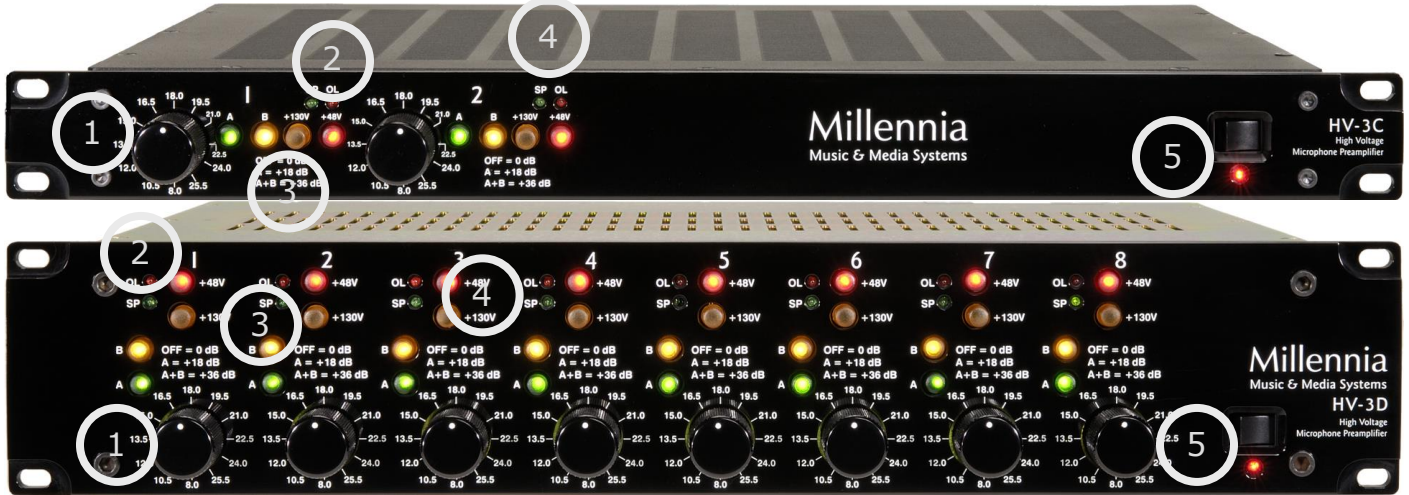


Quick Start Guide



HV-3 Series Preamp Front Panel

1. HIGH RESOLUTION GAIN CONTROL

Detented, 36-position gain control employing a superior quality Grayhill mil-spec gold plated rotary switch. Switch gain is approximately 1.5 dB per step and is inter-channel matched to better than 0.08 dB at all settings.

After a brief warm-up period, adjustment of this switch is virtually silent. Two illuminating pushbutton switches (Green and Amber) determine the gain "range" of the rotary switch.

When the pushbutton switches are not depressed (non-illuminated), the mic preamp gain provided is as printed on the front panel (9.0 dB, 10.5 dB, 12.0 dB, etc..).

When the green pushbutton switch (only) is depressed and illuminated, add 18 dB to the gain settings as printed on the front panel. When the green and amber switches are both depressed and illuminated, add 36 dB to the gain settings as printed on the front panel. For example, with both pushbutton switches depressed and the rotary switch at 12:00 o'clock position, the preamp gain would be 54 dB (18 + 36).

2. PHANTOM POWER SELECT SWITCH ("+48V")

Illuminating pushbutton switch which provides phantom power (+48VDC) to the microphone inserted into that channel. When this switch is depressed (illuminated red), phantom power is applied simultaneously through dual 6.81k ohm resistors to pins 2 and 3 of the three-pin female XLR input.

Use phantom power with condenser and other microphones requiring traditional phantom supply.



CAUTION: Applying phantom power to ribbon microphones could damage them. Do not use phantom with ribbons, moving coil, and other microphones which do not require phantom power. Use care, as well, to not insert or extract mic cables from the HV-3 series preamp when phantom power is active.

3. HIGH VOLTAGE SELECT SWITCH ("+130V")

Optional Illuminating pushbutton switch which selects the four pin XLR input (+130VDC) for DPA (B&K) high voltage microphones type 4003, 4004, 4009, and 4012.

When this switch is depressed (illuminated amber), the HV-3 series preamp receives mic-level audio from the four pin XLR input. If you are using a B&K (DPA) high voltage microphone with four pin XLR connectors, depress this switch so that it illuminates. If a conventional microphone is used, do not depress this switch. The HV-3 series preamp will not combine ("mix") both conventional and high voltage microphones on one channel. NOTE: The HV-3 series preamp is designed to provide uninterrupted DC power to B&K (DPA) high voltage microphones, regardless where this switch is set. Use care that high voltage microphone cables are not inserted or extracted from the unit when power is on.

4. SIGNAL INDICATORS "OL" & "SP" LEDs

The green "signal present" (SP) LED indicates that a nominal signal is present at the microphone input. It is set to illuminate in the neighborhood of -35 dBu.

The red "overload" (OL) LED has been set to illuminate when the balanced output reaches a level of +25 dBu. However, the HV-3 series preamp can produce unclipped, undistorted levels over twice this voltage. Hence, the overload LED is not an indication of preamp clipping. Rather, it is a general reference showing a nominal "system" peak level.

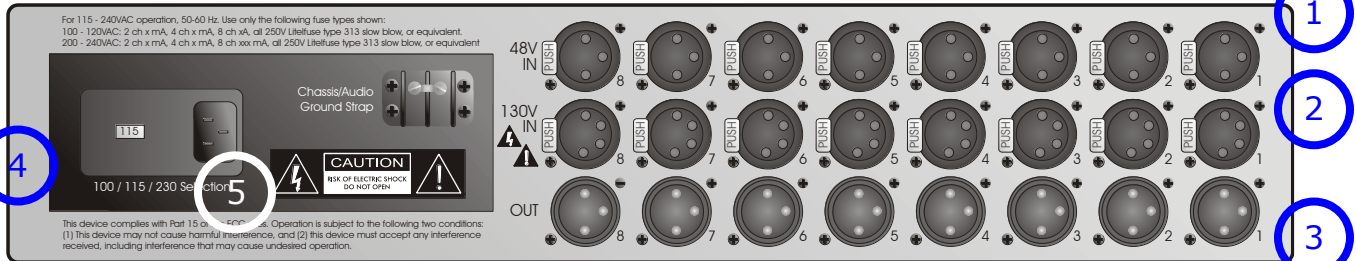
If clipping is occurring in your recording path, check all devices connected after the HV-3 series preamp and reduce system gains accordingly. In the event that B&K (DPA) 4004 or 4012 microphones are used with hazardous sound pressures (over 130 dB, SPL), an attenuator may be required between microphone and preamp.

5. POWER SWITCH "POWER and PILOT INDICATOR LIGHT LED

- Rocker switch for switching AC line power on and off. When LED is illuminated, shows that the HV-3 series preamp unit is powered up and active.



HV-3C



HV-3D

Rear Panel

1. CONVENTIONAL MIC INPUTS "48V IN "
 Conventional 3-pin female XLR input jacks for use with all conventional balanced XLR microphones, both phantom and non-phantom powered. Provides +48V Phantom powering. Standard input impedance is approximately 6,200 ohms. Pin 1 is ground. Pin 2 is positive polarity. Pin 3 is negative polarity.

2. OPTION MIC INPUTS Two input options are available; a 130V input and a DC-coupled "ribbon" input. The option inputs are installed in the center row. The drawing shows eight 130V inputs installed.

a.) 130V Option
 Four-pin female XLR connector for use only with DPA (B&K) models 4003, 4004, 4009, and 4012 microphones. Pin 1 is ground. Pin 2 is not connected. Pin 3 is +130 Volts DC power and pin 4 is unbalanced audio signal. Connecting anything other than the above listed DPA models to this connector may result in serious damage to microphone, the HV-3 series preamp, or both.

b.) DC Option
 Three-pin female XLR connector optimized for dynamic microphones (ribbon, etc.). The DC option bypasses the entire phantom circuit and routes a microphone directly to the bases of the ultra-matched gain transistors.

3. LINE LEVEL OUTPUTS "OUT"
 Conventional three pin male XLR connectors providing balanced, line level microphone output. Pin 1 is ground. Pin 2 is positive polarity. Pin 3 is negative polarity. The line level output is designed for driving 600 ohm loads and long, high capacitance cables. Outputs may be configured in an unbalanced configuration by either grounding one of the audio polarities (pin 2 or pin 3), or taking one audio polarity directly as an unbalanced signal (recommended). In the former configuration, the output is automatically decreased by 6 dB.

4. AC VOLTAGE MAINS SELECTION Note that since 2017, HV-3C and HV-3D preamplifiers have shipped with switch-mode power supplies. These SMPS's detect mains voltages (90VAC to 243VAC) and adapt automatically.

5. FUSES
 5 x 20 mm, 1000 mA, slow blow, 250 V, Littelfuse 218 or equivalent

POWER ENTRY "IEC Power Receptacle"
 An IEC-type AC line-power receptacle for use with removable cords. Use only the power cord provided with the HV-3 series preamp unit or equivalent U/L approved type SV, SVT, SJ, or SJT AC power supply cord. Do not defeat the third pin earth ground.

The complete HV-3D and HV-3C manuals are available on-line:

[HV-3C and HV-3D Full Manual](#)