	(8)	1 GRP 4 #2	(8)	1 Studio Mute 2-	(8)	1 On Air I/P -	(8)
2 Mic A Open #1	(7)	2 GRP 4 #1	(7)	2 Studio Mute 2+	(7)	2 On Air I/P +	(7)
3 Mic B Open #2	(6)	3 GRP 3 #2	(6)	3 Red Light 2B	(6)	3 On Air O/P B	(6)
4 Mic B Open #1	(5)	4 GRP 3 #1	(5)	4 Red Light 2A	(5)	4 On Air O/P A	(5)
5 Cough Mute A (+)	(4)	5 GRP 2 #2	(4)	5 Studio Mute 1-	(4)	5	(4)
6 Ext Mute A (+)	(3)	6 GRP 2 #1	(3)	6 Studio Mute 1+	(3)	6	(3)
7 Cough Mute B (+)	(2)	7 GRP 1 Mute #2	(2)	7 Red Light 1B	(2)	7	(2)
8 Ext Mute B (+)	(1)	8 GRP 1 Mute #1	(1)	8 Red Light 1A	(1)	8	(1)
9 Ext Mute B (-) (øv)	N/A	9 Chassis		9 Chassis		9 Chassis	
10 Cough Mute B (-) (øv)	N/A	10 Chassis		10 Chassis		10 Chassis	
11 Ext Mute A (-) (øv)	N/A	11		11		11	
12 Chassis		12		12		12	
13 Chassis		13		13		13	
14 Tally B(+)	(10)	14 GRP 5 #2	(10)	14 Red Light 3B	(10)	14 Conf CTL I/P 1-	(10)
15 Tally A(+)	(9)	15 GRP 5 #1	(9)	15 Red Light 3A	(9)	15 Conf CTL I/P 1+	(9)
16 Start B #2	(12)	16 GRP 6 #2	(12)	16 Studio Mute 3-	(12)	16 Conf CTL I/P 2-	(12)
17 Start B #1	(11)	17 GRP 6 #1	(11)	17 Studio Mute 3+	(11)	17 Conf CTL I/P 2+	(11)
18 Stop B #2	(14)	18 GRP 7 #2	(14)	18	(14)	18 Conf CTL I/P 3-	(14)
19 Stop B #1	(13)	19 GRP 7 #1	(13)	19	(13)	19 Conf CTL I/P 3+	(13)
20 Start A #2	(16)	20 GRP 8 #2	(16)	20 Prod T/B Eng CTL +	(16)	20	(16)
21 Start A #1	(15)	21 GRP 8 #1	(15)	21 Prod T/B Eng CTL +	(15)	21	(15)
22 Tally A(-) (øv)	N/A	22 Chassis		22 Chassis		22 Chassis	
23 Tally B(-) (øv)	N/A	23		23		23	
24 Cough Mute A (-) (øv)	N/A	24		24		24	
25 Chassis		25		25		25	

KLARK TEKNIK GROUP



KLARK TEKNIK
SIGNAL PROCESSING BY DEFINITION



DDA
BETTER BY DESIGN

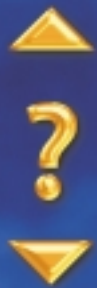


MIDAS
DESIGNED FOR A PURE PERFORMANCE

Celebrating their 30th anniversary in 2000, Midas have for many years been the first choice of discerning audio professionals all over the world. Though the demands of their many customers and markets have changed dramatically over the years, the fundamental principles applied to their products by Midas remain unchanged: to provide the audio professional with the ultimate in quality, flexibility and reliability. The Midas XL4 has already been welcomed in numerous OB applications, and the experience gleaned from this success has provided an ideal basis for the first Midas Broadcast console.



Now, from the same design team as the phenomenal Heritage and XL-Series live audio performance consoles, and the legendary Klark Teknik range of signal processing equipment, comes Midas Broadcast 2000. This is the first Midas console to be designed from the ground up for television audio production, and brings with it all the traditional benefits of Midas ownership. Unrivalled audio performance, intuitive operation, superlative engineering quality and the most comprehensive global support network of any manufacturer. Make the new Broadcast 2000 the natural choice for your broadcast suite and allow yourself one less thing to worry about when on air.



Klark Teknik Group

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