

HA-81A EQ

MONO CHANNEL CLASS A
MICROPHONE PREAMP / 81- STYLE EQ

ELITE SERIES



USER MANUAL



INTRODUCTION

Thank you for choosing the Elite Series **HA-81A EQ**. Heritage Audio is dedicated to bringing you ‘the sound of yesterday for tomorrow’. We specialize in capturing that unique, enticing sound that everybody has fallen in love with. For years engineers, producers and musicians have been yearning for that classic vibe. Usually the only option is to search for old, used original equipment that is almost always in a questionable state of operation. This brings with it a whole lot of other issues, making the experience less than desirable. Not to mention the very high prices asked for this equipment, which makes them virtually unobtainable for the great majority. Now it’s possible to obtain that same sound with a brand new piece that will give you all the problem-free, heavy-duty use you’ll need for years of music making history.

Peter Rodriguez
CEO
Heritage Audio - Madrid, Spain

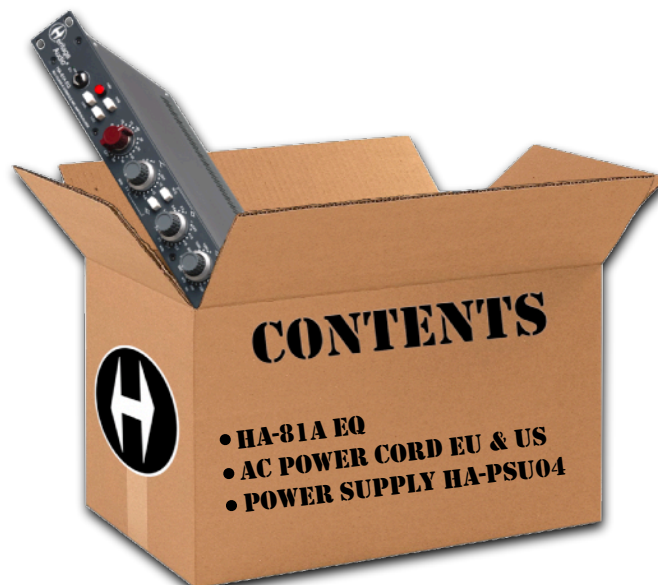


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DESCRIPTION

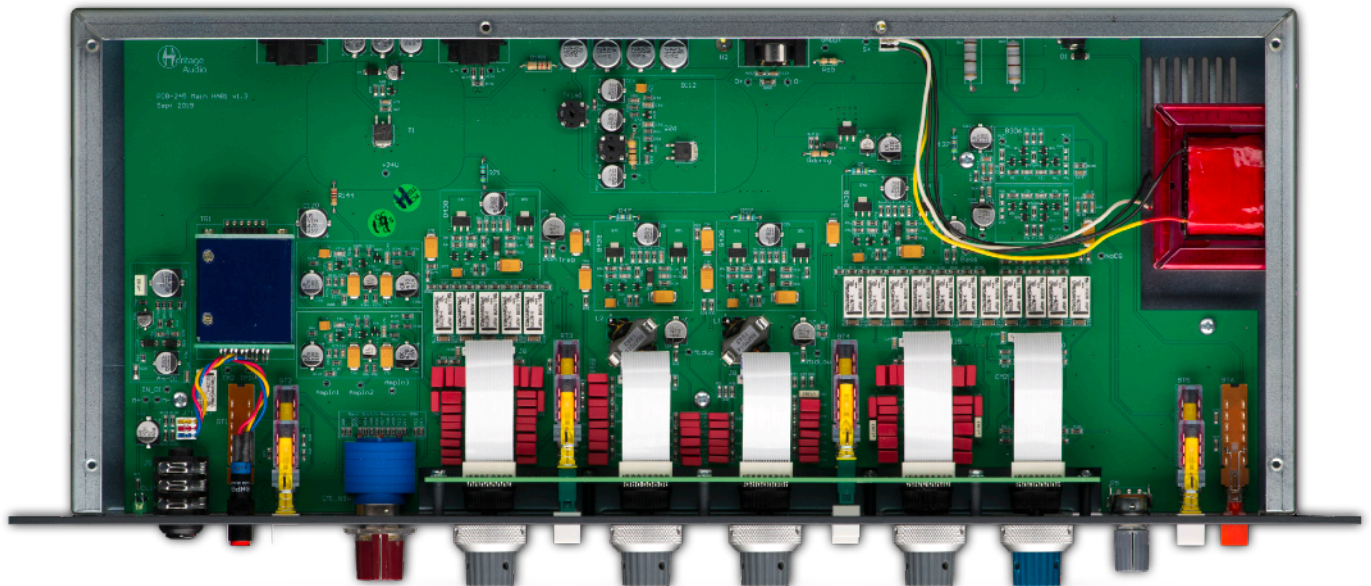
Heritage Audio's HA-81A EQ is a mix of 2 of the most famous classic console circuits, combining one's preamp with the other's EQ section. It's a channel strip built with an all discrete, Class A 73-style mic preamp with an extremely versatile and musical console style equalizer — arguably a popular trick for recreating that classic sound sought by all recording engineers, artists and producers.

The HA-81A's preamp section is a powerful 80dB, all discrete Class A design with Carnhill St Ives input and output transformers, the same ones found in the other Elite Series modules. The preamp features a 2-stage, stepped gain knob for easy recall and a fully adjustable output trim. Also available are a -20 db pad, a polarity reverse button, +48 V phantom power and switchable impedance for optimizing the preamp's response to a variety of microphones. The HA-81A EQ preamp section delivers a solid Class A sound with a harmonically rich bottom end, musical but focused mids as well as sparkling and airy highs.

The HA-81A EQ includes a very comprehensive equalizer section with an exceptionally musical 4 band, inductor-based equalizer. We've also incorporated high quality 18 dB 3-pole high and low pass filters for total tonal control. Where 3 band equalizers such as the typical 73-style exceed at musicality but may be short of features, the HA-81A EQ excels at both. There is also control over Shelf or Bell response curves on the high and lows, dedicated high and low mid bands with dual Q options, and a range of 40 frequency selections to choose from

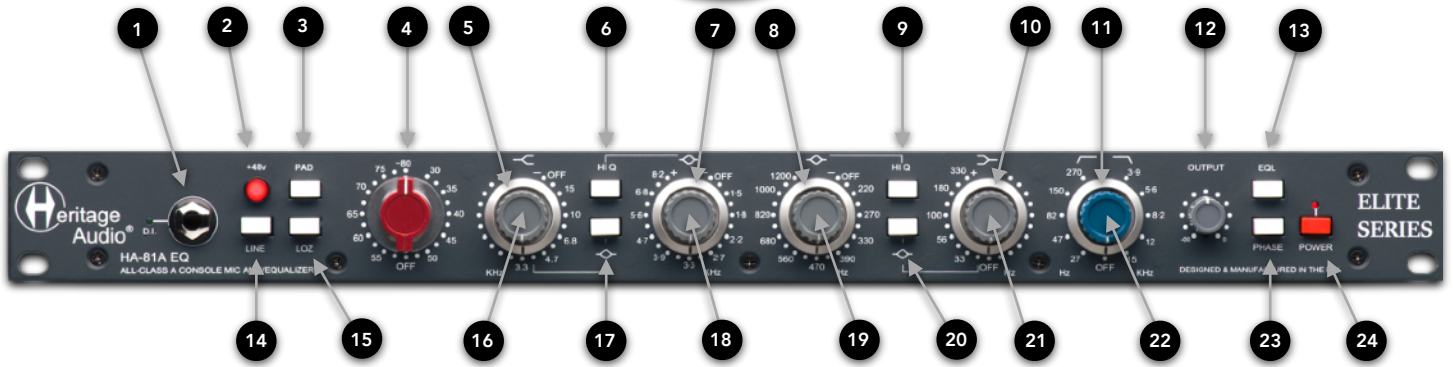
The Heritage HA-81A EQ utilizes only rotary switches and precision, concentric potentiometers. And like all of the products in our Elite range, the HA-81A EQ is built with the most cutting edge methods in manufacturing and design, without ever compromising audio quality or cutting corners — all at the Heritage Audio headquarters in Madrid-Spain.

All in all the HA-81A EQ is a fantastic choice, providing a professionally processed signal that'll take your recordings to the next level.



GETTING STARTED

FRONT



1	2	3	4	5	6
D.I. INPUT High Impedance Class A JFET	PHANTOM POWER SWITCH Activates 48 V	MIC PAD BUTTON 20 dB Reduction Ahead of Input Transformer	INPUT GAIN SWITCH 5 dB Steps from 30 to 80	HI SHELF FREQUENCIES Selectable Frequencies: 3.3, 4.7, 6.8, 10 and 15 kHz	HI Q BUTTON Push to create a sharper bandwidth
7	8	9	10	11	12
HI MID BAND FREQUENCIES Selects from 10 frequencies: 1.5 kHz to 8.2 kHz or OFF position to remove the band from the signal path	LOW MID BAND FREQUENCIES Selects from 10 frequencies: 220 Hz to 1200 Hz or OFF position to remove the band from the signal path	HI Q BUTTON Push to create a sharper bandwidth	LOW SHELF FREQUENCIES Selects frequency for the Low Shelf: 33, 56, 100, 180 and 330 Hz or OFF position to remove the band from the signal path	HI PASS FILTER 18 dB/Octave 3-pole Filter at selectable frequencies: 27, 47, 82, 150 and 270 Hz or OFF position to remove the filter from the signal path	OUTPUT ATTENUATOR Attenuates from 0 to Infinity
13	14	15	16	17	18
EQL Turns Equalizer ON and OFF	LINE BUTTON Switches from MIC/D.I. to LINE input	MIC INPUT IMPEDANCE (LOZ) 1200 Ω or 300 Ω when pressed	HI SHELF BOOST/CUT ±15 dB of Boost or Cut	BELL BUTTON Turns Bell shape ON or OFF	LOW MID BAND BOOST/CUT ±15 dB of Boost or Cut
19	20	21	22	23	24
HI MID BAND BOOST/CUT ±15 dB of Boost or Cut	BELL BUTTON Turns Bell shape ON or OFF	LOW SHELF BOOST/CUT ±15 dB of Boost or Cut	LOW PASS FILTER 18 dB/Octave 3-pole Filter at selectable frequencies: 3.9, 5.6, 8.2, 12, and 15 kHz or OFF position to remove the filter from the signal path	PHASE BUTTON Flips phase 180°	POWER Activates unit

REAR



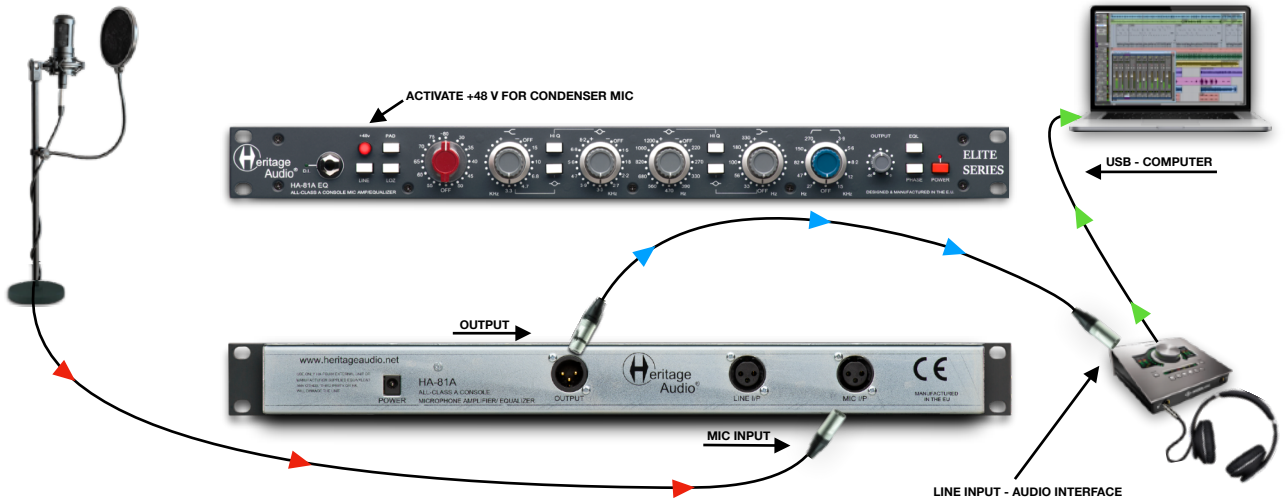
1	2	3	4
POWER INPUT To Be Connected to the HA PSU04 Power Supply	LINE OUTPUT Male XLR Connector	LINE INPUT Female XLR Connector	MIC INPUT Female XLR Connector

All XLRs are: Pin 1: GND Pin 2: Hot Pin 3: Cold	MALE XLR 	FEMALE XLR 	D.I. Jack: Tip: Signal Sleeve: Ground	 Tip=Signal Sleeve=Ground/Shield
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APPLICATIONS

MIC

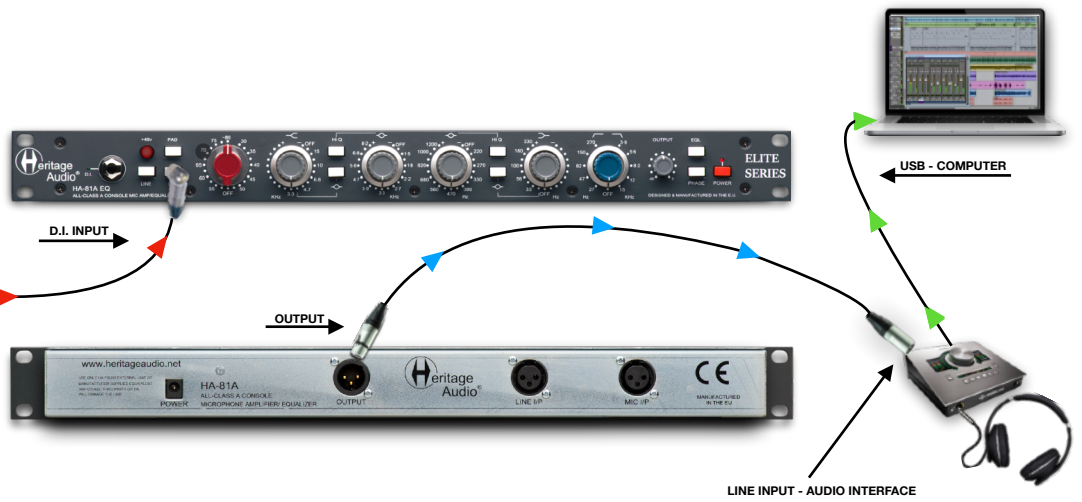
CONDENSER MIC



D.I.

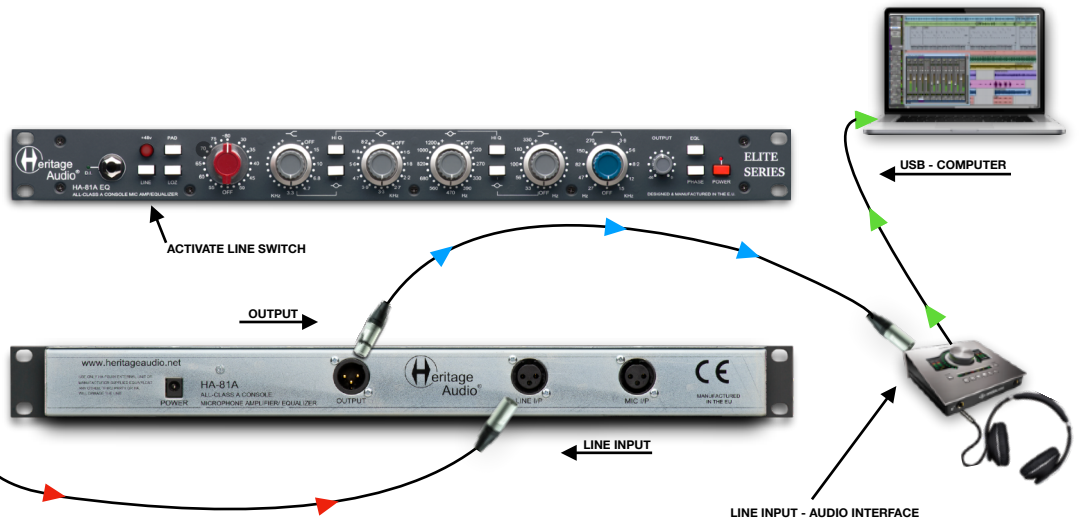


GUITAR FX PEDAL



LINE

LINE OUTPUT - KEYBOARD

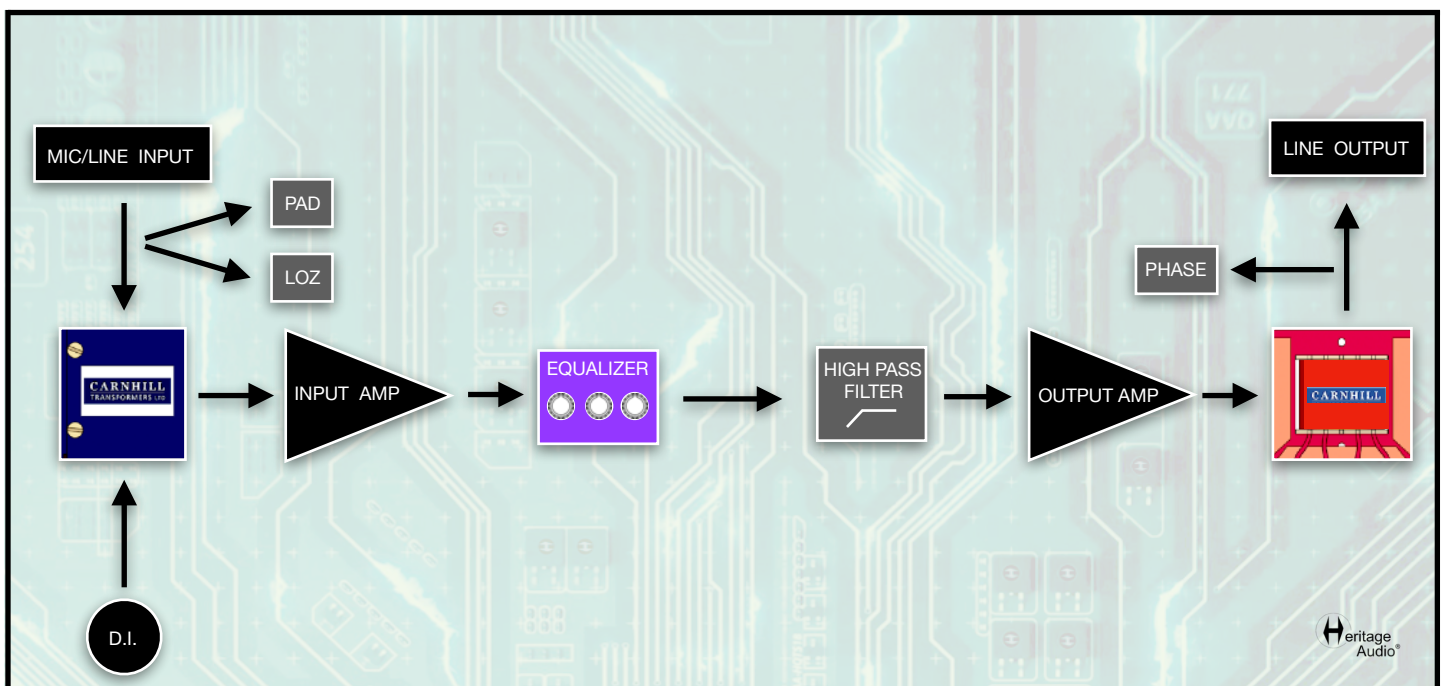


SPECIFICATIONS



- **Microphone input impedance:** High=1200 Ω minimum; Low=300 Ω minimum. Higher gain positions gradually have greater impedances, optimum for low gain ribbon mics. Input is transformer balanced and floating.
- **Line input impedance:** 10 k Ω bridging, transformer balanced and floating.
- **Output impedance:** Less than 75 Ω , Carnhill transformer balanced and floating, to drive a load of 600 Ω (Factory terminated).
- **D.I. input impedance:** Greater than 2 M Ω , unbalanced.
- **Maximum output:** Greater than +26,5 dBu into 600 Ω (internally terminated).
- **THD:** Less than 0,025 % at 1 kHz, Less than 0,05 % at 100 Hz.
- **Frequency response:** 20 Hz (+0,3 dB) to 20 kHz (-0,2 dB).EQ Off.
- **Maximum Gain:** Slightly greater than 80 dB.
- **Output stage noise:** Less than -100 dBu.
- **Power consumption:** Less than 150 mA @48 V DC.
- **Dimensions (W x H x L):** 482 mm x 44 mm (1 Rack unit) x 184 mm.

SIGNAL FLOW



TROUBLE SHOOTING



PROBLEMS	SOLUTIONS
There doesn't appear to be any signal at all arriving at the back XLR.	Make sure the GAIN knob is not in the 'Off' position.
There still doesn't appear to be any signal at all arriving at the back XLR.	Check to see if a jack cable has been left plugged into the front panel D.I.
Condenser microphones don't seem to work with HA-81A EQ.	Make sure the red +48 V button is pressed in to activate the phantom power sent to the microphone.
There doesn't seem to be any output at all from the unit.	Check to see if the OUTPUT knob is fully turned down as this will attenuate the signal completely.
Sending a signal to the unit from a DAW overloads it terrible.	It is necessary to be in the LINE GAIN section when sending it a line level source. And use the XLR LINE Input as it expects a signal with a very different impedance and level.
The Equalizer doesn't seem to be working.	Make sure you have pushed the EQL button to activate it.
My mid band boost seem to be too sharp.	Check to see if you have the 'HI Q' button pushed.

* For any further doubts or questions please get in contact with us at: support@heritageaudio.com



WARRANTY STATEMENT

LIMITED 2 YEAR WARRANTY

Heritage Audio **HA-81A EQ** is warranted by Heritage Audio SL to be free from defects in materials and workmanship for the period of 2 years to the original purchaser. In the event of such defects, the product will be repaired without charge or, at our option, replaced with a new one if delivered to Heritage Audio prepaid, together with a copy of the sales slip or other proof of purchase date. The warranty excludes problems due to normal wear, abuse, shipping damage or failure to use the product in accordance with the specifications.

Heritage Audio shall not be liable for damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation or commercial loss or any other damages, whether incidental, consequential or otherwise.

This warranty is not transferable.

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REGISTRATION

Please visit our website: <https://heritageaudio.com/registration/>



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