


FILM-TECH

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| | AP20 Dolby® Digital Operation | | TN-H459 | A | 1 of 3 |
| DEPARTMENT Engineering | CREATED BY: F. Pflaum | EFFECTIVE DATE November 1, 2010 | APPROVED BY: D. Eyre | | |

Introduction

The AP20 accepts a Dolby® Digital audio stream from a DVD, Game Console, Satellite link or other source device. The Dolby® Digital bit stream is automatically detected and decoded internally by the AP20 software. The decoded stream will be routed to the first eight channels internally on the AP20.

- This feature is only available with AP20 system software V1.02.00 and above.
- Please also refer to the AP20 Installation and Operating Guide (*TM-H392 1.2* and above) for general information on the AP20.

Inputs that support Dolby® Digital

The following digital inputs accept and the Dolby® Digital audio stream:

- HDMI (ports 1 – 4)
- S/PDIF1 (TosLink)
- S/PDIF2 (TosLink)
- S/PDIF3 (Coax)


Operation

The AP20 monitors the selected input signal from one of the S/PDIF or HDMI ports to determine the type of audio signal received. If a Dolby® Digital stream is detected, the AP20 decodes the audio and places it on the first 8 channels (see Table 1).

If an un-encoded digital signal is received (i.e. 2-channel PCM), the signal is routed to the first two channels in the AP20 (Left and Right) and the others remain muted. The HDMI also supports 6 or 8 channel un-encoded PCM signal. The AP20 will switch between Dolby® Digital and PCM as the signal type changes. This occurs automatically within the AP20.

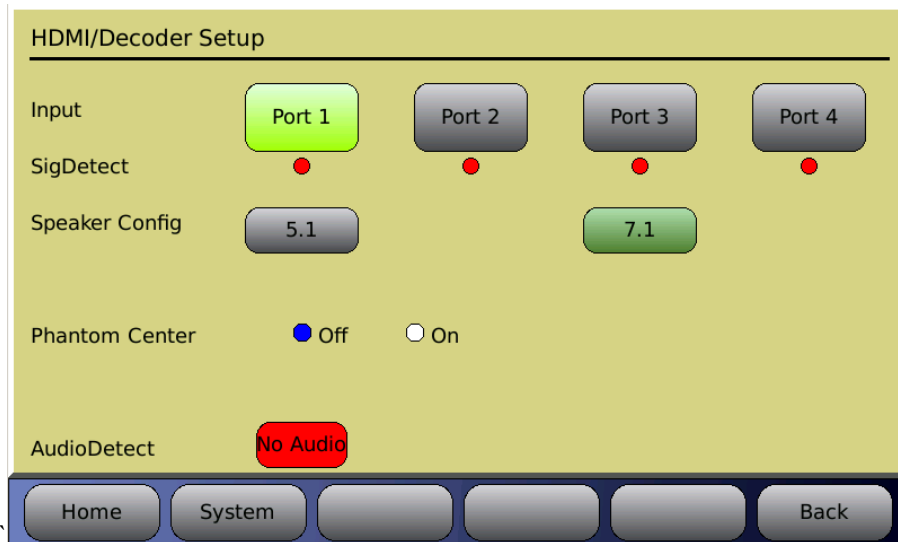
Table 1: Dolby® Digital Channel Assignments

| CHANNEL NUMBER | CHANNEL NAME |
|----------------|--|
| 1 | Left |
| 2 | Right |
| 3 | Center |
| 4 | LFE |
| 5 | Left Surround |
| 6 | Right Surround |
| 7 | Back Surround (only with 6.1 playback) |
| 8 | |

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HDMI Setup Options

Additional Dolby® Digital options are available to set the speaker configuration and phantom center option. These options are accessed through the menu path Formats → Format Options → HDMI Options. (Note: You must first select a format with HDMI as the source).




Speaker Config

- **5.1** – When playing Dolby® Digital 6.1 audio the back surround channel information will be mixed into the left surround and right surround channels.
- **7.1** – When playing Dolby® Digital 6.1 audio the back surround channel information is placed on both back surround channels: 7 and 8. When playing 5.1 audio, the back surround channels are silent.

Phantom Center

- **Off** – Normal operation with a center channel speaker.
- **On** – Use when center channel speaker is not available. The information from the center channel plays on the left and right channels. Note: This is only in effect while playing Dolby® Digital audio.

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