

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.

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



**LED alarm on front panel**



**Remote Control and Supervision by HTTP WEB**



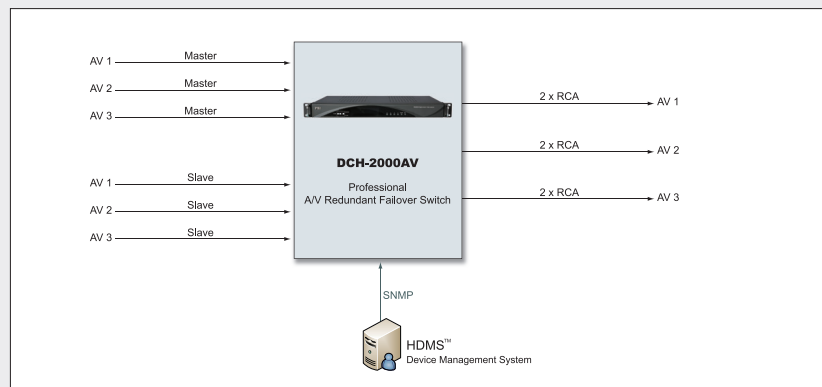
## DCH-2000AV

### Audio/Video 1+1 Redundancy Switch



#### 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



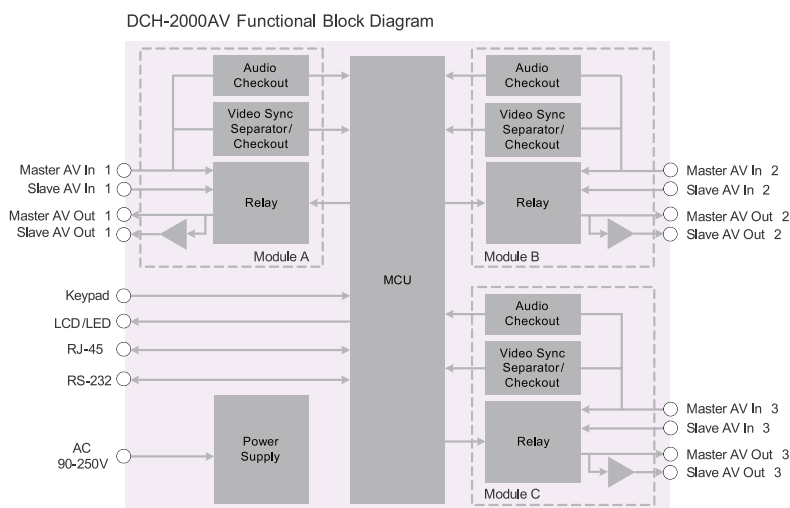
## Specification

|                              |  |
|------------------------------|--|
| <b>Analog Video</b>          |  |
| 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   |
| <b>Analog Audio</b>          |  |
| 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<br>Right: 40Hz -15kHz, ±0.5dB   |
| Amplitude                       | 1kHz, 0dB, ±0.5dB  |
| <b>Audio/Video Switching</b>    |  |
| 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  |
| <b>Control &amp; Monitoring</b> |  |
| 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   |
| <b>Physical</b>                 |  |
| Dimension                       | 483mm×220mm×44mm   |
| Weight                          | 3Kg Net, 4Kg Gross   |
| Power Supply                    | AC 90V ~ 250V, 50/60Hz   |
| Power Consumption               | 12W  |
| Operating temperature           | 0~45°C   |
| Storage temperature             | -10~60°C   |
| 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



## Back panel Interface

