

MX34 DSP Enabled Console Switching System



Specifications

Analogue Inputs:

Consoles A/B/C
3 x 4, 24-bit, 96kHz conversion; max input level +21.5dBu; dynamic range typ. 116dB
Background Music (Stereo Line)

Stereo unbalanced 3.5mm front panel jack, 2 x rear panel balanced XLR (in parallel)

24-bit, 96kHz conversion; variable gain -INF to +20dB; max input level +21.5dBu

Microphone

Mono balanced front panel XLR, rear balanced XLR (in parallel)

24-bit, 96kHz conversion; variable gain -50dB to +50dB; 48V phantom power; EIN (150R) -127dBu

AES Inputs:

3 x (2+2), with individual pair sample rate conversion

Analogue Outputs:

4 x balanced XLR, max output +21.5dBu; Analogue In-Out THD+N typ. <0.002%; dynamic range typ. 114dB

AES Outputs:

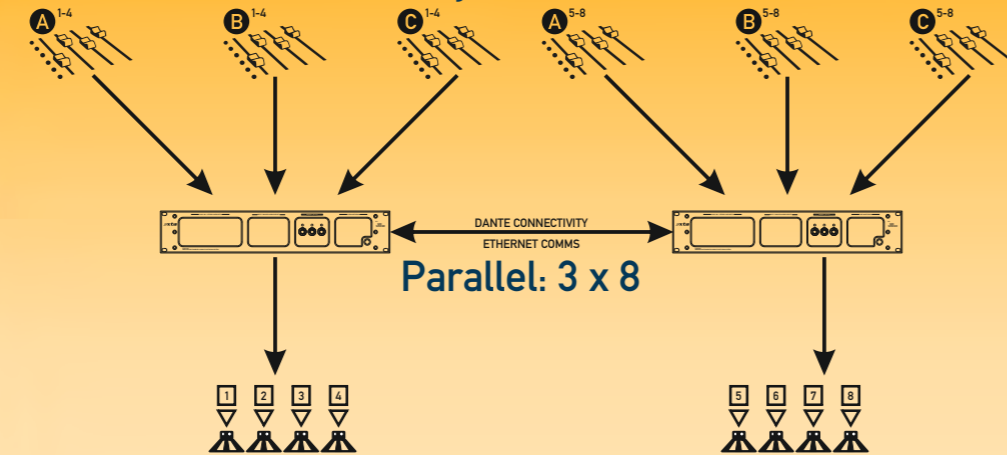
2 x 2, 48kHz or 96kHz (native) internal word clock, or sync to optional external BNC word clock

Mxutility software allows fixing of sample rate at 48K or 96K, ignoring external word clock if required

General Purpose Input (GPIO port)

2 x GPI : Allow connection to allow 3rd party control for a) Muting b) Muting & Emergency Mic and/ or pre recorded emergency announcement on the stereo line input. This operation is configured using Mxutility software.

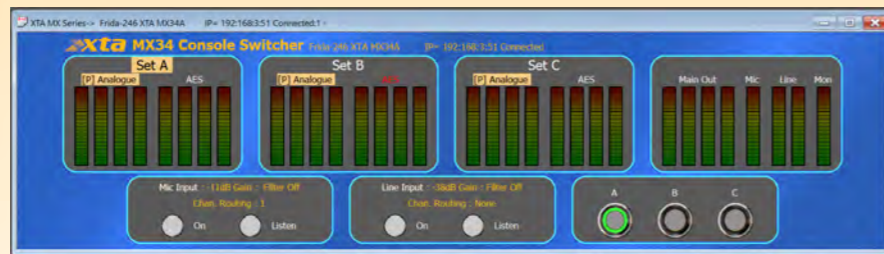
Need More Channels? Try Parallel Mode...



Parallel 3 x 8

3 Sets, but each with 8 inputs with full redundancy, and 8 outputs. Mic and stereo line inputs are available across all outputs. Console select and failover source selection on either unit is automatically reflected across both.

MXControl Software



MXControl Whilst all source selection and switching is controllable via the front panel this PC software allows remote ethernet monitoring of all input and output levels, it provides bi direction control / indication of Console Selects, Source Selects and Mic / Line Selection.

MXUtility PC Software provide configuration 2 xGPI for alarm integration, special AES modes for 2 channel source flexibility and fixed ip address operation.



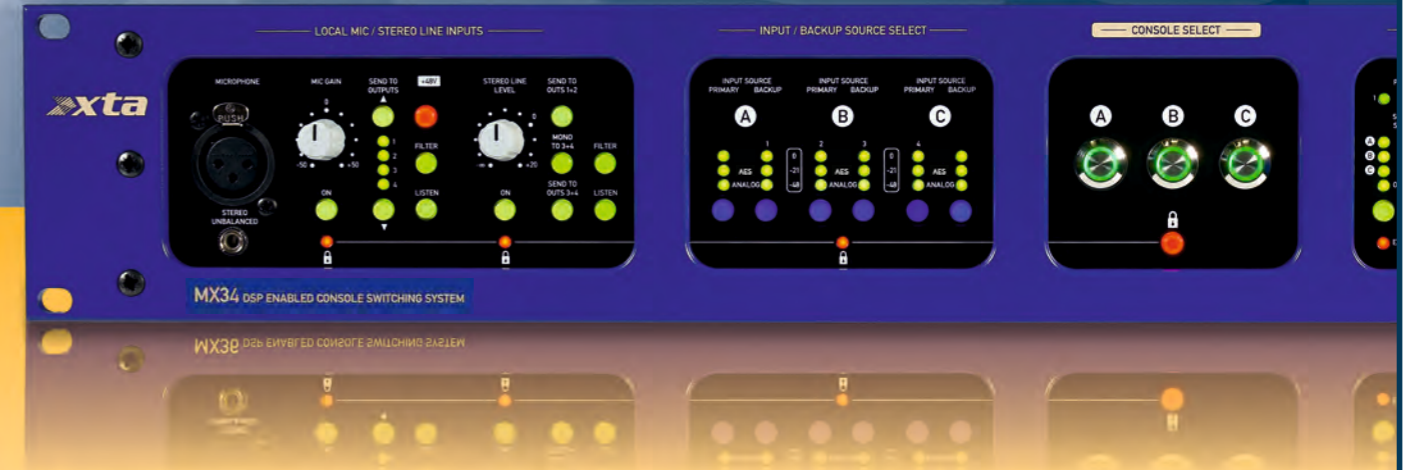
MX34 DSP Enabled Console Switching System

3 x Sets (A,B & C) x 4 Input Channels
2 x Redundant Sources per Set (Analogue, AES)
Fully Automatic Failover of Inputs

4 x Outputs (Analogue and AES simultaneously)

Local Stereo Line + Mic Pre

Monitor Every Line



CONSOLE SWITCHING with REDUNDANCY

The MX Series from XTA



MX34 DSP Enabled Console Switching System

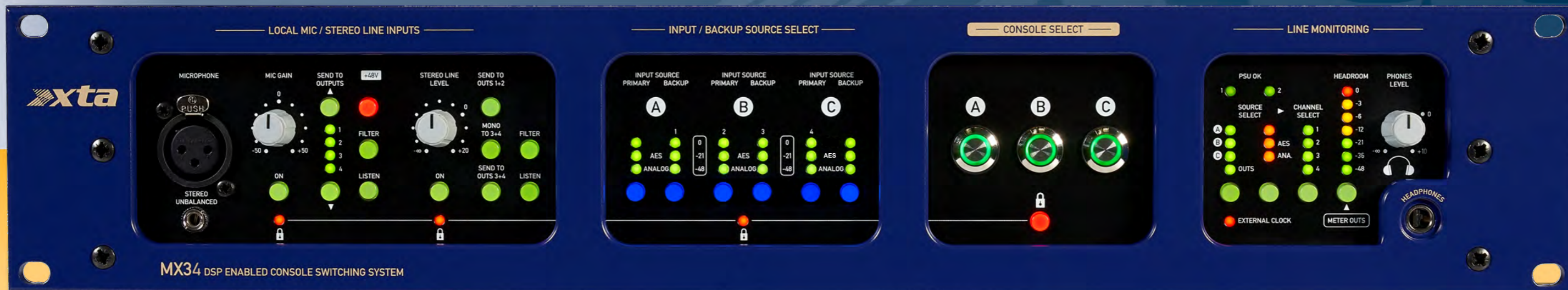
Clever Simple Quick Easy

When you need to ensure that the show goes on, no matter what happens, you need backups of backups. You need a way to automatically switch between them when the signal path drops out. You need the ability to work with any sample rate on any input. To perform this across not just stereo pairs, but four channels simultaneously. With no software, no PC and definitely no way for this to be tampered with.

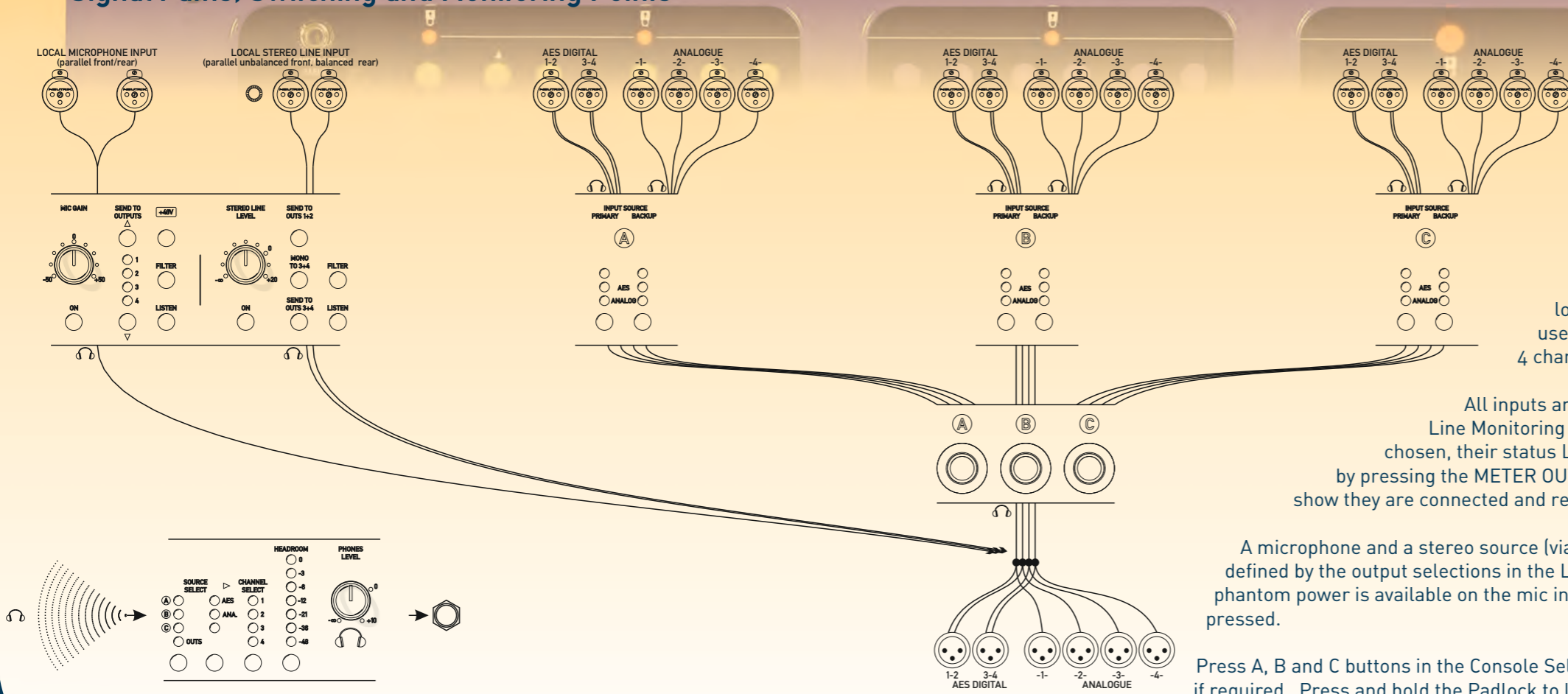
The MX34 is the solution. It handles four simultaneous inputs across two source types (analogue and AES - a total of 24 individual inputs) and even when you're not monitoring a source it will be checking the signal integrity and will auto-select the highest priority source seamlessly if anything fails.

All you have to do is press A, B or C to choose what's routed to the four outputs (again all available in analogue, AES flavours simultaneously with the option for external sync). Feed in a stereo source direct to the MX34 for background music and a mic for announcements. Plug in some headphones and monitor every individual feed from any source, plus check what's on the outputs.

Once you're happy, lock it all down and walk away, safe in the knowledge that the MX34 will keep the music playing, with optional dual redundant power supplies, and XTA's 25+ years of DSP knowledge ensuring your audio is treated with kid gloves through the best audio conversion.



Signal Paths, Switching and Monitoring Points



All you need to know to operate an MX34

Each set of four channels has 96k analogue to digital conversion, plus AES inputs with individual sample rate conversion from 32k up to 192k per input pair.

The priority of the input sources is chosen for each set using the Input Source / Backup buttons for each of banks A, B & C. Analogue is always the lowest priority - your "if all else fails" option. If an AES signal is lost, the MX34 will switch to the backup (Analog). If either of the AES pairs is lost then the MX34 will switch to the Analogue (on a 4 channel basis to maintain latency timings). If Analogue is chosen as Primary then no backup source can be selected. The Source Select buttons will flash if a selected source is lost. Failover can also be disabled, and the PRIMARY SOURCE buttons used to switch between the 2 source types for manual switching of up to 6 x 4 channel sources.

All inputs and overall output channels can be monitored with metering using the Line Monitoring Controls. Additionally, once the Primary and Backup sources are chosen, their status LEDs can be swapped to show output meters for confidence monitoring by pressing the METER OUTS button. The dual power supplies have front panel PSU OK LEDs to show they are connected and ready.

A microphone and a stereo source (via the front or rear) can be routed to the chosen output channels as defined by the output selections in the Local Mic / Stereo Line Inputs section when ON is pressed. 48V phantom power is available on the mic input, and the FILTER button inserts high pass and clarity EQ when pressed.

Press A, B and C buttons in the Console Select section to route that Console to the outputs - they can be summed if required. Press and hold the Padlock to lock out all essential keys. Outputs are fed to four analogue outputs and a pair of AES outputs simultaneously. There is a rear panel BNC to sync the AES outputs' clock with an external source, and the LED on the front shows when this is connected.