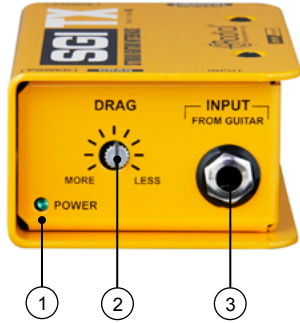


FEATURES

SGI TX

- 1 **POWER LED** - indicates the SGI TX is active when power supply is connected.
- 2 **DRAG** - load correction allows you to dial in the proper load for your pickups.
- 3 **INPUT** - ¼" jack for instrument connection.
- 4 **TRANSMIT** - XLR output transmits balanced signal to the SGI RX unit.
- 5 **POWER** - connection for included 15VDC power supply. The SGI is also compatible with pedalboard power supplies ranging from 9V to 15V.



SGI RX

- 6 **RECEIVE** - locking XLR input receives balanced signal from SGI TX unit.
- 7 **OUTPUT** - ¼" jack outputs guitar signal.
- 8 **GROUND LIFT** - reduces ground loop hum by disconnecting the ground path from pin-1 on the XLR jack.



TrueToYourMusic®

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Please take proper care when handling and consult local government regulations before discarding.



TrueToYourMusic®

SGI

STUDIO GUITAR INTERFACE



USER GUIDE

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User Guide - Part# R870 1115 20 / 05-2026 • © Copyright 2025 all rights reserved
Specifications and appearance are subject to change without notice.

Congratulations on your purchase of the Radial SGI studio guitar interface. The SGI has been designed and constructed to provide years of dependable performance whether it is used in the studio or on the road.

Your new SGI features a discrete buffered signal path to ensure optimum audio performance, and it is equipped with premium Jensen transformers to provide isolation and eliminate buzz and hum caused by ground loops. To further assure sonic integrity the SGI TX includes Radial's unique Drag control load correction circuit. Drag lets you apply the perfect load to your instrument to ensure the natural tone and dynamics are maintained.

Although the SGI is 'plug & play' and easy to use, we recommend that you take a few minutes to read this short manual so that you get the most out of your Radial SGI. Should you have any additional questions, we invite you visit the FAQ portion of our website at www.radialeng.com where you can find the latest updates on the SGI.

INTRODUCTION

The Radial SGI studio guitar interface is delivered as a transmit TX and receive RX set that is connected together with a standard balanced twisted pair XLR microphone cable.

The SGI TX is an active device that requires power to drive the signal. A 15VDC power supply is included with the SGI to power the audio path. However, the SGI TX can also be powered by standard pedalboard power supplies ranging from 9V to 15V, so you can easily integrate the SGI TX onto your pedalboard. You can use power supplies with either center-pin negative or center-pin positive polarity. Both are compatible with the SGI TX. The SGI RX receive module is passive. This means that it does not require any power.

The SGI is designed to transmit high impedance guitar signals to 100 meters (330 feet) and beyond. With these distances in mind, it is likely that each end will be connected to equipment that will, in turn, be powered by different electrical circuits. To alleviate noise problems caused by potential ground loops, the SGI is equipped with premium Jensen isolation transformers at each end to deliver your signal as faithfully as possible.

The bright yellow finish increases visibility to make finding each end as easy as possible, while the outer chassis is 14 gauge steel and features welded I-beam construction to eliminate potential stress on the circuit board.

USING THE SGI

As always, before making any audio connection, ensure audio system power is off and volume controls are turned down. This practice eliminates popping caused by power-up transients that could damage loudspeakers or other components.

Begin by connecting your instrument to the SGI TX, an XLR cable between the TX and RX module, and the RX module to your guitar amp or pedals. You can now connect the power supply to the SGI TX module. There is no power switch. As soon as you connect the supply, the LED should illuminate telling you power is on.

Although the SGI has been optimized for guitar, you can use it with any high-impedance instrument. If you intend to use your SGI with high output instruments such as keyboards, simply listen to the signal to make sure it is clean and distortion free. If you hear distortion, it is likely that the instrument signal is too hot. Turn it down and you should be set to go.

The Radial SGI RX is passive. The only control on the RX is a ground lift. This lifts pin-1 ground on the XLR receive and is used to further eliminate ground loops should hum or buzz be encountered.

DRAG CONTROL

The Radial SGI TX is equipped with a recessed knob called Drag control. This unique load correction circuit allows you to apply a resistive-capacitive load on your pickup to counteract any effect of the buffering circuit or cable. It is designed specifically for passive guitar pickups that are most sensitive to the input impedance of an amplifier. Drag will have almost no effect on active devices such as guitar pedals or active basses.

For best results, we suggest that you start with a clean tone and set the Drag control to 50% or 12 o'clock and then adjust to suit. More drag will result in a darker tone, while less drag will reduce the load on the pickup and add sparkle. Using a guitar pick as a screwdriver, simply find the setting that you like and you are set. Drag control is subtle yet very musical.

FAQ

Can I use the SGI as a Reamping device?

No. The Radial SGI employs a proprietary balanced signal between the TX transmit module and the RX receive module, making it unsuitable for typical line-level signals.

Can I use other instruments such as a keyboard through the SGI?

Yes. Just make sure you do not overload the input as this will cause distortion. Keep in mind that the SGI is designed for guitar levels. Keyboards and line-level outputs are significantly more powerful and should be attenuated.

Does the Drag control have any effect on active pickups?

You will hear very little effect, if any, when using active instruments, as their buffered outputs will generally not be affected by an added load. The SGI's Drag control is really designed to affect passive electric guitar pickups.

Can I connect effect pedals between the SGI and my guitar amp?

Yes of course! The SGI will work just like your guitar, except you will be able to play your amp several hundred feet away.

Can I use the SGI on a large stage to drive my amp or modeller?

Absolutely. The SGI can be used over distances up to 300 feet without issue.

Could the SGI cause noise or crosstalk in a live touring snake system?

The SGI is completely analog and is low level. You should not encounter any of these problems using the SGI.

USING THE SGI WITH THE JX44 V2

The SGI is compatible with the JX44 V2 Guitar Signal Manager's effects loop and can be mounted on a remote pedalboard to act as an interface between the JX44 and your guitar pedals, converting low-impedance signals from the JX44's XLR connections to high-impedance signals required for connecting over 1/4" to your guitar pedals.

To connect to the JX44 V2, mount both SGI units on your remote pedalboard and connect the included 15VDC power supply to the SGI-TX. Once connected, the POWER LED on the SGI-TX will illuminate.

