

Hot Standby Shelf

Analog/HDTV Hot Standby Switch Protection



Applications

- Hot Standby protection for MRC FLR, DAR, TwinStream, or DAR Plus transmitters and receivers

Features

- Hot Standby Switching for NTSC/PAL analog audio/video or HDTV digital paths
- Switching for 2 analog channels with NTSC or PAL video and 4 audio channels
- Hot standby switching of dual ATSC streams using alarm based detection
- Automatic and Manual operating modes
- Configurable for 1 to 2 hot standby analog channels and one HDTV channel
- Dual power supply backup protection

Overview

The MRC Hot Standby Shelf provides backup protection for MRC's FLR, DAR, DAR-Plus, and TwinStream radios. The shelf can be configured for one or two NTSC/PAL audio/video channels for transmit or receive directions. Additionally, a digital switch can be added for switching an HDTV channel in parallel with an analog channel.

Each analog channel accepts input from the two receivers or transmitters. Each analog channel has a plug-in logic card which switches each receiver or transmitter to a common output based on an alarm detection from either of the units.

An additional analog channel can be added by installing an optional backplane and logic board. In addition, a digital backplane can be added to switch ATSC HDTV signals. The digital backplane uses the alarm signal from the digital channel to switch in parallel with the analog channel.

The shelf uses 2 redundant power supplies for added protection.

For added protection to your digital signal, MRC provides the MRC Diversity Shelf to provide "errorless" switching protection for HDTV data streams. The Diversity Shelf provides several modem configurations with several upgrade options.

Contact MRC today to explore the variety of solutions for both hot standby and diversity solutions.

SPECIFICATIONS

SWITCH ACTIVATION:

Tx and Rx: Summary Alarm

INSERTION LOSS

Tx Waveguide Switch: 0.5 dB MAX*

Rx Splitter Loss: 3 dB

ISOLATION

Tx Waveguide: 70 dB*

Rx Video Switch: >70 dB

*Note: RF Specifications may vary with specific bands and RF Branching

SWITCHING TIME

Tx: 15 sec

Rx: <10 msec

PILOT (RADIO)

Standard: 9.923 MHz

Optional: 8.5 MHz

POWER REQUIREMENTS

(Per Channel)

Tx Switching: 23 watts

Tx Static: 5 watts

Rx: 5 watts

PHYSICAL:

Dimensions: 5.25"h x 15"d x 19"w
(13.3 x 38.1 x 48.3 cm)

Weight: 20 lbs. (9.1 kg)

ENVIRONMENTAL

Operating Temperature Range: 0° to +50°C

Relative Humidity: 0 to 95%, non condensing

POWER SUPPLY

901049-1 (AC)

901049-34 (AC)

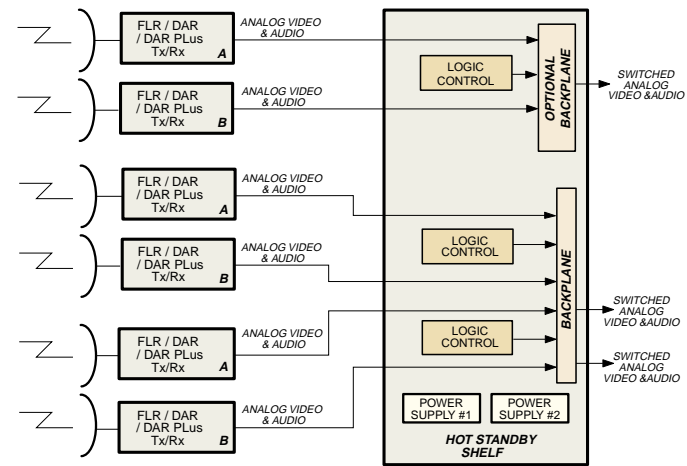
902289 (DC)

902290 (DC)

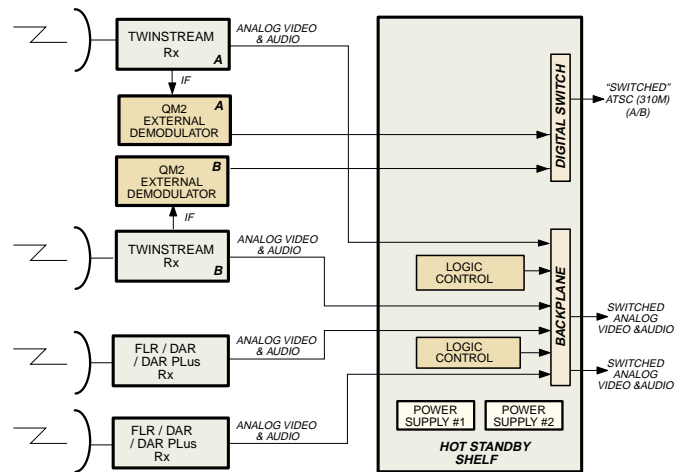
PLAGIC CONTROL CARD

901012-1 for the receiver board.

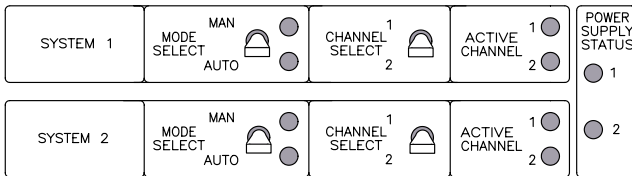
901012-2 for the transmitter board.



Hot standby protection for a TwinStream receive configuration for analog and digital channels as well as an additional audio/video channel.



Hot standby protection for 3 analog channels. Note the optional backplane used to switch an additional audio/video channel.



Hot Standby Shelf Front Panel Controls and Display



Analog Switch Digital Switch

Rear Panel View showing hot standby for 2 analog and 1 digital channel



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