

XTC-120D & XTC-121D

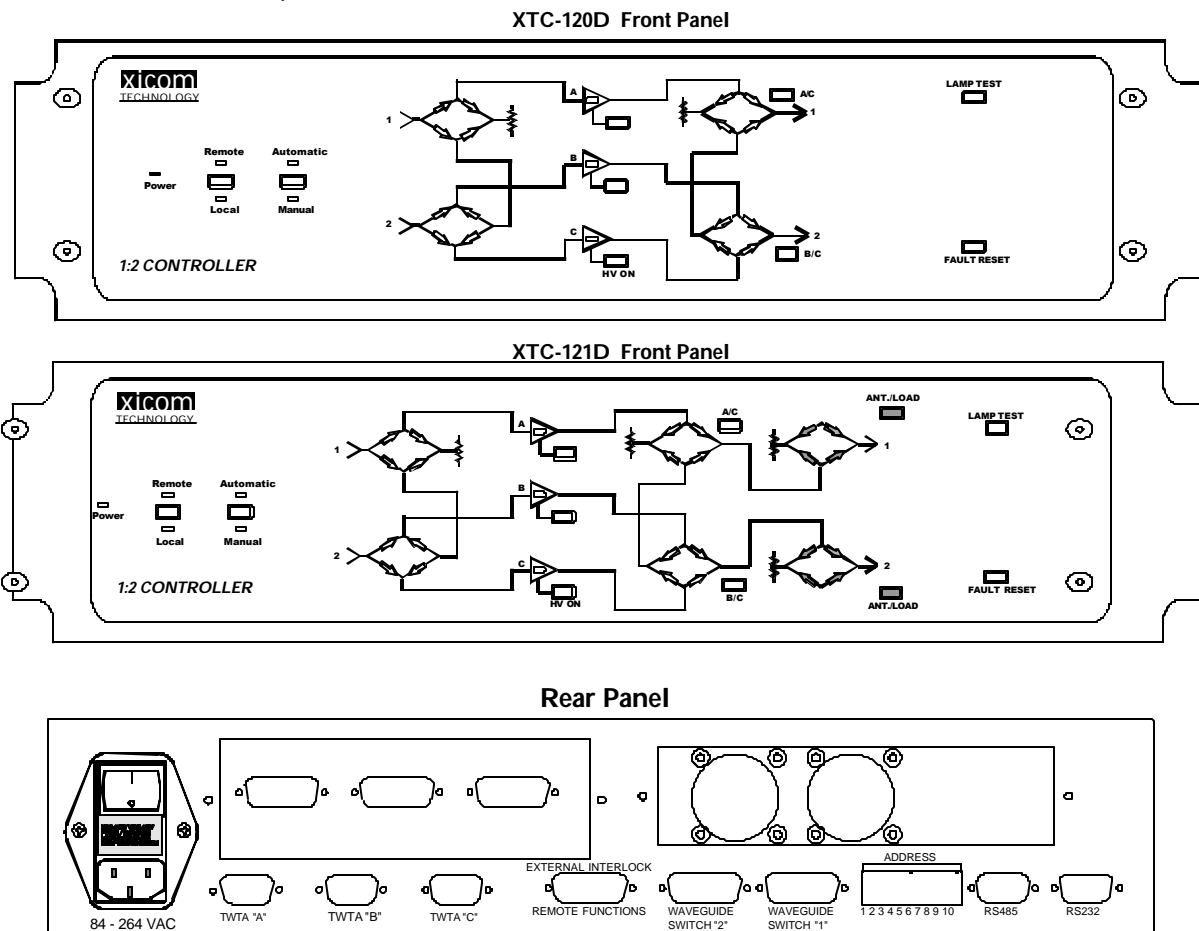
1:2 REDUNDANT HPA CONTROLLERS

Features

- Compatible with all Xicom Digital Rack-Mount Amplifiers
- Two Front Panel Configurations Available
- Full HPA Amplifier Status
- Front Panel LED Display including both input and output switch position indicators
- Rack mounted - 2 rack units high
- Remotely controllable via serial interface

The XTC-120D 1:2 redundant controller is designed to allow the 1:2 redundant operation of Xicom Technology's line of digital rack-mount amplifiers. The XTC-121D provides a second set of output waveguide switches that switch the output between the antenna and a load. 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 controller is compact and requires only two rack units (3 1/2 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

Control Functions (Both)	Status Indicators (Both)
<ul style="list-style-type: none"> • Local / Remote • Manual / Automatic • High Voltage On - A/B/C • Channel Selected - A/B/C • Fault Reset • Lamp Test 	<ul style="list-style-type: none"> • Local / Remote • Manual / Automatic • High Voltage On - A/B/C • Standard Output Switch Position • Input Switch Position • Summary Fault A/B/C • HPA Standby • Power ON
Control Functions (121D Only)	Status Indicators (121D Only)
<ul style="list-style-type: none"> • Output Selected - Antenna/Load 	<ul style="list-style-type: none"> • Auxiliary Output Switch Position

REMOTE FUNCTIONS VIA RS-232/485

Control Functions - A/B/C	
<ul style="list-style-type: none"> • Channel Select • High Voltage On • High Voltage Off (resets all faults) • Set Power (gain adjust) • Heater Standby (on/off) • Fault Reset • Manual/Automatic 	<ul style="list-style-type: none"> • Set Alarm or Fault Detection On/Off <ul style="list-style-type: none"> ▪ Low Power ▪ High Power ▪ Reflected Power • Set Alarm/Fault Limit Values • Minimum Power • Maximum Power • Reflected Power
Status Indicators - A/B/C	
<ul style="list-style-type: none"> • HPA Parameters <ul style="list-style-type: none"> ▪ Helix Current ▪ Helix Voltage ▪ Temperature ▪ Heater Hours ▪ Beam Hours ▪ RF Power ▪ Reflected Power • High Voltage Selected • Beam On • Local/Remote-HPA 	<ul style="list-style-type: none"> • Summary Fault • High VSWR Fault • High Voltage Fault • Helix Current Fault • Temperature Fault • Low Power Alarm • High Power Alarm • Reflected Power Alarm • Standby • Filament Time Delay (FTD)
Status Indicators - Other	
<ul style="list-style-type: none"> • AC Power • Channel Selected • RF Transmit Power • RF Reflected Power 	<ul style="list-style-type: none"> • RF Power to Load • Local/Remote-Controller • Manual/Auto