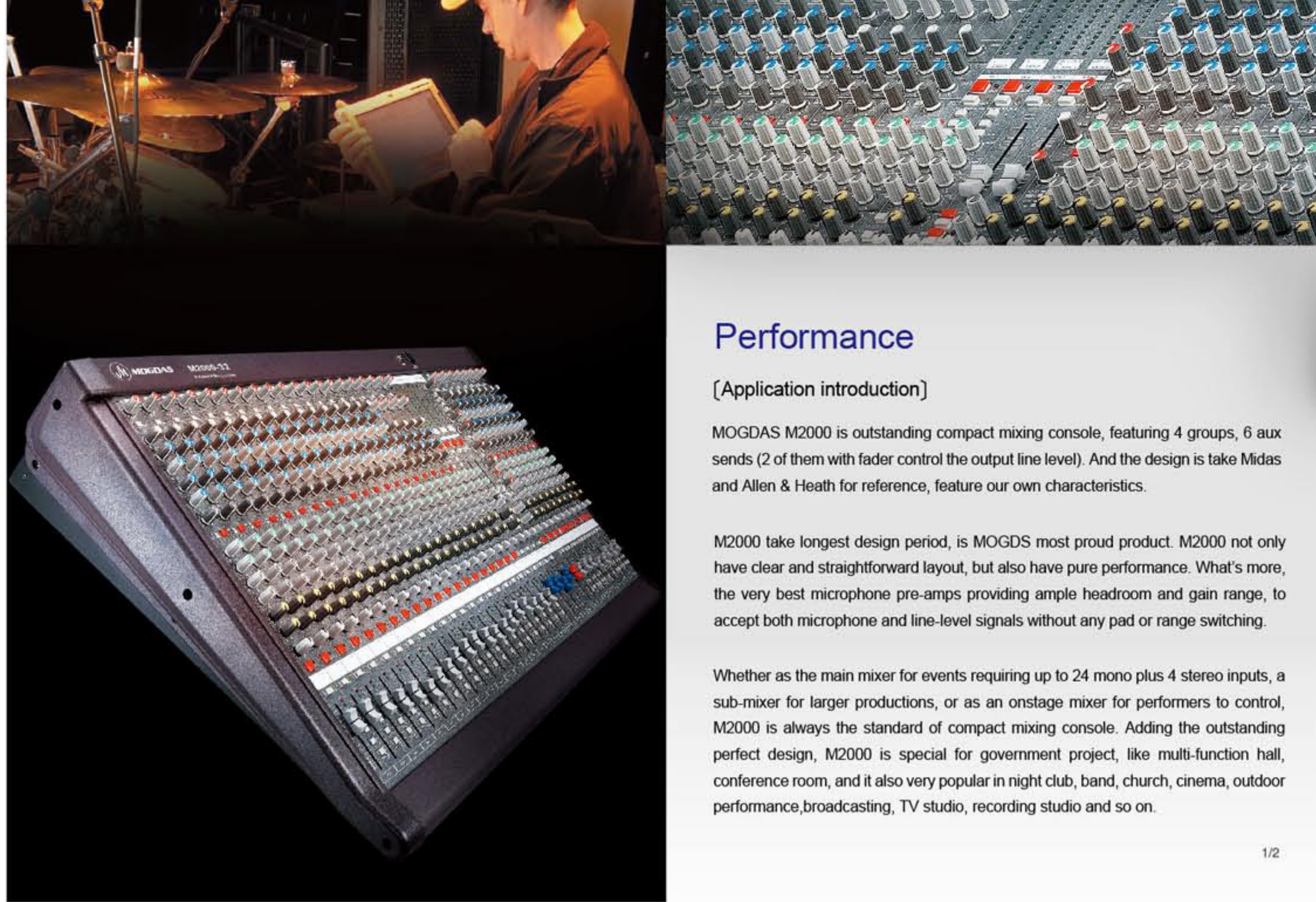


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Performance

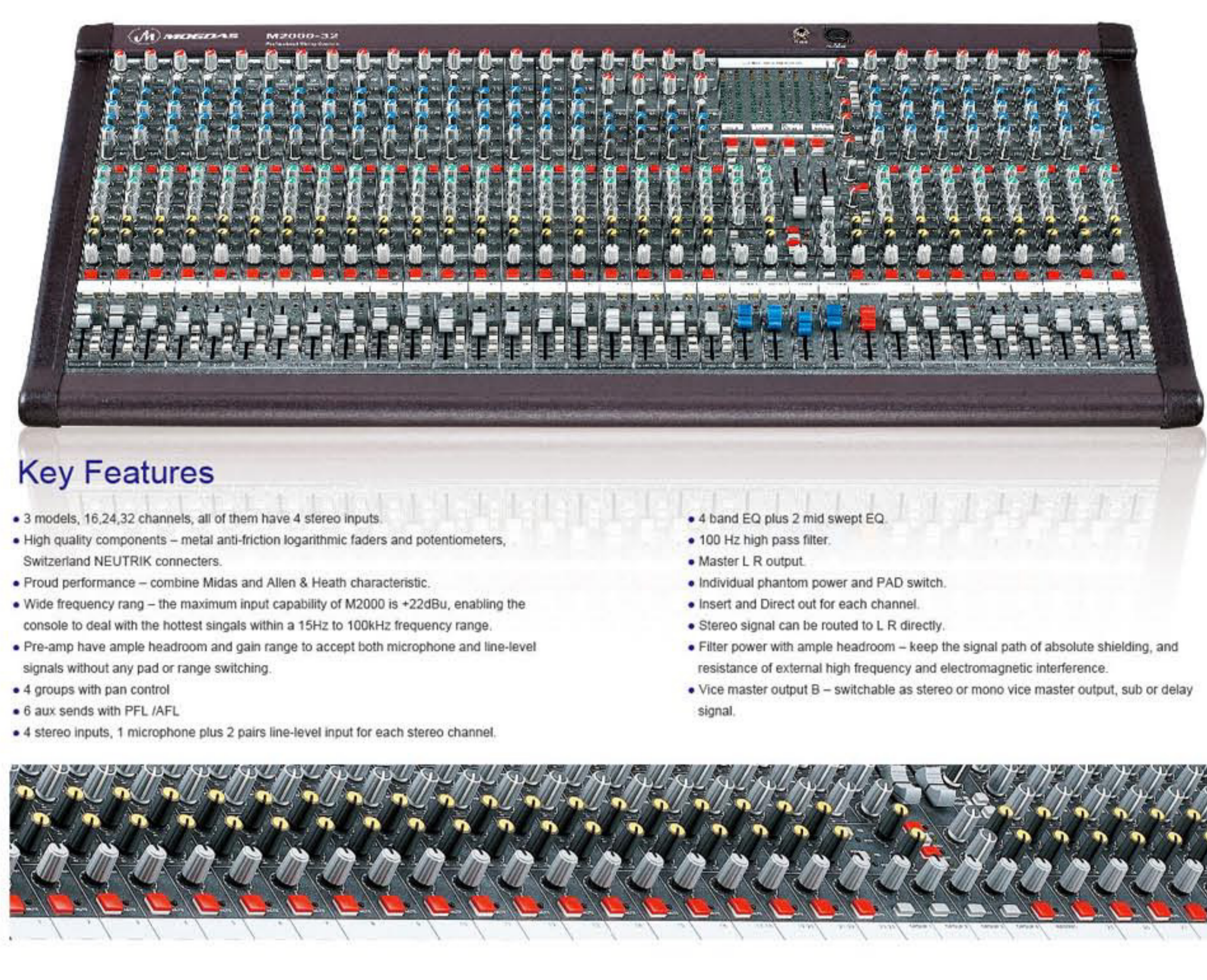
[Application introduction]

MOGDAS M2000 is outstanding compact mixing console, featuring 4 groups, 6 aux sends (2 of them with fader control the output line level). And the design is take Midas and Allen & Heath for reference, feature our own characteristics.

M2000 take longest design period, is MOGDAS most proud product. M2000 not only have clear and straightforward layout, but also have pure performance. What's more, the very best microphone pre-amps providing ample headroom and gain range, to accept both microphone and line-level signals without any pad or range switching.

Whether as the main mixer for events requiring up to 24 mono plus 4 stereo inputs, a sub-mixer for larger productions, or as an onstage mixer for performers to control, M2000 is always the standard of compact mixing console. Adding the outstanding perfect design, M2000 is special for government project, like multi-function hall, conference room, and it also very popular in night club, band, church, cinema, outdoor performance, broadcasting, TV studio, recording studio and so on.

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Key Features

- 3 models, 16,24,32 channels, all of them have 4 stereo inputs.
- High quality components – metal anti-friction logarithmic faders and potentiometers, Switzerland NEUTRIK connectors.
- Proud performance – combine Midas and Allen & Heath characteristic.
- Wide frequency range – the maximum input capability of M2000 is +22dBu, enabling the console to deal with the hottest signals within a 15Hz to 100kHz frequency range.
- Pre-amp have ample headroom and gain range to accept both microphone and line-level signals without any pad or range switching.
- 4 groups with pan control
- 6 aux sends with PFL /AFL
- 4 stereo inputs, 1 microphone plus 2 pairs line-level input for each stereo channel.
- 4 band EQ plus 2 mid sweep EQ.
- 100 Hz high pass filter.
- Master L R output.
- Individual phantom power and PAD switch.
- Insert and Direct out for each channel.
- Stereo signal can be routed to L R directly.
- Filter power with ample headroom – keep the signal path of absolute shielding, and resistance of external high frequency and electromagnetic interference.
- Vice master output B – switchable as stereo or mono vice master output, sub or delay signal.

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Application advantages

- **High quality components** – The fader and potentiometer of M2000 require very low line-level, still can accurate control line-level. MOGDAS mixers are well known as reliability product, are able to handle thousands of events and hundreds of thousands of miles of travelling without fault still. Only the high quality components can guarantee the reliability, lowest register rate, and pure performance. There is no other way to do it. The operational benefit is that two identical signals will sound equal regardless of which channel they are fed into.
- **MTA-3 pre-amp** – take Midas and Allen&Heath for reference, M2000 also use same MTA-3 pre-amp, featuring ample headroom, gain range and low distortion. To retain the natural qualities of many different sorts of signals, M2000 are able to handle incoming signals across a very wide frequency range with lowest possible distortion, and the microphone or line-level input without any cut or adjust. The microphone or line level up to +22dBu, can be find adjustable by a high resolution gain in the gain range.
- **Proud performance** – M2000 can create pure performance, the EQ are use high quality components provides the ability to accurate control, fine-tune audio signals, also provides the creative processing power to create personalized soundscapes without any unwanted side-effects. For instance, this means that the HF and LF filters won't interfere with the mid-band frequencies. All filters keep their gain regardless of frequency settings, and +15dB on a gain potentiometer means exactly what it says.
- **Ample headroom filter PSU** – all of MOGDAS big size mixer are use external PSU, in order to keep the signal path of absolute shielding, and resistance of external high frequency and electromagnetic interference. Considering the limited space in the small mixer also, so all of the MOGDAS high class mixer are designed use same one standard external PSU, with ample voltage range to meet all over the world requirement.
- **LED display** – incoming signal levels to both mono and stereo input channels are displayed on two LED indicators. The green signal present LED illuminates when the incoming signal exceeds -16dBu, and continues to sense the input even if the EQ section is by passed. However, because of the quality of the MOGDAS input circuitry, there is still around 5dB of headroom available even when the red peak LED is flashing.
- **Individual +48V phantom power** – the individual phantom power with LED indicate for each channel (for condenser microphones and active DI boxes)
- **4 Group** – 4 groups signal could be routed to master LR or as independent output. There is Insert for each group to connect to audio processor. 4 groups also with PAN control.

- **6 auxiliary sends** – to accommodate constantly-changing monitor/FX requirements, MOGDAS offer two further auxiliary busses (labeled Aux1 and Aux2), which can be individually switched pre- or post-fader on the master module. In pre-fade mode they follow the pre/post EQ selection of Monitor 1 and Monitor 2. Thus MOGDAS offer the flexibility to provide 2 FX sends plus 4 monitors, 3 FX sends plus 3 monitors, or 4 FX plus 2 monitors. Onstage channels, the auxiliary sends provide a sum of the left and right inputs, all auxiliary sends offer a range of minus infinity to plus 10dB, providing accurate level control over a very wide gain range.

- **Clear and Straightforward Layout** – All console manufacturers have their own philosophy of control surface design and layout. While M2000 can certainly be used for recording, MOGDAS's "dedicated to live production" approach means the design layout of Venice is optimized for quick and easy control. Every function is exactly placed where it should be, easy to find, operate and read even at low light levels (though connectors for two desk lamps are fitted as standard). M2000 provides the right feature set for all live applications: very clear and straightforward, and easy to reach despite the high density of controls.

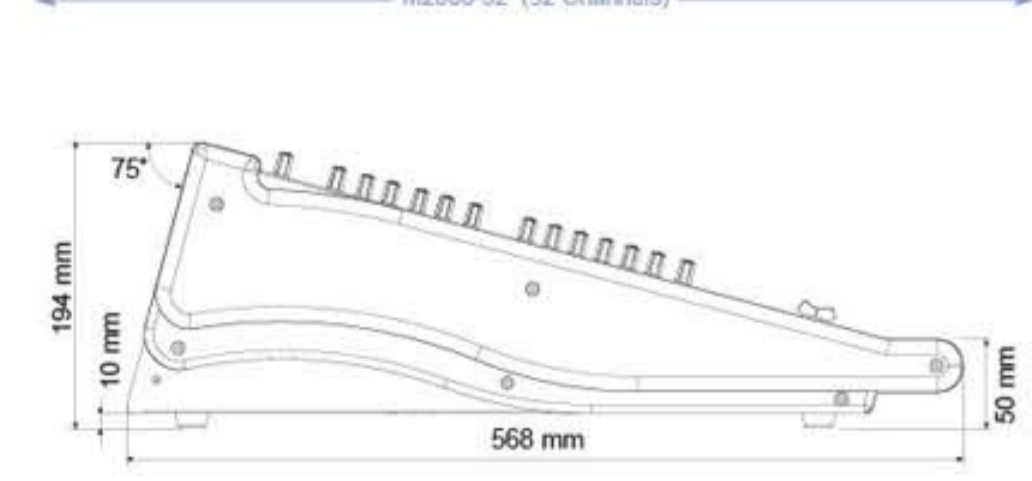
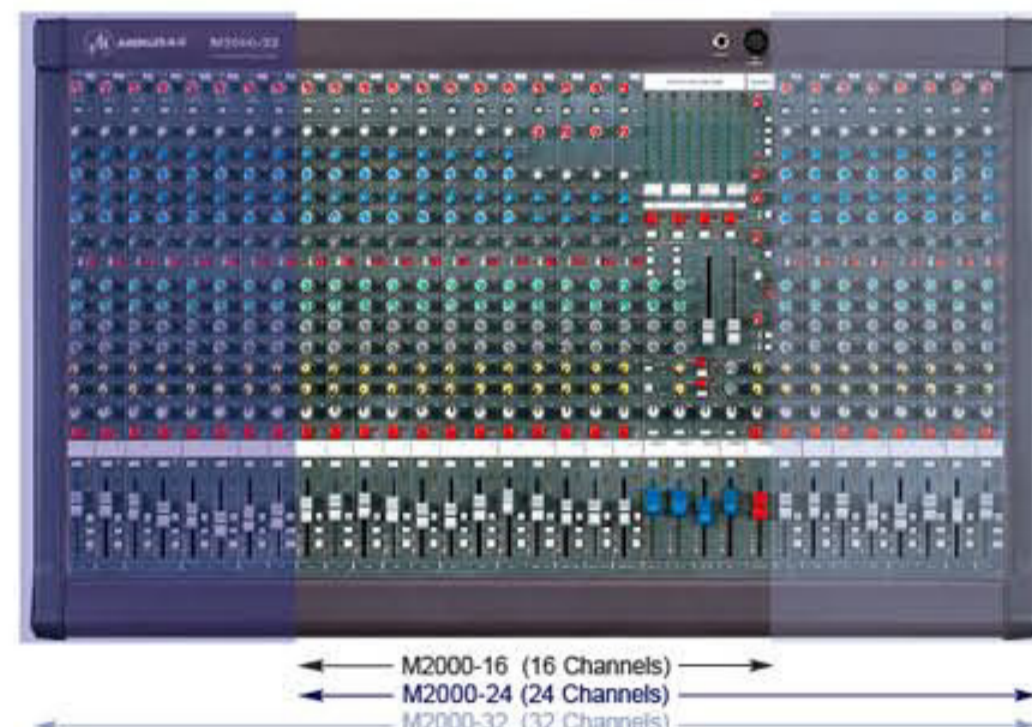
- **High pass filters** – A second-order Butterworth hi-pass filter set at 80Hz with an enable switch allows effective elimination of unwanted low-frequency noise, such as stage rumble.

- **Stereo input** – The stereo input channel features the same microphone pre-amp as the mono channel, including the hi-pass filter. In addition, two line-level inputs are fitted to accept stereo signals. Because the inputs have two independent circuits, it is possible to have all three inputs connected at the same time, providing silent backup in the event of something unexpected happening - (a common occurrence in live sound situations).

- **SOLO & MUTE** – The solo button (with yellow LED indication) switches the signal from the selected channel to the headphone bus and control room speakers. It is possible to choose between PFL (pre-fade listen) in mono or AFL (after fader listen) to evaluate and control a signal within the full stereo image. In addition the level of the "soloed" signal is displayed on the high-resolution LED metering on the master section, without disrupting the metering for the master outputs. The solo switch is situated well away from the mute switch to avoid unintended

- **Master B** – The master B control provides a second, independently switchable stereo or mono master signal which can be used for a variety of purposes. For instance, in stereo it can feed other zones, while in mono it can be used for delay lines or subwoofer feeds. This function is unique to M2000 within this class of console, and also features the extra 10dB of gain on the output.

Dimension



	Width	Depth	Height	Weight
M2000-16	490/19.3"	688/22.4"	194/7.8"	10.4/30.2lbs
M2000-24	699/27.5"	688/22.4"	194/7.8"	21.1/49.2lbs
M2000-32	906/35.7"	688/22.4"	194/7.8"	25.9/56.9lbs

Technical Specifications

Input Impedance	
Mic.	2k Balanced
Line	20k Balanced
Input Gain	
Mic.	Continuously variable from 0dB to +60dB
Line Mono Channel	Continuously variable from -20dB to +40dB
Line Stereo Channel	Continuously variable from -20dB to +20dB
Line Level Inputs	0dB
Maximum Input Level	
Mic.	+22dBu
Line Level Inputs	+22dBu
Line Mono Channel	+42dBu
Line Stereo Channel	+28dBu
CMR at 100Hz	
Mic (gain + 40dB)	Typ. 75dB
Mic (gain + 40dB)	> 35dB
Line	> 45dB
Frequency Response (20 to 20kHz)	
Mix to Mix (gain + 60dB)	+0dB to +1dB
Noise (20 to 20kHz)	
Mic EMI ref. 1500Hz (gain + 60dB)	-120dBu
Mic EMI ref. 1500Hz (gain + 60dB)	-120dBu
System Noise (20 to 20kHz)	
Mic to Mix (15 channels routed with faders down)	+90dBu
Line to Mix (15 channels routed at 0dB, pan centre)	+96dBu
Distortion	
Mic to Mix (15 channels routed with faders down)	Typ. 0.0007%
Mic to Mix (15 channels routed with faders down)	Typ. 0.0007%
Mic to Mix (15 channels routed with faders down)	Typ. 0.0007%
Cross-talk	
Channel to Channel	0.009%
Mix to Mix	< -80dB
Channel to Mix	< -80dB
Fader Attenuation	>100dB
Switch Rejection	>100dB
Output Impedance	
All Line Outputs	75 Ohms Balanced Source
Headphones	To drive 32 ohms 32ohms
Maximum Output Level	
Master Outputs on XLR	+25dBu
All other Outputs on XLR	+22dBu
All Outputs on 1/4 inch jacks	+22dBu
Headphones	+22dBu/500ohms
Nominal Signal Level	
Mic.	-60dBu to 0 dBu
Line	0dBu
Equaliser Mono Channel	
H Pass Slope	12dB / Oct
Treble Frequency	Continuously variable+15 dB to -15 dB Centre detent = 0dB
Treble Gain	Continuously variable+15 dB to -15 dB Centre detent = 0dB
H Mid Frequency	Continuously variable+15 dB to -15 dB Centre detent = 0dB
H Mid Gain	Continuously variable Centre from +0dB to 8k
H Mid Bandwidth	1 Oct. (Q = 1.4)
Lo Mid Frequency	Continuously variable+15 dB to -15 dB Centre detent = 0dB
Lo Mid Bandwidth	1 Oct. (Q = 1.4)
Bass Gain	Continuously variable+15 dB to -15 dB Centre detent = 0dB
Bass Shelving Frequency	80Hz

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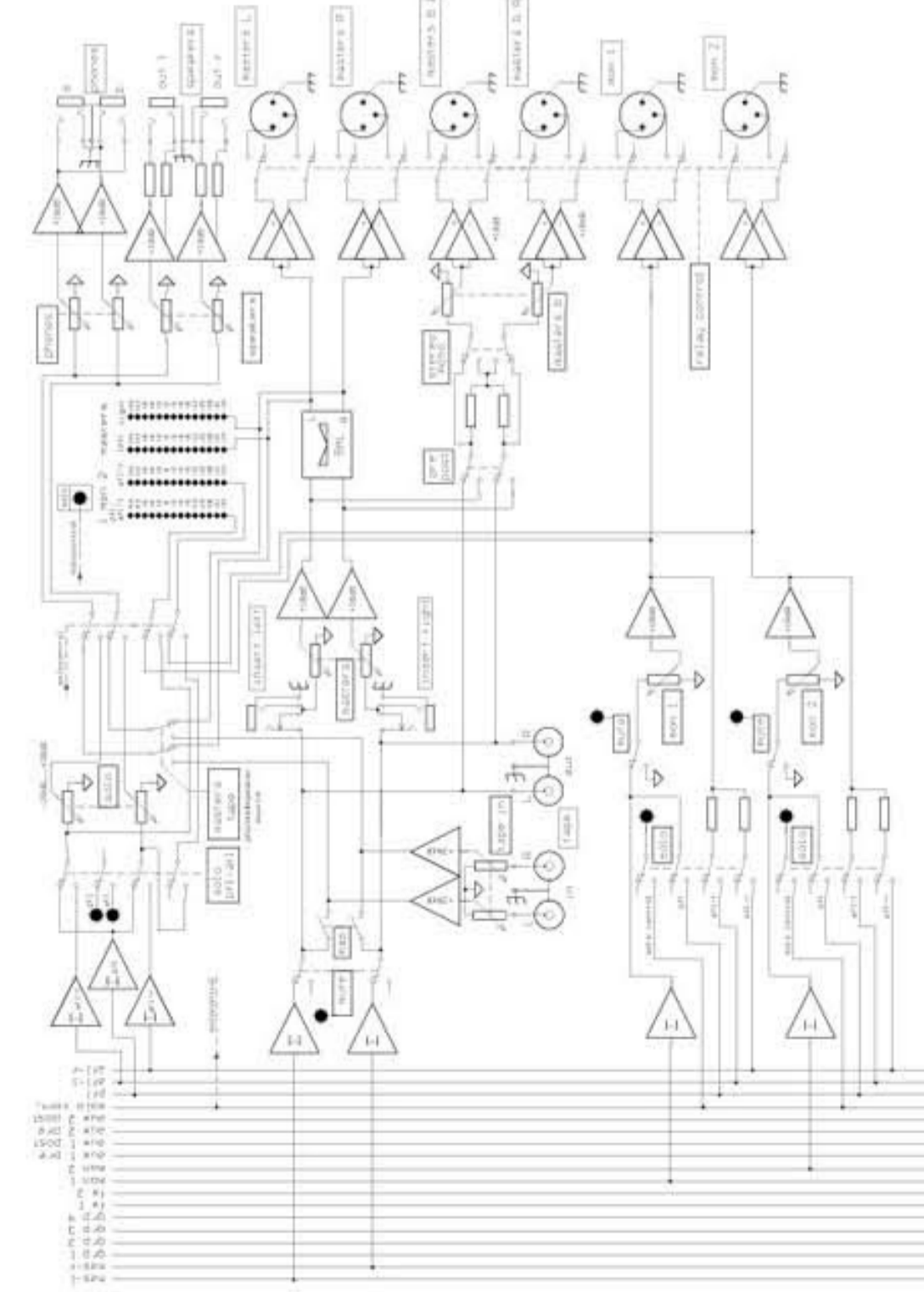
Equaliser Stereo Channel

H Pass Slope	12dB / Oct
H Pass Frequency	Continuously variable+15 dB to -15 dB Centre detent = 0dB 12k
Treble Gain	Continuously variable+15 dB to -15 dB Centre detent = 0dB 12k
H Mid Frequency	Continuously variable+15 dB to -15 dB Centre detent = 0dB 3k
H Mid Bandwidth	1.4 Oct. (Q = 1)
Lo Mid Frequency	Continuously variable+15 dB to -15 dB Centre detent = 0dB 300Hz
Lo Mid Bandwidth	1.4 Oct. (Q = 1)
Bass Gain	Continuously variable+15 dB to -15 dB Centre detent = 0dB
Bass Shelving Frequency	80Hz

Mechanical Specifications

Features and Specifications	M2000-16	M2000-24	M2000-32
Inputs (total)			
Mono-Inputs (Mic/Line) with Inserts	30	38	46
Stereo-Line/Mono-Mic-Input Channels	8	10	24
Stereo-Effect-Returns (Line)	4/4	4/4	4/4
Stereo-Tape-Return (Line)	4	4	4
Busses			
Subgroups	16	16	16
Aux Pre-Fader (Monitor)	2	2	2
Aux Post-Fader (Effects)	2	2	2
Aux switchable Pre/Post-Fader	2	2	2
Master L/R	1	1	1
Master-PFL	1	1	1
Stereo-AFL	2	2	2
Outputs			
Subgroups (with Inserts)	4	4	4
Aux Pre-Fader (Monitor)	2	2	2
Aux Post-Fader (Effects)	2	2	2
Aux switchable Pre/Post-Fader	2	2	2
Master with Inserts	2	2	2
Master B Out	2	2	2
Switchable Mono/Stereo, pre-post Fader	2	2	2
Tape Send (Recording)	1	1	1
Direct Outputs (1/4 inch Jack)	8	8	8
Stereo-Headphones	16	16	16
Stereo-Speakers	2	2	2
Size (mm/inch)			
Width	490/19.3"	699 / 27.5"	906/35.7"
Depth	688/22.4"	688 / 22.4"	688/22.4"
Height	194/7.8"	194 / 7.8"	194/7.8"
Weight (kg)			
Weight	14.5	19.2	24
Power Consumption			
Power	100W	120W	150W
Mains Voltage			
Voltage	220V~240V	220V~240V	220V~240V
Additional Features			
Connector for desk lamps	Yes	2 x 12V/5W (4-Pin XLR)	Yes
External Power Supply	Yes	Yes	Yes
Accessories			
Accessories	External power supply 12V Desk lamp(not included)		

Block Diagram



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