

PPROFESSIONAL INTEGRATED RECEIVER/DECODER

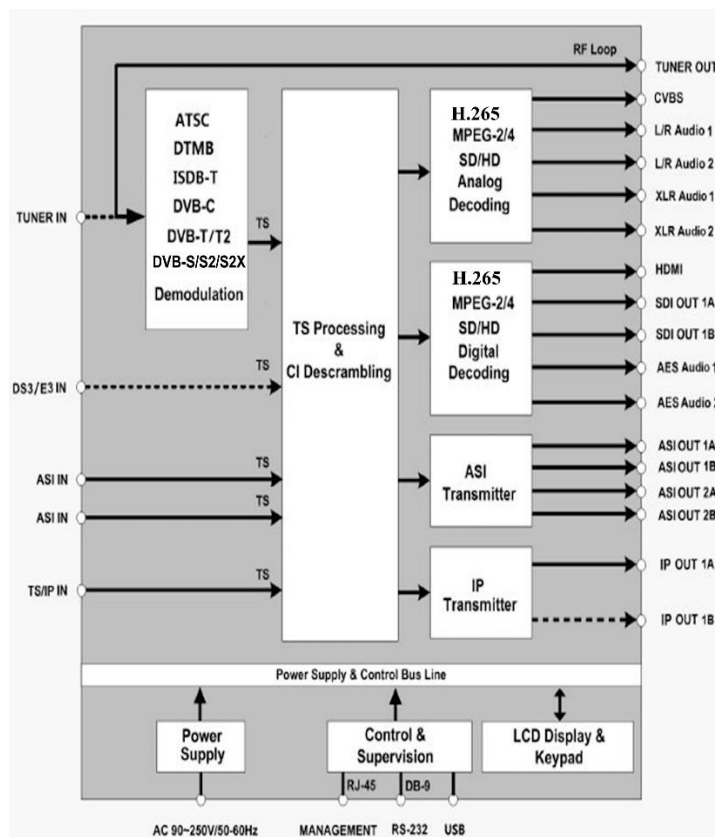
- DVB-S/S2/S2X, DVB-T/T2, DVB-C, ATSC, DTMB, ISDB-T, ASI and IP Receiver
- ASI and IP inputs, SRT reception (optional)
- MPEG-2, H.264/MPEG-4 AVC, H.265/HEVC SD/HD Decoder
- HD/SD-SDI, HDMI, Composite, ASI and IP Outputs
- Built-in re-multiplexer
- 2 independent ASI outputs
- TS over IP: 2 GBe ports (Full Duplex)
- IPTV Gateway: SPTS IP outputs – up to 64TV channels; UDP/RTP, unicast/multicast
- BISS Descrambler
- 2 DVB-CI Slots, compatible with: Conax, Cryptoworks, Irdeto, NDS, Mediaguard, SECA, Viaccess and more
- VBI Teletext, EBU/DVB Subtitle and CC support



Rear Panel



Block Diagram



The ADV-6010 provides an ideal solution for receiving, re-multiplexing, descrambling and decoding broadcast signals. It is equipped with a variety of inputs that ensure compatibility with all transmission media. The ADV-6010's re-multiplexing capabilities enable creation of new transport streams by combining existing sources. Customized services may be output as multiple SPTS or MPTS over IP, as well as over ASI. Through the dual DVB common interfaces, ADV-6010 has the capability to decrypt multiple services present in transport streams. ADV-6010 is also a professional IRD that features a broadcast quality decoder for MPEG-2, MPEG-4 AVC/H.264 and H.265/HEVC in both Standard Definition and High Definition formats, and provides a variety of industry standard digital and analog outputs, including CVBS video, AES/EBU Audio, analog Audio, embedded audio, HDMI, SD-SDI and HD-SDI. The unit can perform HD down-conversion and aspect ratio adaptation of HD programs in order to generate professional quality baseband analog video and audio outputs for easy integration with existing cable network infrastructure. This all-in-one architecture makes the ADV-6010 an ideal product for any broadcast environment.

Key Features

- Many input options: DVB-T/T2, DVB-S/S2/S2X, DVB-C, ATSC, ISDB-T, DS3/E3, TS/IP and ASI
- Support for DVB-S2 Input Stream Identifier (ISI)
- 2 ASI inputs, IP input (UDP/RTP, unicast/multicast). Optional SRT reception support.
- SD/HD MPEG-2, MPEG-4 AVC/H.264, HEVC/H.265 video decoding
- 2 Stereo pairs audio decoding: Analog, Embedded and AES/EBU outputs
- Audio formats: MPEG Layer 1, MPEG Layer 2, DRA, AAC-LC, HE AAC V1/V2, Dolby Digital
- Analog and Digital Outputs: CVBS, HDMI, SD/HD-SDI, AES/EBU Audio, ASI, TS/IP
- HD/SD decoding support: up to 1080i for SDI output, up to 1080p for HDMI output
- Built-in TS re-multiplexer for 2 independent outputs, can receive from ASI, Tuner and TS/IP Inputs
- 2×DVB-CI Slots, multi-program decryption, BISS-1 and BISS-E decryption
- Redundant backup among Tuner, ASI and TS/IP, with configurable priority
- Support for VBI TELETEXT, WSS, EBU/DVB Subtitle, Closed Caption
- UDP/RTP, Unicast/Multicast, outputs up to 64 SPTS/MPTS over IP
- Remote and Local Control and Supervision by SNMP, HTTP WEB and LCD menu
- On Site software update through IP

ORDERING INFORMATION

ADV-6010S - IRD with DVB-S/S2/S2X tuner

ADV-6010A - IRD with ATSC (8-VSB) tuner

ADV-6010T - IRD with DVB-C/T/T2 tuner

ADV-6010I - IRD with ISDB-T tuner

Additional Option:

OPT-SRT - SRT IP reception

Specifications

Tuner Input	
DVB-S/S2/S2X Tuner Input	
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output
Input Frequency Range	950 ~ 2150MHz
Input Level	-25 ~ -65dBm
Symbol Rate	DVB-S QPSK: 2 ~ 45MBaud
	DVB-S2X/S2 QPSK 8PSK: 1 ~ 60MBaud
	DVB-S2X/S2 16APSK: 1 ~ 58MBaud
	DVB-S2X/S2 32APSK: 1 ~ 55MBaud
Roll-off Factor	DVB-S: 0.35
	DVB-S2: 0.35, 0.25, 0.2
	DVB-S2X: 0.35, 0.25, 0.2, 0.15, 0.1, 0.05
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
	DVB-S2X: 64800 bits FECFRAME VCM and ACM
LNB Polarity Selection Voltage	0, 13V, 18V selectable
LNB Band Selection Tone	0/22KHz selectable
Satellite Selection Command	DiSEqC 2.0
PLS	0 ~ 262141 user configurable
ISI ID	1 ~ 255 user configurable
DVB-C Tuner Input	
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output
Input Frequency Range	42 ~ 1002MHz
Input Level	-60 dBm ~ -20 dBm
Symbol Rate	1.8 ~ 7.2MBaud
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Bandwidth	6MHz, 7MHz, 8MHz
Input Return Loss	7dB (typ.)
DVB-T/T2 Tuner Input	
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output
Input Frequency	42 ~ 1002MHz (VHF/UHF)
Input Level	-20 ~ -60dBm
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
Guard 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
FEC Code Rate	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.)

ATSC Tuner Input	
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output
Input Frequency Range	54MHz~864MHz
Input Level	-75dBm~-7dBm
Symbol Rate	10.762MBaud
Constellation	8VSB
Roll-off Factor	0.115
Bandwidth	6MHZ
ISDB-T Tuner Input	
Connector Type	1×F type female 75Ω for Input, 1×F type female 75Ω for loop through output
Input Frequency Range	42 ~ 1002MHz
Input Level	-60 dBm ~ -20 dBm
Standard	ARIB STD-B31 v2.2
Constellation	QPSK, 16QAM, 64QAM
Bandwidth	6MHz, 7MHz, 8MHz
FFT Mode	2K, 4K, 8K
ASI Input	
Connector Type	2×BNC female, 75Ω
Standard	DVB-ASI, 188/204 packets, EN50083-9
Input Bit Rate	≤ 200Mb/s
DS3 Input (Optional)	
Connector Type	2×BNC female, 75Ω, including loop through
Standard	Compliant with ITU-T G.703
Frame Structure	Compliant with ITU-T G.752 and ITU-T G.804
Bit Rate	44.736Mb/s
TS over IP	
Connector Type	2×RJ-45, 10/100/1000 Base-T for TS/IP
Effective Bit Rate	300Mb/s, Full duplex: 64 streams output, 1 stream input
Protocol	UDP / RTP, Multicast / Unicast, IGMPv3, ARP, optional SRT reception
TS Processing	
TS Input Management	Demux and Remux among Tuner / DS3(optional)/ E3(optional), ASI and TS/IP Inputs
TS Output Management	Demux and Remux for 2 independent ASI outputs
Service and PID Management	Remux, filtering and remapping
PSI/SI	PSI/SI table regeneration, NIT, SDT and SDT edition, LCN Edition and Regeneration, EIT P/F edition
Descrambler	Dual PCMCI: DVB-CI, BISS-1, BISS-E
Common Interface	Double PCMCIA slots, compatible with major CA CAMs in the market
ASI Output	
Connector Type	2 pairs of BNC female, 75Ω
Standard	DVB-ASI, 188/204 packets, EN50083-9
Output Bit Rate	≤ 200Mb/s
TS Processing	2 Independent TS Re-multiplexed from tuner, TS/IP and ASI inputs
HDMI Output	
Standard	1×HDMI 2.0
Video Resolution	1080p60, 1080p59.97, 1080i60, 1080i25, 720p60, 720p50, 576i25, 480i59.97

Audio Embedded	1× stereo pair
Digital Video Processing	
Video Standard	MPEG-2(MP@ ML for SD, MP@HL for HD)
	MPEG 4/H.264 AVC Part 10 (MP@L3 for SD, HP@L4.1 for HD)
	H.265/HEVC
	AVS/AVS+/AVS2
Video PID Bit Rate	≤ 60Mb/s
HD/SD-SDI Output	
Connector Type	2x BNCs (mirrored) , female, 75Ω
SDI Video Resolution	1080i60, 1080i59.94,1080i50, 720p60,720p59.94, 720p50, 576i50, 480i59.97
SD Standard	SMPTE 259M, 270 Mb/s (10bit)
HD Standard	SMPTE 292M, 1.485 Gbit/s (10bit)
Level	800mV p-p
Audio Embedded	2x stereo pairs
Digital Audio Processing	
Connector Type	2×D-sub 9 male with XLR adaptor cables
Number of Output	2×audios are decoded or passed through
Audio formats	MPEG Layer 1, MPEG Layer 2, DRA, AAC-LC, HE AAC V1/V2, Dolby Digital
Audio Sampling Rate	32, 44.1 and 48 KHz
Audio Bit Rate	32, 64, 96, 128, 160, 192, 224, 256, 288, 320, 352, 384, 416 and 448 Kb/s for MPEG-1 Layer I, 32, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224,256, 320 and 384 Kb/s for MPEG-1 Layer II
Nominal Output Level	1V p-p (with standard test stream)
Output Format	AES/EBU
Load Impedance	110Ω (with XLR adaptor cables)
Analog Video Output	
CVBS Connector	BNC female 75Ω
CVBS Standard	NTSC, PAL, and SECAM
CVBS Resolution	576i×25, 480i×29.97
Nominal Output Level	1.0 Vp-p±5% (with standard test stream)
Frequency Response	<±1 dB, at 5.5 MHz for PAL/SECAM, 4.2MHz for NTSC
Chroma-Luma Delay	<±30 ns
Field Time Distortion	<2%
Line Time Distortion	<1%
Short Time Distortion	<2%
Differential Gain	<3%
Differential Phase	<2°
Signal to Noise Ratio	>55dB (luminance weighted)
Analog Audio Output	
Connector Type	2xRCA, 2×D-sub 9 male, with XLR adaptor cable
Output Impedance	600Ω (balanced)
Output Mode	Left, Right, Dual Mono, Stereo
Number of Output	2 pairs of stereo audio outputs (2 Audio PIDs are decoded).
Cross Talk Among Channels	>70dB
THD	<0.3% @ 400Hz, 1KHz test tone
Frequency Response	±0.5dB over 20Hz ~ 18KHz
Output Level	0dBm in 600Ω (0dBu), adjustable range ±10dB
Ancillary Data Processing	

Subtitle	DVB, EBU
VBI	Teletext, WSS
Closed Caption	EIA 608, EIA 708, EIA 608-to-708
Redundancy	
Redundancy Port	among Tuner, ASI input and TS/IP input
Switching Condition	TS Sync Loss
Switching Mode	Main, Spare
Control & Monitoring	
Connector Type	1×RJ-45, 10/100 Base-T, for equipment IP Control
Remote Control	SNMP 2.0, HTTP (Web Interface), Proprietary HDMS (Headend Device Management)
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, WEB HTTP, USB
Physical	
Dimension	44mm×483mm×255mm
Weight	3.4Kg Net, 4.4Kg Gross
Power Supply	AC 90V ~ 250V, 50/60Hz
Power Consumption	24W (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	

* For more information about digital audio pass through, please contact our sales representative.