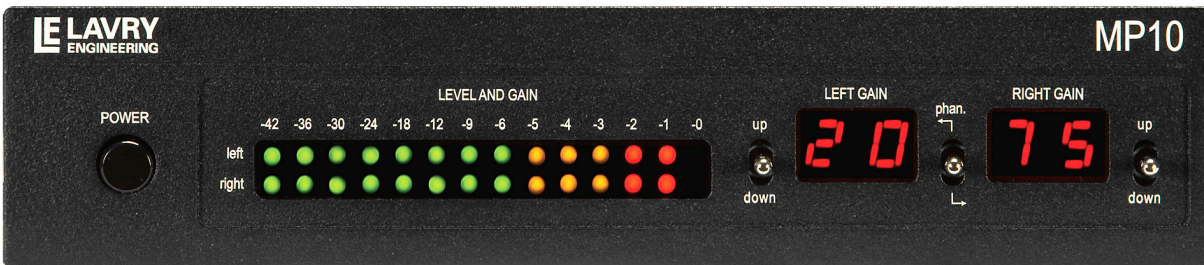




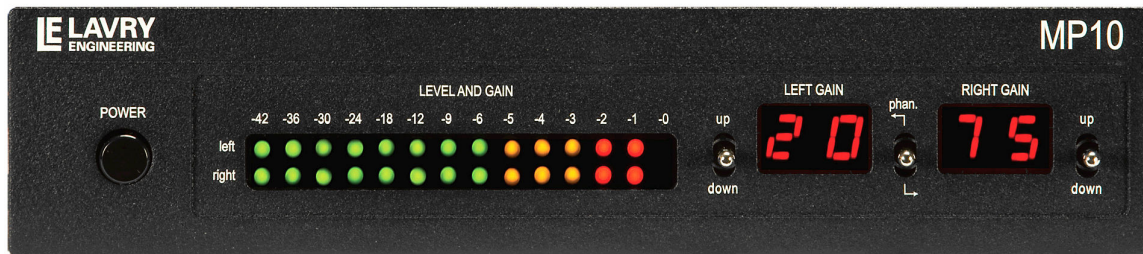
LavryBlack Series Model MP10 Stereo Microphone Preamplifier



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MODEL MP10

The LavryBlack MP10 features:

- Ultra-low noise and distortion for transparent sound
- Precise matching of channels ideal for stereo recording
- High-Low impedance switch to match inputs to Ribbon or Condenser and Dynamic Mic's
- Individually controllable Phantom Power for each channel.
- Large wide-range meter -42 to 0 dB
- Gain adjustable in 1 dB steps from 20-75 dB
- High gain for low output Ribbon microphones
- Gain adjustment by digitally controlled analog circuitry for sonic purity
- Balanced or unbalanced outputs

CONNECTIONS (Rear Panel)



MICROPHONE INPUTS:

Connect microphones with XLR cables to the Microphone inputs. There is a "hi z/lo z" switch located between the two input connectors. This allows the input impedance of both channels to be matched to the type of microphones being used. For example- "lo z" would be used for Dynamic and Condenser microphones and "hi z" would be used for Ribbon Mic's. The inputs are a transformer-free electronically balanced design for accurate and extended bass response with excellent rejection of unwanted hum and noise.

ANALOG OUTPUTS:

The transformer-free electronically balanced outputs are capable of +24dBu peak level or +18dBu when set for unbalanced operation. Connect the outputs to balanced inputs using XLR cables. For unbalanced inputs, use either adapters or adapter cables and set the "unbal/bal" switch to "Unbal." The output will be unbalanced "Pin 2 Hot" when the switch is in the "unbal" position.

AC POWER:

The MP10 automatically adjusts to AC power inputs in the range of 90 to 264 Volts AC and line frequencies between 47 and 63 Hertz. There are no settings to change.

OPERATION:

A. Front Panel

The MP10 has three toggle switches on the front panel. There is an individual gain adjustment for each channel, and a three position toggle switch to enable or disable the phantom power for each channel. Large numeric digital displays show both the level during normal operation, and back panel settings on power-up. There is also a wide range LED level meter to facilitate gain setting and display possible overloads.

B. AC Power Switch and Initialization

The AC power switch is used to turn the power "On" or "Off" on the MP10. When powered on, the unit initializes for about 10 seconds. During initialization, the gain displayed by the numeric digital displays start at a minimum setting, then "ramp up" to the levels that were set before the power was turned "Off." The numeric displays then switch to displaying the settings of the rear panel switches while the meter display "scans" through the segments. Once initialization is complete, the numeric displays revert to the gain display.

C. Gain

The gain is adjustable for each channel in one dB steps from 20 to 75 dB. Use of a digitally controlled analog gain circuit allows for precise adjustment and reset-ability, while maintaining outstanding low-noise and distortion characteristics over a very wide range of gain. The left channel gain is adjusted using the toggle switch labeled "Up/Down" to the left of the LEFT GAIN display, and the right channel is adjusted using the toggle switch labeled "Up/Down" to the right of the RIGHT GAIN display.

The wide gain range accommodates both the vast majority of microphones available and output levels suitable for both unbalanced "-10" and balanced "+4" level inputs. When the output switch is set to "unbal," the maximum output level is reduced by 6 dB from the maximum level for balanced operation of +24 dBu. Even so, when feeding the output of the MP10 to an unbalanced "-10" level input, care should be taken to set the gain so that the peak signal level displayed on the MP10's meter does not exceed "-6." This corresponds to the (approximate) 12 dB difference between the peak level for a "+4dBu" and "-10dBV" signal. Exceeding this level when feeding a "-10" input may result in clipping at the input stage of the "-10" device.

D. Meters

The output level is displayed on two 14 segment LED meters covering the range from -46 to 0 dB's below peak output level. For balanced outputs peak level is +24 dBu, and for unbalanced outputs peak level is +18 dBu.

E. Phantom Power for Condenser Microphones

The three position momentary toggle switch located between the two numeric GAIN displays (labeled "phan.") is used to select +48V Phantom power for each channel, individually. Clicking the switch once in the up direction will enable or disable the Phantom power on the left channel, and clicking the switch once in the down direction toggles the right channel Phantom power on or off. The decimal point in the GAIN display of the appropriate channel illuminates when the Phantom power is enabled.

F. Impedance Switch

There is a toggle switch labeled "hi z" or "lo z" located on the back panel between the input and output XLR connectors. The "lo z" position should be used for low impedance Dynamic or Condenser microphones, and the "hi z" position optimizes the input impedance for Ribbon microphones. When AC power is applied, the setting of this switch is displayed in the right GAIN display during initialization.

G. Balanced/Unbalanced Switch

The XLR outputs of the MP10 are electronically balanced and should not be connected to an unbalanced input without first setting the rear panel switch to “unbal.” Doing so will not cause damage to the amplifiers, but will raise the distortion level of the outputs significantly. The switch is located between the two sets of XLR connectors and is labeled “bal” and “unbal.” The peak output level is reduced from +24 dBu to +18dBu when the switch is set to “unbal.” After AC power is applied, the setting of this switch is displayed in the left GAIN display during initialization as “ba” for balanced and “Ub” for unbalanced.

SPECIFICATIONS:

Distortion- Measured at -3dBFS (21dBu) at 1kHz, 10kHz, &20kHz:

Gain Setting 20	Less than 0.00070%dBFS
Gain Setting 40	Less than 0.00090%dBFS
Gain Setting 60	Less than 0.00800%dBFS

Noise- Input referenced noise at Gain Setting 40 with -999dBr input

150 Ohm source	Less than -124dBu (Unweighted) Less than -127dBu (A-Weighted)
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Inputs- Transformer-free electronically balanced Pin 2 “+” XLR inputs with common hi/lo impedance switch.

Phantom Power- +48 volts Phantom power for condenser microphones, can be enabled or disabled for each input channel individually using front panel switch.

Outputs- Transformer-free electronically balanced outputs. Rear panel switch for balanced Pin 2 “+” or unbalanced Pin 2 “Hot” operation.

Meter- 14 segment LED meter per channel, displays output signals ranging from -42 to 0dB below peak output level. Maximum balanced peak output 24dBu, maximum unbalanced peak output is 18dBu.

Dimensions and Weight- 8”wide x 10.75” deep* x 1.75” high, 4.5 lbs
*depth includes clearance for front and rear panel switches and connectors

AC Power:

Voltage 90-264 VAC, Frequency 47-63Hz, Current 0.1A

Fuse Rating 4A “Fast Blow” *

*Subject to change! Please always check the rating on the fuse and the one printed next to the fuse holder on the power supply PC board before replacement. Replace the fuse ONLY with a fuse of the same rating. If you have any questions, contact: techsupport@lavryengineering.com

ACCESSORIES

Included in box: U.S.A. Power Cord, Warranty Card, This User’s Manual

Optional: LavryBlack Series 19 inch rack-mount kit. This kit is designed to mount two LavryBlack units side-by-side in a 1U rack space.

LIMITED WARRANTY – LAVRYBLACK SERIES MODEL MP10

Subject to the conditions set forth below, for one year after the original purchase date of the product, Lavry Engineering will repair the product free of charge in the United States in the event of a defect in materials or workmanship.

Lavry Engineering may exchange new or rebuilt parts for defective parts. Please call the factory for an RMA number prior to shipment. No product will be accepted for warranty service without a pre-issued RMA number.

This warranty is extended only to an original purchaser of the product from Lavry Engineering, or an authorized reseller of Lavry Engineering. Products that are purchased from unauthorized resellers do not have any warranty coverage. A valid purchase receipt or other valid proof of purchase will be required before warranty service is provided. This warranty only covers failures due to defects in materials or workmanship and does not cover damages which occur in shipment or failures resulting from accident, misuse, line power surges, mishandling, maintenance, alterations and modifications of the product, or service by an unauthorized service center or personnel. Lavry Engineering reserves the right to deny warranty service to products that have been used in rental, service bureau, or similar businesses.

This limited warranty gives you specific legal rights. You may have others which vary from state/jurisdiction to state/jurisdiction.

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