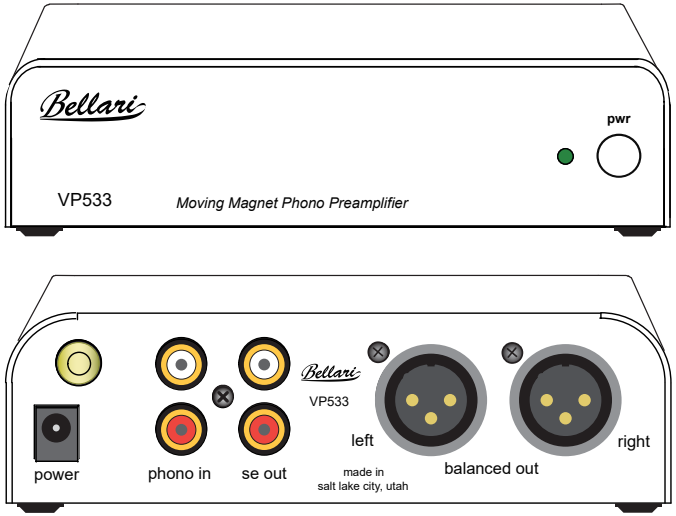
What's in the box?

1 - VP533 proudly made in Salt Lake City, UT
1 - Owner's Manual
1 - PS27s power adapter
1 - Love for audio, Decades of experience building and designing

Bellari

Bellari
Salt Lake City, UT
12/25

VP533 Phono Preamp



SPECIFICATIONS

Input Connectors:	RCA
Output Connectors:	RCA (SE Out), XLR (Balanced)
Gain:	40 dB gain @ 1kHz
Input Loading:	47k ohms resistive
	120pF capacitive
Output Impedance:	470 ohms
Frequency Response:	3Hz to 36kHz
Sensitivity:	2.85 mV for 284 mV output at 1kHz
	32.84 mV for 3.28 V output at 1 kHz
Equalization:	RIAA +/- .15 dB, 20Hz to 20kHz
THD:	.005% @ 1KHz
	Ref 4V RMS balanced, 2V RMS SE
S/N Ratio:	>96 dB unweighted
	Ref 4V RMS balanced, 2V RMS SE
Crosstalk:	-98 dB, 20-20kHz
PWR:	15 VDC
Size:	5.5"w x 3.5"d x 1.25"h
Weight:	.8 lbs
Indicator:	1 Power LED

Connecting the VP533

To set up the VP533, connect its input to your phonograph and its output to your preamp or amplifier. The ground post is usually where things get tricky. Turntables are especially prone to ground hum, so we recommend using the VP533's ground post to connect to your turntable's ground wire. In our experience, using the ground connection always sounds better than leaving it unconnected.

Ground loops are common in audio systems—adding more equipment increases the likelihood of noise caused by ground currents circulating in a "loop." Because turntables are often the source of grounding issues, they should be checked first. If a ground loop persists even when using the ground post, you can try attaching the turntable's ground wire to the ground sleeve of an RCA jack instead.

Remember that a ground loop can occur anywhere in the system, so take time to isolate the specific component causing the issue rather than focusing on just one device.

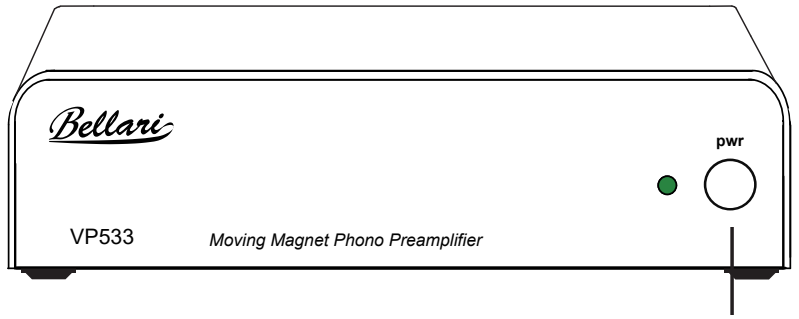
If you're using the XLR balanced outputs, note that it provides roughly double the output level of the single-ended RCA output. Most connected devices can handle this without distortion, but if you do hear distortion, simply reduce the level on the device you're feeding.

To hear your records correctly, you need a preamp that includes the proper RIAA de-emphasis. This can be built into your main preamp, or you can use a dedicated phono preamp like the VP533. Many people believe a standalone unit is better, but that's subjective and depends on the design and quality of your preamp. I personally like having the phono stage separate from the main preamp, but I wouldn't claim that a standalone unit is always better—it varies dramatically case by case.

Q: What is the RIAA and why do I need a separate unit for it?

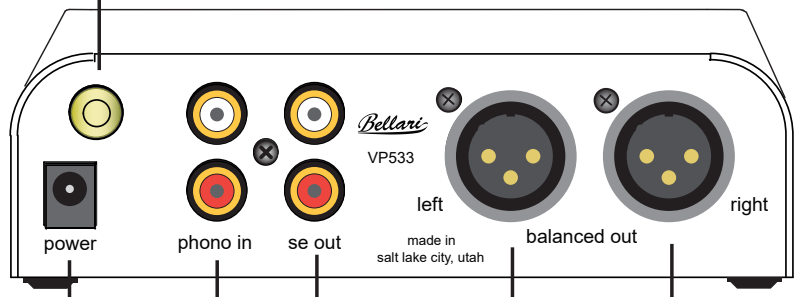
A: The RIAA equalization curve was intended to operate as the global industry standard for records since 1954. However, it is almost impossible to say when the change actually took place.

RIAA equalization is a form of pre-emphasis on recording and de-emphasis on playback. A recording is made with the low frequencies reduced and the high frequencies boosted, and on playback the opposite occurs. The net result is a flat frequency response, but with attenuation of high frequency noise such as hiss and clicks that arise from the recording medium. Reducing the low frequencies also limits the excursions the cutter needs to make when cutting a groove. Groove width is thus reduced, allowing more grooves to fit into a given surface area, permitting longer recording times. This also reduces physical stresses on the stylus which might otherwise cause distortion or groove damage during playback.



Power switch and LED.

GROUND CONNECTOR:
Connects to the Ground of the phonograph.



Power for connection to the included power adapter.

OUTPUT: Stereo RCA and XLR jacks for connection to a preamplifier or amplifier.

INPUT: Stereo RCA jacks for connection to the phonograph.

Q: Do I need to use XLR balanced cables to get better sound?

A: No. Sound quality is the same. The purpose of using an XLR balanced cable is to reduce noise, not to improve the audio itself.

Q: So I'll have less noise if I use XLR?

A: Not necessarily. Balanced connections mainly help when cable runs are long and more susceptible to interference—from things like power cables, lighting, or other electrical noise.

Q: Then why should I care about XLR at all?

A: If your preamp has balanced XLR balanced inputs, there's no harm in using them. Many people debate whether XLR balanced is beneficial in home audio, but in professional audio it's an industry standard. I've designed hundreds or audio products and built hundreds of thousands of units with XLR balanced ins and outs for pro use.

Q: You sound experienced—what do you use in your own home setup, RCA or XLR?

A: I use both. One system has a preamp with XLR inputs, so I use XLR there. The other system only has RCA inputs, so I stick with RCA. I've never heard any sonic difference because there isn't one. As for noise, my cables are only about three feet long, so they're not likely to pick up interference. If your system supports XLR, feel free to use it—you have nothing to lose except the price of new cables. But if you're already using RCA and it works fine, there's no need to switch.

Q: How long does a cable need to be before XLR balanced becomes necessary?

A: For line-level signals, anything over about 25 feet should definitely be XLR balanced—no question. That applies to both home and professional audio.