XTC-122D

1:2 REDUNDANT TWTA CONTROLLER

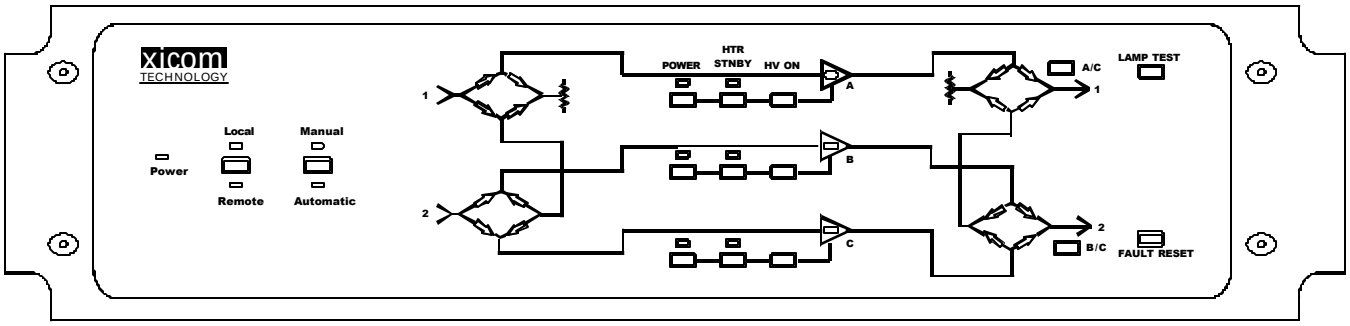
Features

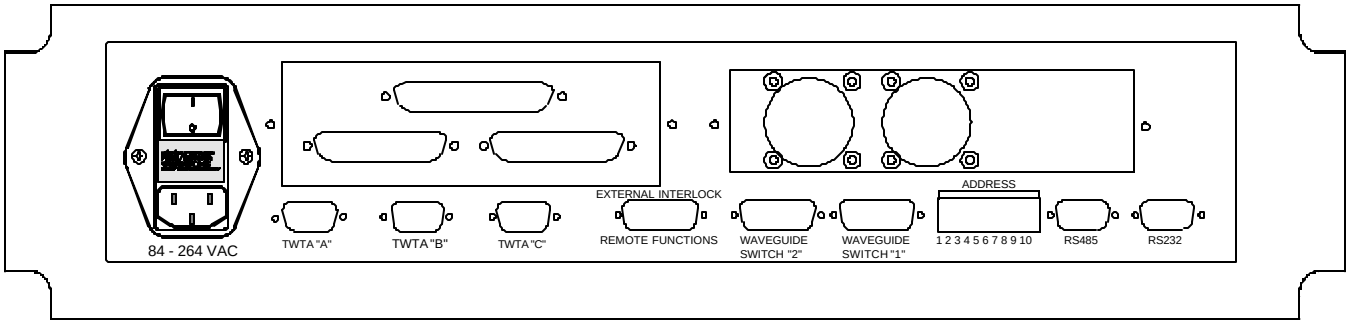
- Compatible with all Xicom antenna mount amplifiers
- Full HPA amplifier status
- Dual function capability, TWTA controller and redundant system controller
- Front panel LED display
- Two rack units high (3 ½ inches)
- Remotely controllable via serial interface

The XTC-122D 1:2 redundant controller is designed to allow the redundant operation of Xicom Technology's line of digital antenna mount amplifiers. This dual function controller eliminates the need for a separate TWTA controller for each antenna mount TWTA. The unit is compact and requires only two rack units (3 ½ inches) of a standard 19 inch rack.

The XTC-122D 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 TWTA, only one customer serial line is required for complete M&C of the system. Amplifiers can also be activated and switched from the front panel.

Front Panel





Rear Panel

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LOCAL FUNCTIONS

Control Functions	Status Indicators	
• Local / Remote	• Local / Remote	• Filament Time Delay(FTD) †
• Manual / Automatic	• Manual / Automatic	• Waveguide Switch Position
• High Voltage On A / B	• High Voltage On †	• Standby †
• Channel Selected - A / B	• Summary Fault †	• Transmit Select A / B
• Power On / Off	• Input Switch Position (optional)	• Heater Standby On
• Heater Standby	• Power On	• AC On
• Fault Reset		
• Lamp Test		

† One mode of multi-function LED

REMOTE FUNCTIONS VIA RS-232/485

Control Functions - A/B	
• Channel Select	• Set Alarm or Fault Detection On / Off
• High Voltage On	▪ Low Power
• High Voltage Off (resets all faults)	▪ High Power
• Set Power (gain adjust)	▪ Reflected Power
• Heater Standby (on / off)	• Set Alarm / Fault Limit Values
• Fault Reset	▪ Minimum Power
• Manual / Automatic	▪ Maximum Power
	▪ Reflected Power

Status Indicators - A/B	
• Parameters (A)	• Summary Fault
▪ Helix Current	• High VSWR Fault
▪ Helix Voltage	• High Voltage Fault
▪ Temperature	• Helix Current Fault
▪ Heater Hours ‡	• Temperature Fault
▪ RF Power ‡	• Low Power Alarm ‡
▪ Reflected Power ‡	• High Power Alarm ‡
▪ High Voltage Hours ‡	• Filament Time Delay (FTD)
• High Voltage On	• Reflected Power Alarm ‡
• Local / Remote (TWTA)	• Standby

Status - Controller	
• Channel Selected	• Local / Remote-Controller
• Manual / Auto	

‡ Digital M&C Only