

SMPTE 310M Protection Switch

The 4450 module is a fail-safe, bypass protection switch for critical SMPTE 310M signals for broadcast or satellite applications. When a fault is detected in the primary input, and the secondary input is verified as good, the switch will activate causing the secondary input to be switched to the module's output. The 4450 includes a passive, fail-safe path that ensures there is an output even in the event of a total power failure.

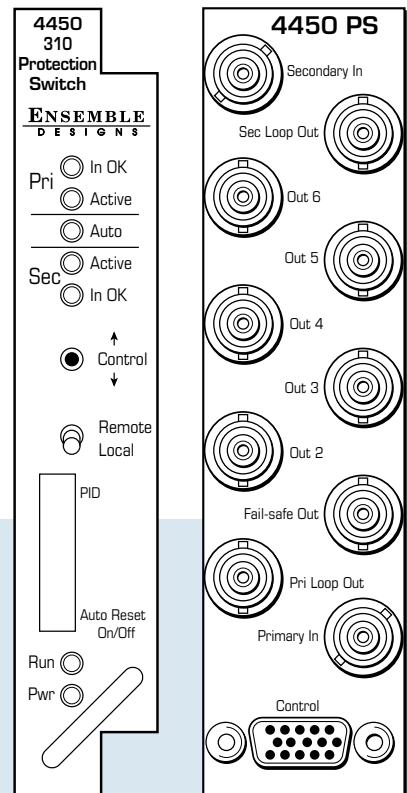
The health of a 310 signal is determined by monitoring digital clock lock, packet presence, and PID presence. The user can configure tests to define the minimum number of video packets and audio packets expected per second in a given service.

The switch can operate in two modes: automatic or nonresetting. In fully automatic mode, the 4450 will automatically switch back to the primary signal once it's been restored. In the nonresetting mode, the secondary input remains routed to the output, even after the primary input has recovered.

Controls are easily accessed through an Avenue Control Panel, Avenue PC, GPIs, or front edge module controls. GPI inputs allow faults detected in upstream equipment to contribute to the switching logic.

Features

- » Fail-safe Bypass Protection Switch for SMPTE 310M signals
- » Detects Signal Presence, Program Packets, PMT, PAT and PIDs
- » Detection specifics are user-programmable
- » Alarm generation
- » Remote control and monitoring



Input Signal

Number Two
Signal Type SMPTE 310M

Loopback

Number Two total
One primary
One secondary
Impedance 75 Ω

Output Signal

Number Six total
One fail-safe bypass output
Five outputs
Signal Type SMPTE 310M
Impedance 75 Ω

General Specifications

Power Consumption <7.0 watts
Temperature Range 0 to 40°C ambient
(all specs met)
Relative Humidity 0 to 95%, noncondensing
Altitude 0 to 10,000 ft
Fusing 4 each 0.75 Amp PTC resettable fuse with each domain of the module independently regulated.

