



# MERIS 440 USER MANUAL



The Meris 440 was designed in every aspect to be the premier solution for recording guitar. The basis of the design yields classic American console tone heard on countless records. From the legendary Cinemag input and output transformers to the high performance hybrid-discrete opamps, our engineers carefully made every design decision with the highest sonic performance in mind. We set our sights on the goal of creating the ultimate preamp for miking an amp or even an acoustic guitar. You'll find that the 440 provides the shortest path to great guitar recordings. With its specifically tuned filters, and its integrated pedal level post effects loop, the Meris 440 is a complete solution for a finished guitar track. Of course the 440 also performs on varying sources like vocals, strings, and percussion. The effect pedal level loop opens up a world of color and processing to all of your recordings.

### Installation into a 500 Series compatible rack enclosure

1. Power down your 500 series rack before installing (and removing) the 440.
2. Align the 440 with the desired rack slot, and check that the 440 is right side up.
3. Apply pressure to the top and bottom edges of the front panel to seat the 440 into the backplane connector.
4. Secure the 440 with the appropriate mounting screws for your rack.
5. Power up your 500 series rack only after the 440 is securely installed.

### Usage

Start with the Gain and Output controls at 12 o'clock, and the -20dB Pad switch in the down position (OFF). Set the filters to the middle position (bypass) which will provide a flat frequency response.



Connect a microphone to the 440's corresponding rack rear XLR input using a balanced connector.

Apply Phantom power only if you are certain the microphone requires it. Phantom power may damage certain microphones including ribbon mics.

For unbalanced line or instrument signals, use the Return / D.I. input as a high impedance input and control D.I. gain with the Output control.

## Features

- Legendary Cinemag input and output transformers used in classic American consoles that were the basis of the West Coast sound of the 70's. A short list of records that would have featured these electronics: Van Halen - II, Fair Warning, Diver Down, Rolling Stones - Exile on Main Street, The Doors - several albums including L.A. Woman, the Beach Boys - Pet Sounds, Fleetwood Mac - Rumors. The list goes on and on.
- 2 high performance Hybrid-Discrete opamps. One at the input transformer section and one driving the output section.

The output control was carefully placed in the output transformer hybrid-discrete drive section avoiding post-output transformer attenuators in other preamps that can degrade the output transformer's performance.

High-pass filter selectable between 80Hz and 200Hz. The 80Hz setting is useful for cutting the mud out of a woofy guitar cabinet or even as a typical high-pass on vocals. The 200Hz setting is often useful when recording an overly boomy acoustic guitar.

High shelf boost filters at 4kHz or 7kHz give you 3dB of boost at those respective corner frequencies. Many times when miking a guitar cabinet, engaging the 4kHz high shelf and the 80Hz high-pass achieves a finished tone that requires no additional e.q. at mixdown. The 7kHz high shelf can add necessary presence to an otherwise outstanding ribbon mic that could benefit from some sparkle in the high end.

The effects return jack also doubles as a great D.I. for bass, guitar or other instruments that require a high impedance input. The D.I. also provides up to 12dB gain if necessary and benefits from the tone of the output transformer.

Standard feature Pad and Phase switches.

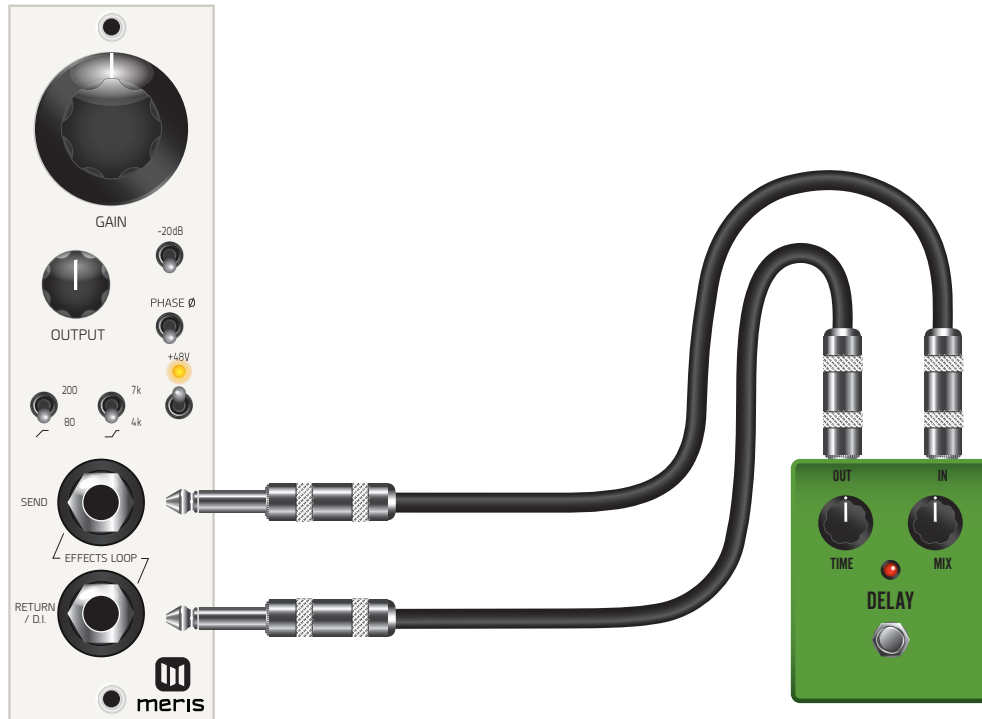
Switchable phantom power with LED indicator.

Effect pedal level effects loop. The loop is located between the input and output transformer sections for the highest signal integrity. The signal levels are carefully optimized as to not cause clipping in pedals.

- Only premium quality components selected for the 100% analog signal path
- Meris designs and manufactures all of our gear in Los Angeles, CA USA. Even our transformers are wound just a few miles away from the Meris office.

## Tips & Tricks

**1** Place post effects pedals like Reverb and Delay in the 440's effects loop for a cleaner more defined sound. These effects would have been traditionally added "on the board" in the big studio days with million dollar consoles and outboard rack effects. With today's project and home studio environments, that functionality is brought back with the 440's loop and high powered pedal effects.



**2** Use the high shelf and high pass filters to create a "finished tone" with 100% analog e.q. and no additional plug-ins necessary at mixdown



**3** Use the 80Hz or 200Hz high pass to cut the "mud" out of a woofy guitar cabinet





**4** Use a pair of 440s to interface with a mono input / stereo output pedal like a stereo reverb. Send the pedal input from the send jack of the first 440 and return signals to both 440s. Then record your track in stereo.



**5** Add sparkle to a ribbon mic with the 7kHz or 4kHz high shelf filters

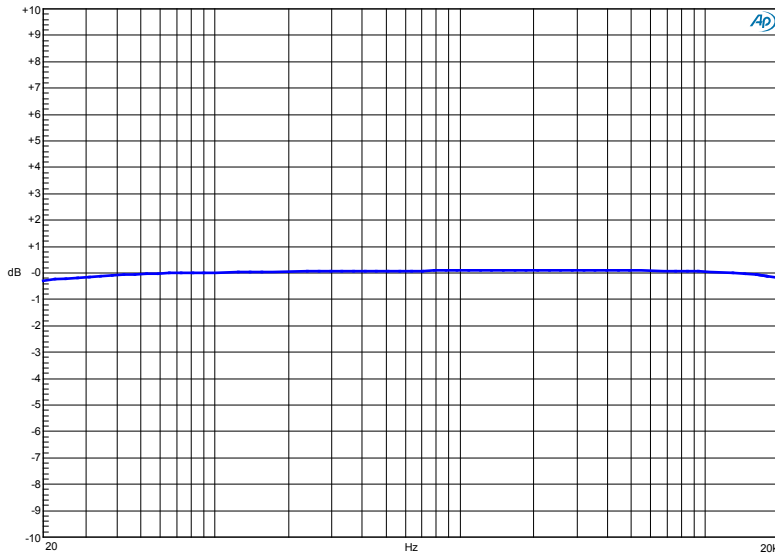


**6** Use the D.I. input as a premium quality high impedance D.I. for bass guitar

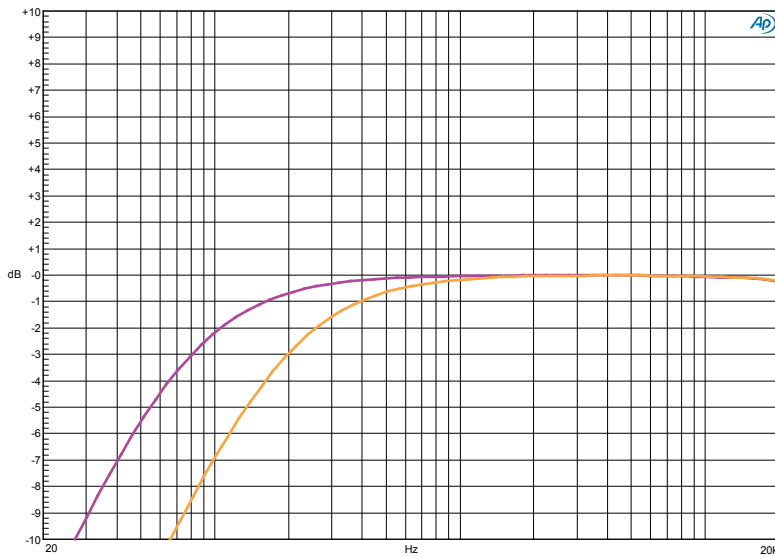


**7** Set up the 440 for unity gain and use the effects loop to interface with effects pedals in a mix

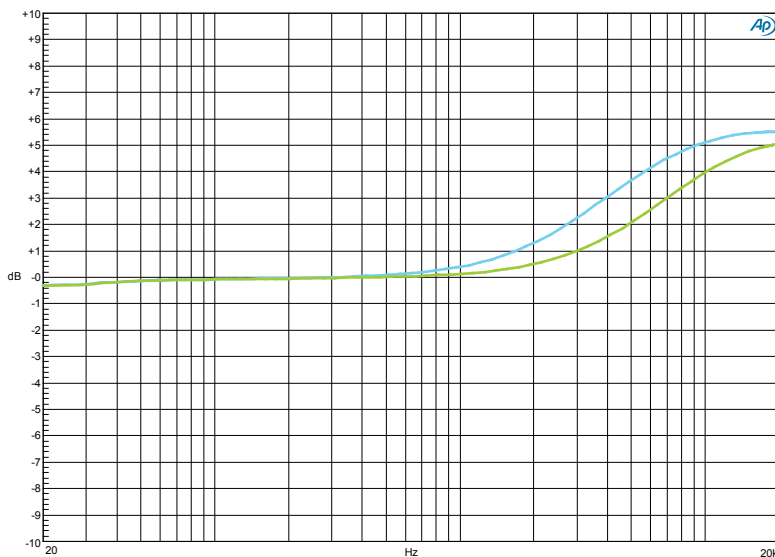
### Frequency Response & EQ Curves



Flat - all filters bypassed

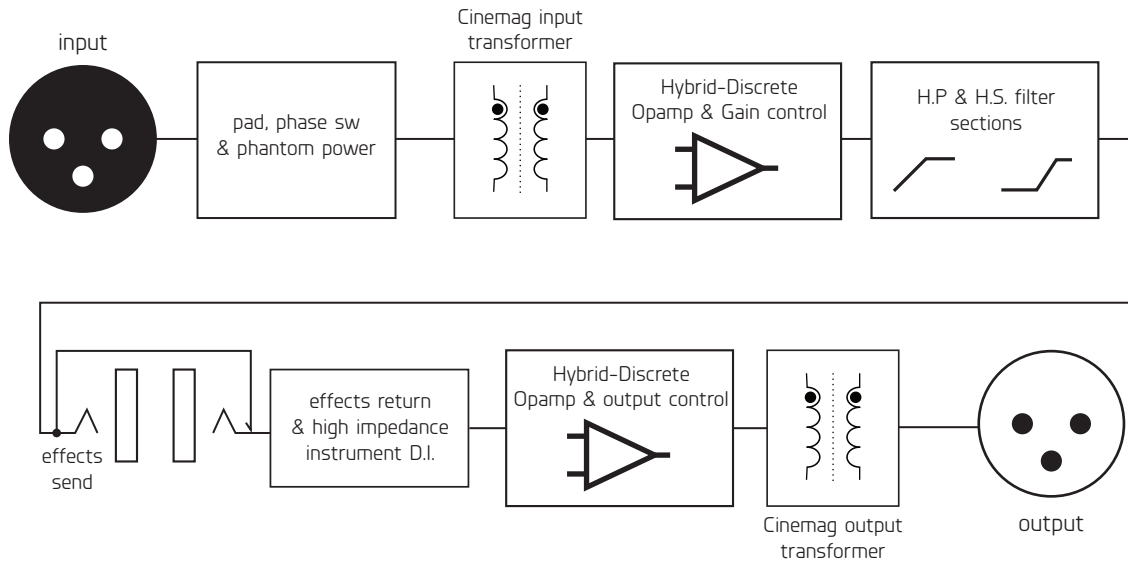


High-Pass filter response  
-3dB corner at 80Hz or 200Hz



High-Shelf filter response  
+3dB corner at 4kHz or 7kHz

## 440 Signal Path



## Specifications

- Up to 60dB of gain at the input section
- Output trim -27dB to +12dB (occurs pre-output transformer to preserve output transformer secondary impedance)
- 12dB / octave High-Pass: 80Hz or 200Hz corner frequency
- High-Shelf boost: + 3dB at 4kHz or 7kHz corner frequency
- 20Hz to 20kHz flat frequency response (+/- .3 dB) with all filters disengaged
- -130dBu EIN (A-weighted)
- 1 Meg Ohm input impedance at Return/D.I. input

## Limited Warranty

Meris, LLC warrants our electronic products to be free from defects in material and workmanship for one (1) year from the original purchase date. If the product fails before the warranty period has ended, Meris, LLC will repair or replace it at our discretion at no cost to the original purchaser. This warranty is not transferable. This warranty does not cover loss, theft or damage by misuse, abuse, modification or loss from natural disasters. Meris, LLC will not be held liable for any damages that result from the failure of this product which include but are not limited to: damage to other equipment, lost monies, and damages due to the inability to use the product. Meris, LLC will in no case be liable for any amount exceeding the purchase price. To obtain warranty service in the USA please contact us at [support@meris.us](mailto:support@meris.us) or by phone at +1-747-233-1440. We will reply with warranty claim instructions. International customers should contact the authorized dealer which the product was originally purchased at. Original proof of purchase is required for warranty repair.