



The DCS88 CobraNet® Digital Audio Transceiver



Features and Functions

What is CobraNet®?

CobraNet is a combination of software, hardware and network protocol, which allows distribution of many channels of real-time, high quality digital audio over an Ethernet network. Since CobraNet is a network, any audio input group (called a “bundle”) can be routed to any audio output group in any combination. A system can be reconfigured in real time, it can be expanded without rewiring the facility, the audio can remain in the digital domain throughout and audio sources and destinations can be located anywhere. CAT-5 cable allows distances up to 100 meters. This distance can be increased by the addition of standard Ethernet switches or by converting to fiber optics.

What is a DCS88?

The DCS (Digital Contract Series) products by Whirlwind are the first low power CobraNet® compatible transceivers. Each DCS88 unit can convert 8 mic or line analog inputs to CobraNet protocol and transmit them over the network to any other CobraNet compatible device. In addition, each DCS88 unit is capable of receiving and converting 8 channels of digital CobraNet audio back to line level, analog audio.

Why low power?

This breakthrough feature, developed by Whirlwind engineers, provides for the remote application of operating power directly through the CAT-5 connecting cable. This greatly simplifies the design, implementation or expansion of a CobraNet distributed audio network in new or existing systems. There will be no need for AC drops at each location and in many applications, no need for expensive conduit. The small “brick shape” size allows placement of the unit anywhere –



(Clockwise from top - DCS88R, DCS88P, DCS88s)

under a table, in a ceiling or crawl space – without any additional wiring. Just plug in the CAT-5 and go! There are also panel mount and rack mount versions available.

How does remote power work?

Simply route any CobraNet line on the network to a Whirlwind DCSP power supply located at any convenient location within 100 meters of the DCS88. Connect the output of the supply to the DCS88. That's it! Power supplies are available to power one or as many as four DCS88s.



(DCSP4 - four unit power supply)

How is a DCS88 configured?

The functions of the DCS88 can be accessed through controls and switches on the unit or through up to four remote controls connected directly to either of the two DCS88 RJ45 remote ports. A remote hub (not pictured) increases the number of remotes that can be applied to a DCS88 to eight, where each remote controls one channel.

Can I save configuration parameters?

Yes. Each DCS88 has four memory locations that can store its settings. The first three can be used to store and recall the most commonly used setting combinations. The fourth is used with the “Auto-Store” feature to automatically store all settings after five minutes of control inactivity. In the event of a power interruption, a DCS88 will recall its saved settings and operate within 4 seconds of power restoration.

A special “advanced mode” allows users to store and recall presets in memory, manage front panel and remote lockouts, turn auto-save on and off, and determine what version of software the DCS88 is using. Requires no external PC or controller.

“I want more control!”

That's easy. Load up Whirlwind's PC Control application on any WIN98/2000/XP computer connected to the network. This intuitive graphical user interface will automatically discover all of the DCS88s on the network, display their assigned names and put you in control. The unit's name is stored in non-volatile memory inside each DCS88 and you can change the name to make each box easy to identify.



The operator can adjust input levels, select mic or line input mode and assign channel names in the application. A special linking function gangs two adjacent channels together for controlling stereo sources with a single fader.

All parameters can be saved to a disk file for instant recall at a later time. This is especially useful for setting up a system “on the fly”

when you need to change settings for different church services, meetings, banquets, etc.



(PC Control Application Screen Shot)

Can these units operate independently?

For simple routing of audio between two points, DCS88s can be connected without using any additional CobraNet equipment or controllers. Just connect two DCS88s to each other through a DSP4 power supply with a crosswired jumper cable and you have an instant 8X8 digital snake. Input levels and mic/line selection can be controlled at each end or use the “Crosswired Control Mode” feature to control the unit at the “far” end of the cable.

What about security?

A lock out feature disables both the front panel controls and remote control access to prevent adjustment by non-qualified personnel. Activated in Advanced Mode or by dipswitch settings. Does not affect controlling the unit via Whirlwind's PC Control Application. When operating with the PC Control Application, units are password protected to allow basic operation but prevent the changing of critical parameters.

Is it compatible with other control protocols?

The DCSPT Protocol Translator (not shown) is available to convert Whirlwind Asynchronous Remote Protocol (WARP) to AMX or Crestron protocol to allow interface with those systems.

OK, the big question, “How does it sound?”

The Whirlwind brand has always stood for quality. Well, we think this is the best sounding CobraNet digital device available. We've put every bit of our 25 years of experience designing broadcast quality mixers and mic preamps to good use here. But don't take our word for it, A-B it with any other CobraNet device and you'll hear the difference a Whirlwind makes.

Part Numbers:

DCS88S	Standalone DSC88
DCS88P	DCS88 – 12” X 8” panel mount
DCS88R	DCS88 – 19” rackmount
DCSP1	Single Unit Power Supply
DCSP4	4 Unit Power Supply
DCSRT8	8 Channel Tabletop Remote
DCSRW1	Single Channel Wall Mount Remote
DCSRW8	Eight Channel Wall Mount Remote

DCSPT	Protocol Translator
DCS88PCCA	PC Control Application
ES100-4	4-port 10/100 Ethernet Switch
ES100-8-FC	8-port 10/100 Ethernet Switch and CAT-5 to fiber optic converter

In addition, CAT-5 and fiber optic cable, connectors, tools, etc. are available through your Whirlwind distributor.

For more information, email techsupport@whirlwindusa.com or call toll free, 800 733-9473, 9-5 Eastern Time. We'll be glad to discuss your particular application and help any way we can.

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