

WHX-4800D

8-Channel DTV Receiver

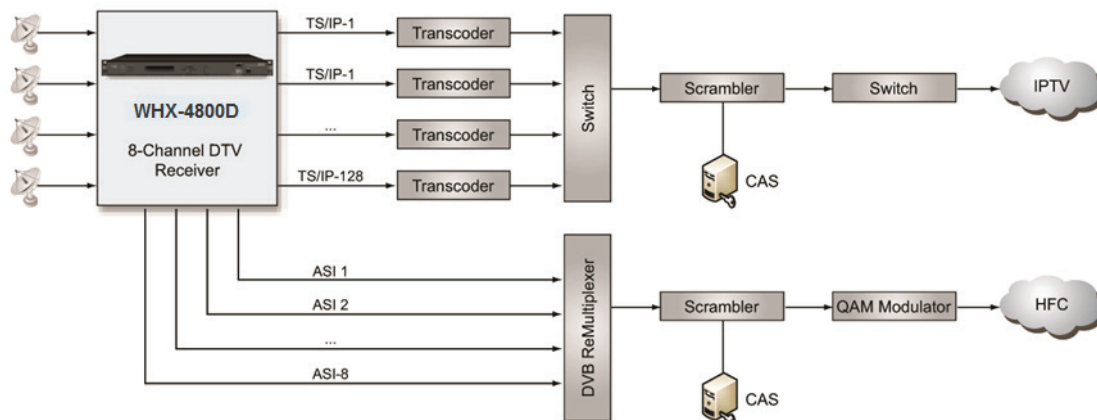


WHX-4800D is a high-density, modular and CI decryption professional TS processor equipped with 8 independent tuners, which can be either of DVB-T/T2, DVB-S2/S, DVB-C, DTMB, ISDB-T and ATSC types. It supports a wide range of application by combining 8 tuners processing capability with industry standard outputs including ASI and TS/IP. WHX-4800D has 8 DVB common interface slots capable of working with most of well-known CAS in the market to de-encrypt multiple pay TV services. WHX-4800D provides operators an ideal solution for multi receiving, re-multiplexing, descrambling and TS over IP operations, the compact 8 tuners and the powerful 8 CI decryption design make WHX-4800D one of the most competitive product in the head-end market.

Main Feature

- 8xTuners Input, Supports variety of input options DVB-T2/T/S2/S/C/DTMB/ATSC/ISDB-T
- Supports DVB-S2 Input Stream Identifier (ISI, optional) and DVB-T2 Multi PLP and SFN MIP pass through
- Built-in TS re-multiplexer receives from ASI, CI Slot1 to CI Slot8 and TS/IP inputs
- 8xDVB-CI Slots, multi-program decryption, BISS-1 and BISS-E decryption
- 8xASI output the transport stream from CI Slot1 to CI Slot8 or BISS decryption
- 1xchannel full duplex TS over IP or 128xchannels IP out without IP input
- Remote Control and Supervision by SNMP v2, HTTP WEB and Proprietary HDMS software
- On Site software update through IP or USB
- RSSI, received signal strength, Eb/NO, C/N and BER monitoring
- Redundancy power supply

Application Case

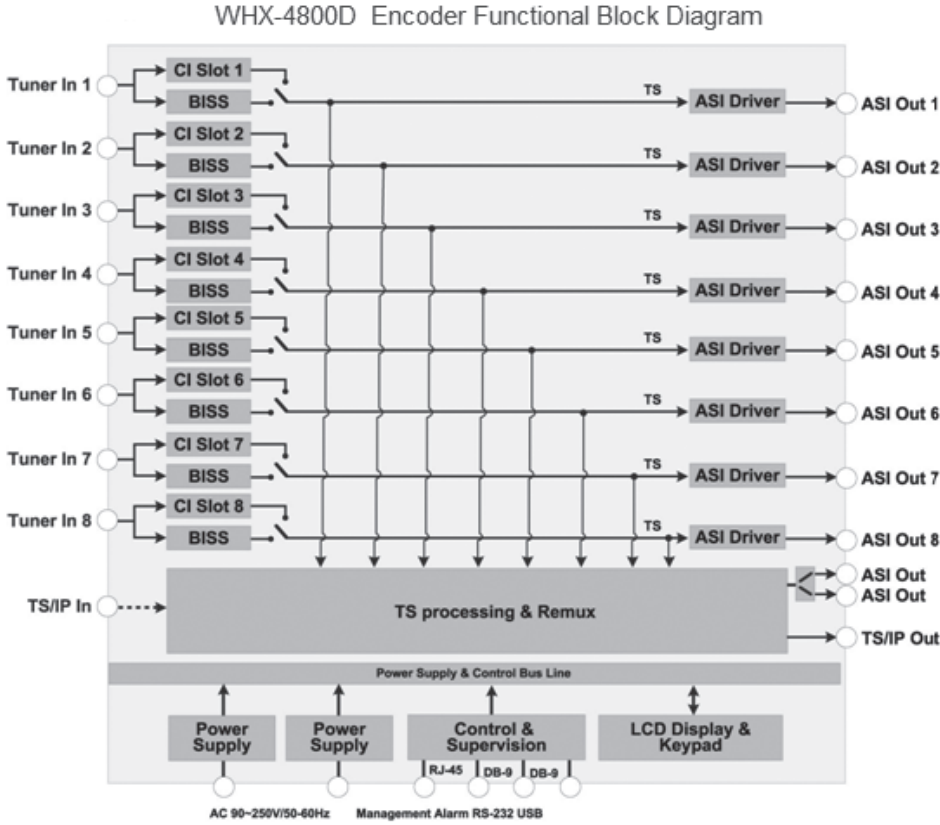


Specification

Tuner Input	
DVB-S/S2 Tuner Input (ISI Factory Optional)	
Connector Type	8×F type female 75Ω for Input
Input Frequency Range	950 ~ 2150MHz
Input Level	-25 ~ -65dBm
Symbol Rate	2 ~ 45MBaud
Roll-off Factor	DVB-S QPSK: 0.35 DVB-S2 8PSK: 0.35, 0.25, 0.2
FEC Code Rate	DVB-S QPSK: 1/2, 2/3, 3/4, 5/6, 7/8 DVB-S2 QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9,9/10 DVB-S2 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10
LNB Polarity Selection Voltage	0, 13V, 18V selectable
LNB Band Selection Tone	0/22KHz selectable
Satellite Selection Command	DiSEqC 1.0
ISI ID	1 ~ 255 user configurable
DVB-C Tuner Input	
Connector Type	8×F type female 75Ω for Input
Input Frequency Range	51 ~ 862MHz
Input Level	51 ~ 75dBμV
Symbol Rate	1 ~ 7MBaud (ITU J.83 Annex A)
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Bandwidth	6MHz, 7MHz, 8MHz
Input Return Loss	7dB (typ.)
DVB-T/T2 Tuner Input	
Connector Type	8×F type female 75Ω for Input
Input Frequency	104 ~ 862MHz (VHF/UHF)
Input Level	-20 ~ -70dBm
Constellation	DVB-T: QPSK, 16QAM, 64QAM DVB-T2: QPSK, 16QAM, 64QAM, 256QAM
Bandwidth	6MHz, 7MHz, 8MHz
FFT Mode	DVB-T: 2K, 8K DVB-T2: 1K, 2K, 4K, 8K, 16K, 32K
Guarding Interval	DVB-T: 1/4, 1/8, 1/16, 1/32 DVB-T2: 1/4, 5/32, 1/8, 5/64, 1/16, 1/32, 1/64, 1/128 DVB-T: 1/2, 2/3, 3/4, 5/6, 7/8 DVB-T2: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6
Input Return Loss	7dB (typ.)
DTMB Tuner Input	
Connector Type	8×F type female 75Ω for Input
Input Frequency Range	46.5~866MHz
Input Level	-87~-29dBm
Symbol Rate	7.56MBaud
Bandwidth	6MHz/7MHz/8MHz
Constellation	4QAM-NR,4QAM,16QAM,32QAM,64QAM
Guard Interval	PN420, PN595, PN945
Roll-off Factor	0.05
Interleaving Depth	240,720
FEC Code Rate	0.4, 0.6, 0.8
ATSC Tuner Input	
Connector Type	8×F type female 75Ω for Input
Input Frequency Range	54~864MHz
Input Level	-75~-7dBm(ATSC 8VSB)
Symbol Rate	10.762MBaud
Constellation	8VSB
Roll-off Factor	0.115
Bandwidth	6MHz

TS Processing	
TS Input Management	Demux and Remux among ASI, TS/IP and CI Inputs
TS Output Management	Demux and Remux for ASI output
Service and PID Management	Service and PID level for Remux, filtering and remapping
PSI/SI	PSI/SI table regeneration, NIT and SDT edition, LCN Edition and Re-generation
Descrambler	DVB Common Scrambling Algorithm (CSA)
BISS Mode	BISS-1, BISS-E
Common Interface	8 x PCMCIA slots, compatible with major CA CAMs in the market
ASI Output	
Connector Type	9 independence BNC female, 75Ω,
Standard	DVB-ASI, EN50083-9
Output Bit Rate	≤ 200Mb/s
TS Processing	8xASI out pass through the TS from CI 1 to CI8, 1xASI Out from Remux,
ASI Input	
Connector Type	1×BNC female, 75Ω
Standard	DVB-ASI, EN50083-9
Input Bit Rate	≤100Mb/s
Connector Type	1×BNC female, 75Ω
TS over IP	
Connector Type	1×RJ-45, 100/1000 Base-T
Effective Bit Rate	400Mb/s for 128 channel IP out without IP in 80Mb/s for full duplex 1 channel
Protocol	UDP / RTP, Multicast / Unicast, IGMPv3, ARP
Alarm	
Connector Type	1×D-sub 9 male
Switching Condition	User Defined
Control & Monitoring	
Connector Type	1×RJ-45, 10/100 Base-T, for equipment IP Control
Remote Control	SNMP, HTTP (Web Interface), Proprietary HDMS (Headend Device Management System)
Local Control	LCD display and 6-key keypad
Serial Port	1×RS-232 D-sub female, for debug use only
Equipment Upgrade	Embedded FTP loader ,Telnet and http
Physical	
Dimension	44mm x 255mm x 430mm
Weight	3.5kg
Power Supply	AC 90V ~ 250V, 50/60Hz
Power Consumption	30W (exclusive of LNB power)
Operating temperature	0~45°C
Storage temperature	-10~60°C
Operating Humidity	10~90%, non-condensed
Certification	
EMC: EN 55024:1998+A1:2001+A2:2003, EN 55022:2006+A1:2007, EN 61000-3-2:2006, EN 61000-3-3:2008	
FCC: Part 15 Class B	
LVD: EN 60950-1:2006 + A11:2009	

Block Diagram



Back Panel Interface

