

EXPRESS MKII

SIMPLE COMMENTATOR UNIT

PRODUCT DETAILS

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Glensound **Glensound Electronics Ltd**

Thank you for choosing a new Glensound product.

All rights reserved.

Information contained in this manual is subject to change without notice, if in doubt please contact us for the latest product information.

If you need any help with the product then we can be contacted at:

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Maidstone
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ME14 1HE
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EMAIL ADDRESSES

General enquires: office@glensound.co.uk

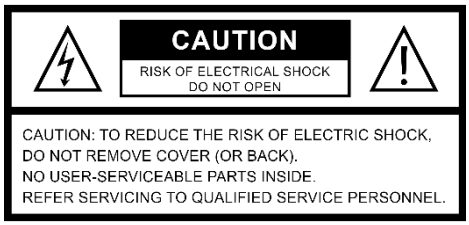
Technical enquires: techinfo@glensound.co.uk

Sales enquires: sales@glensound.co.uk

IMPORTANT SAFETY INSTRUCTIONS

Read this safety sheet prior to installation or initial use. This generic safety sheet covers multiple product configurations across our range. The full operating & installation manual and model-specific technical specifications are available online at: www.glensound.com

 DANGEROUS VOLTAGE: This symbol is intended to warn that dangerous voltages within the product are present and constitute a risk of electric shock.	 IMPORTANT INSTRUCTIONS: This symbol is intended to highlight that there are important operating, installation, and maintenance instructions in the literature accompanying this unit.
 **THIS UNIT MUST BE EARTHED (Class I Mains Models):** English: This symbol highlights that the equipment must have a valid earth connection with the protective earthing conductor. Danish: *Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord.* Finnish: *Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan.* Norwegian: *Apparatet må tilkoples jordet stikkontakt.* Swedish: *Apparaten skall anslutas till jordat uttag.*	**CAUTION – SHOCK HAZARD: DISCONNECT ALL POWER SOURCES:**  This symbol warns that the product can be energised simultaneously from more than one power source (e.g., dual AC mains supplies, external DC power, and/or PoE). Care must be taken if accessing internal components. Ensure that ALL connected power supplies are fully disconnected.



WARNING:

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.

1. Read & Keep Instructions: Read these instructions, keep these instructions, heed all warnings, and follow all instructions.

2. Indoor Use & Moisture: Unless otherwise specified in the model-specific manual, this product is intended for indoor use only. Do not use this apparatus near water, and do not expose this product to rain or moisture.

3. Ambient Temperature: The intended ambient operating temperature of this product is 0°C to 40°C (or 0°C to 50°C where specified in the model-specific technical specifications in the online user manual).

4. Cleaning & Heat Sources: Clean only with a dry cloth. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

5. Cable & Cord Protection: Protect all power cords and network cables from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

6. Attachments & Lightning: Only use attachments/accessories specified or supplied by the manufacturer. Unplug this apparatus during lightning storms or when unused for long periods of time.

7. Servicing & No User-Serviceable Parts: The product contains no user-serviceable parts and must not be disassembled or modified in any way. Doing so could result in personal injury and/or product failure. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when a power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

8. Professional Environment: This equipment is not suitable for use in locations where children are likely to be present.

POWER SUPPLY & DISCONNECT INSTRUCTIONS (APPLICABLE BY MODEL CONFIGURATION)

9. Simultaneous / Redundant Power Sources (Mains, DC & PoE): Depending on the model, this product may be powered by a single source or simultaneously by multiple redundant power sources (dual AC mains inlets, an AC mains inlet, an external DC power input, and/or Power over Ethernet [PoE]). Disconnecting a single power lead will NOT isolate the unit if another power source remains connected. To completely de-energize the equipment, unplug ALL connected AC mains cords, DC barrel jack/external DC connectors, and PoE RJ45/etherCON network cables.

10. AC Mains Disconnect Devices (Single or Dual IEC Inlets): Where AC mains inlets are fitted, the mains plug(s) and rear-panel IEC appliance coupler(s) serve as the disconnect device(s). On dual-mains models, both mains' cords must be unplugged to isolate the unit from AC mains power. The socket-outlet(s) used for mains power must be installed near the equipment and be easily accessible.

11. Plug Grounding & Polarization (AC Mains Models): Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has 2 blades with one wider than the other. A grounding-type plug has 2 blades and a third grounding prong provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

12. Approved Detachable Earthed Mains Cords (Class I AC Mains Models): Use only approved detachable 3-core earthed mains cords (minimum H05VV-F 3G0.75 mm² with IEC 60320-1 C13 connector) rated for the country of installation: • United Kingdom: Use a BS 1363-1 approved molded plug fitted with a 5 A ASTA-approved BS 1362 fuse. • European Union: Use a CEE 7/7 (Schuko/French) earthed plug. • Denmark: When connecting to wall socket-outlets in Denmark, use an approved 3-pin earthed plug complying with DS 60884-2-D1 (Standard Sheet DK 2-1a) to ensure protective earthing is maintained. • USA/Canada: Use a UL-listed / CSA-certified 3-conductor grounding power cord [minimum 18 AWG, SVT/SJT] with a NEMA 5-15P plug. • All other regions: Use a nationally safety-approved 3-core earthed mains cord rated for the country of installation.

13. Internal Primary Fusing & Neutral Fusing Warning (AC Mains Models – Service Personnel Only): Internal primary fuse(s) are located between the Live terminal of the IEC inlet and the Live input of the power supply and should only be changed by a qualified service engineer using a correctly rated replacement as specified in the product handbook. WARNING – Neutral Fusing: Because the AC mains plug may be reversible in some electrical distribution systems, the internal primary fuse may be located in the neutral conductor. Always disconnect all AC mains power cords completely from the IEC inlet(s) to de-energize all phase conductors before opening the enclosure or servicing the unit.

14. Power over Ethernet (PoE) Models: Unplugging the RJ45 / etherCON network cable disconnects PoE power from the unit. The Ethernet cable intended to be connected to the unit is for indoor building routing only and must not exit the building structure without appropriate primary surge protection.

15. External DC / USB Power Input Models: Connect only the manufacturer-supplied AC/DC power adaptor (where provided), or a safety-approved external DC or USB power supply complying with BS EN IEC 62368-1 (classified as ES1 and PS2/Limited Power Source [LPS]) that matches the voltage, minimum current rating, and pin polarity marked adjacent to the DC/USB input connector or specified in the product manual. The external power adaptor plug and the DC/USB input connector serve as the DC disconnect devices and must remain readily accessible; unplugging the DC/USB connector disconnects external DC power only and will not isolate the unit if AC mains or PoE remains connected.



INSTALLATION, THERMAL, MECHANICAL & OPTICAL SAFETY (APPLICABLE BY MODEL CONFIGURATION)

16. Ventilation & Sealed Heatsink Enclosures: Do not block any ventilation openings; install in accordance with the manufacturer's instructions. On models where the aluminum enclosure acts as the units heatsink, do not cover the unit or speaker grille with soft furnishings, cloths, or curtains, and allow free airflow around the housing.

17. 19-Inch Equipment Rack Installation (Rack-Mount Models): Rack-mounted models are designed for stationary installation in a standard 19-inch equipment rack. Secure the unit to the front rack rails using all four mounting holes on the integral rack ears with appropriate rack screws (e.g., M6 screws and cage nuts). Ensure that ventilation openings on the chassis are not obstructed by rack walls or cabling.

18. Carts, Stands, Brackets & Tip-Over Hazard: Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

19. Optical SFP Transceiver Modules (Where fitted): Any optical SFP transceiver modules installed in this product must be certified Class 1 Laser Products in accordance with IEC/EN 60825-1. Do not look directly into open optical ports or fiber-optic cable ends while the equipment is energized.



Disposal (WEEE): the crossed-out wheeled bin symbol means this product must not be disposed of with household waste. Take it to an approved electrical and electronic equipment recycling point, or contact Glensound for advice.
Declaration of conformity: Glensound declares that this product complies with the applicable UK and EU legislation. The full declaration of conformity is available at www.glensound.com.
Manufacturer: Glensound Electronics Ltd, The Design Buildings, 6 Brooks Place, Maidstone, Kent, ME14 1HE, UK · Tel: +44 (0)1622 753662 · Email: sales@glensound.com · www.glensound.com

PRODUCT WARRANTY

All equipment is fully tested before dispatch and carefully designed to provide you with trouble free use for many years.

We have a policy of supporting products for as long as possible and guarantee to be able to support your product for a minimum of 10 years.

For a period of one year after the goods have been dispatched the Company will guarantee the goods against any defect developing after proper use providing such defects arise solely from faulty materials or workmanship and that the Customer shall return the goods to the Company's works or their local dealer.

All non-wear parts are guaranteed for 2 years after dispatch and any defect developing after proper use from faulty materials or workmanship will be repaired under this warranty providing the Customer returns the goods to the Company's works or their local dealer.



SAFETY WARNING



This product can produce high sound levels via the headphone output.

Please take caution when operating this product as listening to excessively high peak or sustained levels of volume may permanently damage human hearing.

CE

EU DECLARATION OF CONFORMITY FOR:

EXPRESS MKII
SIMPLE COMMENTATOR UNIT

This declaration of conformity is issued under the sole responsibility of the manufacturer.

This equipment is manufactured by Glensound Electronics Ltd of Brooks Place Maidstone Kent ME14 1HE is CE marked and conforms to the following Union harmonisation legislation:

Low Voltage Directive:	EN60065 and EN62368-1:2014
Emissions:	BS EN55032:2015
Immunity:	BS EN55035:2017

Signed for and on behalf of Glensound Electronics Ltd.



Gavin Davis, Managing Director
Maidstone, Kent, England

Date: 29/03/2018

ROHS DIRECTIVE

EC directive 2002/95/EC restricts the use of the hazardous substances listed below in electrical and electronic equipment.

This product conforms to the above directive and for these purposes, the maximum concentration values of the restricted substances by weight in homogenous materials are:

Lead	0.1%
Mercury	0.1%
Hexavalent Chromium	0.1%
Polybrominated Biphenyls	0.1%
Polybrominated Diphenyl Ethers	0.1%
Cadmium	0.01%

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT REGULATIONS 2006 (WEEE)

Glensound Electronics Ltd is registered for business to business sales of WEEE in the UK our registration number is:

WEE/JJ0074UR

GLENSOUND EXPRESS MKII

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OVERVIEW

The Glensound Express MKII is a two user commentary box providing all of the basic functionality required for two commentators or announcers, where quick and easy setup and operation is important.

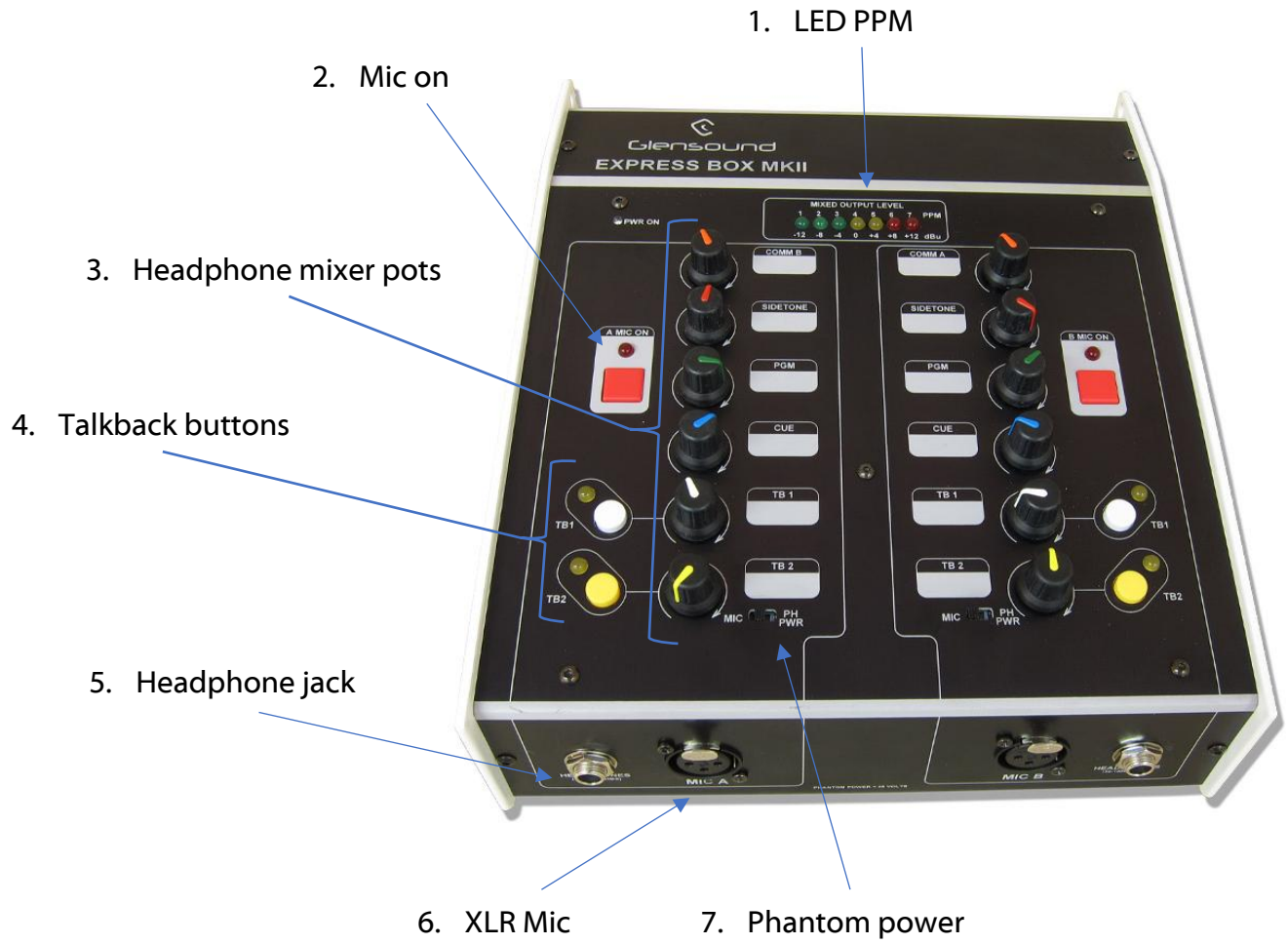
It is widely used for sports commentary, reporter interfacing at news events, or for studio based audio translation.

There are four audio inputs into the users' headphones for monitoring, and two talkback circuits. High quality mic amps are used, along with Glensound's Referee compressor/limiter system to help prevent overloading the input circuit.

NEW FOR MKII

The Express MKII features two additional audio paths for the commentators, allowing them both to be able to hear each other's mic locally without external mixing.

EXPRESS MKII FRONT PANEL LAYOUT



1. **LED PPM Meter**

   The LED PPM Meter indicates the level of outgoing audio using the BBC 1 – 7 scale.

2. **Mic on button**

   Pressing this button routes the microphone to the programme audio output. It is a latching button by default but can be set to be always on, or a momentary mute when held down. More information can be found on page 14.

3. **Headphone mixer knobs**

   COMM B & A

   This pot adjusts the mic audio level of the opposing channel for the headphone output.

SIDETONE

This pot adjusts the level of the mic audio for the headphone output.

PGM

This pot adjusts the headphone level of the PGM audio signal.

CUE

This pot adjusts the headphone level of the CUE audio signal.

TB 1

This pot adjusts the headphone level of the Talkback 1 audio signal.

TB 2

This pot adjusts the headphone level of the Talkback 2 audio signal.

4. **Talkback buttons**

   Pressing either talkback 1 or talkback 2 mutes the microphone on the programme output, and routes the audio to the corresponding talkback output. The operation of this button is configurable into 4 modes (momentary, latching, intelligent, off). See page 14 for details.

5. **Headphone jack output**

   The 6.35mm jack socket allows 35 – 1000Ω impedance headphones using A/B gauge plug.

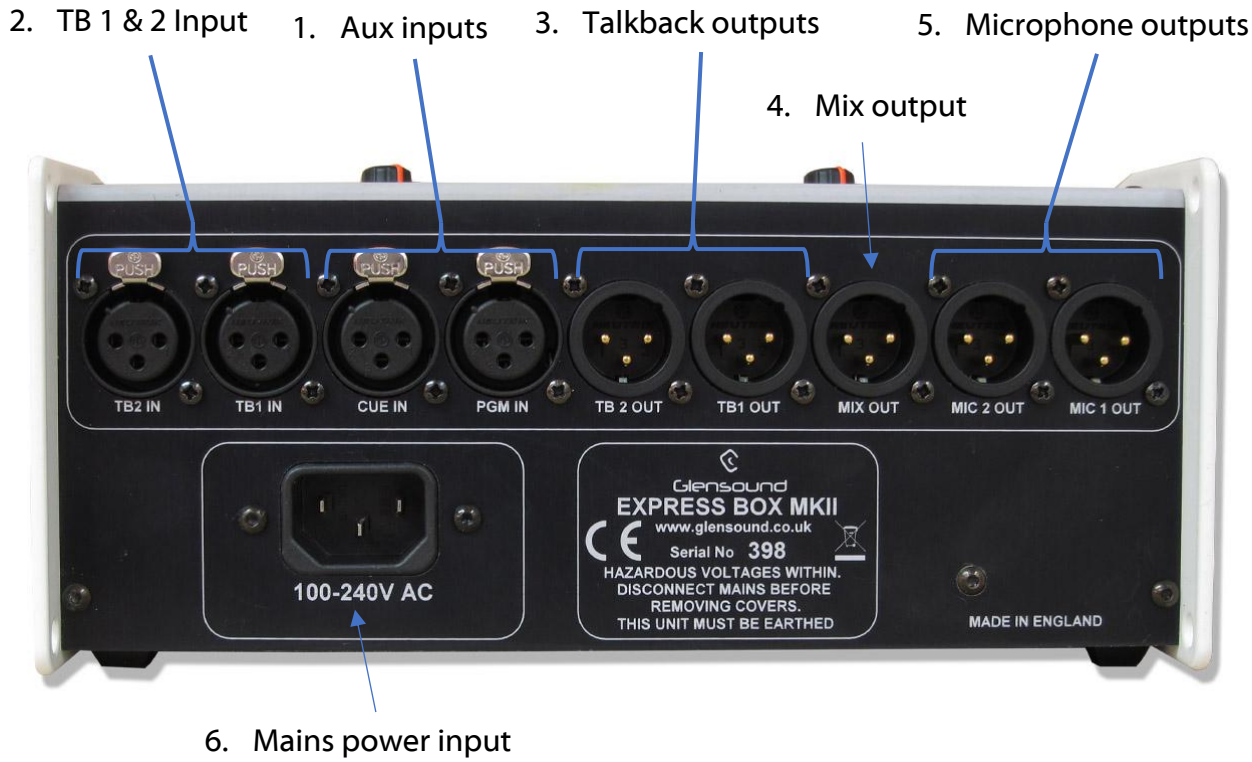
6. **XLR Mic input**

   The female 3 pin XLR socket allows microphones to be connected to the Express MKII.

7. **Phantom power switch**

   This switch turns on or off +48v phantom power input for use with condenser microphones.

EXPRESS MKII REAR PANEL LAYOUT



1. **TB 1 & 2 Input**

   Two female XLRs allow audio signals to be sent to the Express MKII that will appear on the headphone outputs at the push of the TB1 & TB2 buttons on the front panel.

2. **Aux inputs**

   Two female XLRs for Cue In and PGM In are both audio signals sent to the headphone mix for channel A and B. The level of these signals in the headphone mix is adjusted via the corresponding pots on the front panel.

3. **Talkback outputs**

   Two male XLR inputs for talkback 1 and talkback 2 mean that audio from the microphone input on the front panel can be sent here. This is commonly used for when the user needs to speak only to a technician or producer rather than have their voice broadcast.

4. **Mix output**

   This male XLR will output audio containing the mix of levels that the user has configured with the pots on the front panel.

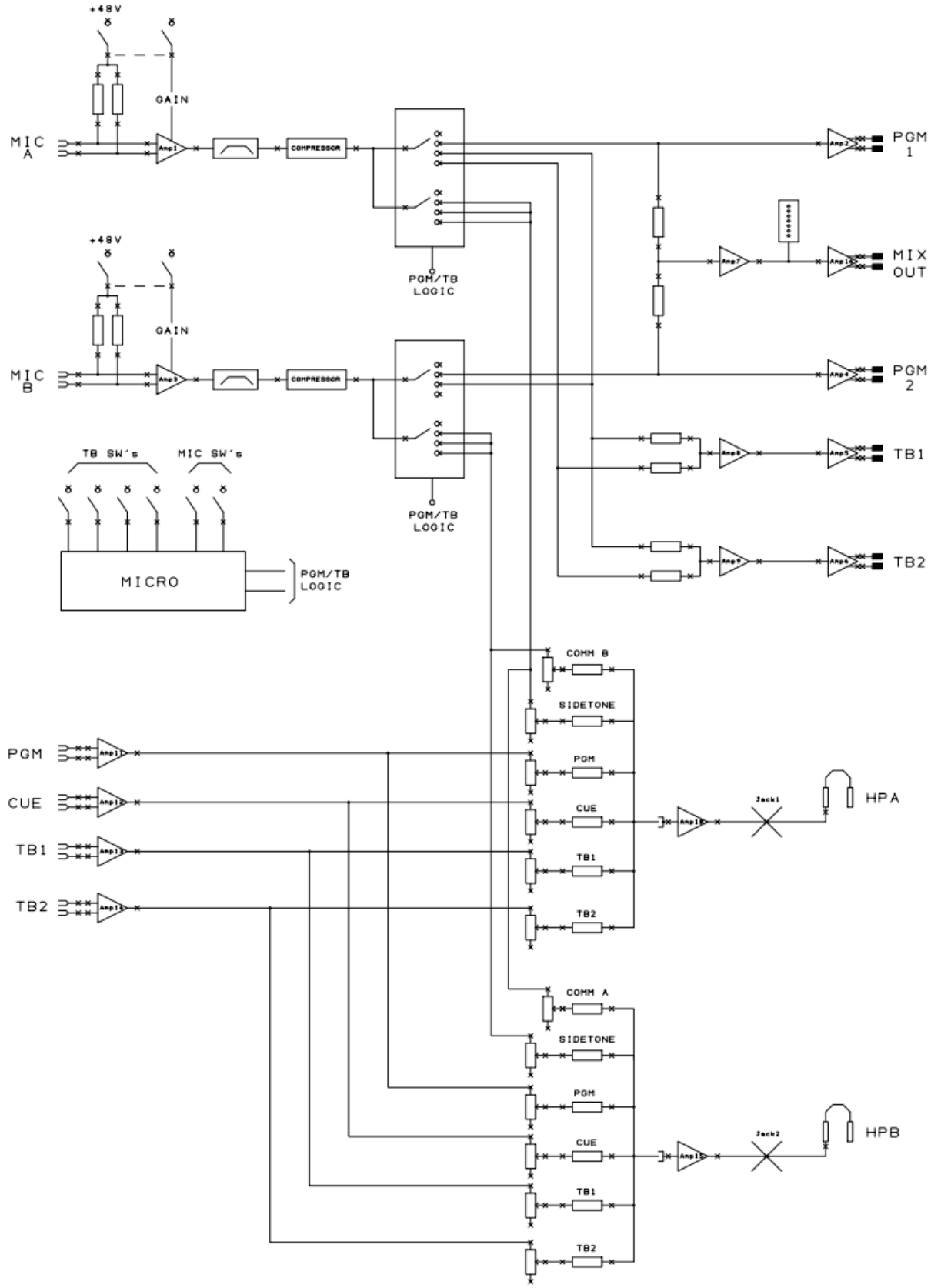
5. **Microphone outputs**

   Two male XLRs provide the microphone output for both microphone inputs.

6. **Mains power input**

   The IEC mains plug accepts external AC voltages of 100 - 240 VAC +/- 10%. There is a non-accessable internal fuse for this input.

SIMPLIFIED BLOCK DIAGRAM



BUTTON FUNCTIONALITY

Two modes are available for the channel on/ off button and 4 modes for the talkback button operation. After mode changes the selected configuration will be stored, and reloaded when the Express MKII is next switched on.

To enter programming mode of the Express MKII:

1. Turn the Express MKII off.
2. Hold down the 'A MIC ON' and 'A-TB1' buttons.
3. While holding the above buttons down turn the Express MKII on.
4. Release the above buttons, you are now in programming mode.
5. While in programming mode the LEDs indicate the current setting.
6. To change a setting push the switch next to the LED.

After setting the desired mode, turn the Express MKII off, your new settings will now be ready next time the unit is turned on.

LED INDICATION OF MODES

A & B MIC ON

Each main mic on switch can be programmed independently. Two modes are available, toggle on/ off or momentary off (cough).

LED	SWITCH OPERATION
OFF	Momentary (Cough)
ON	Toggle On/ Off

TALKBACK SWITCHES

The operation of all the talkback switches must be identical. There are 4 different possible settings.

TB1 LED	TB2 LED	All TB SWITCH OPERATION
OFF	OFF	Toggle & Momentary (quick tap to toggle, press & hold for momentary)
OFF	ON	Toggle
ON	OFF	Momentary
ON	ON	Disabled

INTERPRETER MODE

It is possible to set the Express MKII to operate as a simple two language interpreter's unit.

If set to interpreter mode then A and B Mic On buttons latch and toggle on/off. TB1 buttons also latch and toggle on/off.

The MIC A & B buttons interact with their own channel's TB1 button, whereby a channel's Mic On and TB1 (on) button cannot both be on at the same time and pressing one while the other is active will cause them to toggle.

The above means that Mix Out would be used for language one and TB1 out would be used for language two.

TB2 button still works as an off air talkback channel and pressing it will automatically turn off either Mic ON or TB1 (on) if they were on, on the channel that TB2 has been operated on.

To enable the Interpreter mode then:

1. Turn the Express MKII off.
2. Hold down the 'A MIC ON', 'A-TB1' and 'A-TB2' buttons.
3. Whilst holding down the above buttons turn the Express MKII on.
4. Both MIC On LEDs will flash very quickly to indicate the programming has been accepted.
5. Turn the Express MKII off.

The next time you turn the unit on it will be in Interpreter mode.

To turn off the Interpreter mode, then follow the instructions to enter programming mode under 'button functionality' on the previous page.

MICROPHONE GAIN

The two microphone inputs of the Express MKII have a fixed gain level.

To account for the higher gain level of condenser microphones; when the phantom power switch is turned on a -10dB pad is applied to the output.

If you have a microphone with an exceptionally high output level, the Express MKII fixed gain level may not be low enough to avoid clipping.

It is possible to change the gain by removing two internal links. This process is semi-permenant, as it requires a sharp object to do and a soldering iron to undo.

Warning

This process must only be undertaken by an approved technician. **DO NOT** attempt this procedure unless you know what you are doing. **Take extreme care.**

Equipment needed

1x M3 Screwdriver

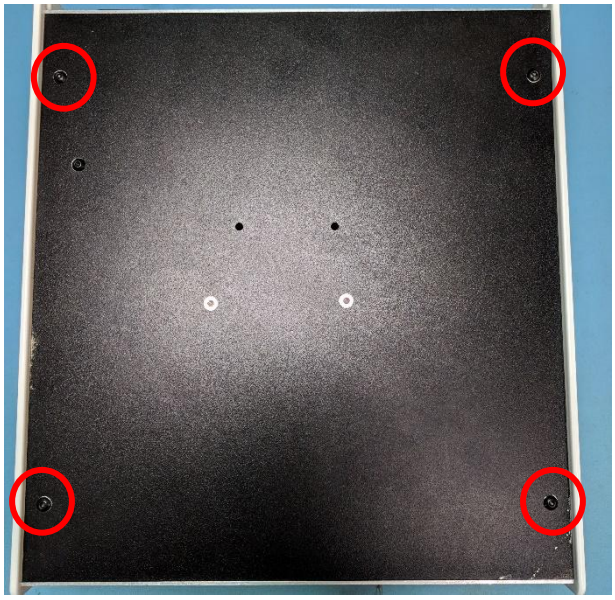
1x A small precision sharp object – A scapel is best

Disconnect the Express MKII from all power sources before continuing.

Procedure

To disassemble the Express MKII, remove screws 1, 2, 3 and 4 from the bottom panel.

1 2



3 4

Remove the bottom panel.

You will be greeted with this view of the motherboard. The location of two links which must be removed are highlighted in red circles.

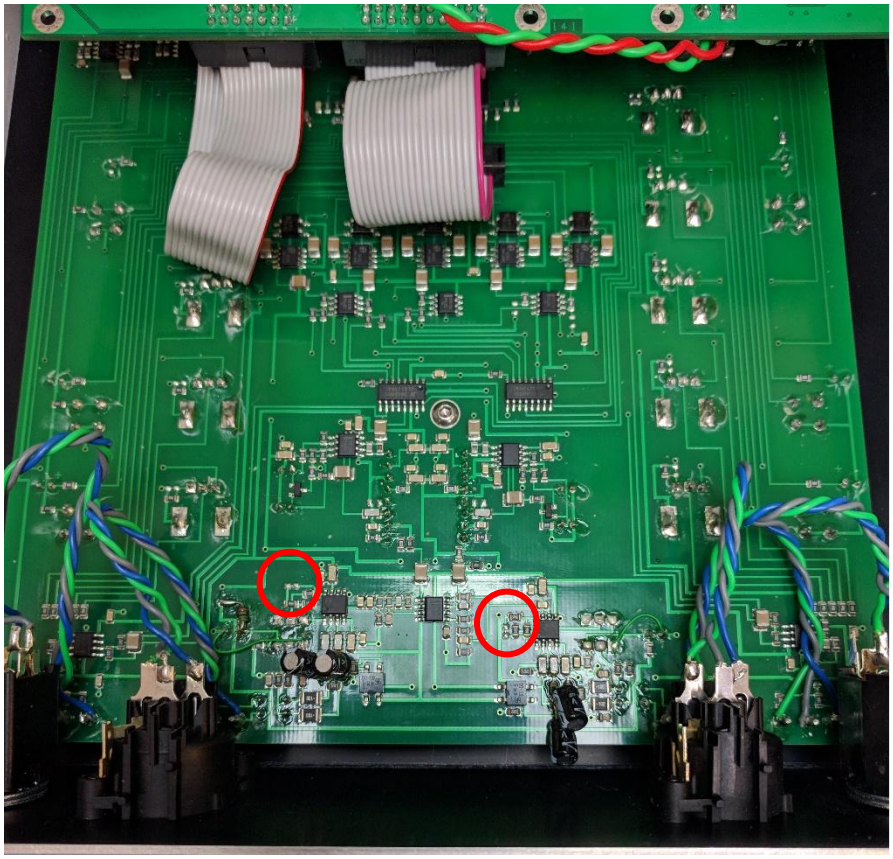


Figure 1 Interior view

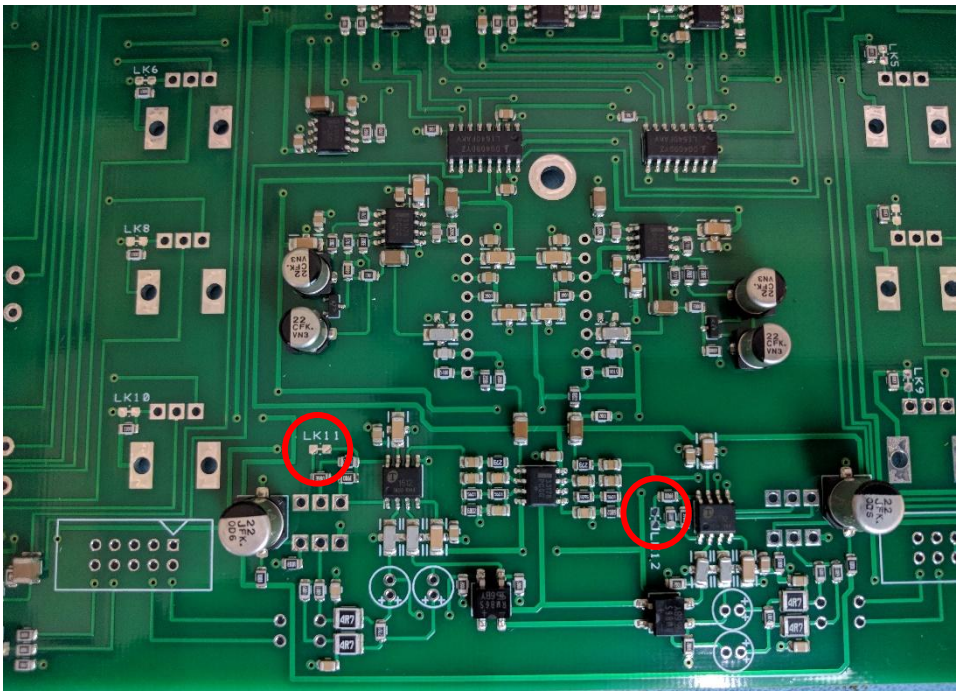


Figure 2 Links

Using a precise sharp object, cut the small track between the two pads for LK11 and LK12.

Take extreme care, cutting more than just the specific links may cause the Express MKII to malfunction.

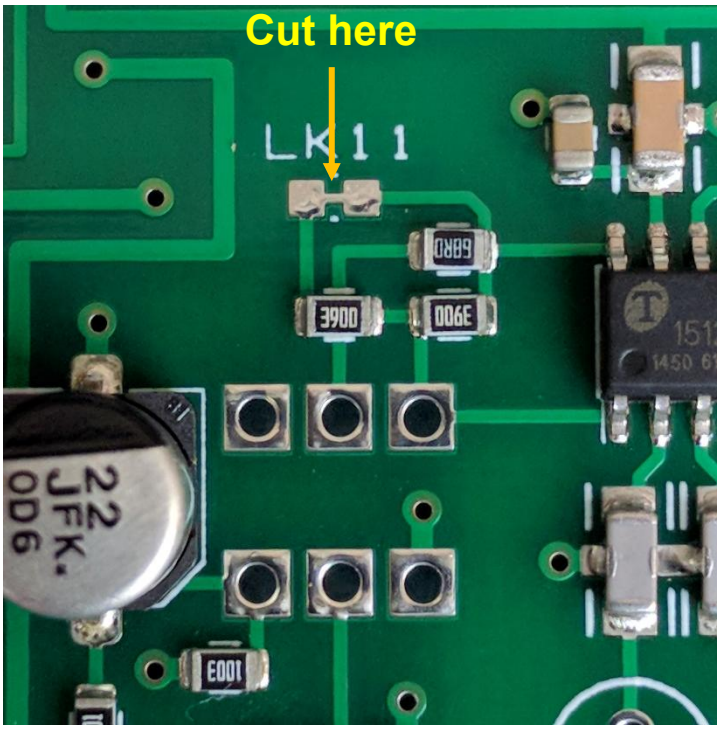


Figure 3 Link 1

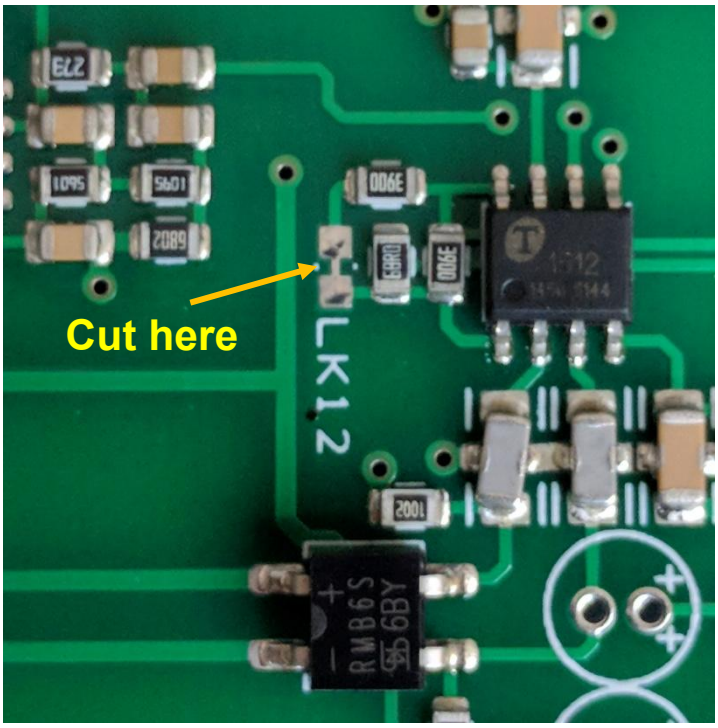


Figure 4 Link 2

Once the small track between the two pads has been cut, the gain will have been adjusted.

To revert this process, you must solder a bridge across one pad to the other to recreate the link.

Always ensure that the unit has been properly re-assembled and the bottom panel screwed securely in **before** powering up the Express MKII.

MICROPHONE GAINS FOR 0dBu OUTPUTS

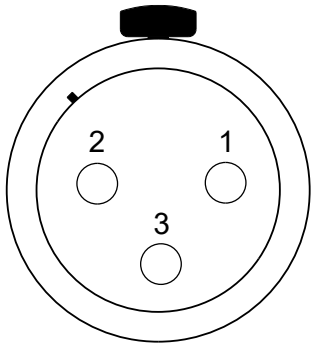
Dynamic Mic (Phantom power OFF) : 54dB

Condenser Mic Phantom power ON and internal link made: 44dB (factory default)

Condenser Mic Phantom power ON and internal link CUT: 37dB

WIRING INFORMATION

XLR & JACK Wiring



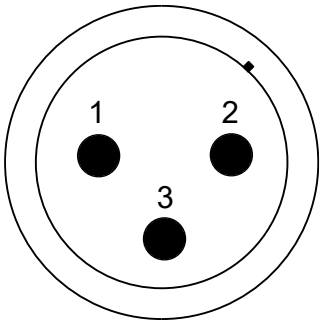
XLR SOCKET (FEMALE)

STANDARD XLR AUDIO PINOUTS:

1: Ground/ Earth

2: INPHASE/ POSITIVE/ MIC +

3: MATE/ NEGATIVE/ MIC -



XLR PLUG (MALE)

STANDARD HEADPHONE WIRING:

TIP: A/ LEFT Ear

RING: B/ RIGHT Ear

SLEEVE: Common/ Earth

