



MODEL 805 USER MANUAL



UNPACKING & INSPECTION

- Save all packing materials – they are required for returns and warranty service.
- Inspect the 805 and packing materials for any signs of damage during shipping.
- Report any damage to PAU Audio immediately at info@pauaudio.com.

PRECAUTIONS

The PAU Audio MODEL 805 microphone preamplifier is a wall/mains-powered electrical device. It contains extensive electrical protection, but reasonable precaution should be taken when installing/uninstalling the device, or changing your power routing.

Always use the correct AC line voltage with a grounded power cable. Do not bypass the ground pin on the power cable. Using an incorrect power voltage can damage your 805, and may void your warranty. Verify the marking on the 805 before installing.

Do not install the 805 directly above or below substantial heat-producing equipment. Maximum ambient operating temperature is 45°C. Exceeding the maximum ambient temperature may cause internal damage to your 805.

Never attach power amplifier audio outputs or other power sources directly to any of the 805 connectors.

Never attach any equipment output(s) to the outputs of your 805.

The 805 is designed for indoor use only. To prevent fire or shock hazard do not expose it to rain or moisture.

IMPORTANT SAFETY NOTICES!

- Read and keep these instructions.
- Heed all warnings.
- Follow these instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Do not block ventilation openings; install in accordance with manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers, pre amps, recording equipment) that produce heat.
- Do not defeat the safety purpose of the polarized or grounded 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 and prong are for your safety. If the provided plug does not fit in your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect power cord from being walked on or pinched.
- Use only attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Service is required when the apparatus has been damaged in any way, such as by being dropped, exposed to rain, liquid being spilled on it, or otherwise does not operate normally.

SERVICE

- There are no user serviceable parts inside.

- All service must be performed by qualified personnel.

WARNING!

- **This equipment requires the correct AC line voltage as set by the manufacturer, and is not auto sensing.**

- **Check the line plug voltage in your area and use the correct type/voltage.**

- To reduce the risk of fire or electrical shock, do not expose this equipment to dripping or splashing water and ensure that no objects containing liquid are placed on the equipment.

- This apparatus must be earthed.

- Use a three-wire grounding-type line cord like the one supplied with this product.

- Be aware that different operating voltages require the use of different types of line cords and attachment plugs.

- This equipment should be installed near the socket outlet and disconnection of the device should be easily accessible.

- To completely disconnect from AC mains, disconnect the power supply cord from the AC receptacle.

- Do not install in a confined space.

- Do not open the unit. Risk of electrical shock inside.

Caution

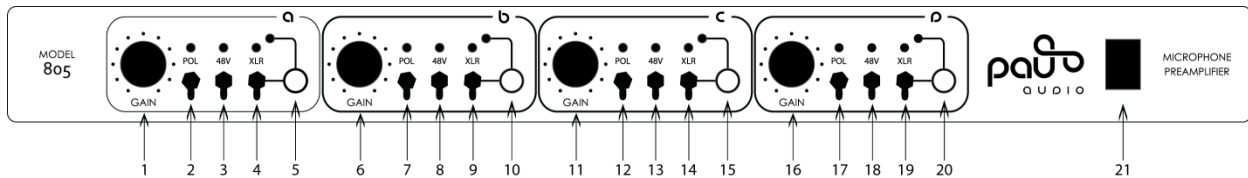
- You are cautioned that any change or modification not expressly approved in this manual could void your authority to operate this equipment, and will void your warranty.

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Please contact us if you have any questions regarding the information in this manual, or your 805.

1 FRONT PANEL OVERVIEW



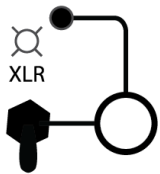
General

21: Power switch –

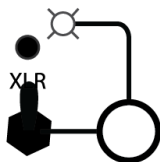
Turns on/off your 805 mic preamp. The external power cord included with your 805 must be attached to the 805, and plugged in to a wall socket.

Channel a

- 1: Gain – This knob controls the channel gain. This is a “smooth” gain control (non-stepped) allowing small gain adjustments while tracking.
- 2: POL - The POL (polarity) switch inverts the phase of the audio output XLR for this channel. The LED is illuminated when the phase is inverted. The phase inversion is an internal switch of the audio on output pins 2 and 3.
- 3: 48V – The 48V switch turns on/off the +48V phantom power supply to the microphone input XLR for this channel. The +48V is present on the XLR input while the LED is illuminated.
- 4: XLR – The XLR switch switches between the XLR input (on the back of the unit), and the ¼” input on the front of the unit, for this channel. The LED is illuminated to show what input is selected, as shown below:



The rear XLR input for this channel is engaged. All audio being fed into the front ¼” input for this channel is ignored.



The ¼” input for this channel is engaged. All audio being fed into the rear XLR input for this channel is ignored.

5: ¼" input: The ¼" input is a high impedance input for this channel. It is a mono, unbalanced input for instruments, such as guitars, basses, and synths.

Channel b

6: Gain Knob
7: POL
8: 48V
9: XLR
10: ¼" input

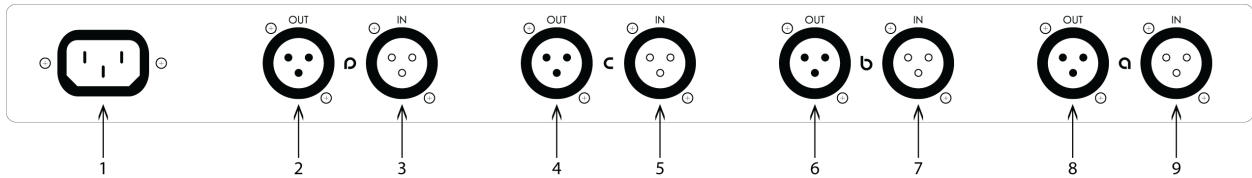
Channel c

11: Gain Knob
12: POL
13: 48V
14: XLR
15: ¼" input

Channel d

16: Gain Knob
17: POL
18: 48V
19: XLR
20: ¼" input

2 REAR PANEL OVERVIEW



General

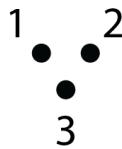
1: Power Input (**WARNING!**) –

This is an IEC standard grounded AC power inlet with fuse. The fuse must be the correct type for the voltage set, see rear panel. **APPLY ONLY THE AC VOLTAGE AS SET BY THE MANUFACTURER.**

Channel d

2: XLR Output –

Standard balanced XLR output for this channel. See the diagram below for the pinout.

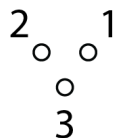


Pinout for XLR Output

WARNING: See Section 2.1 XLR Output to 1/4" Adapter if you are connecting this XLR output to a 1/4" connector.

3: XLR Input –

Standard balanced XLR input for this channel. See the diagram below for the pinout.



Pinout for XLR Input

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Channel c

4: XLR Output
5: XLR Input

Channel b

6: XLR Output
7: XLR Input

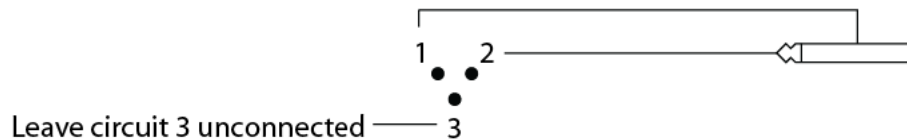
Channel a

8: XLR Output
9: XLR Input

2.1 XLR Output to 1/4" Adapter

Special care must be taken when using a custom XLR to 1/4" cables for the 805's XLR outputs. These outputs are not isolated by a transformer. **No pins need to be shorted to ground (pin 3).** The correct connection for a XLR to 1/4" output cable is shown below.

WARNING: Do not intentionally short pin-2/pin-3 (signal) to pin-1 (shield/ground). THIS IS NOT REQUIRED. While the XLR outputs provided temporary protection for short circuits, an intentionally permanent short-circuit to this output may damage the 805 output circuitry, and void your warranty.



Correct connection from the XLR output to a 1/4" cable connector

2.2 MOUNTING THE 805

The 805 is designed to be mounted in a standard 19" equipment rack, or used standalone on a flat surface. Do not install the 805 directly above or below any equipment that produces significant amounts of heat. While the 805 is not particularly heat sensitive, it does contain electronic components that have a guaranteed temperature range for operation.

3 POWER REQUIREMENTS

The 805 comes equipped with a three-pin IEC-320 power input. A detachable power cord is included that provides the connection from chassis ground to the AC mains ground.

The 805 operates from either 110/120VAC or 230/240VAC at 50Hz or 60Hz. The 805 ships configured for its intended country of sale. Contact PAU Audio at info@pauaudio.com if you are purchasing a unit not specified for your intended operating voltage.

WARNING!

Do not apply power other than what is specified on the unit as shipped from the manufacturer. Doing so will cause damage to your 805, and will VOID YOUR WARRANTY.

4 TECHNICAL SPECIFICATIONS

4.1 Connectors

4 x XLR Inputs (chassis rear, one per channel)
4 x XLR Outputs (chassis rear, one per channel)
4 x ¼" Mono (TS) Inputs (chassis front, one per channel)

4.2 Analog Inputs

	XLR Input (Chassis rear)	¼" D.I. Input (Chassis front)
Impedance	1.6 Ohms	2 MOhms
Max Input Level	+13 dBu	+13 dBu
Frequency Response	8 Hz to 42 kHz +- 1dB	10 Hz to 42 kHz +- 1dB
Noise (ESN @ 150 Ohm)	-128 dBu	-120 dBu
Gain (max)	+66 dB	+60 dB
Gain (min)	+13.5 dB	+6.3 dB

4.3 Analog Outputs

	XLR Output (Chassis rear)
Max Output Level	+26 dBu
Output Impedance	50 Ohms
Output Short Circuit Protection	Temporary – 10 seconds minimum

4.4 GENERAL

Chassis Dimensions	19" x 1.75 "x 11"
Chassis Finish	Black Powder Coat
Weight	4 kgs
Shipping Weight	4.5 kgs
Mains Voltage	10-240 VAC, 50 Hz – 60 Hz, Factory Set
AC inlet fuse	5x20, 500mA 250V slow blow
Spare Fuse	Supplied
Power consumption	Less than 40W
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-30°C to 70°C (-22 °F to 167°F)
Warranty	2 year parts and labor

5 Certificate of Conformity

PAU Audio Inc., #303 912 6th Ave SW, Calgary, AB, Canada hereby declares on own responsibility that the **MODEL 805 Microphone Preamplifier** is covered by this certificate and marked with the CE label conforming to the following standards:

- EN 60065 Safety requirements for main operated electronic and related apparatus for household and general use.
- EN 55103-1 Product family standard for audio, video, audiovisual and entertainment lighting control apparatus for professional use. Part 1: Emission.
- EN 55103-2 Product family standard for audio, video, audiovisual and entertainment lighting control apparatus for professional use. Part 2: Immunity.

With reference to regulations in the following directives:
2006/95/EC, 2004/108/EC

December 2012
Andrew Hamill
President

6 USER MANUAL REVISION HISTORY

Jan 5, 2013 – Initial Publish

July 29, 2013 – Updated technical specifications

NOTE

PAU Audio Inc. reserves the right to make improvements to this manual and the 805 at any time and without notice.