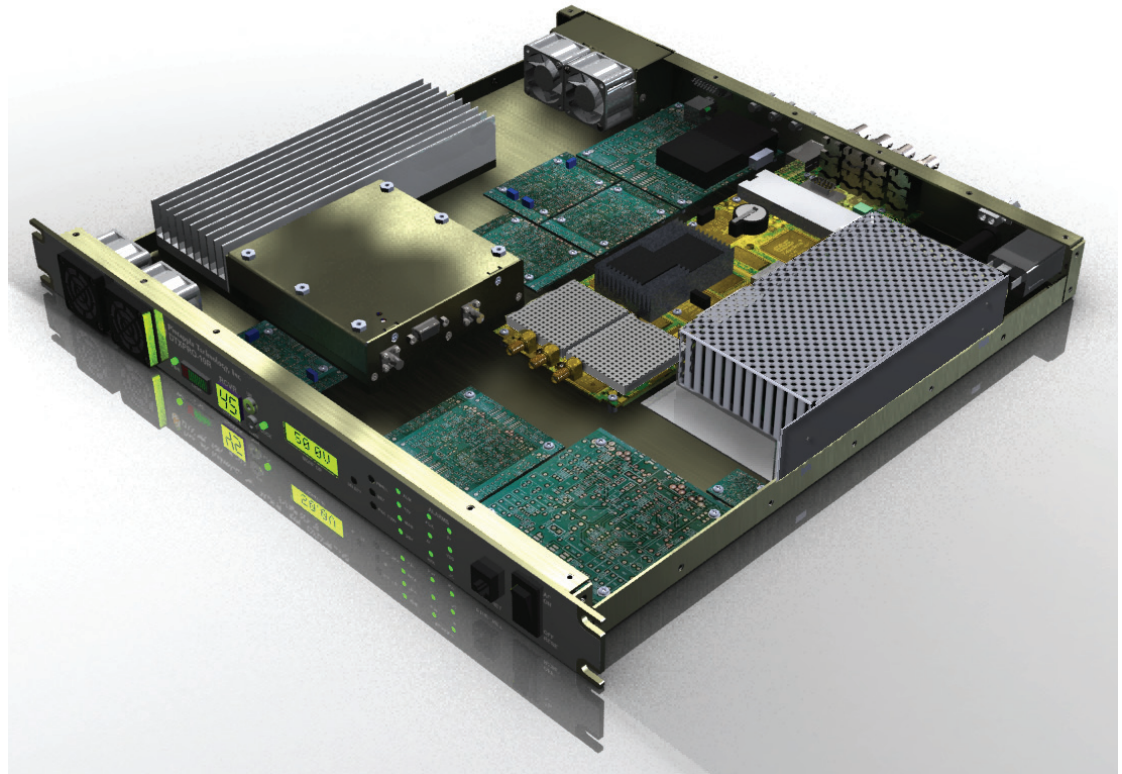


DTXPRO-10 TRANSMITTER

DIGITAL MODULATOR &
TRANSMITTER CONTROLLER



INTRODUCTION

The **DTXPRO-10 Transmitter** integrates a **DIGITAL MODULATOR** with the latest **LD MOS HPA TECHNOLOGY**. The transmitter is completely controlled via **ETHERNET** or on site with a simple laptop computer. A friendly **WEB GUI** is provided for system interface and control. All settings are protected with **NON-VOLATILE** device technology. The transmitter can be power by a simple 48 volt Telecom backup power system in case of primary AC power failure.

OPTIONAL MODELS

- DTXPRO-10UUHF TV Transmitter
- DTXPRO-10VVHF 50–220 MHz Transmitter

STANDARD EQUIPMENT

- Digital Mask Filter, External
- Dual Directional Coupler, External



PINEAPPLE TECHNOLOGY, INC.

www.ptibroadcast.com

DTXPRO-10 TRANSMITTER

DIGITAL MODULATOR & TRANSMITTER CONTROLLER

GENERAL SPECIFICATIONS – MODULATOR

- Standards.....ATSC: A/53, A54, SMPTE-310M, DVB-ASI
- TS Options.....ASI or SMPTE-310M
- RF Output.....VHF 50–220 MHz & 470–860 MHz
- Clock Stability<2 ppm or GPS Lock
- Modulator8 Level VSB Trellis ATSC Compliant
- CorrectionAuto Linear & Non Linear
- Ethernet Connection with Web GUI Provided
- Password Protected

TRANSMITTER SPECIFICATIONS

- Power Output 10 Watts Avg. 8 VSB
- Complies with FCC Standards
- Primary Power..... AC 110 Vac
- Primary Power..... DC 44–52 VDC <2.5 Amps
- Remote Control via Ethernet
- Rack Mounting..... 19 in., 1 RU
- Chassis Depth 17 in.
- Weight 10 lbs.
- Output Connector..... Type N
- ASI Input BNC 75 Ohm
- GPS Input BNC 50 Ohm
- ASI Output BNC 75 Ohm
- Remote Interface..... DB15

TRANSMITTER REMOTE CONTROL AND MONITOR FEATURES VIA IP ADDRESS 6/15/2010 6/15/2010

CONTROL	TRANSMITTER	STANDBY	ON/OFF
MONITOR	TRANSMITTER	POWER OUTPUT	WATTS (XXXX.X)
	TRANSMITTER	REFLECTED POWER	WATTS (XXXX.X)
	SUPPLY VOLTAGE	DC VOLTAGE	VOLTS (XXXX.X)
	SUPPLY CURRENT	DC CURRENT	AMPS (XXXX.X)
ALARMS	1. HPA TEMP.	GREEN LED OK	RED LED FAULT
	2. DC VOLTAGE	GREEN LED OK	RED LED LOW VOLTAGE
	3. Po (W)	GREEN LED OK	RED LED Po OUT OF RANGE
	4. AC MAINS	GREEN LED OK	RED LED AC MAINS FAULT

LOCAL/FRONT PANEL CONTROL

The front panel is divided into several sections as follows:

1. TRANSMITTER MONITOR AND ALC CONTROLER

All the REMOTE MONITORING and CONTROLS shown on the WEB GUI are also displayed here for local viewing and diagnostic. The monitor also serves to display power level with making power adjustment using ALC MANUAL mode. Once the power level is set selecting ALC AUTO, it will hold that level.

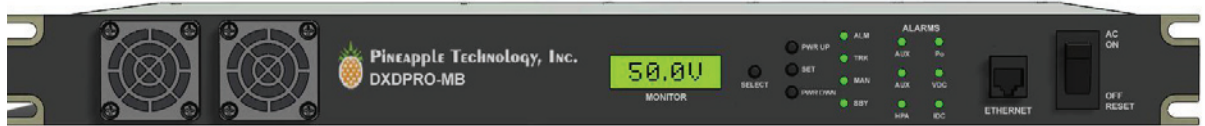
2. ALARM STATUS

The key alarm features are displayed on the front panel and on the WEB GUI. GREEN LED indicates **normal** operation and RED LED indicates a **fault**.

DTXPRO-10 TRANSMITTER

DIGITAL MODULATOR & TRANSMITTER CONTROLLER

FRONT PANEL DISPLAY



REAR PANEL



WEB PAGE GUI

PT2000 Terrestrial Gateway **PRO TELEVISION TECHNOLOGIES**

RECEPTION
INPUT
MODE
PRE-CORRECTION
OUTPUT

The diagram shows the signal path: ASI-1 and ASI-2 inputs go through a Switching block to a MONITOR. The signal then passes through HP and LP Coders, an OFDM block (8K 1/8 64QAM), a Linear block, a Clipping block, and a Non-Linear block, finally resulting in an RF Output (Ch. 21 0dBm). A NET block is also shown.

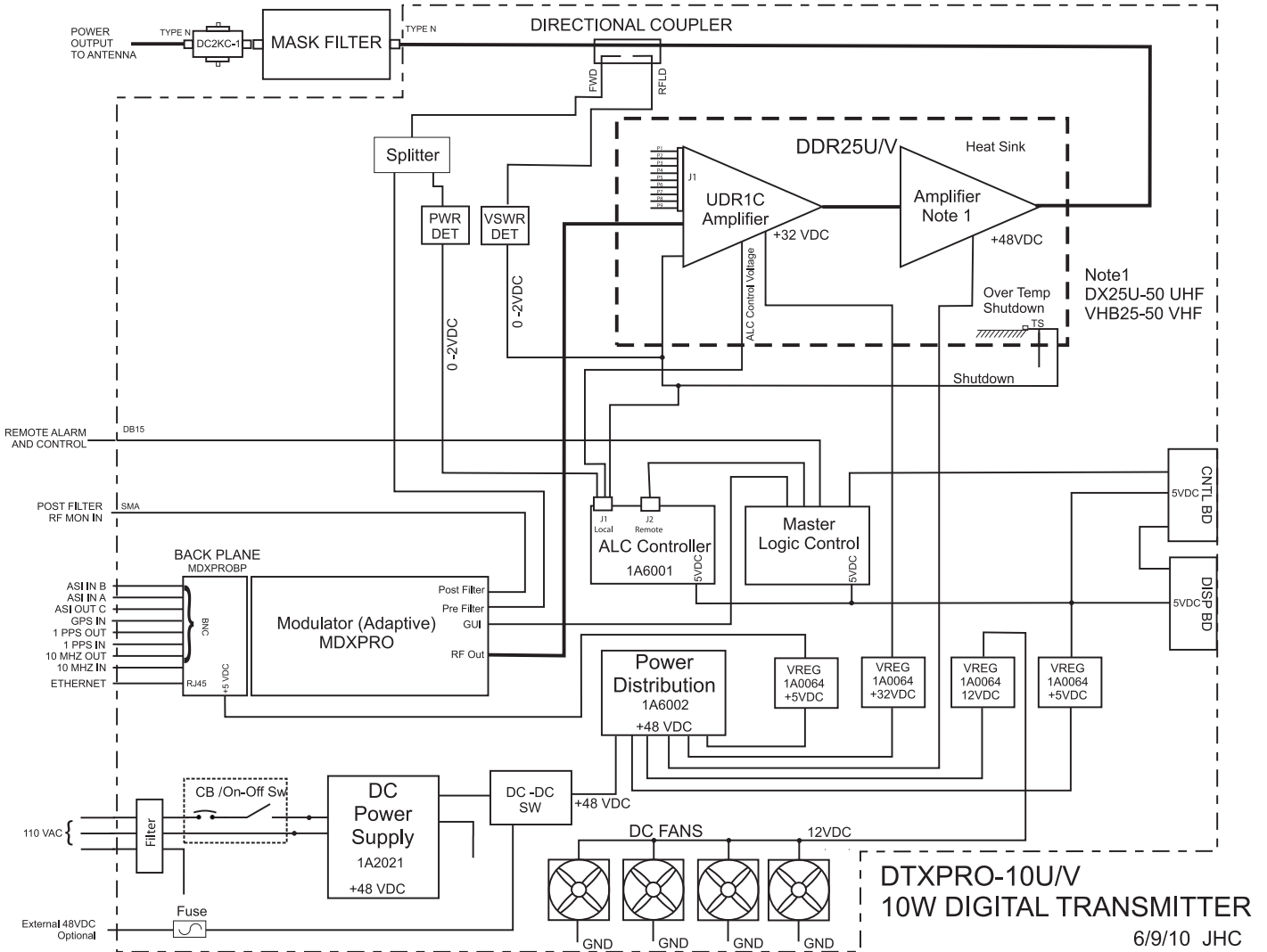
Input	Output	Mode
ASI TS-Primary Alarms: Active	RF Alarms: Active	SFN Alarms: Active
ASI TS-Secondary Alarms: Active	Output Status: MUTE	Network: MFN SFN
Reference Alarms: Active	Channel Raster: UHF	Network Delay: 1161 x100ns
RF Alarms: Active	Channel Subsystem: VHF B	OFDM
GPS Alarms: Ok	Bandwidth: 8 MHz	IFFT: 8K
Reference Source: Auto Ext Int Gps	Channel: 21	Constellation: 64QAM
Actual Source: INT	Frequency: 474000000 Hz	Guard Interval: 1/8
MIP Optional Data	Frequency Offset: 0 Hz	Hierarchy: None a=1 a=2 a=4
Power: 0 dBm	Spectrum Polarity: Inverted	HP Coder
Time Offset: 0 x100ns	Level: 0 dBm	LP Coder
Cell ID: 0	Test signal: OFF	Frequency Offset: 0
Frequency Offset: 0 Hz	ASI Monitor: ASI in 1	

SYSTEM Cancel Apply

DTXPRO-10 TRANSMITTER

DIGITAL MODULATOR & TRANSMITTER CONTROLLER

DXDPRO-10 BLOCK DIAGRAM



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

Information contained herein is subject to change without notice.
© 2010 Pineapple Technology, Inc. All Rights Reserved. Rev. 06/2010