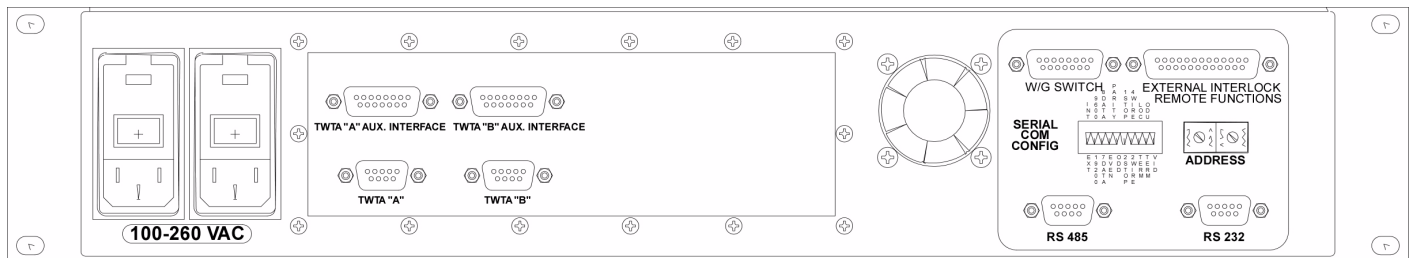




# XTC-110D

## 1:1 Redundant HPA Controller



- **Compatible With All Xicom Rack Mount Amplifiers**
- **Full Hpa Amplifier Status**
- **Front Panel LED Display**
- **Rack Mounted — 2 Rack Units High**
- **Remotely Controllable Via Serial Interface**

The XTC-110D 1:1 Redundant Controller is designed to allow the redundant operation of Xicom Technology's line of digital rack mount amplifiers. The controller allows for remote switching, control and monitoring from the ground station's M&C via an RS-232 or RS-485 serial interface. Because control functions and status requests are passed through the controller to each HPA, only one customer

serial line is required for complete M&C of the system. Amplifiers may also be activated and switched from the front panel.

The unit is compact and requires only two rack units (3.5 inches) of a standard 19 inch rack. Total required rack space for a full 1:1 Redundant HPA system is 8 RU (14 inches) for amplifiers up to 400W, and 24 RU (42 inches) for 600W - 2250W amplifiers.

# LOCAL FUNCTIONS

| TYPE     | FUNCTION                        |                             |
|----------|---------------------------------|-----------------------------|
| CONTROLS | Local/Remote                    | Channel Selected — A/B      |
|          | Manual/Automatic                | Fault Reset                 |
|          | High Voltage ON — A/B           | Lamp Test                   |
| STATUS   | Local/Remote                    | Manual/Automatic            |
|          | High Voltage ON †               | Summary Fault †             |
|          | Standard Output Switch Position | Filament Time Delay (FTD) † |
|          | Summary Fault A/B/C             | Standby †                   |
|          | Transmit Select A/B             |                             |

† One Mode of Multifunction LED

# REMOTE FUNCTIONS VIA RS-232/485

| TYPE                        | FUNCTION                             |                                     |
|-----------------------------|--------------------------------------|-------------------------------------|
| CONTROLS— A/B               | Channel Select ‡                     | High Voltage ON                     |
|                             | High Voltage OFF (resets all faults) | Set Power (gain adjust)             |
|                             | Heater Standby (on/off)              | Fault Reset ‡                       |
|                             | Manual/Automatic ‡                   | Set Alarm or Fault Detection On/Off |
|                             | Set Alarm/Fault Limit Values         | Low Power                           |
|                             | Minimum Power                        | High Power                          |
|                             | Maximum Power                        | Reflected Power                     |
| STATUS — A/B                | Parameters (A)                       | Standby                             |
|                             | Helix Current                        | Local/Remote (HPA)                  |
|                             | Helix Voltage                        | Local/Remote-HPA                    |
|                             | Temperature                          | Summary Fault                       |
|                             | Heater Hours                         | High VSWR Fault                     |
|                             | Beam Hours                           | High Voltage Fault                  |
|                             | RF Power                             | Helix Current Fault                 |
|                             | Reflected Power                      | Low Power Alarm                     |
|                             | High Voltage Selected                | Reflected Power Alarm               |
|                             | High Power Alarm                     | Filament Time Delay (FTD)           |
|                             | STATUS — Controller                  | Channel Select ‡                    |
| Local/Remote — Controller ‡ |                                      |                                     |

‡ Controller Functions Only