

GECKO® EXODUS ODYSSEY MXR 3604L / MXR 5204L

OWNER'S MANUAL



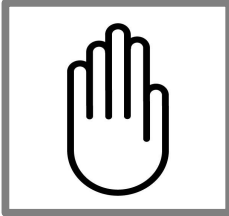
www.geckomusicgroup.com



SAFETY INSTRUCTIONS & SYMBOLS GUIDE

For your own safety and to avoid invalidation of the warranty, all text marked with these symbols should be read carefully.

SYMBOLS:



NOTES

Contain important information and useful tips on the operation of your equipment.



WARNING

The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



CAUTIONS

The exclamation point **within an** equilateral triangle is intended to alert the user to the presence of important **operating** and maintenance (servicing) instructions in the literature accompanying the **appliance**. Please read the manual carefully.



HEADPHONES SAFETY WARNING

Contain important information and useful tips **for** headphones outputs and monitoring levels.



SAFETY INSTRUCTIONS:

- To reduce the risk of electrical shock, do not remove covers. No user-serviceable parts inside. Please refer servicing to qualified personnel.
- To reduce the risk of electrical shock or fire, do not expose the equipment to rain or moisture.
- Do not impose unnecessary stress on your equipment (i.e. placing heavy objects on it, over screwing its mounting, etc).
- Read and keep the instruction manuals in a safe place for future references.
- Do not attempt to clean the equipment with chemical solvents as this may damage the finish. Clean only with a dry cloth.
- Do not block any ventilation openings.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- Do not defeat the purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the grounding prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for the replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Unplug the apparatus during lightning storms or when it is not in use for a long period of time.

- Use only attachments/accessories specified by the manufacturer.
- Always shut down power supply when not in use to save energy and for a prolonged lifespan.
- Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a period of time. The U.S. Government's Occupational Safety and Health Administration (OSHA) and the Singapore Workplace Safety and Health Council (WSHC) has specified the permissible noise level exposures shown in the following chart. According to OSHA and WSHC, any exposure in excess of these permissible limits could result in some hearing loss. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels use hearing protectors while the equipment is in operation. Earplugs or protectors in the ear canals or over the ears must be worn when operating the equipment in order to prevent permanent hearing loss if exposure is in excess of the limits set forth here:

Duration/Day (Hours)	dB, Sound Pressure Level (SPL)	Descriptions
	Below 90dB	Safe zone
8.00	90	Hearing damage
6.00	92	
4.00	95	
3.00	97	
2.00	100	Serious hearing damage
1.50	102	
1.00	105	
0.50	110	
0.25 or less	115	Human pain threshold

GECKO MUSIC GROUP

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FOREWORD

Dear Friends,

Thank you very much for purchasing quality products by **GECKO MUSIC GROUP**. I am very grateful that we have journeyed this far, since 2002! We have set new audio standards in the industry and we have touched and changed lives along the way! I believe our journey will not stop but continue to pursue more breakthrough findings and improvements that will change our lives for the better.

At **GECKO MUSIC GROUP** we focus on developing nothing but the best professional audio equipment and premium grade audiophile products you ever need! Our engineering team is constantly doing R&D to meet this goal. I thank God that by His grace, we have succeeded in developing the revolutionary C.R.I.S.T.A.L.® technology that has changed and is changing the way how audio is captured, encoded, reproduced and managed!

On behalf of **GECKO MUSIC GROUP**, I would like to pledge our continuing commitment to uphold our traditions in serving the music and audio communities around the world with more value-added premium quality GECKO® professional audio equipment and premium grade audiophile products!

Once again, thank you very much for your support. We trust you will love what you hear!

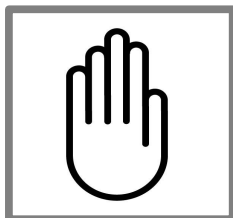
Yours truly,

A handwritten signature in black ink, consisting of a large, stylized 'D' followed by a series of loops and a final flourish ending in a small dot.

Daniel Foo
Founder/Director (R&D)
GECKO MUSIC GROUP

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NOTES: This manual covers the 36-channel GECKO® EXODUS ODYSSEY MXR 3604L C.R.I.S.T.A.L.® Audiophile mixing console and the 52-channel GECKO® EXODUS ODYSSEY MXR 5204L C.R.I.S.T.A.L.® Audiophile mixing console. As both consoles are operationally identical, this manual will discuss the GECKO® EXODUS ODYSSEY MXR 5204L.

INTRODUCTION

The GECKO® EXODUS ODYSSEY MXR 3604L and MXR 5204L C.R.I.S.T.A.L.® Audiophile mixing consoles are designed and built for professional engineers and for those who hear, appreciate and demand the best. Over the years, many seeking those “long-lost” pure, smooth, warm tones for their music recording, mixing, mastering, and live sound applications have turned to the EXODUS ODYSSEY mixing consoles. Everything about the EXODUS ODYSSEY mixing consoles are designed to give you the best audio fidelity, from the superb sounding C.R.I.S.T.A.L.® Audiophile PreAmps to the linearly noiseless and transparent stereo summation.

Equipped with a comprehensive range of features such as assignable talkback functions, matrices, individual channel direct out, etc, you can be sure that the EXODUS ODYSSEY mixing consoles are not only fantastic works of engineering, they also make complex mixes easy!

The GECKO® EXODUS ODYSSEY C.R.I.S.T.A.L.® Audiophile mixing consoles are the preferred analog mixing consoles for complementing the modern digital audio world to overcome digital colorations and noises.

Features at a glance:

- 36 channels frame (MXR 3604L) / 52 channels frame (MXR 5204L)
- C.R.I.S.T.A.L.® Audiophile PreAmps for smooth, natural gain structure and wide headroom
- C.R.I.S.T.A.L.® circuitry for uncolored, lossless stereo summing
- MAIN LR (stereo) mix
- Multi-mode M output
- 7 x 4 MATRIX
- 6 AUX sends
- 4 GROUP sends
- Precision 100mm dustproof faders for linearly noiseless operations
- Channel DIRECT OUT for multitrack recordings
- PRE/POST EQ and PRE/POST fader switching for AUX and DIRECT OUT
- Assignable TALKBACK
- 1kHz OSCILLATOR / PINK Noise generator
- Per-channel +48V PHANTOM, POLARITY, HPF, LINE/PAD, INSERT
- Precise and transparent channel EQ with BYPASS function
- Solid copper ground buss
- Dual-functionality console for front-of-house and monitoring
- HEADPHONES and MONITOR outputs
- Stabilized power supplies, and many other wonderful features

PACKAGE CONTENTS

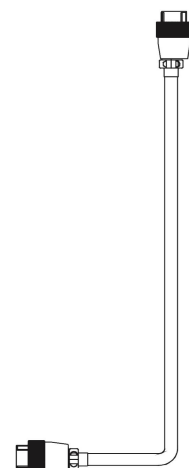
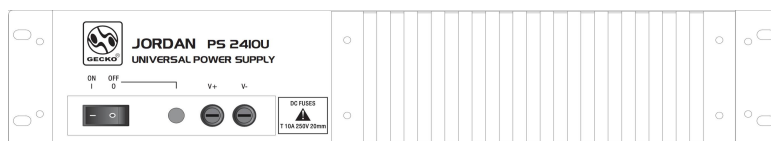
EXODUS ODYSSEY MXR 3604L:

- GECKO® EXODUS ODYSSEY MXR 3604L 36-channel C.R.I.S.T.A.L.® Audiophile mixing console
- IEC Power Cord. EXODUS ODYSSEY MXR 3604L comes with built-in universal power supply.



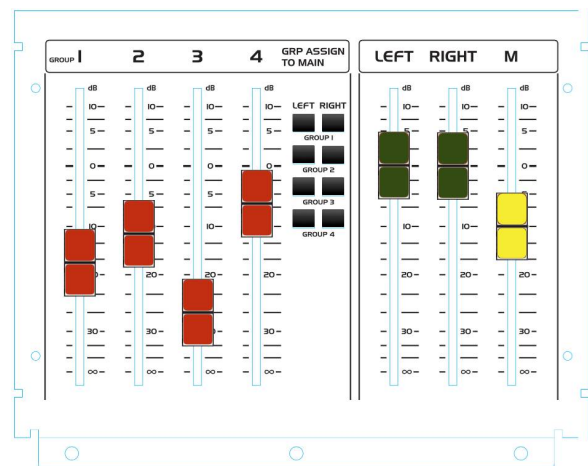
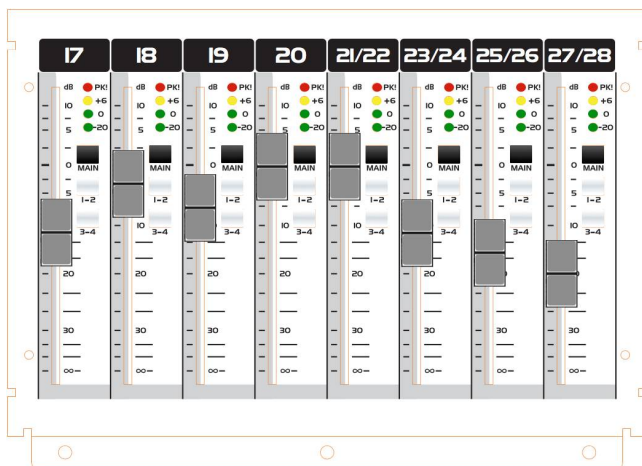
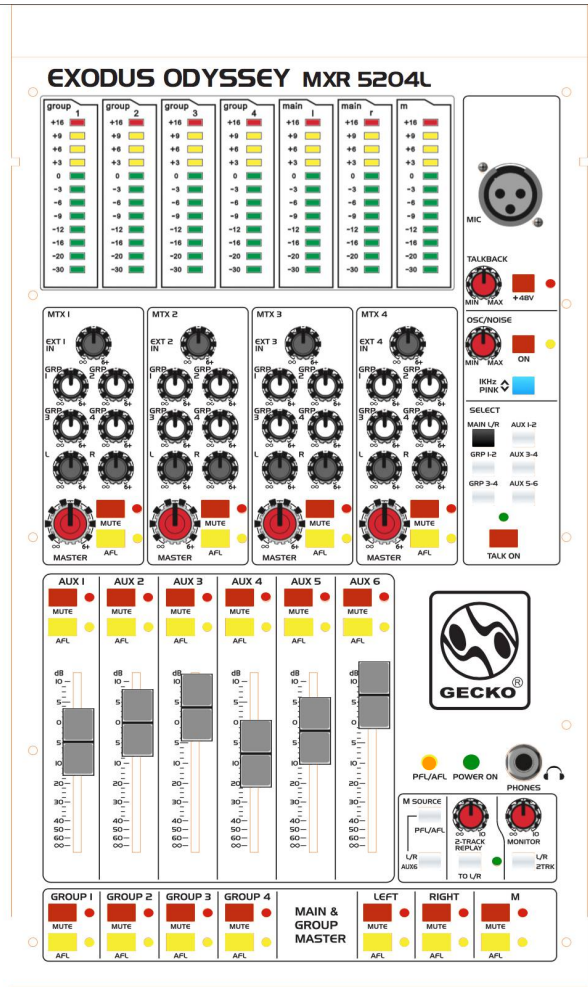
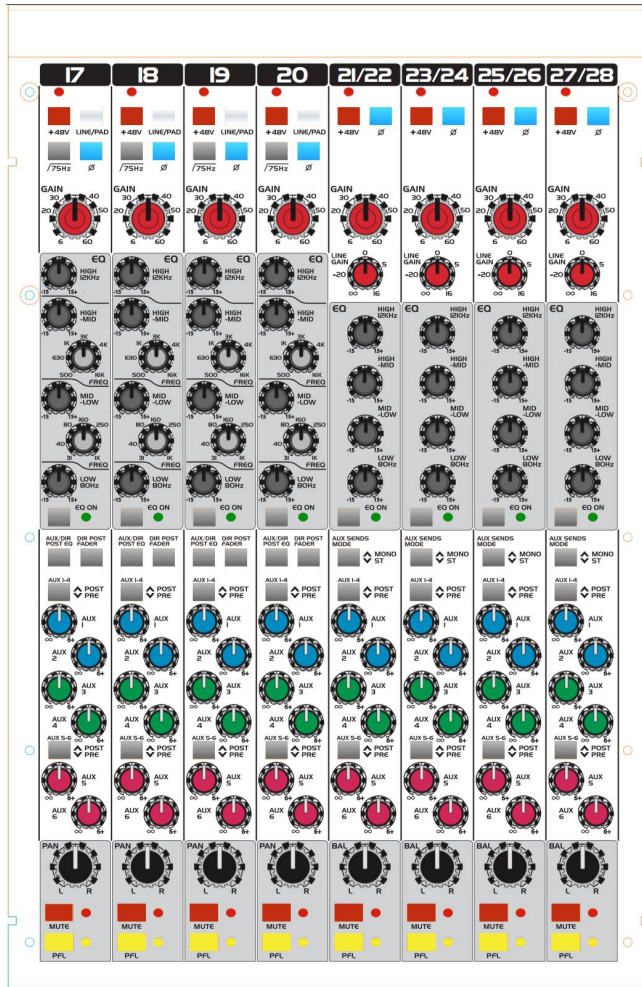
EXODUS ODYSSEY MXR 5204L:

- GECKO® EXODUS ODYSSEY MXR 5204L 52-channel C.R.I.S.T.A.L.® Audiophile mixing console
- IEC Power Cord
- GECKO® JORDAN PS 2410U universal power supply with 10-pin DC power cable

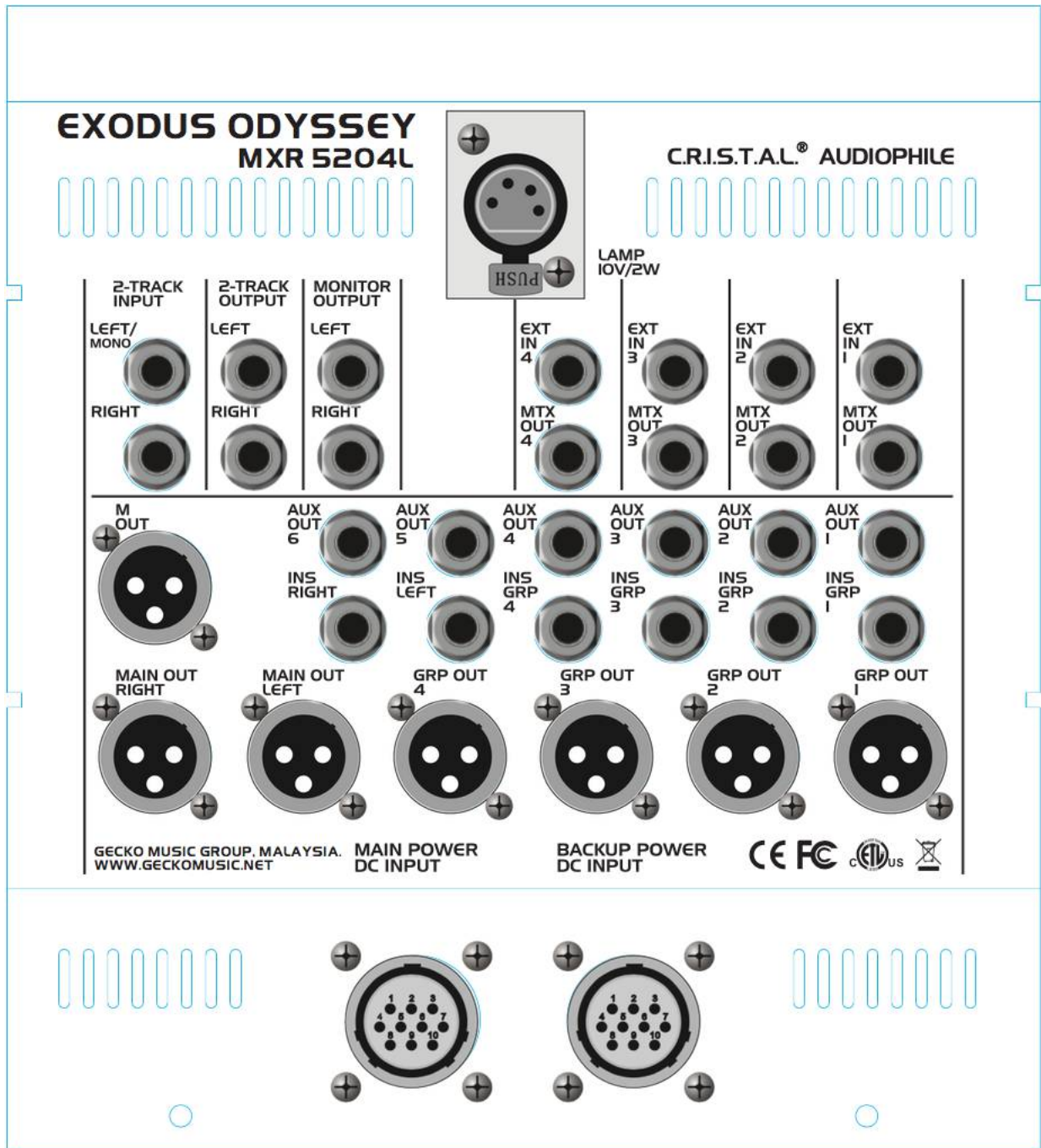


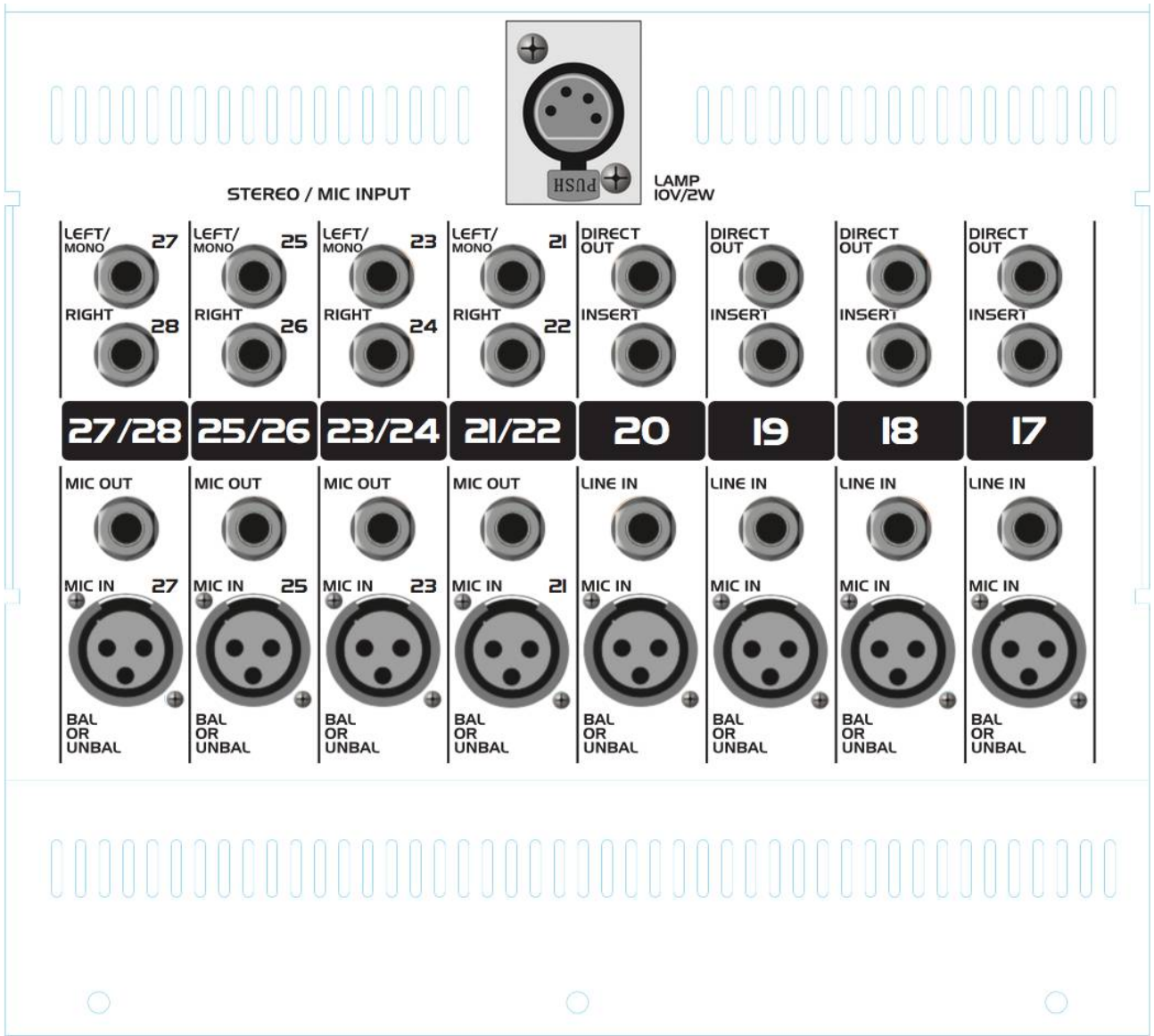
PANEL LAYOUTS

FRONT



REAR





INSTALLING THE CONSOLE

The EXODUS ODYSSEY mixing console has a space-saving, compact chassis design. This is convenient, both in saving seats for the paying audience in a busy venue and in reducing the size, complexity, and weight of flight casing for on-the-road use. The control surface has a 10 degrees slope for optimum visibility during operations.

Free Standing

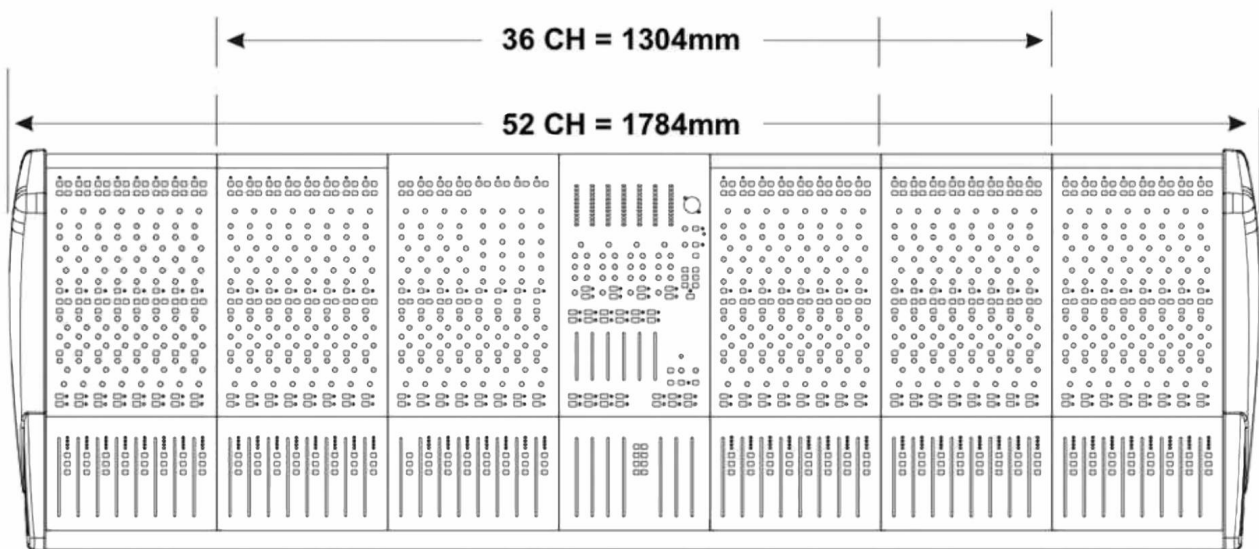
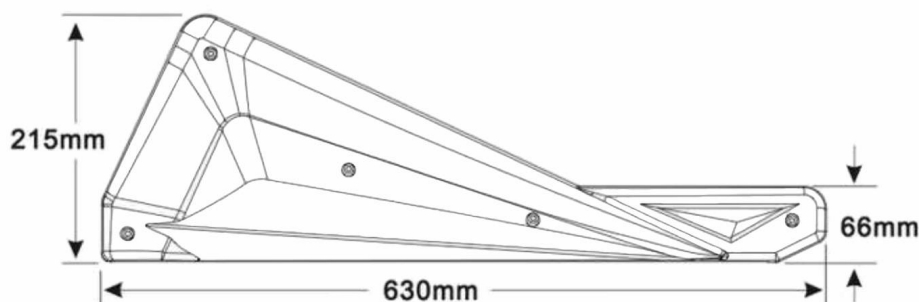
The console has rubber feet fitted for free standing operation on a flat surface. Make sure the surface is well supported, stable and big enough for the console to sit securely on all its feet. Allow enough space behind the console for access to its connectors.

Flight Casing

The console is shaped for easy flight casing. Make sure it is supported on all sides using suitably thick, shock-absorbent foam intended for this purpose. Ensure no part of the case or its lid touches the controls or connectors. If you include a rear “doghouse” to house the connections, make sure the cables can be supported in a way that prevents putting stress on the console connectors. To prevent transit damage through inadequate protection, we recommend you have the flight case supplied or approved by a professional, and or a specialist equipment case manufacturer.

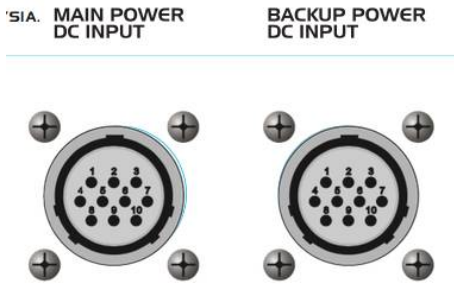


CAUTIONS: Do not obstruct the ventilation openings on the top and rear surfaces. Ensure adequate airflow around these surfaces. To avoid audible hum, buzz or other performance degradation, do not place equipment that radiates strong electromagnetic fields such as mains power supplies, amplifiers, and computers next to or directly underneath the console.

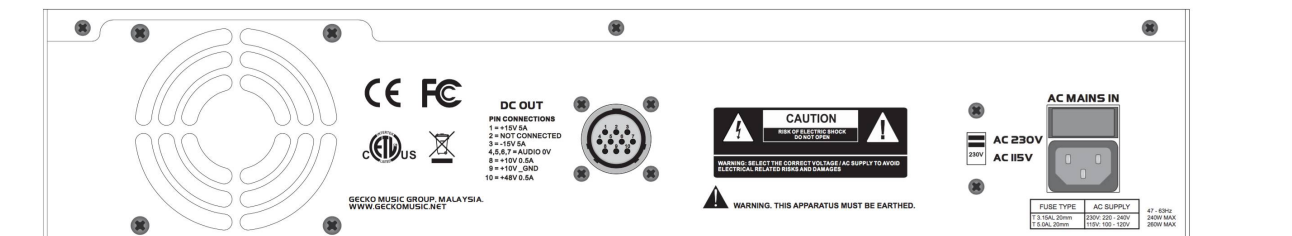
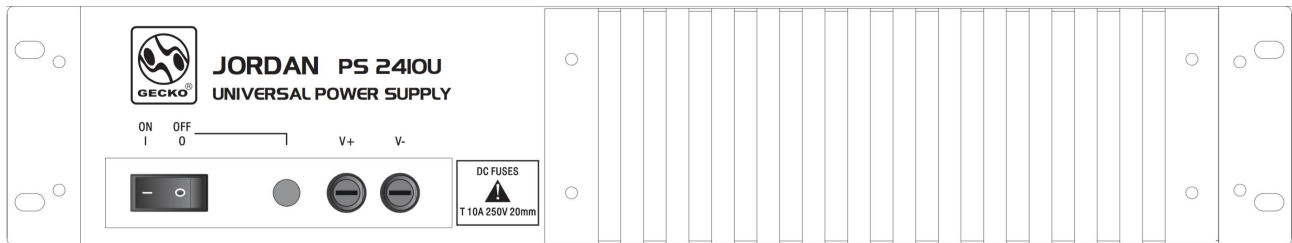


CONNECTING POWER

EXODUS ODYSSEY MXR 5204L 10-PIN DC INPUTS



JORDAN PS 2410U UNIVERSAL POWER SUPPLY



Read and understand the **Safety Instructions** printed at the start of this manual, and the warnings printed on the rear of the console. Check that your local mains supply voltage is the same as that selected on the rear of the JORDAN PS 2410U universal power supply unit. Connect the supplied 10-pin DC power cable to the MAIN POWER DC INPUT on the console and to DC OUT at the rear of the JORDAN PS 2410U. Check that the correct mains lead with a molded plug has been supplied. Make sure the IEC mains plug is pressed fully into the panel socket of the JORDAN PS 2410U before switching on.

GROUNDING

The connection to ground in an audio system is important for two reasons:

1. **SAFETY** – To protect the operator from high voltage electric shock, and
2. **AUDIO PERFORMANCE** – To minimize the effect of ground (earth) loops which results in audible hum and buzz, and to shield the audio signals from interference.



For safety, it is important that all equipment grounds are connected to mains grounds so that exposed metal parts are prevented from carrying high voltage which can injure or even kill the operator. Do not disconnect the ground on the mains lead. It is recommended that the system engineer check the continuity of the safety ground from all the points in the system including microphone bodies, turntable chassis, equipment cases, rack metalwork and so on.

CONNECTING THE POWER SUPPLY

Connect the supplied 10-pin DC power cable to the MAIN POWER DC INPUT on the console and to DC OUT at the rear of the JORDAN PS 2410U.

SWITCHING THE CONSOLE ON AND OFF

It is a good practice to turn the power amplifiers off before switching the console and other connected equipment on or off. This prevents any unexpected clicks or thumps when the equipment is powered up.



CAUTIONS: When powering up a system, always switched ON power amplifiers or powered speakers last. When powering down a system, always switched OFF power amplifiers or powered speakers first.

Turn the EXODUS ODYSSEY MXR 5204L console on and off using the ON/OFF power switch on the front of the JORDAN PS 2410U (there is no separate ON/OFF switch on the MXR 5204L console itself). The red neon indicator on the front panel of the JORDAN PS 2410U will illuminate to show the JORDAN PS 2410U universal power supply is powered up. The green POWER ON LED indicator on the console front panel will illuminate to show the console is switched on.

To turn the MXR 3604L on, press the ON/OFF button found at the rear panel of the console. The green MAIN LED / ACTIVE POWER SUPPLY next to the ON/OFF button will illuminate to show the main power supply is in operation. The green POWER ON LED indicator on the console front panel will illuminate to show the console is switched on.

CONNECTING A BACKUP SUPPLY

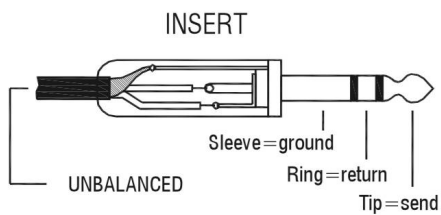
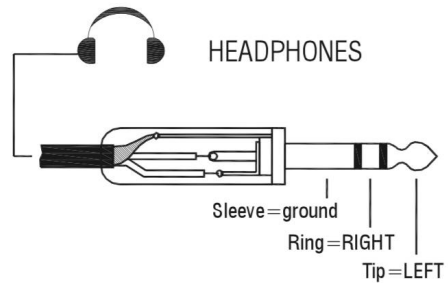
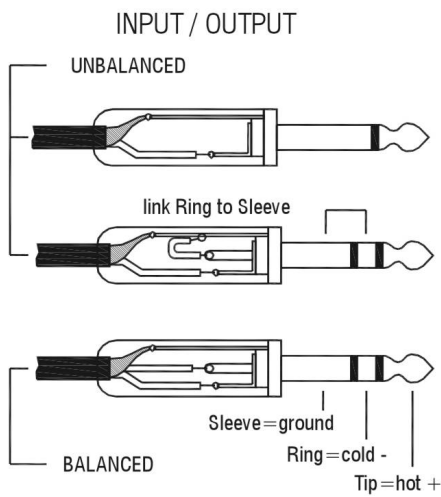
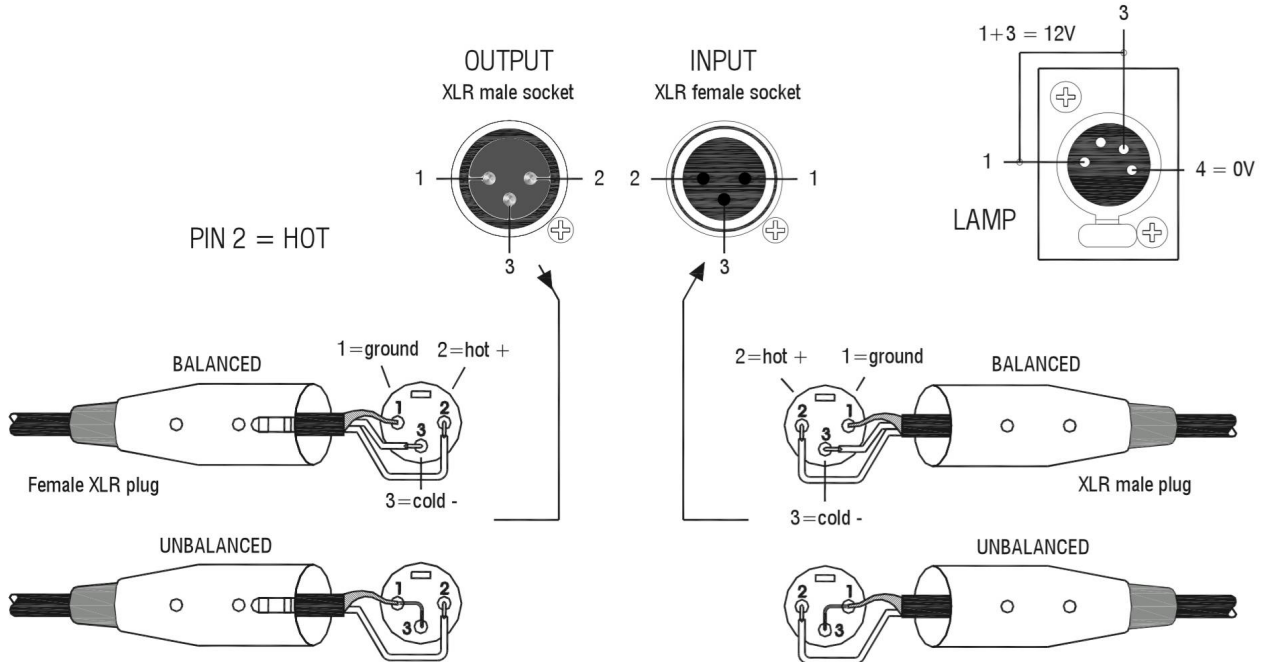
A second power socket labeled “BACKUP POWER DC INPUT” is included for plugging in an optional power supply. This provides the reassurance of power supply dual redundancy, a feature usually found only on expensive top-end consoles. The console uses Diode Combining technology so that both supplies can be powered at the same time. One will automatically take over should the other be switched off or stopped working. The recommended backup supply for the EXODUS ODYSSEY MXR 5204L is a second JORDAN PS 2410U and JORDAN PS 2310U for the EXODUS ODYSSEY MXR 3604L.



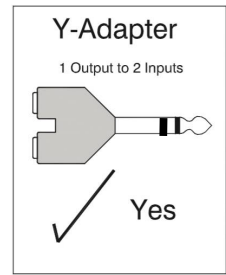
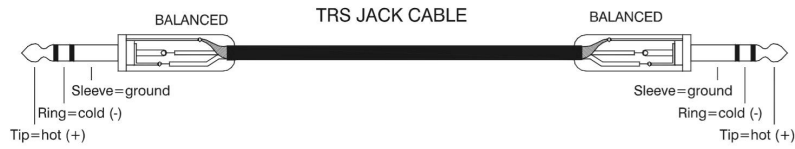
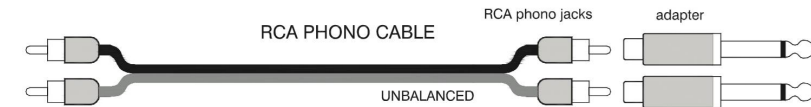
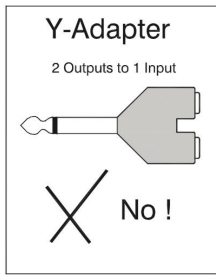
CAUTIONS: Use only the recommended power supply unit. Do not attempt to modify any other power unit to work with the console. Do not attempt to modify or extend the DC power cable that comes with the supply.

The green BACKUP LED / ACTIVE POWER SUPPLY next to the ON/OFF button on the EXODUS ODYSSEY MXR 3604L will illuminate to show backup power supply is active.

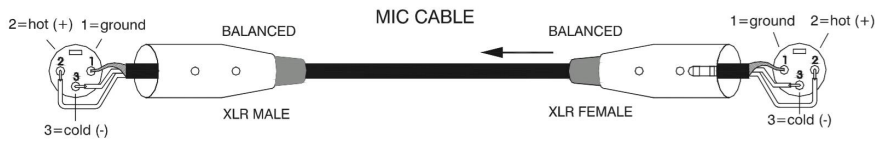
CONNECTIONS



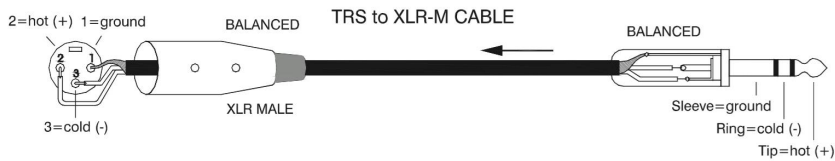
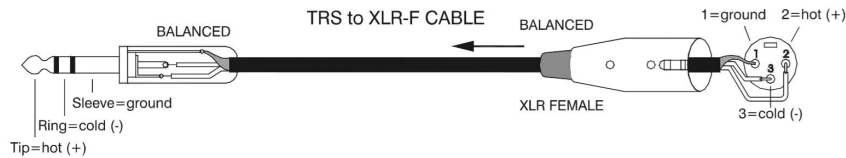
Notes: All the TRS and TS connectors illustrated here are of 1/4" (6.3mm) diameter.



TO INPUT



FROM OUTPUT



Notes: All the TRS and TS connectors illustrated here are of 1/4" (6.3mm) diameter.

This audio mixer uses professional-grade 3-pin XLR (male and female) and 1/4" TRS (3-pole) sockets. To ensure the best performance, we recommend that you use high-quality TRUTH T3AL audiophile-grade signal cables and OLYMPIAN or AUDIOPHILE series audiophile-grade connectors for your connections. Take time to check for reliable and accurate cable assembly. It is well known that most audio system problems (and sound quality degradations) are due to faulty or sub-standard interconnecting leads and connectors.

DEALING WITH GROUND LOOPS, BUZZ, AND INTERFERENCE

For optimum performance, all audio signals should be referenced to a solid, noise-free ground (earth) point, also known as “star point” or “clean earth”.

A ground loop is created when potential differences exist between grounds at different points in the system, and the signal has more than one path to ground. In most cases, ground loops do not result in audible problems. Should you experience hum or buzz caused by a ground loop, check first that each piece of equipment has its own separate path to ground. If so, operate ground lift switches on the connected equipment (i.e. DI boxes) in accordance with their respective instruction manuals.

Alternatively, disconnect the cable screen at the destination end only. This breaks the offending loop while keeping the signal shielding down the length of cable.



WARNING: For operator safety, do not remove the ground (earth) connection in the power lead of the console or connected equipment.

To avoid interference pickup, keep audio cables away from mains power units and cables, lighting cables, thyristor dimmer units, computer equipment, and mobile phones. Where this cannot be avoided, cross the cables at the right angle (90 degrees) to minimize interference.

A NOTE ON BALANCED CONNECTIONS

A differentially balanced connection has two signal wires, signal + (hot) and signal - (cold), and a shield. The signal source generates positive-going polarity down the + wire and negative polarity down the - wire. The destination input stage accepts the + signal on its non-inverting (+) input pin, but it inverts the - signal, adding it to the + signal. The result is that the wanted signal is boosted. Now examine what happens when unwanted interference (hums and noise) is induced into the cable. The noise is induced equally and with the same polarity into both wires. At the destination input, the - wire signal gets inverted and added to the + signal. Because the polarity is the same on both input wires, the noise cancels itself out at this point (destination). For this interference rejection to work, it is important that the source, the cable, and the destination input are all balanced. Balancing provides the greatest advantage with low-level signals such as those produced by microphones.

An impedance balanced output provides similar interference rejection, but not as much maximum drive capability as the differentially balanced output, typically +20dBu versus +26dBu. It does not generate a negative polarity signal at its - output. Instead, the - wire has no signal but is held at the same impedance at the + wire. This means that both wires pick up the noise equally, resulting in the advantage of noise cancellation as described above when connected to a balanced input stage.

THE CONSOLE CONNECTORS

1. MONAURAL (MONO) CHANNEL MIC IN/LINE IN

The LINE/PAD switch selects either the MIC IN XLR or LINE IN 1/4" TRS as the input source. The XLR is normalled through the 1/4" TRS jack so that it can be used for microphone or line-level signals when nothing is plugged into the jack socket. The channel is fitted with C.R.I.S.T.A.L.® Audiophile PreAmps for purest sound amplification, with massive headroom of +34dBu maximum input capability using XLR or TRS jack. Both inputs are balanced and can be wired to work with unbalanced signals when required. The MIC IN XLR can be switched to provide +48V DC PHANTOM for condenser microphones and other equipment requiring phantom power.



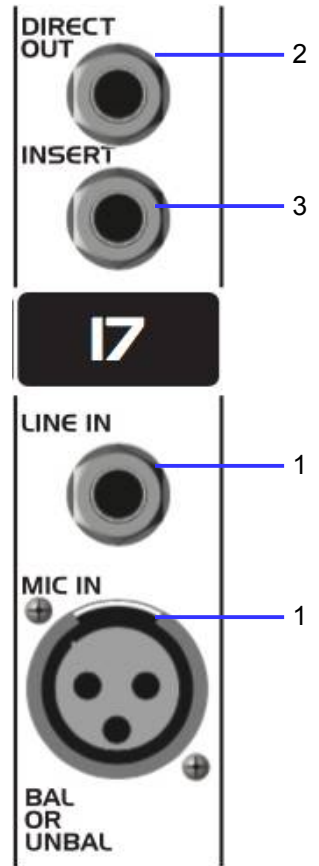
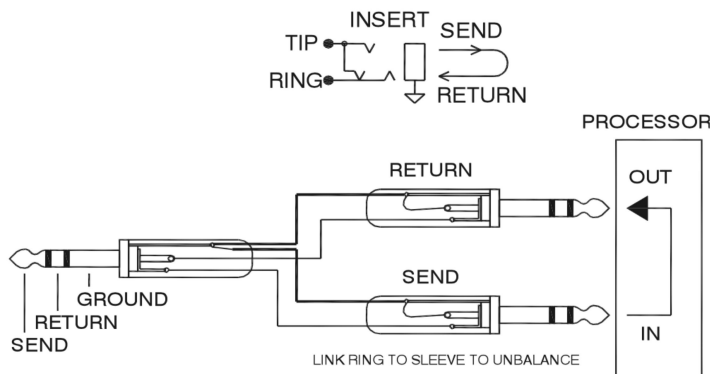
CAUTIONS: Do not connect unbalanced sources or cables to the XLR input when +48V PHANTOM power is selected. To avoid loud thumps, always turn the channel off by pressing MUTE when switching the +48V PHANTOM on or off, and when plugging or unplugging cables.

2. DIRECT OUT

Each mono channel DIRECT OUT is available on an impedance balanced 1/4" TRS jack, providing a line-level signal operating at 0dBu (output of C.R.I.S.T.A.L.® Audiophile PreAmps). A great feature for recording individual tracks into a multi-track recording system. The source is pre-fade by default. You can opt for post-fade by pressing the DIR POST FADER button on the channel strip. You can choose to have your DIRECT OUT source to be pre-EQ or post-EQ by using the AUX/DIR POST EQ function button on the channel strip too (pressing in the AUX/DIR POST EQ button will post-EQ your DIRECT OUT and AUX source on that channel).

3. INSERT

A single 3-pole TRS jack carries the unbalanced insert signal for each mono channel and main mix (MAIN L/R) output. The channel inserts are post-HPF, pre-EQ, and operate at 0dBu. The group (INS GRP 1-4) and LR mix (INS LEFT, INS RIGHT) inserts are pre-fader and operate at -2dBu. Use these to patch in line-level signal processing equipment such as compressors, outboard EQ, delay units and so on. The wiring of a suitable cable is shown in the diagram below.



4. STEREO CHANNEL MIC IN

Each stereo channel features a mono microphone XLR input (MIC IN) and two independent stereo line inputs (LEFT/MONO RIGHT). The balanced MIC IN input accepts a maximum of +14dBu and can be switched to provide +48V DC phantom power.

5. STEREO CHANNEL MIC OUT

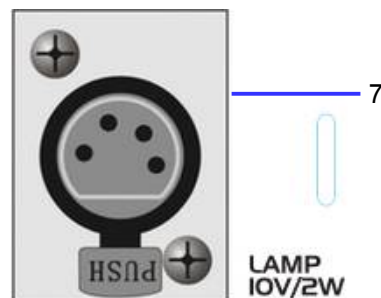
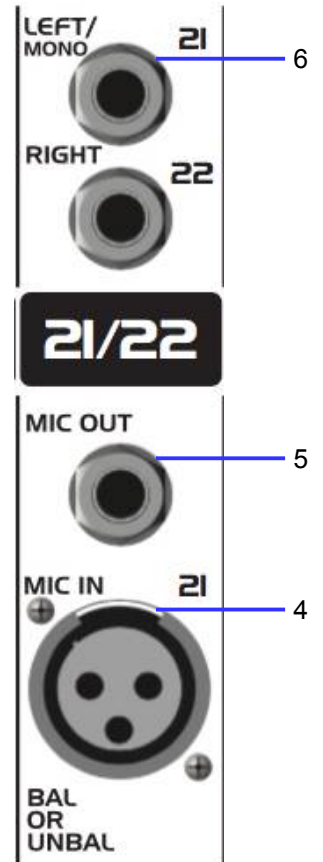
The output of the microphone preamp (C.R.I.S.T.A.L.® Audiophile PreAmps) is available on the MIC OUT (¼" TRS) jack socket. This is impedance balanced and operates at a nominal 0dBu line level. Plugging into this socket breaks the signal into the associated stereo channel. This means that the microphone preamp can be used independently of the channel, for example, to create an ambient microphone feed for recording, or as a preamp for the RTA measurement system.

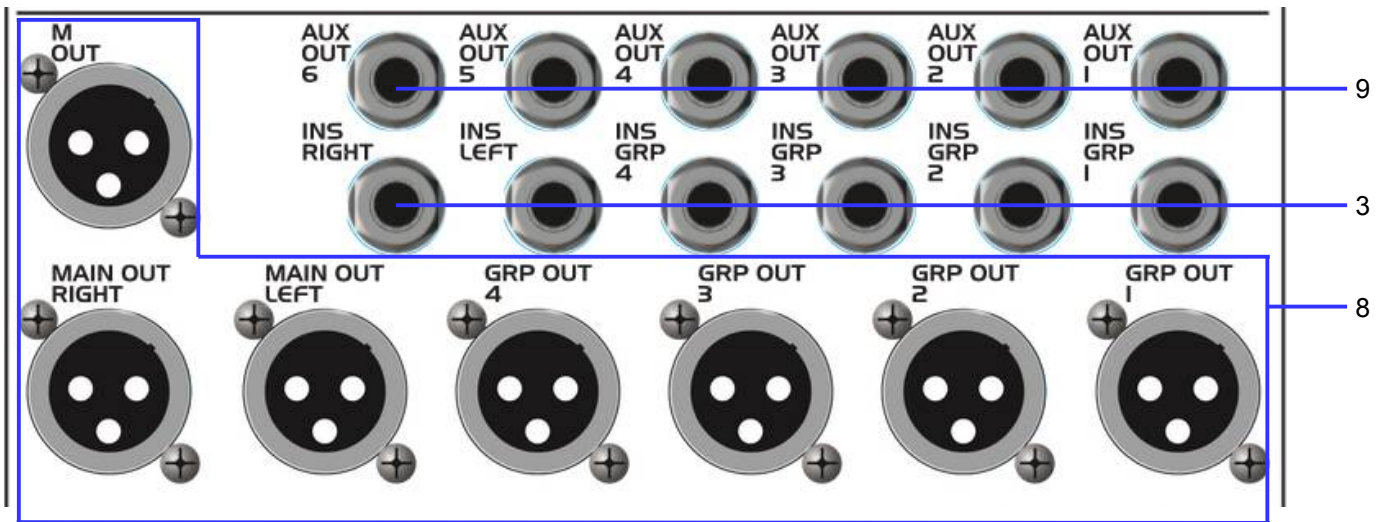
6. STEREO CHANNEL LINE IN

The LEFT/MONO input is normalled through the RIGHT socket to accept mono signals on a single jack.

7. LAMP

The 36-channel EXODUS ODYSSEY MXR 3604L has five, while the 52-channel EXODUS ODYSSEY MXR 5204L has seven 4-pin XLR sockets to plug in standard 10V/2W gooseneck lamps to illuminate the operating surface when working in a dark environment. Only use lamps intended for this purpose.





8. GROUP, MAIN L/R, M OUTPUTS

The main console mix outputs are on electronically balanced XLR. These produce professional standard +4dBu when meters read “0”, and provides up to a maximum +32dBu. The MAIN LEFT and RIGHT outputs typically feed the house system in a live mixing or a 2-track recorder for stereo summing in studio. The L and R summed mono source is fed at the M output for various audio applications.

9. AUX (1-6) OUTPUTS

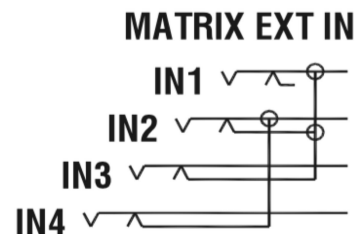
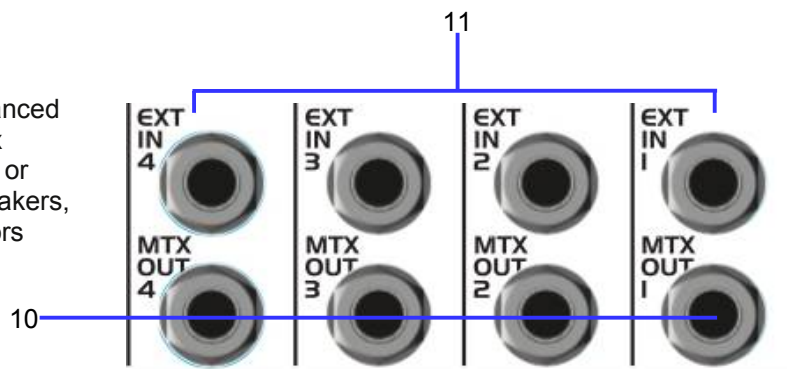
Each aux send is available on an impedance balanced ¼” TRS jack operating at +4dBu line level. The aux sends are typically used to feed monitors, effects devices (i.e. reverb and delay), and for special mix requirements.

10. MATRIX (1-4) OUTPUTS

Each matrix output is available on an impedance balanced ¼” TRS jack operating at +4dBu line level. The matrix outputs, MTX (1-4) OUT, are typically used for stereo or mono recording or broadcast feeds, delay and fill speakers, zone feeds, additional monitors such as in-ear monitors (IEM), hearing assist loop and so on.

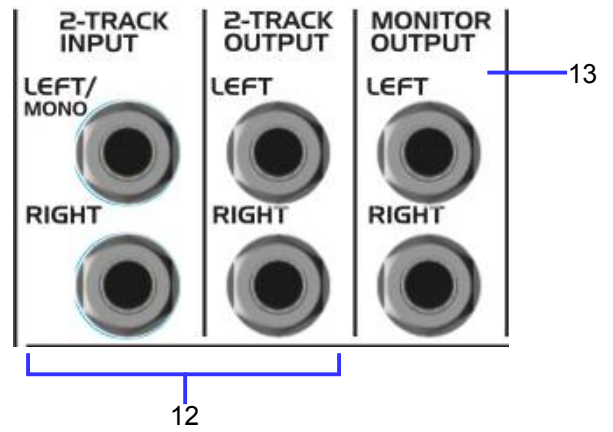
11. MATRIX EXTERNAL IN (1-4)

Each matrix has a balanced/unbalanced 0dBu line-level ¼” TRS jack input. An external signal such as ambiance mix, additional or sub mixer, remote source, reference tone and so on may be mixed into each matrix. The inputs are normalised as shown in the diagram to the right. This means that you can plug in just one jack (EXT IN 1) as a common source to all matrix, two jacks (EXT IN 1-2) as a common stereo source to matrix pairs, or four independent sources. This is ideal for adding mono or stereo ambiance to recordings or in-ear monitors (IEM) fed from the matrix.



12. 2-TRACK INPUT/OUTPUT

Unbalanced 1/4" TRS jack outputs and inputs connect to popular recording and playback devices such as CD player/recorder and or computer audio interface. The nominal line level is -2dBu. The 2-TRACK OUTPUT always follows the post-fader MAIN L/R mix regardless of mode switch configuration. The 2-TRACK INPUT can be used for monitoring a mono or stereo recording, or as a simple input for playback of walk-in and background music. The LEFT/MONO input normals through the RIGHT socket for plugging in a mono source on a single jack.



13. MONITOR OUTPUT

These impedance balanced line-level 1/4" TRS jack outputs follow the post-fader MAIN L/R level monitor signal. Separate sockets are provided for the LEFT and RIGHT signals. Use these to feed local reference monitor speaker systems.

MONAURAL INPUT CHANNEL

14. +48V PHANTOM POWER

Switches +48V DC to the channel input XLR for powering condenser microphones or DI boxes that need phantom power. When pressed, the red LED indicator lights up, indicating the channel +48V is active.



CAUTIONS: Do not connect unbalanced sources or cables to the XLR input when +48V PHANTOM power is selected. To avoid loud thumps, always turn the channel off by pressing MUTE when switching the +48V PHANTOM on or off, and when plugging or unplugging microphones.

15. /75Hz HIGH PASS FILTER (HPF) – (15.)

Switches in the channel high pass filter. This attenuates frequencies below 75Hz by 12dB per octave. Engage the HPF to reduce low-frequency noise such as microphone popping, stage noise, and microphone handling rumble. Also known as “low cut”.

16. Ø POLARITY

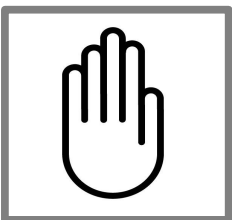
Reverses the polarity (+ and - connections) of the input source. Useful when using the “above/below” microphone technique, for example when miking a snare drum with two microphones, or for correcting microphone placement and cable wiring errors.

17. LINE/PAD

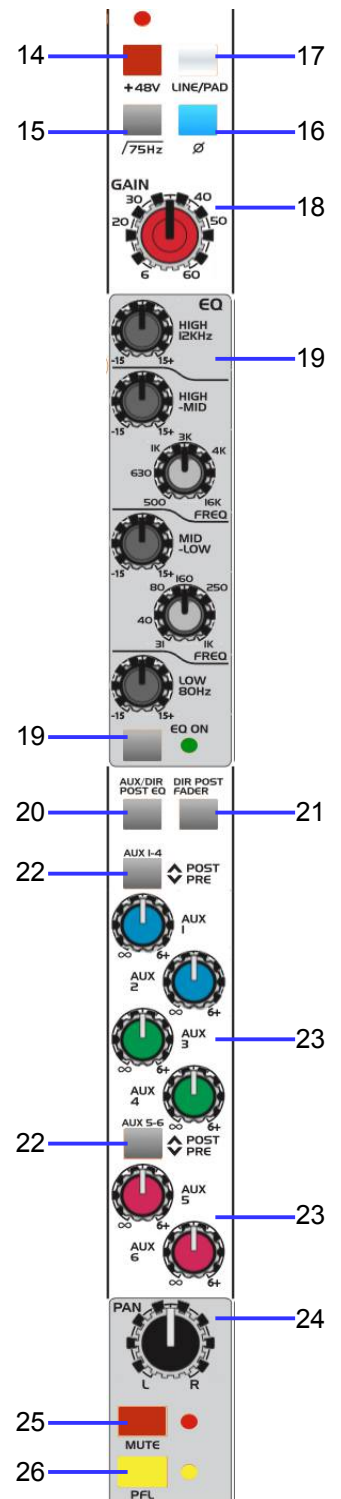
Press this switch to select the channel 1/4” TRS jack LINE IN. Release the switch to select the XLR MIC IN. The XLR normals through the 1/4” TRS socket. With nothing plugged into LINE IN, the switch, therefore, becomes a PAD for XLR IN. It attenuates the input signal by 20dB for connection to a high level microphone or line sources.

18. GAIN

Adjusts the input sensitivity of microphone preamp (C.R.I.S.T.A.L.® Audiophile PreAmps) to match the connected source to the internal 0dBu operating level of the channel. Provides a variable 54dB range from +6dB to +60dB microphone (MIC IN) gain, or -14dB to +40dB (LINE/PAD pressed). The gain should be set so that the meters average “0” with loudest moment lighting “+6”. Reduce gain if the red peak (PK!) indicator lights.



NOTES: Setting channel levels. Use PFL to set the GAIN controls for the correct signal level through each channel. The MAIN L/R VU meters provide a high-resolution display of the channel signal level. Use the faders to balance each signal in the mix. To ensure optimum gain structure, we do not recommend the practice of setting faders to “0” and mixing using GAIN controls.



19. EQ

A responsive 4-band semi-parametric EQ (equalizer) provides independent control of four frequency bands. Use EQ ON to compare the sound with the equalizer switched in or out of the circuit.

HF (HIGH) and LF (LOW) are shelving filters that affect high frequencies above 12kHz, and low frequencies below 80Hz respectively. HM (HIGH-MID) and LM (MID-LOW) are bell-shaped peak/dip filters that affect frequencies around a center point which can be swept from 500Hz to 16kHz, and 31Hz to 1kHz respectively. These have a width (Q) of 1.8 which provides effective control for both creative and corrective equalization. The EQ curves shown opposite display the signal level response at maximum boost and cut as the frequency varies from low (20Hz) to high (20kHz).

All bands can be boosted or cut by up to 15dB and have a center detent 0dB position. The overlapping frequency ranges let you deal with challenging source problems easily using a combination of bands.

Check that you are using the best microphone type and placement before using the EQ. Start with the EQ set flat (neutral) and apply only as much boost or cut as is really needed.

20. AUX/DIR POST EQ

You can choose to have your DIRECT OUT and AUX source to be pre-EQ or post-EQ by using the AUX/DIR POST EQ function button on the channel strip. Pressing in the AUX/DIR POST EQ button will post-EQ your DIRECT OUT and AUX source on that channel.

21. DIR POST FADER

You can choose to have your DIRECT OUT source to be pre-fade or post-fade by using the DIR POST FADER function button on the channel strip. Pressing in the DIR POST FADER button will post-fade your DIRECT OUT source on that channel.

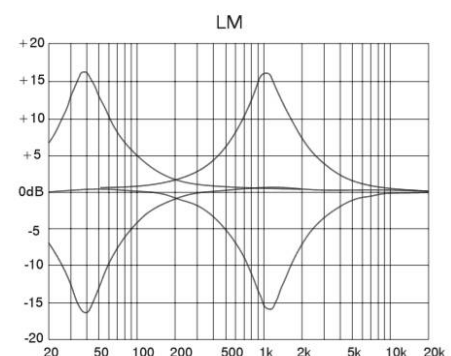
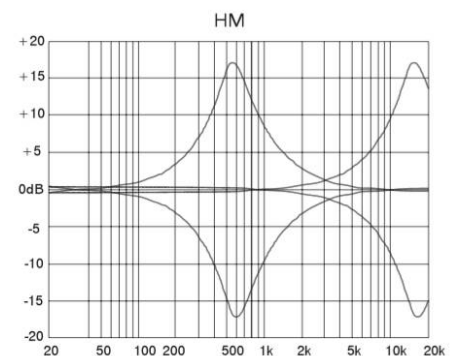
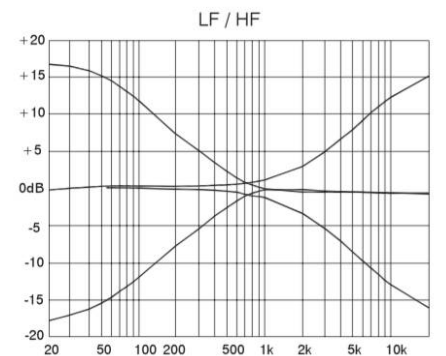
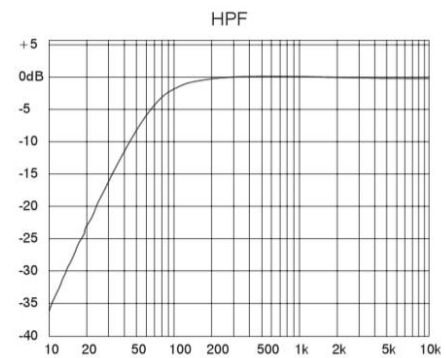
22. POST/PRE

When pressed, the pre-fade channel signal is sent to the associated auxes. When released, the post-fade signal is sent. AUX (1-4) and AUX (5-6), are grouped for pre/post switching.

23. AUX SENDS

These rotary controls adjust how much channel signal is mixed to the aux outputs. Each of the six auxes has its own control. The control adjusts from fully off ($-\infty$) to a +6dB boost. Unity gain (0dB) is marked at 3 o'clock position. AUX (1-4), AUX (5-6) are pre/post switchable.

Pre-fade (also known as “pre-fader”) aux sends signals are not affected by channel fader movements. These are often used to feed stage monitors. In most cases, users also prefer that the monitor sends are not affected by inserted processors or the channel EQ. Post-fade (also known as “post-fader”) aux sends follow the channel fader movements. They are typically used to send a proportion of the channel signal to an effects device such as reverb and delay. Note that post-fade sends may be preferred when the console is configured in monitor mode so that the faders become “masters” for all monitor mixes. Pre-fade or post-fade aux sends may also be used for applications such as recording, zone feeds, sub feeds, clean feeds, and aux



-fed subs or center speaker.

24. PAN

Positions the channel signal between L/R in the stereo mix, and odd/even if routed to the groups. The center 12 o'clock position (mono image) is detented for quick resetting.

25. MUTE

When pressed, the channel signal is turned off. This affects the feed to the MAIN LEFT (L), RIGHT (R), M mix, pre, and post-fade aux sends and direct output, but does not affect the insert send. The red LED indicator lights when the channel is muted. Always mute the channel when switching +48V phantom power, or plugging in the cables and sources.

26. PFL

Press PFL to listen to the pre-fade channel signal in the headphones and local monitors (MONITOR OUTPUT) without affecting the main outputs. The console PFL/AFL active yellow LED indicator lights and the LEFT RIGHT VU meters display the channel signal. Selecting more than one PFL at the same time mixes those signals together in the monitor.

27. CHANNEL METER

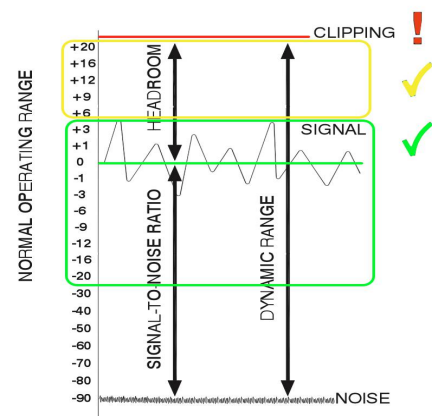
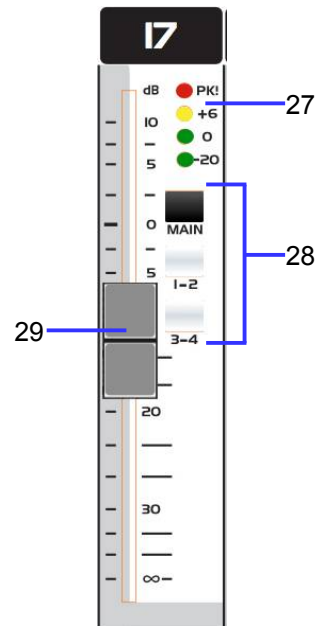
A 4-LED channel meter displays the pre-fader signal level. "-20" green LED lights when a signal level of -20dBu is detected. "0" green LED lights when the nominal 0dBu level is reached, and "+6" yellow LED lights at +6dBu. "PK!" red LED lights when the channel pre-fade signal is within 6dB of clipping (level detected at +24dBu onwards). This gives you enough warning to reduce GAIN before you hear signal distortion.

28. ROUTING

Press MAIN to route the channel signal to of MAIN L+R mix. Press 1-2 and 3-4 to route channel signal to GROUP (1-2) and GROUP (3-4) respectively. Use PAN to position the signal between L/R or the odd /even group pairs. To route to a single group, set PAN fully to one side. You can route to MAIN and all groups simultaneously by pressing in all switches. Check that you have set these switches correctly before you start mixing.

29. FADER

High quality 100mm smooth travel fader with protective dust cover controls the channel level feeding the main mix, groups and post-fade aux sends. It also affects the direct output if this has been set to post-fade. The fader provides a +10dB maximum boost above its normal unity gain 0dB position.



STEREO INPUT CHANNEL

Each stereo channel features a mono microphone preamp as well as a stereo line input. These sources can be mixed together into the channel or split using the microphone breakpoint STEREO CHANNEL MIC OUT (5), so providing unique flexibility. For example, you could patch the STEREO CHANNEL MIC IN (4) as an independent preamp for an ambiance microphone feeding a recording, or for a system calibration microphone, while the STEREO CHANNEL LINE IN (6) returns an external effects processor to the mix. Two stereo channels could be linked so that the microphone preamps cross patch to provide one stereo mic and one stereo line channel.

30. +48V PHANTOM POWER

Switches +48V DC to the channel input XLR for powering condenser microphones or DI boxes that need phantom power. When pressed, the red LED indicator lights up, indicating the channel +48V is active.



CAUTIONS: Do not connect unbalanced sources or cables to the XLR input when +48V PHANTOM power is selected. To avoid loud thumps, always turn the channel off by pressing MUTE when switching the +48V PHANTOM on or off, and when plugging or unplugging microphones.

31. Ø POLARITY

Reverses the polarity (+ and - connections) of the input source. Useful when using the “above/below” microphone technique, for example when miking a snare drum with two microphones, or for correcting microphone placement and cable wiring errors.

32. MIC GAIN

Adjusts the input sensitivity of microphone preamp (C.R.I.S.T.A.L.® Audiophile PreAmps) to match the connected source to the internal 0dBu operating level of the channel. Provides a variable 54dB range from +6dB to +60dB microphone (MIC IN) gain. The gain should be set so that the meters average “0” with loudest moment lighting “+6”. Reduce gain if the red peak (PK!) indicator lights.

33. LINE GAIN

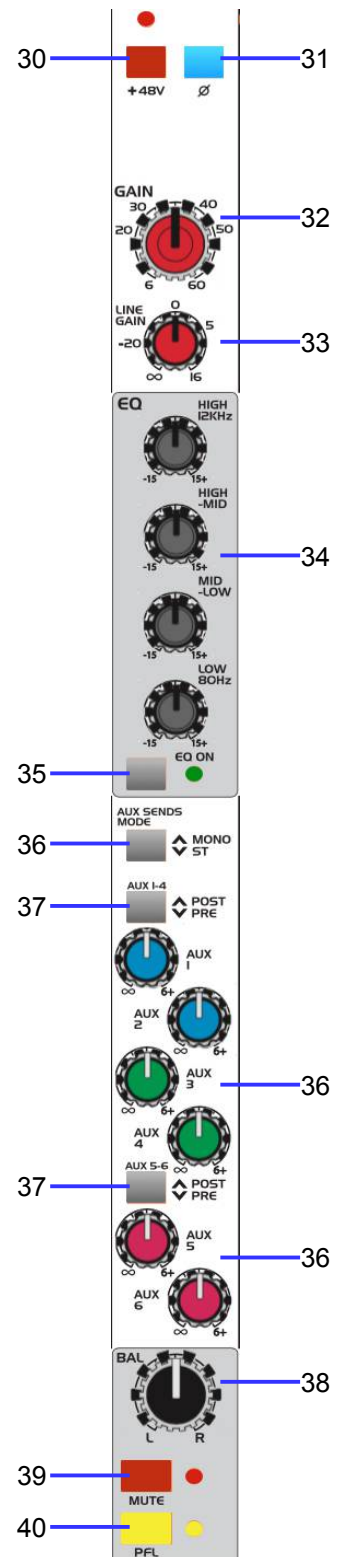
Level control adjusts from fully off (-∞) to +16dB gain. The L input signal is normalised through the R input socket so that a mono source may be plugged in to feed both the left and right sides of the stereo channel. 12 o'clock position is unity gain (0dB).

34. EQ

Similar to the mono channel, but the two peak/dip mid bands are fixed at 250Hz and 2.5kHz centre frequencies.

35. EQ ON

Use EQ ON to compare the sound with the equalizer switched in or out of the circuit. The green LED indicator lights up when the channel EQ circuit is active.



36. AUX SENDS/AUX SENDS MODE

These AUX SENDS work as described for the mono channel, but the L and R sides of the stereo signal sum together to feed each aux in mono. This can be changed using AUX SENDS MODE button (pressed in), so that L feeds the odd-numbered auxes (AUX 1, AUX 3, AUX 5) and R feeds the even (AUX 2, AUX 4, AUX 6).

37. POST/PRE

When pressed, the pre-fade channel signal is sent to the associated auxes. When released, the post-fade signal is sent. AUX (1-4) and AUX (5-6), are grouped for pre/post switching.

38. BAL

Balances the level of the L signal against the R signal to compensate for differences in the source, or to position the signal within the stereo image.

39. MUTE

When pressed, all the channel pre and post-fade signals are turned off except the MIC OUT and any stereo routed directly to MAIN L+R.

40. PFL

Press PFL to listen to the pre-fade channel signal in the headphones and local monitors (MONITOR OUTPUT) without affecting the main outputs. The console PFL/AFL active yellow LED indicator lights and the LEFT RIGHT VU meters display the channel signal. Selecting more than one PFL at the same time mixes those signals together in the monitor.

41. CHANNEL METER

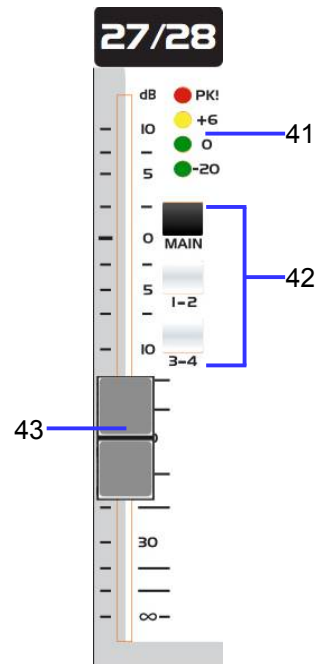
A 4-LED channel meter displays the pre-fader signal level. "-20" green LED lights when a signal level of -20dBu is detected. "0" green LED lights when the nominal 0dBu level is reached, and "+6" yellow LED lights at +6dBu. "PK!" red LED lights when the channel pre-fade signal is within 6dB of clipping (level detected at +24dBu onwards). This gives you enough warning to reduce GAIN before you hear signal distortion. For the stereo channel, the left and right signals are summed to display in mono.

42. ROUTING

As the mono channel, but routes the left signal to MAIN L and odd groups, right signal to MAIN R and even groups, and sums MAIN L and MAIN R to feed the M mix in mono.

43. FADER

High quality 100mm smooth travel VCA fader with protective dust cover controls the channel level feeding the main mix, groups and post-fade aux sends. It also affects the direct output if this has been set to post-fade. The fader provides a +10dB maximum boost above its normal unity gain 0dB position.



GROUP / AUX MASTERS

44. AUX MASTERS

Each aux mix has a master level control that adjusts the output level to match external equipment, or trims the monitor, effect or other send without affecting the mix balance. Up to +10dB boost is available above the normal 0dB position. Note that this becomes the group master in monitor mode.

45. AUX MASTER MUTE

When pressed the aux signal is turned off. The red LED indicator lights when the channel is muted.

46. AUX MASTER AFL

Press AFL to listen to the post-level aux mix in the headphones and local monitor without affecting the main outputs. The console monitor meters (MAIN L+R VU) are interrupted with the aux (group) signal. The yellow LED indicator lights to show that AFL has been selected on the master. Use AFL to check the signal being sent to the monitors, effects or other destination. AFL is pre-mute so that you can check the signal before sending it to its destination.

47. AUX MASTER FADER

High quality 60mm smooth travel fader with protective dust cover. The fader provides a +10dB maximum boost above its normal unity gain 0dB position.

48. GROUP MASTER METER

Each group mix has a master level control that adjusts the output level to match external equipment, or trims the monitor, effect or other send without affecting the mix balance. Up to +10dB boost is available above the normal 0dB position. Note that this becomes the group master in monitor mode.

49. GROUP MASTER MUTE

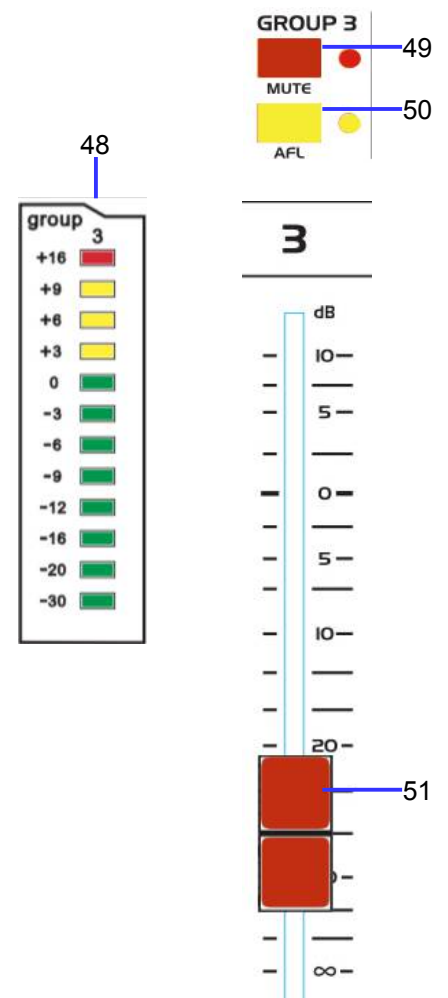
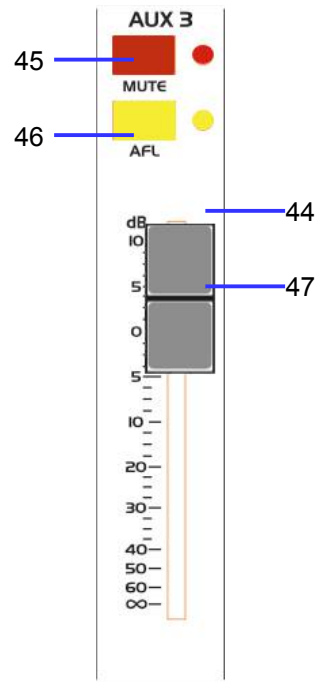
When pressed the group signal is turned off. The red LED indicator lights when the channel is muted.

50. GROUP MASTER AFL

Press AFL to listen to the post-fade, pre-mute group mix in the headphones and local monitors without affecting the main outputs. Note that this becomes the aux mix in monitor mode. The console monitor meters are interrupted with the group (aux) signal. The yellow LED indicator lights to show that AFL has been selected on the master.

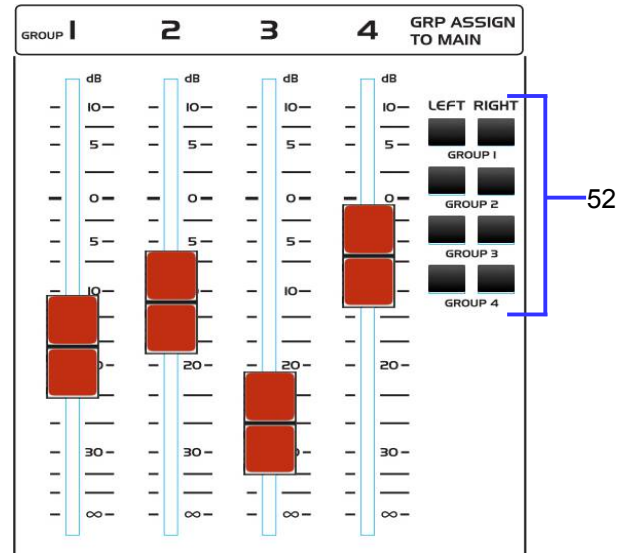
51. GROUP MASTER FADER

High quality 100mm smooth travel fader with protective dust cover. The fader provides a +10dB maximum boost above its normal unity gain 0dB position.



52. GROUPS ASSIGN TO MAIN

One popular use of the subgroups is to use them as master faders for a group of channels on their way to the main mix MAIN L+R. Let us say if you have a drum kit hogging up seven channels and you are going to want to fade them out at a different rate than other channels. You do not want to try that with seven hands or seven fingers, so just un-assign these channels from the main mix (channel MAIN button not pressed), reassign them to subgroups 1-2 (channel 1-2 button pressed), engage the GRP ASSIGN TO MAIN – left on GROUP 1, right on GROUP 2. Now you can ride the entire stereo drum mix with GROUP 1 and GROUP 2 master faders.



L-R-M MASTERS

53. MAIN LR MASTER FADERS

Separate 100mm smooth travel fader with protective dust cover. The fader provides a +10dB maximum boost above its normal unity gain 0dB position.

54. M MASTER FADER

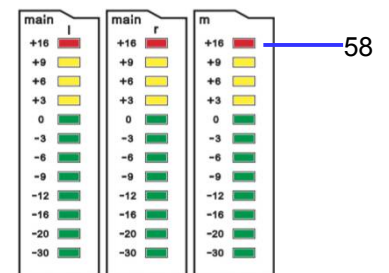
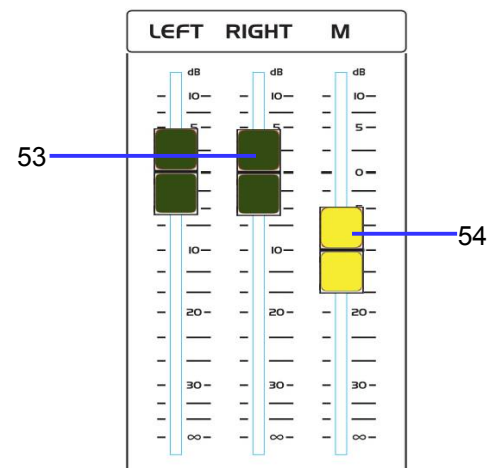
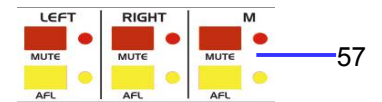
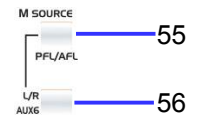
A 100mm smooth travel fader with protective dust cover. The fader provides a +10dB maximum boost above its normal unity gain 0dB position.

The M output adds a true touch of genius to the versatility of the mixer. The source is selected using the two switches on the **M SOURCE** segment.

FOH MODE – With both switches **PFL/AFL (55.)** and **L/R AUX6 (56.)** at the **M SOURCE** segment in the up position, the post-fade MAIN L and R mix are summed together to provide a mono source at the M output. Use this to feed a mono audio system, fill, delay or zone speakers, or even a mono broadcast or recording send.

MONITOR MODE – Press the upper switch **PFL/AFL (55.)** to create an engineer's monitor listen to wedge feed from the PFL/AFL mix. Note that in this mode, the M AFL switch (**57.**) is disabled. It is common to use a wedge speaker of the same type used on stage to listen to and check the various monitor mixes being sent to the performers.

AUX-FED-SUBS MODE – Press only the lower switch **L/R AUX6 (56.)** to configure M as the master for AUX 6. This innovative feature is ideal when driving your sub-bass speakers with their own mix fed from an aux, a technique becoming popular in FOH mixing. This mode provides all the main sound system masters (MAIN L/R, subwoofer) with faders, meters, AFL, and MUTE.



Using the faders, you can adjust the levels of the main sound system without losing the balance between the tops and the subs. The signal is not affected by the AUX 6 rotary master (44.). However, the rotary output AUX 6 OUT can still provide another sub feed with its own independent master control (44.).

Route all sources to LR the usual way (pressed in the MAIN button on the respective channels) to feed the main “top” speakers. In addition, route sources with low-frequency content such as kick drum, bass, keyboards, sound effects to the subwoofers by turning up the AUX 6 send rotary on those channels. Make sure all channels AUX (5-6) sends have been set for post-fader (37.) operation. Use two crossovers, one for the stereo LR high/mid frequencies, the other for the sub feed. Set the system up so that the correct balance is achieved between the tops and subs is achieved when each of the channel's AUX 6 send is at its unity gain “0” (3 o'clock) position and the LEFT (L), RIGHT (R), and M faders in line with each other.

AUX-FED-CENTER MODE – The same principle as above, but AUX 6 is used to feed a center mix such as a fill or C in an LCR system. To route to C only, turn up channel AUX 6 send to 3 o'clock “0” unity gain position, and turn off its assignment switch to MAIN L/R.

58. L-R-M MASTER METERS

Each of the L-R-M masters has a highly precise 12-LED VU meter to its own.

7x4 MATRIX

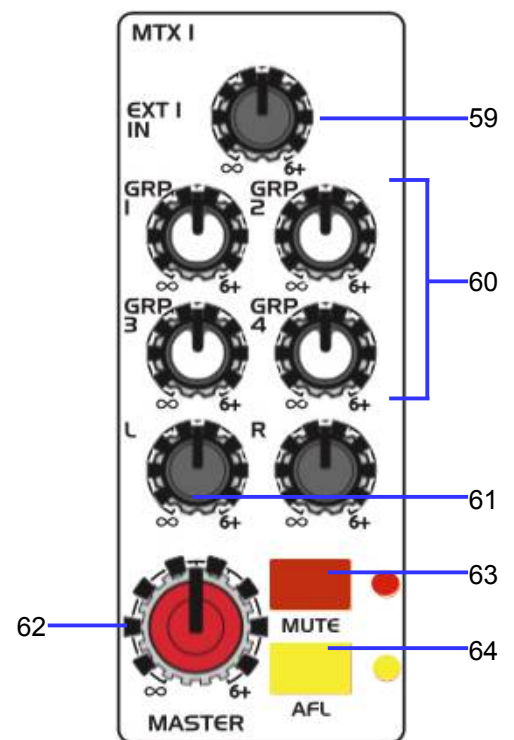
The matrix adds to the powerful multi-tasking capability of the EXODUS ODYSSEY mixing consoles. It provides a set of four additional console outputs. It is a “mixer within a mixer” creating its output from any combination of the groups, main LR mix, and external inputs. It can be used to provide duplicate main outputs or to create new mixes from these outputs. The matrix controls are positioned conveniently away from the live performance controls to avoid accidental operation.

Use the matrix to create special mixes for delay fill and zone speakers, recording and broadcast feed, IEM (in-ear monitors), hearing assist loops and so on. Mono and stereo feeds can be created. For example, mix L and R to create a mono sum output to feed an additional zone, or use two matrix outputs with L fed to one, R to the other to create an independent stereo main output. Mix in an external source such as an ambiance microphone preamp to add atmosphere and audience reaction to a recording or monitor. Compensate for an acoustically loud backline by boosting selected groups in a live recording.

59. EXT IN

Mixes in an external nominal 0dBu line-level source. The rotary provides a +6dB boost. Note that EXT IN jack sockets are normalled (linked) in a way that lets you plug in a mono or stereo common source to feed all the matrices or an independent source to each (11.). Plug into EXT 1 only to feed one source to all four matrix EXT IN controls. Plug L into EXT 1 and R into EXT 2 only to feed a stereo source to matrix MTX (1-2) and MTX (3-4).

Some examples include adding ambiance sources to recordings and in-ear monitoring, adding a direct output or an aux mix to quickly create a monitor from the main mix plus selected channel(s), and linking in another console to feed the



same sound system in a concert or other dual console situation.

60. GRP (1-4)

Mixes in the post-fader, post-mute group mix. The rotary provides a +6dB boost.

61. L/R

Mixes in the post-fader, post-mute main LR mix. The rotary provides a +6dB boost. Turn up both L and R to create a mono sum from the stereo LR mix. Turn up L in one matrix, R in another to create a stereo output from two matrices.

62. MASTER LEVEL

The master level control for the matrix. It provides a +6dB boost above the normal "0" setting.

63. MUTE

When pressed, the matrix output is turned off. The red LED indicator lights when the matrix is muted. Mute does not affect matrix AFL monitoring.

64. AFL

Press AFL to listen to the post-level matrix mix in the headphones or local monitors without affecting the main outputs. The console monitor meters are interrupted with the matrix signal. The yellow LED indicator lights to show that AFL has been selected on that matrix master. Note that MUTE does not affect the AFL function. This means that you can check the matrix signal while its output is muted.

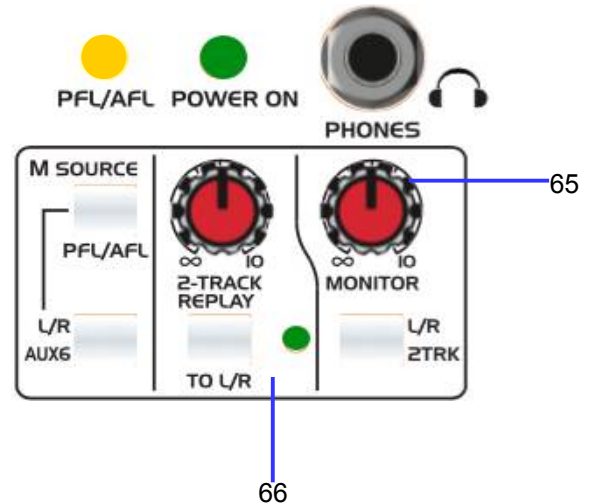
MONITOR, TALKBACK, SIGNAL GENERATOR

65. CONSOLE MONITOR

Comprehensive engineer's headphones and local monitoring is provided. Select the source from the monitor select switch bank. Pressing PFL or AFL elsewhere on the console automatically overrides the current monitor source with the signal from the channel or master selection. The orange PFL/AFL master LED indicator illuminates and the console meters display the active signal.

The console monitor meters (MAIN LR VU meters) provide 12-LED indicators to accurately display the signal level of the selected monitor source. Reduce the gain or level if the red "+16" peak indicator lights. For optimum performance, the signals should be adjusted to read an average "0" with loudest peaks reaching around "+6".

Use the MONITOR level control to adjust the level in the headphones and local speaker monitors. We recommend you use closed-ear headphones in the range 30Ω to 600Ω designed for sound monitoring. GECKO® MAESTRO HRM 1881PRO C.R.I.S.T.A.L.® Audiophile reference headphones are a popular choice.



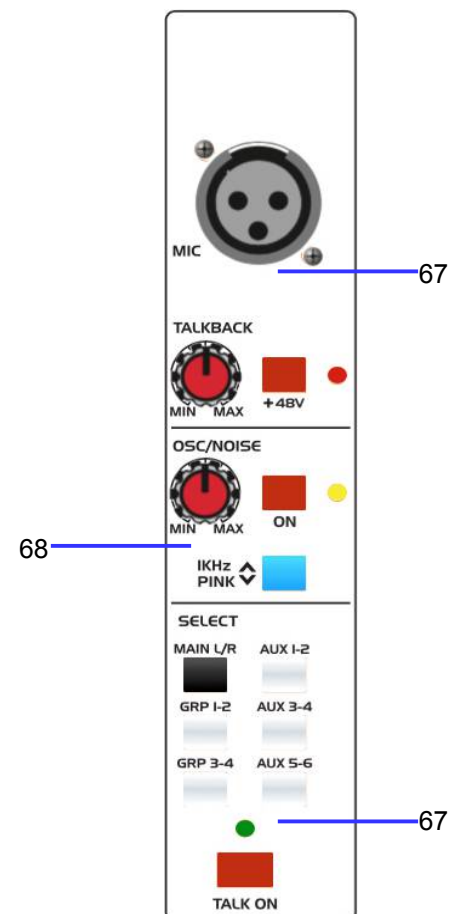
66. 2-TRACK REPLAY

A stereo source such as a recording playback or walk-in CD can be routed directly to the main LR mix. Adjust its level from fully off to +10dB gain using the rotary control. You can check the source on the meters and in the headphones before bringing it into the mix by selecting the TO L/R switch (green LED lights when the switch is engaged).

67. TALKBACK

Individually assignable talkback is available to all the main outputs. Plug in a suitable microphone into the XLR female chassis connector. A good quality dynamic or condenser vocal microphone is recommended. A switchable +48V DC phantom power is available on board for your talkback use.

First, select the source you wish to talk to. You can select the auxes in logical groups, useful for communicating with the performers on stage or in various recording rooms in the studios. You can also talk to LR (pressed in MAIN L/R button), typically used for announcements to the audience. Once selected, press and hold TALK ON (green LED illuminates) to route the talkback microphone signal to the required destination. Adjust the talkback level using the TALKBACK trim control below the talkback microphone XLR. Pressing TALK ON automatically dims the level of the playback source and signal generator if it is turned on.

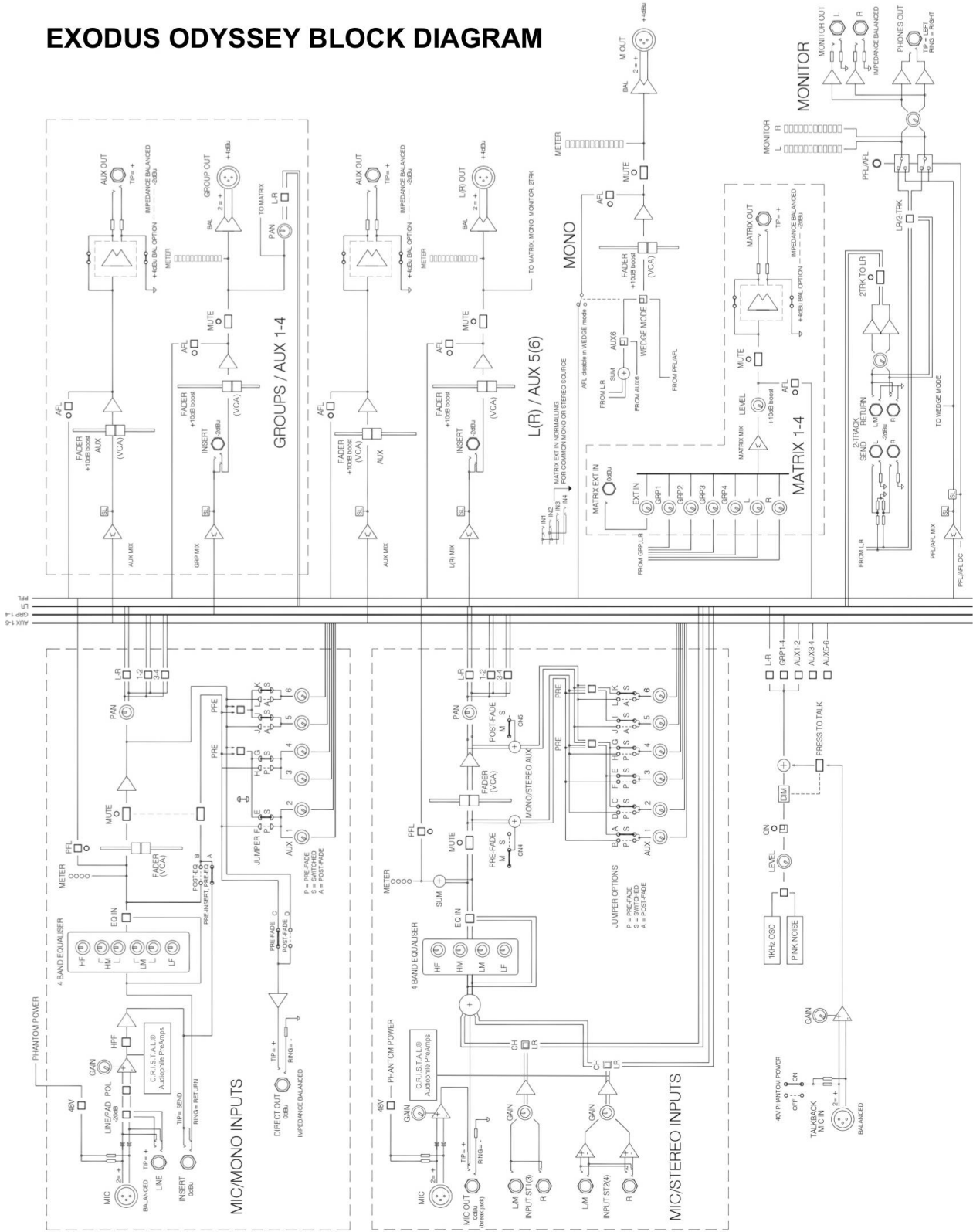


68. SIGNAL GENERATOR/PINK NOISE

Press to select either pink noise (1KHz/PINK switch pressed in) or a 1kHz sine wave tone (1KHz/PINK switch up position) as the test source. Start with the OSC/NOISE trim control fully turned down. The generator ON switch is pressed to activate operation. The yellow indicator LED lights to warn that the generator is enabled.

The generator signal is routed to any source selected on the switch bank above the TALK ON switch. Use the signal to test the loudspeaker system and line up connected equipment. Pink noise is useful for quickly testing the full-range frequency operation and phasing/polarity of loudspeakers. The 1kHz tone is best suited to lining up equipment with its steady reading on the meters.

EXODUS ODYSSEY BLOCK DIAGRAM



SPECIFICATION

EXODUS ODYSSEY MXR 3604L

Pre-Amplifiers:

GECKO® C.R.I.S.T.A.L.® Audiophile PreAmps

Frequency Response:

10Hz ~ 50kHz, +/- 0.5dB

Connections

Channels Inputs:

36 Channels

28 Monaural:

MIC XLR Female: Balanced, sensitivity -60dBu ~ +34dBu

LINE ¼" TRS: Balanced, sensitivity -40dBu ~ +34dBu

PAD Out (MIC): 2kΩ

PAD In (MIC or LINE): >10kΩ, -20dB attenuation)

Max. Input Level: +40dBu

XLR Phantom Power: +48VDC, ON/OFF

4 Stereo:

8 LINE ¼" TRS: Balanced/Unbalanced, sensitivity -16dBu ~ +20dBu

4 MIC XLR Female: Balanced, sensitivity -60dBu ~ +34dBu

Talkback Mic:

XLR Female: Balanced, sensitivity -50dBu ~ -10dBu

Phantom Power: +48VDC, internal jumper

2-Track Inputs:

¼" TRS: Balanced/Unbalanced, >4kΩ, -2dBu

2-Track Outputs:

¼" TRS: Balanced/Unbalanced, <80Ω, -2dBu

Inserts:

Channel: ¼" TRS, 0dBu

Output: ¼" TRS, -2dBu

L, R, M Outputs:

XLR Male: Balanced, <80Ω, +4dBu, +32dBu max.

Group (1-4) Outputs:

XLR Male: Balanced, <80Ω, +4dBu, +32dBu max.

Aux (1-6) Outputs:

¼" TRS: Electronically Balanced, <80Ω, +4dBu, +32dBu max.

Direct Outputs (Monaural Channels):

¼" TRS: Electronically Balanced, <80Ω, 0dBu, +32dBu max.

Mic Outputs (Stereo Channels):

¼" TRS: Electronically Balanced, <80Ω, 0dBu, +32dBu max.

Matrix (1-4) Outputs:

¼" TRS: Electronically Balanced, <80Ω, +4dBu, +32dBu max.

External (1-4) Inputs:

¼" TRS: Balanced/Unbalanced, >4kΩ, -2dBu

Headphones:

¼" TRS: 30Ω ~ 600Ω impedance headphones recommended

Monitor Outputs:

¼" TRS: Balanced, <80Ω, -2dBu, +26dBu max.

Lamps:

5 x 4-Pin XLR: 10V / 2W max.

Faders:

100mm Dust-Protected VCA: Channel; Master (L, R, M); Group Master (1-4)

60mm Dust-Protected VCA: Aux Master (1-6)

Performance

Internal Headroom:

Channel: +20dB

Mix: +22dB

Meters:

LED: 3 color LED, quasi peak response

Channel: 4 segment: -12dB, 0dB, +6dB, +16dB; 6dB before clipping

Master (L, R, M): 12 segment: -30dB ~ +16dB

Group Master: 12 segment: -30dB ~ +16dB

Common Mode Rejection Ratio (CMRR):

Mic CMRR @ 1kHz: >80dB, typical

Total Harmonic Distortion plus Noise (THD + N):

+14dBu, 1kHz: channel to mix out, <0.003%

Crosstalk @ 1kHz:

Fader shutoff: >90dB

Mute shutoff: >90dB

Inter channel: >90dB

Root Mean Square (RMS) Noise, 22Hz ~ 22kHz:

Mic EIN: -128dB

Residual output noise: < -96dBu; -100dB S/N

LR mix noise: < -86dBu; -90dB S/N

Group mix noise: < -86dBu; -90dB S/N

Aux mix noise: < -92dBu; -90dB S/N

Mix noise @ 0dB gain: < -86dB S/N

High Pass Filter (HPF):

Channel HPF: 12dB/octave below 75Hz

Monaural EQ:

HF: Shelving +/-15dB, 12kHz

HM: Peak/dip +/-15dB, 500Hz ~ 16kHz, Q=1.8

LM: Peak/dip +/-15dB, 31Hz ~ 1kHz, Q=1.8

LF: Shelving +/-15dB, 80Hz

Stereo EQ:

HF: Shelving +/-15dB, 12kHz

HM: Peak/dip +/-15dB, 2.5kHz, Q=1.8

LM: Peak/dip +/-15dB, 250Hz, Q=1.8

LF: Shelving +/-15dB, 80Hz

Power Supply:

Built-In Universal Power Supply (IEC inputs)

Supported Voltages:

110V ~ 240V, 260W max. (47 ~ 63Hz)

External 5-Pin DC input for optional JORDAN PS 2310U backup supply

Physical Properties:

Enclosure: Steel

Color: Metallic Grey / Silver

Hardware: Non-Slip Rubber Feet (6)

Net Weight: 32.00Kg

Dimension: (H) 215mm x (W) 1304mm x (D) 630mm

Specifications subject to change without prior notice.

Manufactured under ISO9000 certified management system.

RELATED ACCESSORIES

GECKO® JORDAN PS 2310U Universal Power Supply

EXODUS ODYSSEY MXR 5204L

Pre-Amplifiers:

GECKO® C.R.I.S.T.A.L.® Audiophile PreAmps

Frequency Response:

10Hz ~ 50kHz, +/- 0.5dB

Connections

Channels Inputs:

52 Channels

44 Monaural:

MIC XLR Female: Balanced, sensitivity -60dBu ~ +14dBu

LINE ¼" TRS: Balanced, sensitivity -40dBu ~ +14dBu

PAD Out (MIC): 2kΩ

PAD In (MIC or LINE): >10kΩ, -20dB attenuation)

Max. Input Level: +40dBu

XLR Phantom Power: +48VDC, ON/OFF

4 Stereo:

8 LINE ¼" TRS: Balanced/Unbalanced, sensitivity -16dBu ~ +20dBu

4 MIC XLR Female: Balanced, sensitivity -60dBu ~ +14dBu

Talkback Mic:

XLR Female: Balanced, sensitivity -50dBu ~ -10dBu

Phantom Power: +48VDC, internal jumper

2-Track Inputs:

¼" TRS: Unbalanced, >4kΩ, -2dBu

2-Track Outputs:

¼" TRS: Unbalanced, <80Ω, -2dBu

Inserts:

Channel: ¼" TRS, 0dBu

Output: ¼" TRS, -2dBu

L, R, M Outputs:

XLR Male: Balanced, <80Ω, +4dBu, +32dBu max.

Group (1-4) Outputs:

XLR Male: Balanced, <80Ω, +4dBu, +32dBu max.

Aux (1-6) Outputs:

¼" TRS: Electronically Balanced, <80Ω, +4dBu, +32dBu max.

Direct Outputs (Monaural Channels):

¼" TRS: Electronically Balanced, <80Ω, 0dBu, +32dBu max.

Mic Outputs (Stereo Channels):

¼" TRS: Electronically Balanced, <80Ω, 0dBu, +32dBu max.

Matrix (1-4) Outputs:

¼" TRS: Electronically Balanced, <80Ω, +4dBu, +32dBu max.

External (1-4) Inputs:

¼" TRS: Balanced/Unbalanced, >4kΩ, 0dBu

Headphones:

¼" TRS: 30Ω ~ 600Ω impedance headphones recommended

Monitor Outputs:

¼" TRS: Balanced, <80Ω, -2dBu, +26dBu max.

Lamps:

7 x 4-Pin XLR: 10V / 2W max.

Faders:

100mm Dust-Protected VCA: Channel; Master (L, R, M); Group Master (1-4)

60mm Dust-Protected VCA: Aux Master (1-6)

Performance

Internal Headroom:

Channel: +20dB

Mix: +22dB

Meters:

LED: 3 color LED, quasi peak response

Channel: 4 segment: -20dB, 0dB, +6dB, +24dB; 6dB before clipping

Master (L, R, M): 12 segment: -30dB ~ +16dB

Group Master: 12 segment: -30dB ~ +16dB

Common Mode Rejection Ratio (CMRR):

Mic CMRR @ 1kHz: >80dB, typical

Total Harmonic Distortion plus Noise (THD + N):

+14dBu, 1kHz: channel to mix out, <0.003%

Crosstalk @ 1kHz:

Fader shutoff: >90dB

Mute shutoff: >90dB

Inter channel: >90dB

Root Mean Square (RMS) Noise, 22Hz ~ 22kHz:

Mic EIN: -128dB

Residual output noise: < -96dBu; -100dB S/N

LR mix noise: < -86dBu; -90dB S/N

Group mix noise: < -86dBu; -90dB S/N

Aux mix noise: < -92dBu; -90dB S/N

Mix noise @ 0dB gain: < -86dB S/N

High Pass Filter (HPF):

Channel HPF: 12dB/octave below 75Hz

Monaural EQ:

HF: Shelving +/-15dB, 12kHz

HM: Peak/dip +/-15dB, 500Hz ~ 16kHz, Q=1.8

LM: Peak/dip +/-15dB, 31Hz ~ 1kHz, Q=1.8

LF: Shelving +/-15dB, 80Hz

Stereo EQ:

HF: Shelving +/-15dB, 12kHz

HM: Peak/dip +/-15dB, 2.5kHz, Q=1.8

LM: Peak/dip +/-15dB, 250Hz, Q=1.8

LF: Shelving +/-15dB, 80Hz

Power Supply:

GECKO® JORDAN PSU 2410 Universal Power Supply (2U external, IEC inputs)

Selectable Voltages:

115V: 110V ~ 120V, 260W max. (47 ~ 63Hz)

230V: 220V ~ 240V, 240W max. (47 ~ 63Hz)

External 10-Pin DC input for optional JORDAN PSU 2410 backup supply

Physical Properties:

Enclosure: Steel

Color: Metallic Grey / Silver

Hardware: Non-Slip Rubber Feet (6)

Net Weight: 43.40Kg

Dimension: (H) 215mm x (W) 1784mm x (D) 630mm

Specifications subject to change without prior notice.

Manufactured under ISO9000 certified management system.

RELATED ACCESSORIES

GECKO® JORDAN PS 2410U Universal Power Supply

WARRANTY

GECKO MUSIC GROUP warrants its GECKO® products for a period of one (1) year from the original date of purchase, in accordance to the warranty regulations described below.

What is Covered:

During the applicable warranty period, GECKO MUSIC GROUP warrants the product against defects in materials and workmanship and against malfunctions. GECKO MUSIC GROUP will remedy all such defects and malfunctions without charge for parts or labour if the warranty applies. In the case that other parts are used which constitutes an improvement, GECKO MUSIC GROUP may, at its discretion, charge the customer for the additional cost of these parts. Final determination of warranty coverage lies solely with GECKO MUSIC GROUP.

What is Not Covered:

1. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country where the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in material or workmanship;
2. Normal wear and tear, in particular, of faders, crossfaders, potentiometers, keys/buttons, valves, guitar/bass strings, machine heads, pick-up covers, PVC/PU/leather covers, illuminants, and similar parts are not covered by this warranty;
3. Improper handling, neglect or failure to operate the unit in compliance with the instructions given in the user or service manuals;
4. Connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used;
5. Damages/defects caused by force of nature or any other condition that is beyond the control of GECKO MUSIC GROUP;
6. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty;
7. Modification or removal of serial numbers.

Obtaining Warranty Service:

To return a GECKO® product for warranty service, first fill out the [Online Technical Report](#) on this website and submit for an authorization/service number. Write the authorization/service number so that it is prominently displayed on the outside of the shipping carton. Any products received without an authorization/service number that is clearly visible upon arrival at the factory will be refused. Enclose proof of the original delivery date or a copy of the original sales receipt/invoice. Enclose a description of the suspected defect or malfunction and the condition, if any, which caused the problem. Return the product to either GECKO MUSIC GROUP or the GECKO® Store where the purchase was made. Note: Before sending back to GECKO MUSIC GROUP, you can first check with your local GECKO® Store or authorized reseller where you buy from for support.

Warranty Shipping:

You are responsible for prepaying shipping costs F.O.B. GECKO MUSIC GROUP, Singapore. Shipped product(s) must be properly packaged. Use original shipping cartons and packing materials where possible. GECKO MUSIC GROUP is not responsible for damages resulting from inadequate and or improper packing.

Products received with damages due to improper packaging will be deemed out of warranty.

Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. GECKO MUSIC GROUP will inform the buyer of such circumstance. If the buyer fails to submit a written repair order within six (6) weeks after notification, GECKO MUSIC GROUP will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

Warranty Rights:

This warranty is exclusive and extended to the original buyer and is not transferable to anyone who may subsequently purchase this product. No other person (apart from authorized GECKO® Stores) shall be entitled to give any warranty promise on behalf of GECKO MUSIC GROUP.