

DTXPRO-800VH DIGITAL TRANSMITTER

DIGITAL MODULATOR and
TRANSMITTER
REMOTE CONTROL



INTRODUCTION

The DTXPRO-800VH transmitter is an integrated transmission system. Included in a 24 RU rack is a modulator, power amplifier, mask filter, and standard accessories. The DTXPRO-800VH is tested to FCC specifications.

The modulator used in this assembly is the DXDPRO-10VH. The DXDPRO-10VH is a UHF 8vsb BROADBAND MODULATOR with adaptive linear and nonlinear correction controllable via an Ethernet IP connection. Many additional features are included in this basic modulator such as TRANSMITTER REMOTE CONTROL and STATUS MONITORING, GPS RECEIVER, ASI or SMPTE 310M, and FAULT NOTIFICATION VIA EMAIL. This unit will operate with 110 VAC or any 48 VDC TELECOM back up system in case AC Mains fail. Back up DC supply is not supplied in this package.

The MFA2PAH provides power amplification to achieve the desired power output level to comply with FCC license requirements. LD MOS 50 VOLT DEVICE TECHNOLOGY is used throughout the HPA section for state-of-the-art performance. This unit is wired to operate off 220V AC

An FCC Compliant STRINGENT MASK FILTER is supplied and is built into the rack. Additional components are included to sample forward and reflected power as well as samples for the adaptive linear and nonlinear corrector. The systems HPA is protected from antenna or filter faults by an ISOLATOR built into the HPA. Any faults in the filters or antenna will be detected by the onboard protection circuits. This transmitter includes a LOW PASS FILTER for additional harmonic suppression in the GPS Bands.

Pineapple Technology, Inc. warrants the DTXPRO LINE of transmitter products for 2 years from ship date. Extended warranty is available for an additional 5 years. Contact PTI sales for details.



PINEAPPLE TECHNOLOGY, INC.

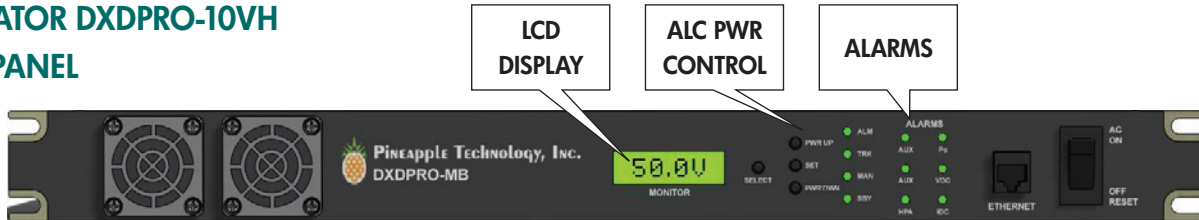
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MODULATOR DXDPRO-10VH FRONT PANEL



Note: Additional information available in DXDPRO-10U data sheet.

RECEIVER DISPLAY: The receiver control and display panel is used to show status of the receiver and allows selection of desired receive channel. The receiver signal strength is displayed as well as LOCK and POWER status.

LCD DISPLAY: The LCD DISPLAY provides selected transmitter test data by depressing the SELECT switch located on the right side. Some of the options include the following;

1. RF POWER OUTPUT LEVEL
2. REFLECTED POWER LEVEL
3. DC SUPPLY VOLTAGE
4. DC CURRENT

ALC CONTROL PANEL: The ALC section serves two important functions.

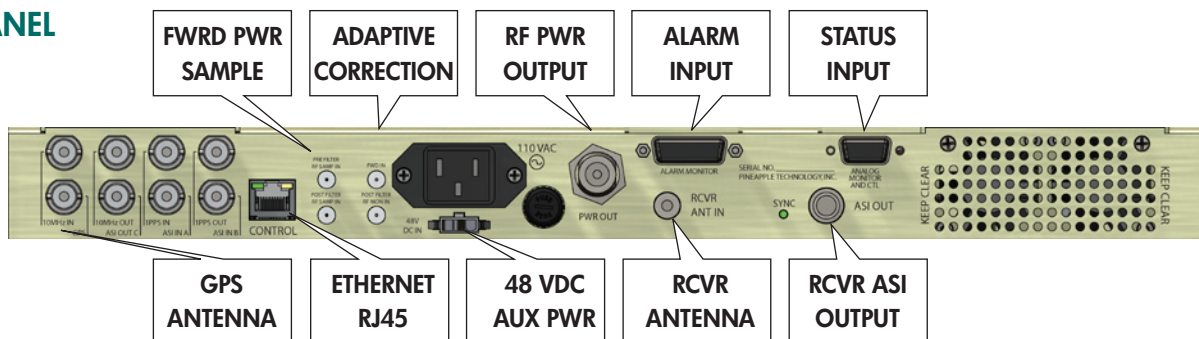
1. Provides a means for raising or lowering transmitter power level.
2. Once the desired power level is reached, the set switch places the ALC circuit in the TRACK MODE. In the TRACK MODE THE OUTPUT LEVEL IS CONSTANT.

ALARM PANEL: The alarm LEDs indicates status of key alarms. Key alarms include the following;

1. LOW OUTPUT POWERNORMAL (GREEN) FAULT (RED) <85 %
2. HIGH REFLECTED POWER.....NORMAL (GREEN) FAULT (RED) >20 %
3. 48 VDC SUPPLY.....NORMAL (GREEN) FAULT (RED) <42 v
4. AC MAIN VOLTAGE*NORMAL (GREEN) FAULT (RED) <50 %
5. AMBIENT TEMPERATURENORMAL (GREEN) FAULT (RED) >40 c
6. HEAT SINK TEMPERATURENORMAL (GREEN) FAULT (RED) >62 c

*48 VDC backup power required

REAR PANEL



Mating Connectors

BNC JACK 75 OHMS	GPS, ASI IN, SMPTE-310	RECEIVER ANTENNA.....	TYPE F JACK
ETHERNET	RJ-45	ALARM INPUTS.....	DB 15 JACK
RF MONITORING	SMA JACK	ANALOG STATUS	DB 9 JACK
ADAPTIVE SIGNAL.....	SMA JACK	48 VDC INPUT.....	MOLEX 3P
RF OUTPUT.....	TYPE N JACK		

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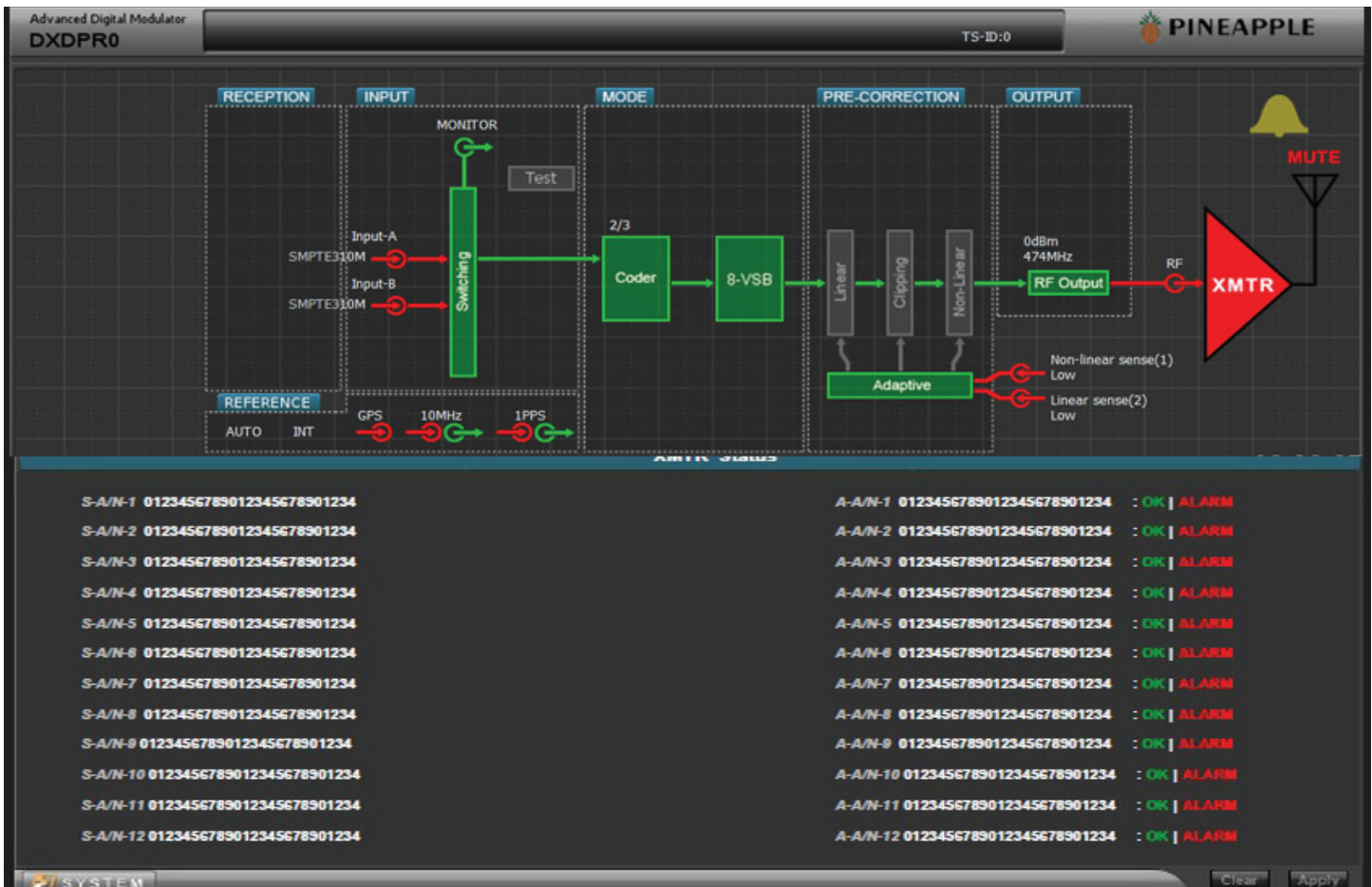
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WEB PAGE GUI

Web Page Commands

- Click and drag (XMTR ICON) to lower 1/2 page to see status and alarms
- Click and drag (LINEAR ICON) to lower 1/2 page to control linear correction
- Click and drag (NONLINEAR ICON) to lower 1/2 page to control nonlinear functions
- Click and drag (MUTE ICON) to lower 1/2 of page to mute and un mute xmtr
- Click and drag (RF OUTPUT) to change the output level from modulator
- Click and drag (BELL ICON) to view modulator alarms
- Click and drag (GPS ICON) to setup GPS receiver
- Click and drag (SWITCHING ICON) to select input port for ASI or SMPTE-310

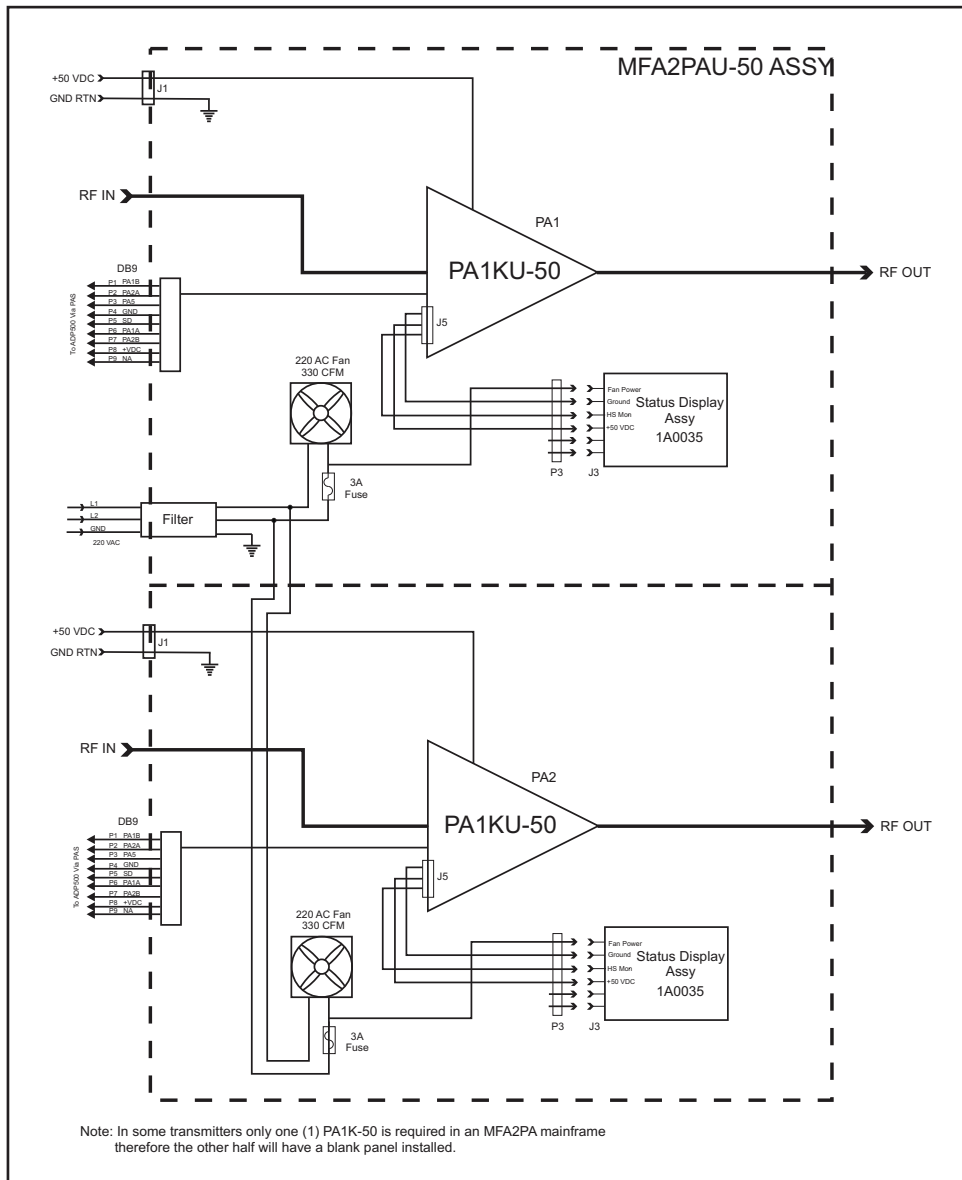


MFA2PAU FINAL AMPLIFIER

The final amplifier Mainframe includes the following items:

1. 2ea PA1K-50
2. PA STATUS PANEL
3. COOLING FANS AND HEAT SINK
4. PA CURRENT STATUS MONITORING VIA DB-9
5. GAIN & PHASE MATCHING MODULE

BLOCK DIAGRAM MFA2PAU



PINEAPPLE TECHNOLOGY, INC.

Web site: www.ptibroadcast.com

4231 Pacific Street, Suite 27, Rocklin, CA 95677

(916) 652-1116 . Fax: (916) 652-1161
U.S. Toll-free (888) 888-8229

ASSEMBLED IN U.S.A. Some products include foreign components.
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