



X-Digital Systems

A Leading Designer and Manufacturer
of Satellite and Terrestrial Multimedia
Communication Systems

XDS-PRO AUDIO SATELLITE RECEIVERS

Low Cost Professional Audio Solution

FEATURES

- Low Cost
- DVB/MPEG Audio Decoder
- L-Band QPSK
- HD Radio Ready
- Remote Control via NMS
- Four balanced audio pairs
- Up to four AES Interfaces
- Up to eight decodes cross mixed
- Sample Rate conversion
- Audio input for Network Automation
- Four PAD Output Ports
- 32 Relays (Fixed & Net Relay)
- Monitor Headphone Jack
- Two 10/100BT Ethernet Ports w/VLAN
- 10/100 Ethernet WAN Port
- Web/Telnet via Ethernet
- XDS-Courier Store and Forward
- Record/Insertion of media
- DHCP, NFS, HTTP, Telnet
- Alarm Port and M&C via RS232
- In Field Firmware Upgradeable
- Optional POTS Modem Port
- Optional Off-Air Monitor
- Optional OSD

APPLICATIONS

- **Live Broadcasting**
News Regional and Time Shift
- **On Demand Broadcast**
Distance Learning, Corporate Communication
and Training
- **File delivery**
Internet and Satellite



PROFESSIONAL GRADE FOR A CONSUMER PRICE

The XDS-PRO is designed as a professional device enabling networks to provide enhanced capability without a large investment in hardware. The XDS-PRO has up to four audio outputs with 32 relays. In addition it provides store and forward capability as well as copy split, spot rotation, audio insertion and digital live recording for time zone feeds.

LIVE BROADCASTS

The XDS-PRO provides live decoding of broadcast media. Each live stream can be routed to any of the balanced outputs. Additionally, each live stream can be digitally mixed with another live stream or a stored file play-back for maximum flexibility.

STORE & FORWARD AND FILE DELIVERY

Media file can be transmitted into local FLASH, a local hard disk or onto a mounted NFS device.

COPY SPLIT – SPOT INSERTION

Audio files residing on the mounted device can be inserted into a live or recorded media being output via the MPEG decoder. This feature allows localization into live and stored programming.

LIVE AUDIO RECORD/PLAYBACK (TIME SHIFTING)

The XDS-PRO is capable of "recording" and playing back any broadcast channel. This enables the network/station to *time shift* content to the proper air-time. Content can be recorded into its local or networked storage.

AUTOMATION READY

The XDS-PRO is equipped with up to 32 programmable Form-A relays. These relays can be actuated via network control or ancillary data channels. This provides a legacy interface for many existing radio station automation systems. Additionally, opto-coupled inputs provide automation directly out of the XDS-PRO receiver. A balanced audio input is also available to allow station by-pass by network.

ADDRESSABILITY

Each XDS-PRO is uniquely addressable via physical ID, Logical ID and Group ID which provides maximum flexibility in configuring a network. Each station can also be configured manually. Up to 32 million clients can be addressed in each network.

ACCOUNTABILITY

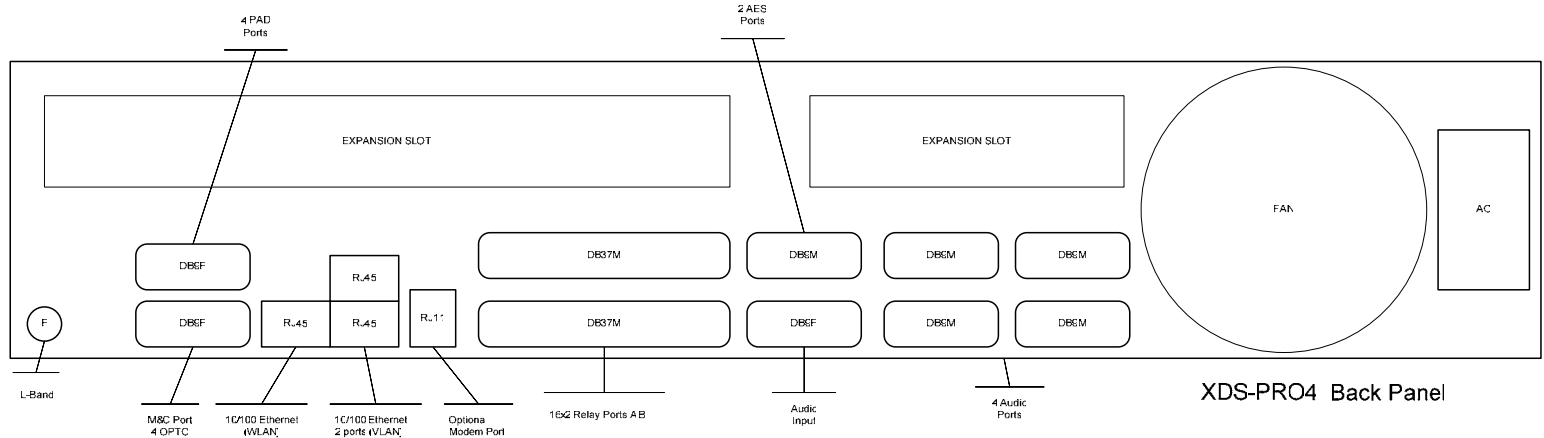
Each XDS-PRO logged its activity. The network can decide what events are logged and how often then are reported to the network. This includes receiver performance, spot play, Live play, time zone delays and all other programming controls. The optional off-air monitor module can also record and tag content received via AM/FM

XDS-PRO AUDIO

NETWORK MANAGEMENT

Each client can be fully controlled by the X-Digital Network Management System (XNMS). Each client's rights management, file distribution and live authorizations are managed from the headend. This gives the network operator flexibility in controlling each client. The XNMS also collects status from the clients via internet connection back channel. This allows the operator to monitor the health and performance of the clients in a real time fashion. Using standard interfaces this collected data can be easily integrated with existing back-office systems. X-Digital offers its customers systems integrations services.

XDS-PRO4 back panel connectors.



The XDS client is available in three configurations: PRO, PRO2, and PRO4. (See chart) Only PRO2 and PRO4 models are rack mountable and are 2RU high. (1RU is also available as a custom request). The PRO model is only available in a desktop chassis.

All models share the same command set and user interface. All three models can be operated in the same network using the XNMS.

The Pro4 model echoes audio channels A and B onto the AES outputs A and B. The monitor head phone jack uses an independent audio decoder. Using it will not interrupt the balanced or AES audio ports. Up to 8 decodes can be mixed onto the audio outputs. Sample rate conversion and multi-format mixing supported. (MPEG Layer2, Layer3 and AAC)

The relays can be assigned to a channel as ancillary data or can be operated independently using Net Relays

RF Input

Frequency Range	950 to 2150 MHz
Data Rates	2-40 MSPS
Carrier Level	-30 to -65 dBm
Connector	F-Type Female
Impedance	75 ohms
LNB DC Power	+18VDC @ 500mA
Modulation	QPSK
FEC	Viterbi-R/S 1/2, 2/3, 3/4, 5/6, 7/8 (188/204)

Control Interfaces

Network Management	via satellite link or TCP/IP
Web	http, telnet
Serial Port	RS232C

	XDS-PRO	XDS-PRO2	XDS-PRO4
Features			
L-Band QPSK 40MSPS	•	•	•
Two 10/100 Ethernet Ports	•	•	•
Two Balanced Audio Ports	•	•	•
Four Balanced Audio Ports			•
Flash memory		1 GB	2 GB
ATA HDD Interface		•	•
Two AES Ports			•
Two PAD ports		•	•
Headphone Jack	•	•	•
16 Form A Relays	•	•	•
32 Form A Relays			•
Spot insertion		•	•
Live Record		•	•
File Delivery		•	•
Options			
56K Telco Modem		•	•
Off-Air Recorder		•	•
120 GB HDD		•	•

Output Ports

Audio	Balanced outputs (600 ohms) DB9-M
	AES (75 ohms) DB9-M
PAD	RS232C DB9-F
Relays	Form A, NO, DB37-M
Ethernet	10/100 BaseT RJ45
Monitor and Control	RS232C DB9-F

Mechanical & Environmental

Input Voltage	90 - 240 VAC (50/60 Hz)
Power Consumption	65W Maximum
Dimensions	3.5" x 18" x 12" (PRO2, PRO4)
Mounting	19", 2RU (PRO2, PRO4)
Weight	8 lbs
Operating Temperature	0°C to 50°C