



Dolby DP564

Latest in the Dolby Professional line is a reference decoder for all multichannel Dolby technologies. Many studio, broadcast and DVD authoring facilities use its predecessor, the DP562, and the new model offers more features and improved hardware.

ANDY DAY

THE DP564 IS A 2U UNIT with a large front panel display, various navigation and user buttons, a master monitor level control, and multiple analogue and digital I-Os on the rear. The general construction is lighter than the usual Dolby 'war proof' design, but adequate for normal studio use. All digital connections are on BNC connectors for AES3 and there are eight analogue outputs for L C R Ls Rs Sub BacksurRL & BacksurRR (for Dolby Surround EX) at +4dB on XLRs. There are also digital connections for the above using four BNC connectors.

A useful addition is the timecode output, which is great for checking embedded timecode in Dolby Digital files with external picture sources. You do need a synchroniser to slave up the picture source. There are plenty of inputs available on two AES, a Toslink optical and an Ethernet port for streaming files. These are switched from the front panel making it easy to compare multiple sources through the same decoder. An AES reference input is also available to integrate the unit into an existing all-digital setup. Other connections include an RS485 serial port for remote control, using the supplied remote control software, and a GPIO connector for connection to the optional Cat No. 549 hardware remote control.

The remote software is excellent for setting up the unit, giving an overview of all the parameters on one page. It can control the unit using a serial port or the more reliable 100baseT Ethernet port which allows several units to be controlled from a single PC anywhere on a local or wide area network, with each DP564 having its own IP address. However, there is another use for the Ethernet port that I'll explain later.

As you would expect from a reference decoder, the DP564 is stuffed with all the consumer Dolby multichannel delivery formats: Dolby Digital, Pro Logic, Pro Logic 2, Surround EX, Dolby Headphone, as well as stereo and mono.

Most of the main features of the DP564 can be accessed from the front panel buttons, others are accessed from the menu using the large display and navigation keys. The buttons are logically grouped into downmix, decode, listening and compression; the flow going from left to right. This is typically how you would check an AC-3 bitstream under various consumer scenarios by performing a downmix then selecting decoding, such as Pro Logic or Surround EX, and finally different listening conditions such as a

phantom centre setup or a Pro Logic setup without surround speakers. Often the compression setting will be set to Line, effectively emulating the line outputs of a DVD player, but as a reference you can bypass the metadata compression settings and compare the two to get an idea of how the metadata will effect the sound when downmixed.

The large front panel display can be switched to show ten different pages of information about the bitstream. These include a main page for the basic data rate, dialogue norm, timecode and some of the bitstream flags and one for the output level meters for all eight monitor outputs. Another page has compression settings with two meters showing when the compression is working, while a monitor status page shows the system speaker configuration graphically and any bass redirection you have set. Incidentally the DP564 can emulate consumer decoders that redirect bass information from the five main channels to the sub. A hot topic at the moment with 5.1 music mixes.

A metadata status page offers a complete list of the metadata settings in the AC-3 stream including the extended bitstream information, while input status shows the condition of the selected input. Other pages indicate the condition of the AES ref. input, show the timecode from the AC-3 stream as a large display, and give error status and system status.

For users of the DP562 the display is a Godsend, especially the main screen, which has all the basic information in one place.

As I previously mentioned the Ethernet port can be used to control single or multiple units from a single PC or network, but that's not all. The Ethernet port is also an input for the decoder allowing a file from anywhere on the network to be streamed and decoded. This is an excellent feature for DVD authoring facilities, allowing any workstation on the network to play back an AC-3 file and, using the timecode output of the DP564, slave a picture source to check for potential audio sync problems. Great if the AC-3 files have been made at another facility where a different picture cut could have been used.

There are many more parameters and menus in the DP564, but we've run out of space here. In a nutshell the DP564 is a significant improvement on its predecessor, the DP562. The improved display, time code output, support for extended bitstream

information and networking capabilities are real enhancements that have been on wish lists for some time. There is a price difference of £950 but the extra features make it worth it, and, as usual with Dolby Professional products, you don't have much choice anyway as no one else makes one. So there! ■

PROS

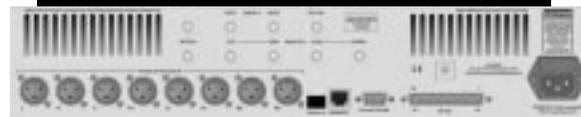
Remote software for setup; DP562 users will love the display; Ethernet port input for decoding

CONS

No one else makes one

EXTRAS

Dolby Digital and Pro Logic are well enough known, but here's a run down of



what the newer ones are. Pro Logic 2 is a decode only process that has presets to decode a LtRt signal into L C R and stereo surrounds or LoRo material into L C R Ls Rs. There are several home decoders available already as well as in-car surround processors.

Surround EX uses an extra channel of surround information to provide a rear centre image, this is sometimes referred to as 6.1. As with Pro Logic 2, several new home theatre decoders are incorporating Surround EX.

Finally there's Dolby headphone, which takes a 5.1 signal (in this case from the Dolby Digital bitstream) and produces a stereo signal which, when listened to on headphones, emulates a 5.1 listening environment. You can switch between three different modes that emulate small, medium and large rooms. Dolby Headphone is already appearing on PCs and will soon be coming to DVD players too.

Contact

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