



- **1-in, 7-out signal routing system for guitarists**
- **One-touch super easy and intuitive operation of all functions**
- **Class-A drive circuit with Jensen Transformer isolated outputs**
- **Natural sound does not introduce artifacts to the signal**
- **Exclusive 'Drag' control to recreate guitar-to-amp relationship**
- **Balanced out and in for amazing studio control**

The **Radial JD-7 Injector™** is a guitar signal distribution amplifier and routing device that allows a guitar signal to drive as many as seven (7) different devices such as guitar amplifiers, effect pedals and modelers. Any of which may be individually selected with the simple push of a button allowing access to hundreds of combinations to spur-on the creative process. An additional (8th) balanced recording output is provided to capture the original performance.

Central to the **Radial JD-7** is the ultra-clean Class-A signal path. The proprietary unity-gain circuit was developed specifically for high-impedance instruments where retaining the natural characteristic of the instrument is critical. In our view, changing the tone of a '57 Strat® is not an option. There are no op-amps or integrated circuits in the audio path. Only the highest quality discrete components are used and as with all Radial DI products, Jensen® transformers on the isolated outputs ensure that signal quality is maintained throughout.

To enhance the natural feel and performance, the **Radial JD-7** introduces Drag™, a control that allows one to simulate the particular relationship between a guitar and amplifier. Here's the scoop: When you connect a guitar to an amplifier, the guitar pickup and the amplifier circuit react in a very distinct manner depending on the type of pickup and the amplifier's front-end design. Drag™ control simulates this relationship by allowing the musician or engineer to 'dial-in' the amount of Drag™ that sounds right. Best of all, Drag™ is extremely musical.

The **Radial JD-7** is equipped with an extraordinary set of input and output features. One of two front-panel instrument inputs can be selected; Input-2 is equipped with an 8dB pad for high output instruments such as active basses or keyboards. A clipping LED indicator

is provided to ensure the signal stays out of the red. There are 6 outputs on the front panel and a 7th auxiliary output on the back panel. Outputs 1 and 7 are active direct coupled while outputs 2 through 6 are Jensen® transformer isolated to eliminate the hum and buzz commonly encountered when connecting various tube and transistor amps together. Outputs 1 through 6 feature an ON/OFF switch with an LED indicator and are set at unity gain. What you put in, you get out. Nothing added – nothing lost.

All isolated outputs feature a ground lift, for added noise reduction, and 180° polarity reverse switches allow the phase alignment of connected amps or effects. Channels 5 and 6 also feature switchable effect loops with individual send and return jacks on the rear panel. This allows you to compare dry and wet signals instantly.

Rounding out the **JD-7** input and output features are a balanced low-impedance XLR Male output and XLR Female input on the back panel. The balanced-out allows the guitar player to perform with a complete array of effects and amplifiers while also sending a dry track directly to the recorder. The balanced XLR input can then be used to take the dry track from the recorder and distribute it to your connected amplifiers and effects for subsequent mixing and recording onto another track(s), allowing the guitarist to sit in the engineer's seat and experiment with different combinations. A input level potentiometer works with the clipping LED to keep input levels under control.

The **JD-7** is housed in a standard 19" single rack space enclosure and is made from 14-gauge steel with welded seams throughout and a baked enamel finish for extreme durability. A cable lock for the D/C power cord prevents accidental unplugging (power supply is included).

Radial™ JD-7 INJECTOR



Front Panel

Instrument Input Section:

The JD-7 is equipped with two selectable inputs. An 8dB pad on Input 2 allows the use of high output instruments such as active guitars or keyboards. A red clipping LED indicator is also provided.

The JD-7 features a true Class-A circuit to retain signal purity throughout. This circuit design does not introduce artifacts common to op-amps with Class-B configuration output circuitry, such as zero-cross distortion, that are both audible and annoying to the professional.

Drag Control: Designed to compensate for the natural relationship that occurs between the guitar and the amplifier. Drag control lets you 'dial in the imperfection' so that it sounds just right.

Output Section:

The JD-7 Injector gets its name from the very fact that you can 'inject' the guitar signal into endless combinations of amps and effects to create rich textures for stereo or even 5.1 surround for film production.

Channel 1 - Direct out: Channel 1 is your direct line to your 'clean' guitar amplifier. It is activated with a quiet shorting switch that does not 'pop' when engaged and is equipped with an LED for a visual indication the channel is selected. The ground (earth) is directly coupled to the guitar and main amplifier here.

Channels 2, 3 and 4: Primary amp driver channels - Transformer isolated, outputs 2, 3 and 4 feature Jensen® transformers for ground hum elimination without affecting signal quality. The Jensen transformer's legendary Bessel curve provides virtually zero phase deviation and because they handle tremendous gain before saturation, you can drive the JD-7 with hot signals, such as those from instruments such as acoustic guitar preamps, active basses and keyboards, without worry.

These channels each have an on-off activation switch with LED indicator, and a chassis ground lift for complete isolation; very desirable for use with those noisy old vintage tube amps that we 'love to hate to love' for their sound. The polarity reverse switches on these channels, besides just being practical, add tremendous new dimensions to explore when you are using several amps or sound sources together.

Channel 5 and 6: Primary amp driver channels with effects loops - In addition to all the great features of Channels-2, 3 and 4, Channels-5 and 6 each have an individually selectable effects loop. This allows an additional level of signal routing versatility. You could, for example, run a distortion box with a flanger on the Channel-5 effects loop and a chorus with reverb on the Channel-6 effects loop into each of your amplifier's two input channels (or two separate amps). Quickly monitor any or all 'dry' or 'wet' signals by simply pressing the respective channel and effects loop buttons on the JD-7. Imagine the possibilities...



Rear Panel

Auxiliary Output:

Channel-7: A rear panel mounted 1/4" output jack is provided to facilitate the use of 'always-on' devices such as tuners. This 7th output can be used with other rack mounted effects devices or as an additional output when creating a 7.1 surround sound recording field.

Balanced output:

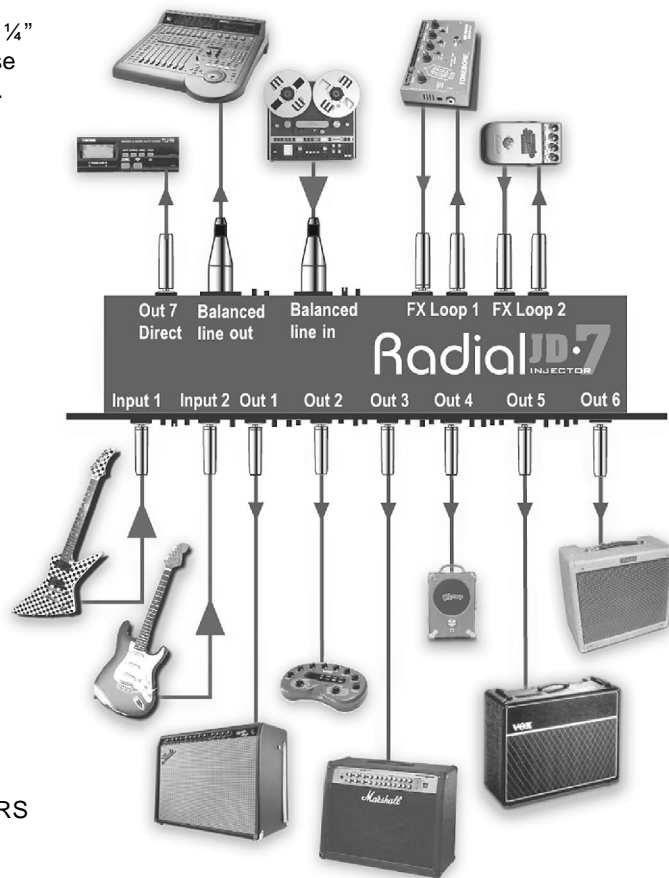
The JD-7's balanced output is used to send a dry track to the recorder while the guitarist is using the other 7 outputs. This allows the engineer to record the performance of all 7 outputs in a traditional fashion with microphones and capture a clean track too.

Balanced input:

Once a clean track has been recorded, the original performance can be sent back into the JD-7 via the XLR female balanced input and remixed with any number of amplifiers or effect devices to create new sounds.

Effects loop send/return jacks:

Channel 5 & 6 send and return 1/4" TRS jacks for external effects processing.

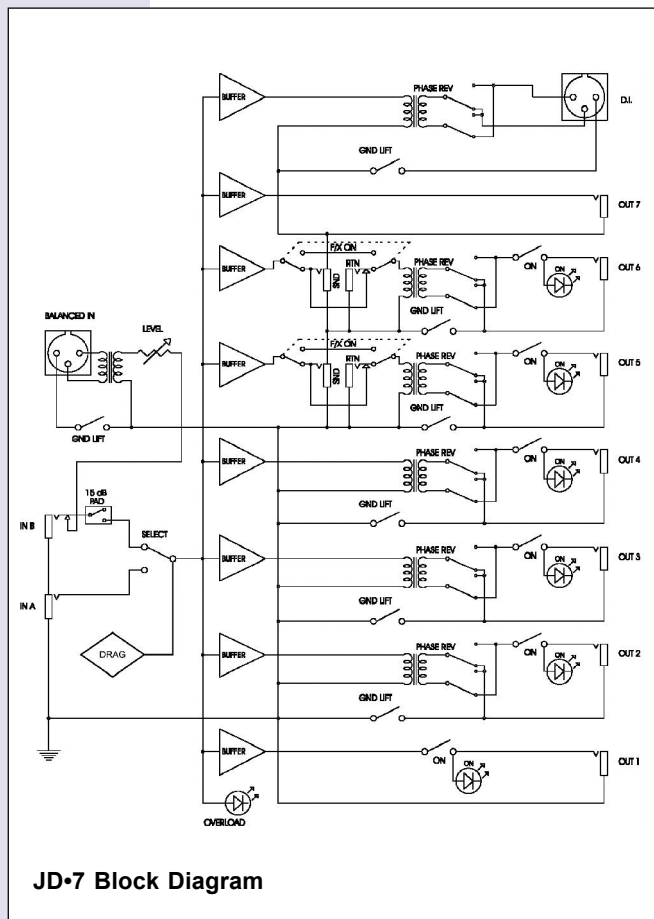
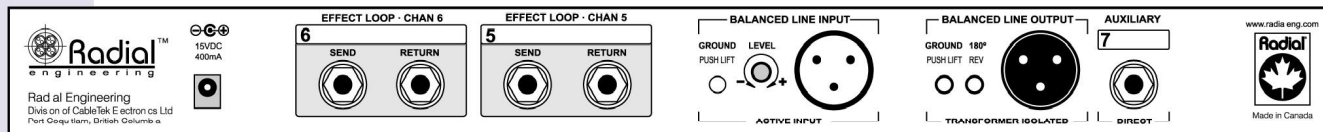
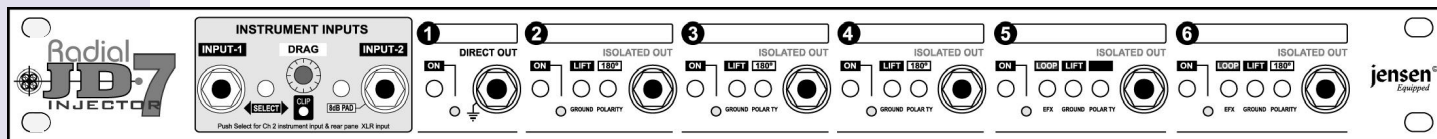


Typical JD-7 connection set-up.



"A creative tool for guitarists..."





SPECIFICATIONS

Instrument inputs: 2 selectable 1/4" inputs w/8dB pad on Input-2.
 Balanced inputs: XLR balanced line level input w/level control.
 Instrument outputs: 2 x 1/4" Class-A direct coupled outputs, 5 x 1/4" Jensen transformer isolated outputs, Mic level isolated balanced XLR output.
 Ground lifts: Ground lifts on output Chanel-2 thru 6.
 Polarity reverse: 180° reverse on all isolated outputs.
 Effect loops: 2 separate switchable loops, 1/4" send / receive on Channels-5 and 6.

Input section:
 Position A – hi-Z input (1mega Ohm).
 Position B – Hi-Z input (1 mega Ohm) with 8dB pad.
 Drag control amp and pickup compensation circuit.
 Overload LED indicator.
 Balanced low-Z(600 Ohm) input with variable trim and LED clip indicator.

Output section:
 1 & 7 – Direct coupled and grounded outputs.
 2 ~ 6 – Jensen Transformer isolated outputs.
 Balanced low-Z (600 Ohm) 'direct to record' output @ -20dB (mic level).

Output	Type	On-Off switch	LED indicator	Ground lift switch	180° polarity	Effect loop
Chan 1	Direct (front)	●	●	●	●	
Chan 2	Isolated	●	●	●	●	
Chan 3	Isolated	●	●	●	●	
Chan 4	Isolated	●	●	●	●	
Chan 5	Isolated	●	●	●	●	●
Chan 6	Isolated	●	●	●	●	●
Chan 7	Direct (rear)					
Record	Isolated			●	●	

	Direct out – 1/4"	Isolated out 1/4"	Balanced i/o - XLR
Linearity from 20Hz to 20kHz:	+/- 0.02dB	+/- 0.3dB	+/- 0.5dB
Harmonic distortion @1kHz:	< 0.05%	< 0.05%	< 0.1%
Inter-modulation distortion:	<0.2%	<0.25%	<0.5%

DIMENSIONS

Construction:	14 AWG welded steel construction, blue baked enamel finish
Power:	15VDC external power supply, UL-CSA approved. Power supply connector 'lock'.
Dimensions:	19" rack mount 1RU, chassis 17.5"w x 6"d x 1.75"h (44.5cm x 15.25cm x 1.75cm).
Shipping box:	22"w x 10"d x 4.5"h (55.9cm x 25.4cm x 11.4cm).
Shipping weight:	8lbs / 3.63kg.

Radial Dealer: