



***DP562 Multichannel
Dolby Digital Decoder
Quick Start Handbook***

DP562 Multichannel Dolby Digital Decoder Quick Start Handbook

The DP562 Reference Decoder makes it possible to monitor Dolby Digital program content while simulating almost all consumer playback conditions. Additionally, the DP562 has the ability to detect errors in encoded bitstreams and to display metadata parameters encoded within the Dolby Digital bitstream. It can also be used to ensure that unique Dolby Digital features such as downmixing and Dynamic Range Control (DRC) are meeting both the intent of the content provider and the needs of the consumer.

1. First power-up

When the DP562 is first powered up, all front-panel buttons light up, the Output Activity LEDs flash, and the LCD shows which version software has been installed. The unit then initializes and boots to the Factory Default condition. If no equipment is connected to the DP562 the LCD reads:

RES/EBU STATUS
NO RES/EBU INPUT

The Stereo button stays lit and the Dolby Digital button flashes.

Note: Factory Default parameters can be restored at any time by selecting the Factory Reset parameter under the User Presets sub-menu in the Setup Menu. Doing so initiates this same start-up sequence. Also, holding the “ENTER” button during power-up places the unit into an “Upgrade Mode” for field upgrades of software.

1.1 Why does the Dolby Digital button flash?

The flashing Dolby Digital button indicates that the DP562 is in Auto Bitstream Detect mode, which means the unit automatically awaits a Dolby Digital input signal. While in this mode, the DP562 also automatically decodes a stereo PCM signal, and additionally allows Dolby Surround Pro Logic decoding if selected; however the manual selection of the decoding modes is limited. You are unable to select the Dolby Digital decode function manually, but you can select Pro Logic decode and its possible listening modes.

If you wish to manually select Dolby Digital decode and its listening modes, you can disable Auto Bitstream Detect via the Setup Menu (refer to the handy Menu Tree included with the operation manual).

See Section 5.6, Bitstream Detect, on page 5-8 in the User's Manual.

1.2 What do the Output Activity LEDs indicate?

Whether or not an individual Output Activity LED lights up depends upon the input signal's channel configuration, listening mode selected, and bass redirection setting.

Dark (unlit): The input channel is not encoded within the input bitstream, or it has not been selected for playback.

Yellow: The input channel is present within the input bitstream, and has been selected for playback.

Green: There is signal present above -60 dB full-scale.

Red: The signal level is above -0.1 dB full-scale (clipping, time to back off).

See Section 4.7, Output Activity LEDs, on page 4-8 in the User's Manual.

1.3 How do I set up my room?

To help balance the channels of your monitor system, the DP562 has a built-in pink noise generator. After you have selected the appropriate Listening Mode for your monitoring environment, press the Test Noise button on the front-panel to cycle pink noise through the channels.

See Section 3 in the User's Manual for a complete explanation of room calibration. The Dolby website, www.dolby.com/tech also provides useful tips on surround mixing and room setup.

1.4 How can I balance the playback system if my amplifiers don't have output level trims?

The DP562 has internal trims for each analog output to aid in balancing your monitor system's playback channels.

See Section 5.2, Output CH Trims, on page 5-3 in the User's Manual.

2. Navigating the DP562

The DP562 features simple push-button operation. Most common configurations can be selected by pressing the appropriate button on the front-panel, while more advanced features are accessed using the setup menu.

2.1 Decoding Modes

Dolby		Listening Mode					
Digital	Pro Logic	Full	3 Stereo	Phant	Stereo	Mono	
■	■	□	□	□	□	□	
□	□	□	□	□	□	□	
None	Custom	Line	RF	Test	User	Setup	
		Dynamic Compression	Noise				

The DP562 supports four decoding modes, that can be selected when in manual mode by means of the Dolby Digital and Dolby Pro Logic buttons in the upper row. Use care when selecting decoding modes manually, as speaker damage may occur if an inappropriate decoding mode is selected.

Dolby Digital only: Decodes a Dolby Digital input signal of up to 5.1 channels.

Dolby Pro Logic only: Decodes a two-channel, Dolby Surround (Lt/Rt) encoded PCM input signal into a four-channel surround output (Left, Center, Right, mono Surround.)

Dolby Digital and Pro Logic: There are two decoding possibilities.
(A) Decodes a two-channel, Dolby Surround (Lt/Rt) encoded Dolby Digital input signal into a four-channel surround output (L, C, R, S)

or
(B) Decodes and downmixes up to a 5.1-channel Dolby Digital input signal into two-channel Dolby Surround (Lt/Rt), and decodes that into a four-channel surround output (L, C, R, S).

Both Dolby modes off: PCM pass-through (bypass).

See Section 4, Operation, in the User's Manual.

2.2 Listening Modes (Downmixing)

Dolby		Listening Mode					
Digital	Pro Logic	Full	3 Stereo	Phant	Stereo	Mono	
□	□	■	■	■	■	■	
□	□	□	□	□	□	□	
None	Custom	Line	RF	Test	User	Setup	
		Dynamic Compression	Noise				

The three Dolby decoding modes (shown above) support five listening, or downmixing, modes that are selected by front-panel push buttons.

Full: All channels relevant to the input signal's configuration and the decoding mode are reproduced by the appropriate speakers.

3 Stereo: Left surround information of the input signal is redirected to the left front speaker, right surround to the right front speaker.

Phantom: Center-channel information of the input signal is redirected to the front left and right speakers.

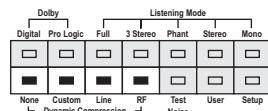
Stereo: Left surround information of the input signal is redirected to the left front speaker, right surround to the right front speaker, and center channel to the front left and right speakers. LFE channel is not included.* When used with the decoding mode "Pro Logic," this mode creates an Lt/Rt stereo-compatible mix.

Mono: All channels are redirected to the center speaker. LFE channel is not included.*

See Section 4.3, Listening Modes, on page 4-4 in the User's Manual.

*When LFE MONITOR MODE is set to AUTO in the Setup menu.

2.3 Dynamic Compression Modes (Appendix C in the User's Manual)



The Dolby Digital decoding modes support four compression modes that assist in emulating the reduced dynamic range that may occur during downmixing, and the user-selectable reduced dynamic range listening modes (late-night listening modes). Selecting a compression mode by its front-panel push button emulates its effect in a consumer decoder, making it possible to check the program's compatibility.

None: A professional mode with no compression or dialogue normalization. This mode is provided as a reference for checking signal levels. This mode is not supported in Consumer Decoders.

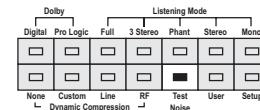
Custom: A professional mode that allows dialogue normalization to be turned off or on. Dynamic range compression parameters are user-selectable. This mode is not supported in Consumer Decoders.

Line: A consumer emulation mode with dialog normalization on. Dynamic range compression parameters are user-selectable. This mode is supported in Consumer Decoders.

RF: A consumer emulation mode with dialogue normalization and heavy dynamic range compression switched on.

See Section 4.4, Compression Modes, on page 4-4, and Appendix C in the User's Manual.

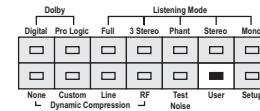
2.4 Test Noise



The Test Noise button sequences pink noise through all selected output channels, making it possible to balance the monitor system for accurate reproduction of source material.

See Section 4.5, Test Noise, on page 4-7 in the User's Manual.

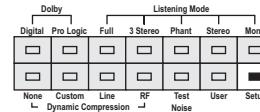
2.5 User



The User button provides a shortcut to several of the lower level Setup Menus.

See Section 4.6, User, on page 4-7 in the User's Manual.

2.6 Setup



The Setup button provides access to the lower level menu system for enabling and disabling individual parameters and test functions.

See Section 5, Setup, in the User's Manual.

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