



PHOENIX AUDIO

Costa Mesa
CA 92626
USA
Telephone +1 866 302 1091
Email : sales@phoenixaudio.net

N-8 DI Owner's Manual

Firstly, let us congratulate you on your purchase of the 8 Channel N-8 DI. We know you will be as pleased with its sonic qualities as we are.

You are now the proud owner of a Class A DI that has the advantages of more than 25 years experience in audio engineering, today's component and manufacturing technology, but still retaining "that sound" uniquely achievable through Class A design.

As you can tell, Phoenix Audio is dedicated to the development of Class A discrete technology used within high build-quality equipment.

The N-8 DI uses our well proven and loved Discrete, Class A output stage (DSOP-2) which gives a "valve-like" sound. It also incorporates our high input impedance DI circuitry.

You CAN hear the difference!!!

N-8 DI - Class A Discrete 8 channel DI

Short description:

1. The Phoenix Audio "N-8 DI" is a high-quality, active, 8 channel DI, with Class A, discrete, high-impedance inputs (10M), and Class A, discrete, transformer balanced outputs.
2. The Phoenix Audio Class A, all discrete, Stereo DI has been tested and used by many guitar professionals in studio recording environments, and the comments are always the same. The overdrive is fantastic, the guitar sounds clean, clear, and un-restrained. This is the definitive DI!!!. The DI's characteristics are very noticeable on any input source, and are superb for "sweetening" the output from DAW or any other signal source.

Specifications

1U rack space unit: With External 24v at 1 amp PSU self switchable 240V/110V

Class A (DSOP-2) Output specs. Frequency response: 20Hz to 20kHz +/- 0.5dB,

Maximum Output Level: +26dBu @ 1kHz

Noise: -90dB @ 20Hz to 20kHz.

Output connections:

Main output : 25 pin D-sub (wired Tascam DA88)

Monitor output : 25 pin D-sub (wired Tascam DA88 wiring)

DI inputs: ¼" TSR Jack on Front Panel

DI Through inputs: ¼" TSR Jack on Front Panel

Individual Earth Lift: Push-button illuminated Switches on rear panel

Gain pad reduction: -15dB pad push-button illuminated switch

High Input Impedance DI: Mono 1/4" 10 meg ohm Jack on front panel (no FETs)

Phase Reverse: on Push-button illuminated Switch

Frequency Response: DI Input Stage: -0.3dB @ 40Hz, - 0.5dB @ 25kHz

Typical Headroom: +26dB on output stage

The N8 is a unique active DI with more crammed into the single rack space than any other active or passive DI on the market today. It has 8 independent channels of Class A discrete, High input impedance input stage, with Class A, transformer balanced outputs.

It is much more versatile than the “dumb” passive DI's on the market, that are often not much more than a “box of jack sockets” with standard transformers on the output.

Value for money with a robust, “touring- grade” heavy-duty all steel chassis, fantastic sound and huge versatility makes the N-8 a market leading active DI.

Overview:

The N-8 is an 8 channel Active DI. Being active has many advantages over a simple “jack to transformer” passive DI.

1: The input impedance is much higher than any passive DI. This means there is minimal loading on the output of the Guitar, Keyboard, DAW, Microphone, or any other source you choose to use, which “opens” the sound of the instrument allowing a new-found level of nuances and sounds to be realized.

2: Coupled with the high input impedance, the huge amount of available gain means that there is virtually no limit to what source can be used, and also offers much more sound flexibility than a passive DI. Starting from clean and crisp through to darker “rock” style, just by use of the available gain.

3: The output is driven into our custom designed output transformers using our renowned Class A output stage. The transformer isolates and balances the output and is capable of driving into long lines and multiple loads with no loss of quality or level when used correctly.

4: There are 2 x 25 Way D-Sub Connectors on the rear panel. Both are wired “Tascam” DA88 standard. The main output is a balanced output and is capable of driving long studio lines, as well as driving multiple loads without degradation of sound quality. The number of loads that can be driven, at once of course depend on the total impedance of the loads and is best trialed in advance, but it is far more than most passive DIs can drive.

The 25 Way D-sub for the monitor outputs follows the main outputs, but at a -8dB reduced level. This is so that monitoring equipment that would normally be over-driven by the active DI can also used at the same time, making it possible to drive multiple monitoring/recording/main outputs all at once.

5: Unlike passive DI's, we have illuminated the push buttons using highly efficient, ultra long-life LED's so that the switch positions of all 8 channels can be seen at a glance, even in the lowest light situation.

The front panel has two illuminated switches.

The **PAD** switch allows hotter inputs to be utilized. The input is padded immediately after the input jack by -15dB. It is unlikely you will ever swamp the output transformer due to the carefully constructed gain stage, so if distortion due to over-drive is heard, the PAD switch would be the first place to try.

The **PHASE** switch inverts the phase at the input jack. This is useful to deal with phase cancellation caused by system delays and other “out of phase” problems.

It should be noted that the PAD and PHASE switches will affect both input jacks at once as they are wired in parallel.

6: The input jacks are 1/4” TRS sockets. These sockets are able to accept both mono and stereo jack plugs. One jack socket is marked “DI Input” and the other marked as “Through”. The two sockets are wired in parallel, and therefore can be interchanged. The through jack socket can be used to send dry signals to other equipment. For instance: Plug a guitar into the DI Input jack. The channel output (the D-25 Sub on the rear panel) could be sent to your recording device. At the same time, plug a 1/4” patch lead into the Through jack, the other end of which is plugged into your guitar amp.

7: The gain control is via the front panel knob. This controls the gain on the Class A output stage (DSOP-2) that drives the output transformer. The output has huge headroom available and the transformer can drive quite heavy loads. It is unlikely that the output would ever be source of any distortion. In the case of any distortion you should always look at the input levels first.

8: Earth lift switch. The illuminated earth lift switch on the rear panel is a highly visible push-button. The switch disconnects the output cable screen of each channel from the chassis/mains earth. It does not disconnect the chassis safety earth.

9: The supplied PSU is a small form-factor world-wide approved, high quality, stable unit capable of automatically adjusting to and accepting any country/continent's mains voltage without the need for manual switching – just plug and play.

The high quality, sturdy metal-bodied DC connector safely screw-locks into the chassis connector on the rear of the unit and cannot be accidentally kicked or pulled out.

Most racks have a convenient AC mains source and the PSU effectively filters out any stray AC noise from external sources, but it's tested and approved to not add any stray AC noise.

No substitute PSU should be used with the N-8. Replacement PSUs are available from Phoenix Audio.

There is no On/Off switch for the N-8. The unit is “always on” while plugged into the AC mains.