PBI

Audio/Video Redundancy Switch

Brighten Your Digital View!

DCH-2000AV
Audio/Video 1+1 Redundancy Switch

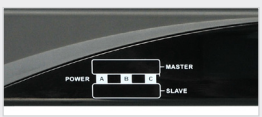
DCH-2000AV is an 1+1 analog base band audio/video redundancy switch. Three groups of independent 1+1 switch are implemented in a single 1RU chassis. Each switch has 1 primary audio/video input port, 1 backup audio/video input port and 2 audio/video output ports in mirror. The primary port is automatically switched to the back-up port in case of primary port failure by using built-in analog video signal quality monitor. The change-over condition is the detection of consecutive synchronization of analog TV signal. DCH-2000AV uses RF Relay switch to ensure reliable transition from primary to secondary input port in the case. With its high performance and stability, DCH-2000AV is an ideal product for broadcast system redundancy.

Main Feature

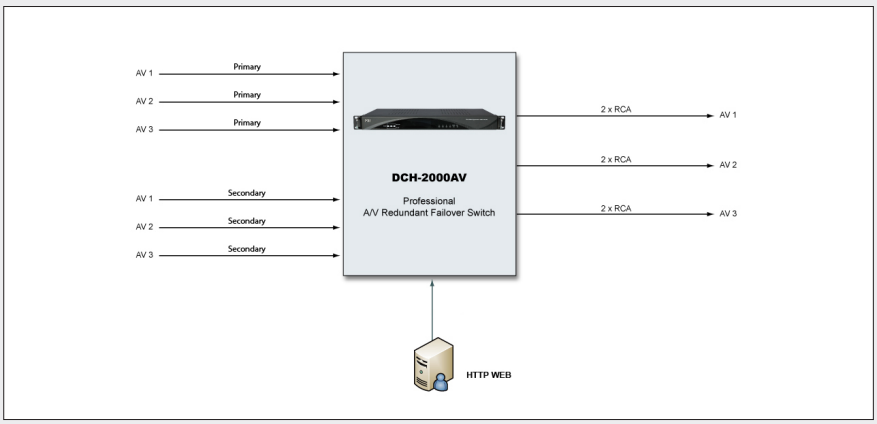
- 3 groups of 1+1 redundancy switch in compact 19″ 1RU chassis
- Support NTSC, PAL and SECAM standards
- Automatic or manual switching mode selection
- User-configurable automatic switch back to primary
- Remote Control and Supervision by HTTP WEB

3-in-1 redundant switch within a compact 19" 1RU chassis

LED alarm on front panel



Remote Control and Supervision by HTTP WEB



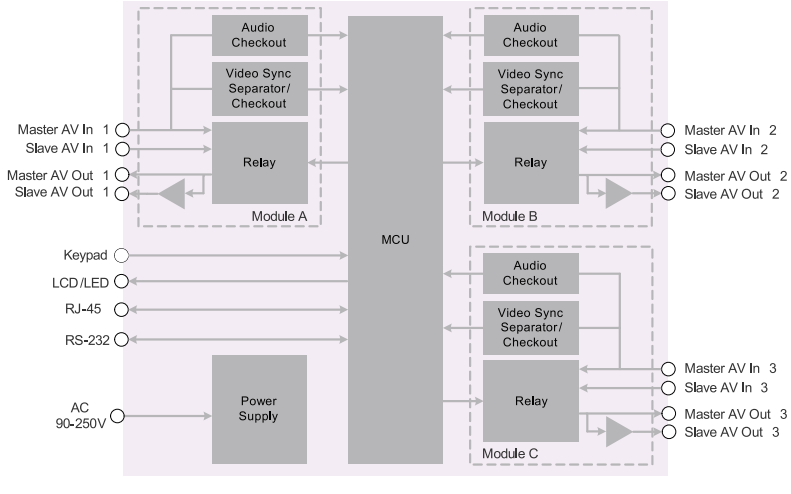
Specification

Analog Video	
Number of input	1 Primary input and 1 Backup input for each of the 3 Groups of 1+1 Switch
Number of output	2 Outputs in mirror for each of the 3 Groups of 1+1 Switch
Connector type	RCA female, 75Ω
Video Standard	NTSC or PAL, or SECAM
White level amplitude	±3mVpp
Horizontally sync. amplitude	±2mVpp
K-factor	0.1%
Differential gain	0.1%
Differential phase	0.05°
Chroma-Luma Gain	1.5%
Chroma-Luma Delay	±13ns
Nonlinear Luminance	0.2%
Horizontal Sync Edge Jitter	±1.5p-p
Frequency Response	0.5MHz ~ 4.8MHz, ±0.4 dB; 5.5MHz, +1/-2 dB
Analog Audio	
Number of input	1 pair primary inputs and 1 pair backup input for each of the 3 Groups of 1+1 Switch
Number of output	2 Outputs in mirror for each of the 3 Groups of 1+1 Switch
Connector type	RCA female, Stereo L/ R
Output Impedance	600Ω (balanced)
Total Harmonic Distortion	60Hz -10kHz, 0.02%
Frequency Response	Left: 40Hz -15Hz, ±0.5dB
	Right: 40Hz -15kHz, ±0.5dB
Amplitude	1kHz, 0dB, ±0.5dB
Audio/Video Switching	
Switching Mode	Auto/Manual
Switching Condition	Video signal loss, Video loss of Sync by 3 times in 1 sec, or Audio mute period longer than user´ s setting
Switching Time	< 300 ms
Power Failure Switching	Mechanical by pass through relay when power failure
Control & Monitoring	
Connector Type	1 × RJ-45, 10/100 Base-T, for equipment IP Control
Remote Control	HTTP Web
Local Control	LCD display and 6-key keypad
Serial Port	1 × RS-232 9-pin D-sub, for debug use only
Equipment Upgrade	Built-in FTP server + Telnet
Physical	
Dimension	483mm × 220mm × 44mm
Weight	3Kg Net, 4Kg Gross
Power Supply	AC 90V ~ 250V, 50/60Hz
Power Consumption	12W
Operating temperature	0 ~ 45℃
Storage temperature	-10 ~ 60℃
Operating Humidity	10 ~ 90%, non-condensed

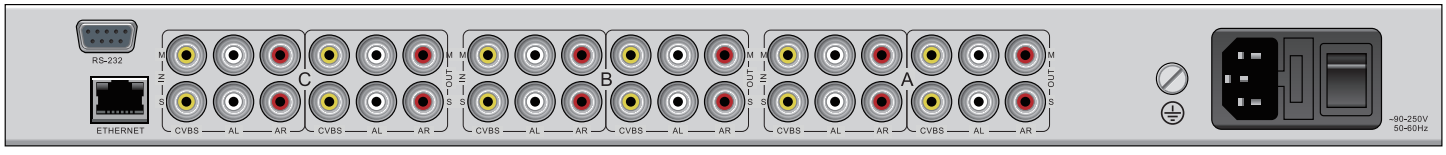
* Note: Video parameters are measured using standard test signal (PAL D, 1Vpp, S/N=60dB).
Audio parameters are measured using standard test signal (Mono, 0dBu, S/N=85dB).

Block Diagram

DCH-2000AV Function al Block Diagram



Back panel Interface



Room 401, Dingjun Plaza, No.75 SuZhou Street, Haidian District, Beijing, China 100080
Tel: +86-10-82617178 Fax: +86-10-82610263 E-mail: sales@pbicn.com