



TYPE 85 ACTIVE DIRECT BOX

The Type 85 connects any high-impedance instrument pickup, even piezo pickups, to a balanced microphone (XLR type) input. It provides a strong, clean signal to the mix board without adding noise or distortion. It won't change the tone or volume you hear from your own amp like passive direct boxes. It won't break just when you need it. It won't develop a dead battery on stage because it runs on Phantom power.

Indestructible

Connectors and switches are recessed into a single-piece extruded case with extra-thick walls. You can literally drive a truck over a Type 85 without hurting it. Internal electronics are molded in a solid epoxy block and fully protected against electrical damage. The input can withstand 220 V AC all day long and static spikes up to 20,000 V.

Battery or Phantom Power

Most mixing consoles provide 48 V Phantom power and the Type 85 will automatically use it. If you don't have Phantom power, the Type 85 will run for about 400 hours from a single internal 9 V battery.

Simply Exceptional Sound

The Type 85 uses only hand-selected high-quality discrete components woven into a single-ended class A circuit, much like a classic tube microphone preamp. The Type 85 has an incredibly smooth, sweet sound. Unlike many active DI boxes, the Type 85 can always isolate ground, even when running on Phantom power, to help eliminate hum and buzz from ground problems.

The Type 85 doesn't have roll off switches or effects. Adjusting the frequency content of a sound source is an artistic decision best done at the mixing location where you can hear the results and easily make changes.

Frequency Response:

20 Hz to 20 kHz +- 1 dB

Noise (shorted input):

.63 μ V RMS (-122 dBu) BW = 20 kHz

Power Requirements:

9 V battery or .4 mA @ 48 V Phantom

Input Protection:

220 V RMS and 20,000 V static discharges

Voltage Gain:

-10 dB in Pickup mode
-46 dB in Speaker mode

RF Filtering:

250 kHz Low Pass on input
30 kHz Low Pass on output

Maximum Input Level:

5 V P-P in Pickup mode

300 V P-P in Speaker mode
Equal to 2,800 Watts into 4 Ohms

Distortion:

.018% THD @ 1 kHz and 1 V P-P in
.08% IMD 10 kHz/60 Hz 1 V P-P in

Input Resistance:

10 MOhms in Pickup mode (10 times the input resistance of a typical guitar amplifier.)

Input Capacitance:

160 picofarad, equal to two feet of low-capacitance guitar cable.

Dimensions:

1.75 in x 3 in x 5 in (45 mm x 77 mm x 127 mm)

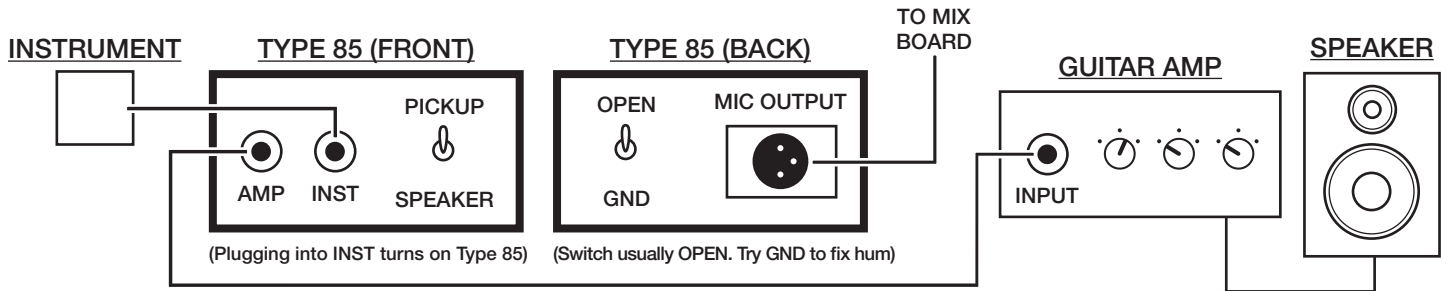
Weight: 18.5 oz (.52 kg)

Type 85: Frequently Asked Questions

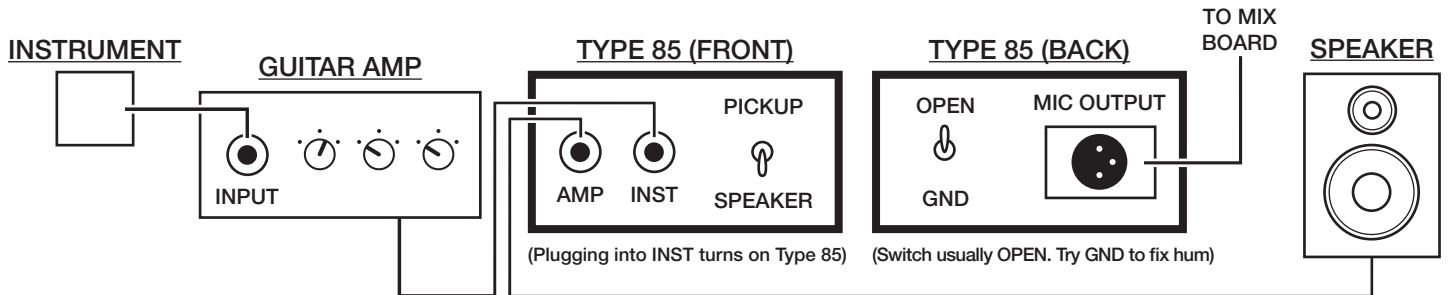
How do you hook up a Type 85?

The diagrams on the next two pages show you the two most common ways to connect your Type 85.

Typical Bass Guitar Setup



Typical Lead Guitar Setup



I have just a guitar (or other signal source) and no amplifier. How do I hook it up to the Type 85?

All signal sources must go to the "INST." jack because inserting a plug into the "INST" jack turns the TYPE 85 on. The "AMP." jack is simply connected in parallel with the "INST" jack but it does not operate the power switch.

How do you use the "PICKUP-SPEAKER" switch?

Use the "SPEAKER" position when the TYPE 85 is connected to the speaker output of an amplifier and the "PICKUP" for all other sources including preamp outputs.

How many watts can the TYPE 85 handle?

The TYPE 85 is so well protected it can handle the full output of any amp without damage. In "SPEAKER" mode the TYPE 85 will distort at the equivalent of 1,700 watts into 8 ohms.

How does the TYPE 85 use Phantom power?

If your microphone input has 48 volt Phantom Power, the TYPE 85 will automatically switch off its battery and use the phantom. The TYPE 85 will operate with phantom voltages as low as 24 volts but you will need to remove its internal battery.

How many hours will the TYPE 85 battery last?

A fresh alkaline 9 V battery will run the Type 85 for 400 hours. That's 2 months running 8 hours a day but only 2 weeks running all the time so it's best to turn the TYPE 85 off when not in use. Unplugging the plug from the TYPE 85 "INST." jack turns off the battery. Unplugging the "INST." input does not turn off the TYPE 85 when it's running on Phantom power but it shorts the input to ground to reduce noise.