

# 4450

## 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.

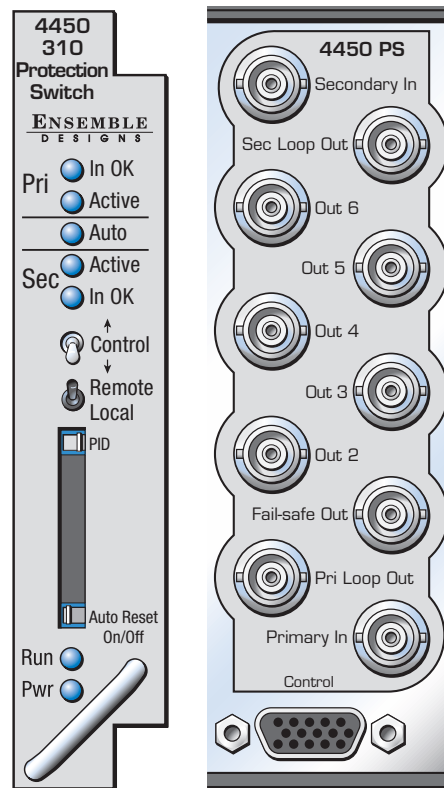
The health of a 310M signal is determined by monitoring digital clock lock, packet presence, and PID presence. The user can configure tests to define the minimum number of video packets and audio packets expected per second in a given service.

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, until it's reset by the operator.

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 with PID specific targeting**
- **Detection specifics are user-programmable**
- **Alarm generation**
- **Remote control and monitoring**



## SMPTE 310M Protection Switch

### Input Signal

|             |            |
|-------------|------------|
| Number      | Two        |
| Signal Type | SMPTE 310M |

### Loopback

|           |   |
|-----------|---|
| Number    | Two total<br>One primary<br>One secondary |
| Impedance | 75 Ω                                      |

### Output Signal

|             |  |
|-------------|--|
| Number      | Six total<br>One fail-safe bypass output<br>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 |

4450 module cannot be installed in slot 3 of a 1RU frame when 5035 System Control module is installed

