

The Takamine Acoustic DI Plus has been designed to provide the electric-acoustic guitarist with a versatile, active direct input interface with special features geared toward an instrumentalist's performance needs. While this unit can be used with virtually any acoustic-electric instrument, it has been engineered especially for use with the Takamine CoolTube<sup>1</sup>. Along with other DI features, the Acoustic DI Plus provides a robust power source directly through the cable supplied with the unit thus eliminating the need for battery replacement in your CoolTube preamp.

### The Acoustic DI+ Delivers Great Connections

Every direct injection device offers a high-impedance to low-impedance interface that allows a musician to connect his instrument to high-end mixers, recorders, and amplifiers. The Acoustic DI Plus does this... and a lot more! Besides converting the output of your guitar to a Low-Z signal available through XLR and 1/4" jacks, you can also send your guitar's signal to your amp through a convenient isolated/buffered output jack. A foot-switchable effects loop with a return gain control provides simple integration of your FX pedal system. A real "plus" for soloists is the built-in variable gain, footswitched boost function that lets you give your solos that extra punch. Add a hum-busting ground lift switch, and a 12dB input attenuator and you've just taken full control of your acoustic-electric instrument.

### The Acoustic DI+ Controls and Functions

While easy to use, to get the most out of your Takamine Acoustic DI Plus, please refer to the diagrams on the following page to help acquaint yourself with the layout and function of the various inputs, outputs, and control features on the unit. Finally, use and operation tips along with a sample hook-up diagram will be presented.

**a ON LED:** This red light emitting diode (LED) illuminates when the power switch is in the on position and AC adaptor is delivering power to the circuit.



**b Cool Tube Power LED:** When this Blue LED illuminates, it indicates that power is connected to your CoolTube preamp. The LED will not illuminate if there is a problem with the cable you are using.

**c Cool Tube Power Switch:** When this switch is pressed, it enables the CoolTube power supply. If you have a CoolTube preamp in your Takamine guitar and you are using the 2-conductor (Stereo) guitar cable supplied with the DI, the blue LED illuminates, indicating power is supplied to your preamp. If the blue LED does not light, there is a problem with the cable or the preamp you've connected. This switch is also used to reset the CoolTube power protection circuit by moving the switch to the "up" position then pressing again to engage the power circuit. Leave the power supply off when using preamps other than a CoolTube.

**d Pad LED:** This yellow LED illuminates when the -12dB attenuator is in use.

**e Pad On Switch:** When this switch is pressed, a 12dB attenuation is applied to the input of the DI. Use this function with high level line output devices or if you notice distortion.

**f Boost LED:** When this LED is lit, it indicates that the level boost circuit is active.

**g Boost Footswitch:** Pushing this footswitch toggles the output boost function that allows you to increase the level of your guitar instantaneously for soloing or emphasis.

**h Boost level Control:** This potentiometer lets you set the amount of gain when the boost circuit is engaged. Full counterclockwise = unity gain; full clockwise = +6dB.

**i Ground Lift Switch:** Normally this switch is in the "up" position, i.e., ground is connected from the input to the output. However, in some cases when connecting to several devices, pushing this switch down can eliminate "hum" caused by multiple ground paths.

**j Loop Return Gain:** This control allows you to adjust the gain of the signal from your effects devices as they are mixed into the main output. This level compensation lets you set the correct EFX return signal no matter the type of device(s) you use.

**m On/Off Switch:** Pressing the white dot on the rocker switch turns on the DI Plus.

**n Power Input:** Connect the power adaptor provided to this jack to energize the unit.

**o Input:** Connect your instrument to this jack to inject your signal into the DI Plus. Plug in your CoolTube preamp here with the 2-conductor (Stereo) cable supplied and your preamp will be remotely powered. Use a single conductor (Mono) cable for other instruments.

**p Buffered Output:** The output from this jack is a buffered (active) version of your guitar signal. Use this signal to connect to your amp or other Hi-Z device.

**q Loop Send:** This output delivers your instrument's signal to the input of your EFX units.

**r Loop Return:** Plugging in the output of your EFX devices into this jack allows you to direct the EFX signals back into the main outputs.

**s Mute FTSW:** Connect a push-on / push-off footswitch to this jack and you can mute the output of the Acoustic DI Plus at will.

**t Unbalanced Output:** If you choose to connect the Acoustic DI Plus to an unbalanced Low-Z or Hi-Z device, this jack will provide the appropriate signal.

**u Balanced Output:** This XLR jack provides a 600 ohm balanced low impedance signal capable of delivering your signal over long cables into high-end mixers, recorders and amps.

To get started using the Acoustic DI Plus, plug in the AC adaptor to the input marked DC In 28VDC. If you own a guitar equipped with the CoolTube, use the 2-conductor (Stereo) cable supplied with the DI and make sure the CoolTube power switch is pressed down. If you are not using a CoolTube preamp, use a normal guitar cable and leave the CoolTube power switch in the “up” position. After making the connections to your accessories, amp and/or mixer, switch on the DI power. You should see the power LED illuminate indicating that the DI is active. Now plug in your guitar. If you have a CoolTube preamp, the blue CoolTube power LED should also be lit<sup>2</sup>.

Adjust your instrument volume as usual, then set the boost volume potentiometer for the desired amount of volume boost for playing emphasis. Press the boost footswitch (illuminating the red boost LED) and check your boost setting. Increase or decrease gain as desired. If your instrument output is exceptionally high, you may wish to engage the 12dB attenuator by pressing the pad switch and noting the yellow pad active LED.

When using an effect device, pressing the effects footswitch engages the EFX Loop circuit (green LED on). Adjust the return level control potentiometer for an appropriate mix of the loop return signal.

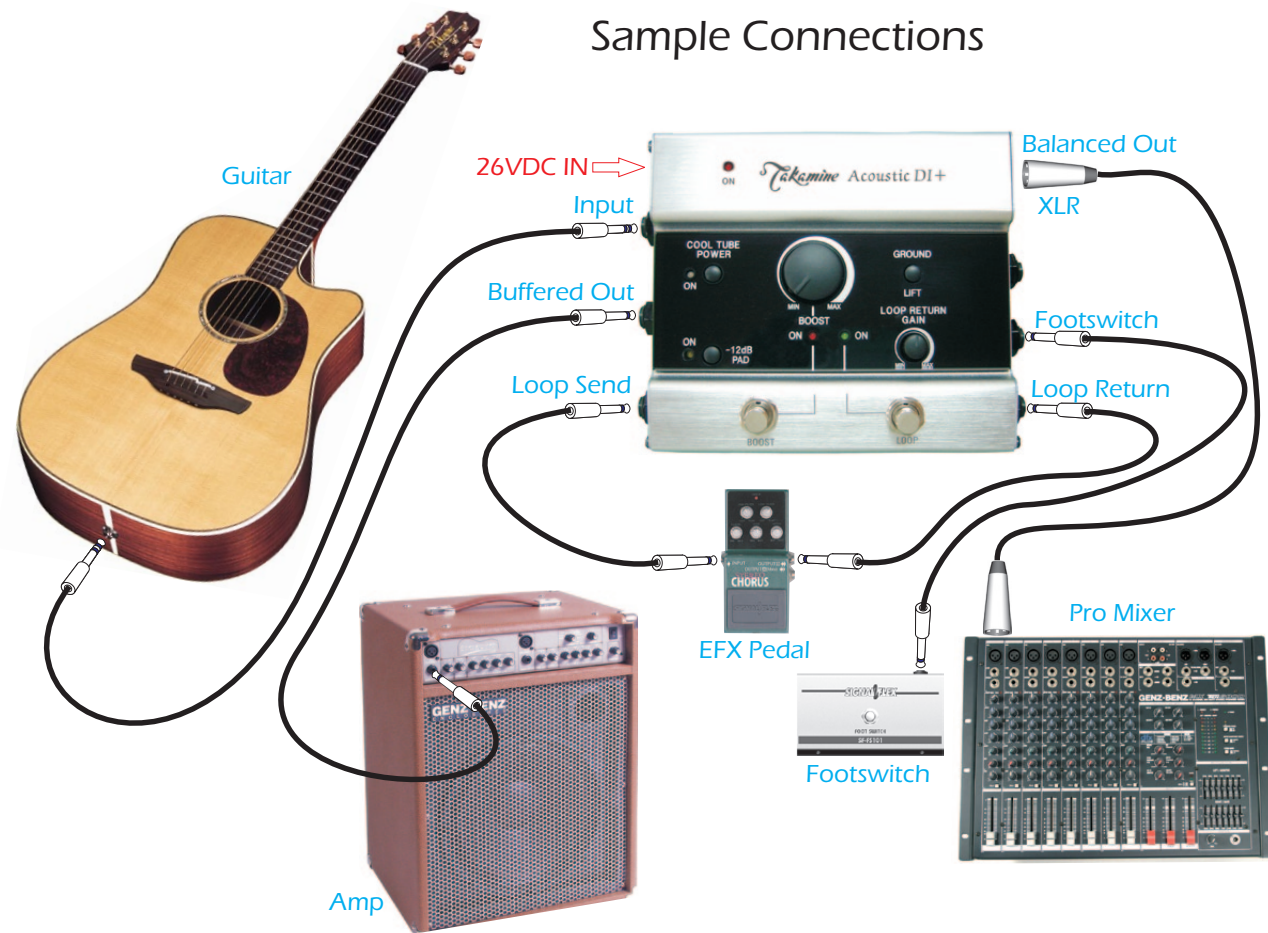
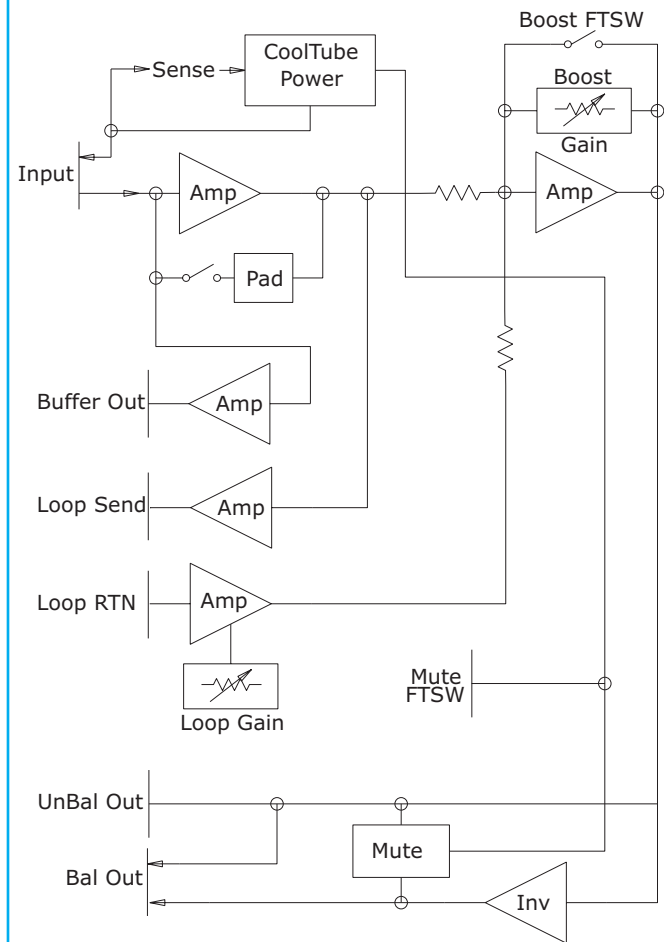
Finally, if you want to mute the output of the DI, while tuning for example, plug in any readily available press-on/press-off footswitch to the Mute FTSW jack to control the built-in mute function.

Now go ahead and experiment with the settings and the connection variations and experience the control and flexibility of the Acoustic DI Plus for your best performance, every performance.

**<sup>1</sup> If using a CTP-1, you must install a remote power retrofit kit and follow the kit instructions. See your Takamine dealer or visit [takamine.com](http://takamine.com) for more details.**

<sup>2</sup> The CoolTube power LED indicates the status of the preamp power supply. A built-in power controller acts as a “circuit breaker” if there’s a problem with your cable or if you are not using a CoolTube preamp. Toggling the CoolTube power switch resets the power control circuit.

Block Diagram



# Takamine

## Acoustic DI+



# Owner's Guide