

T-Ramp™ IP+DVB-S-S2+ASI/SDI+HDMI+ASI+IP
Real Time, Hardware Based, 1 RU, Local or
Remotely Manageable Multi Resolution, SD and
HD, 4:2:0, H.264 and MPEG-2 Decoder with IP,
DVB-S/S2, or Looped ASI Input. Set Up via LCD
Front Panel or via Browser. Output is SDI
(SMPTE 259M), HD-SDI (SMPTE 292M), ASI,
Component, HDMI, or Composite. Audio Output
Includes Embedded AAC or MPEG-1 Layer II on
SDI Ports or Balanced Audio with Dual XLR
Connectors. Supports Dual CAM Modules.



Front



Rear



Overview

IRD's are devices used by professionals to receive or demodulate RF feeds and to then decode the resultant MPEG encoded stream.

The T-Ramp™ IP+DVB-S-S2+ASI/SDI+HDMI+ASI+IP is an advanced MPEG-2 and H.264 standard definition integrated receiver decoder for both high definition and standard definition video. It receives signals from many different sources, including IP, ASI, DVB-S, and DVB-S2. Its numerous output interfaces include SDI, HD-SDI, HDMI, ASI, YPbPr, CVBS, and XLR audio, to meet many different system requirements. The T-Ramp also has two common interface slots which can decode multiple scrambled channels.

Audio support includes embedded AAC or MPEG-1 Layer II on SDI ports, Dolby Digital® AC-3 passthrough, or analog audio output (L, R) on XLR's.

The T-Ramp also converts transport streams to IP, and it converts IP streams to a wide variety of different transport stream outputs, which makes it ideal for IPTV systems and IP-based head-ends.

The system can be operated with front panel controls or web-based management software. With multiple input and output, the T-Ramp can be used in many different settings – including traditional head-end networks and downlinks.

Sample GUI

Status		Output Status	
Tuner	OK	Video	OK
CI	OK	Audio	OK
Decoder	OK	PMT PID	216
Output	OK	Program Number	1
BISS	OK	Audio1 PID	432
TS over IP	OK	Audio2 PID	
System	OK	Video PID	413
Input Status			
Display	# AS11	# AS12	# Tuner
OK	Total Bit Rate (Mbps)	39.999136	Packet Size (Bytes)
	Valid Bit Rate (Mbps)	9.000000	188
OK	Total Bit Rate (Mbps)		Packet Size (Bytes)
	Valid Bit Rate (Mbps)		
OK	Total Bit Rate (Mbps)	3.745458	Strength (dBm)
	Valid Bit Rate (Mbps)	1.121032	Packet Size (Bytes)
	C/N (dB)	30.9	188
	Eb/No (dB)	24.1	BER (dB)
	Total Bit Rate (Mbps)	1.120344	Packet Size (Bytes)
	Link Status	100%	188
Auto Refresh			
Frequency <input type="text" value="Empty all memory"/> <input type="button" value="Save Memory"/>			

Input and Output Status

Features

- Inputs:
 - IP (100/1000 M), DVB-ASI with loopthrough, or DVB-S or DVB-S2 with loopthrough
- Outputs:
 - IP (UDP, RTP), HD-SDI, SDI, HDMI, Two DVB-ASI outputs, Two mirrored DVB-ASI outputs, YPrPb, or Two Composite outputs – one BNC, one RCA
- Audio Outputs: Embedded AAC, MPEG-1 Layer II, YPbPr, Composite, Balanced XLR, Dolby Digital® AC-3 Passthrough
- 100/1000 M IP input and output
- Optional DS3 in/out interface is compatible with Barco and Huawei protocols
- Built-in re-multiplexer
- BISS 1 or BISS E decryption
- Dynamic PMT detection and automatic update
- VBI teletext, EBU/DVB subtitle support
- WSS support
- Closed Caption support
- Unicast and Multicast support
- 2 CI slots support 4 service CAM modules each
- Compatible with: Conax, Cryptoworks, Irdeto, NDS, Mediaguard, SECA, Viaccess and more
- Supports PAL, NTSC, and SECAM
- LCD front panel controls plus web-based management

Applications

- Off air satellite receiver
- MPEG-2/4/H.264 HD Decoder
- Transport Stream Decoder
- HD-SDI file playback
- Content repurposing
- Signal monitoring
- IP to ASI and ASI to IP converter

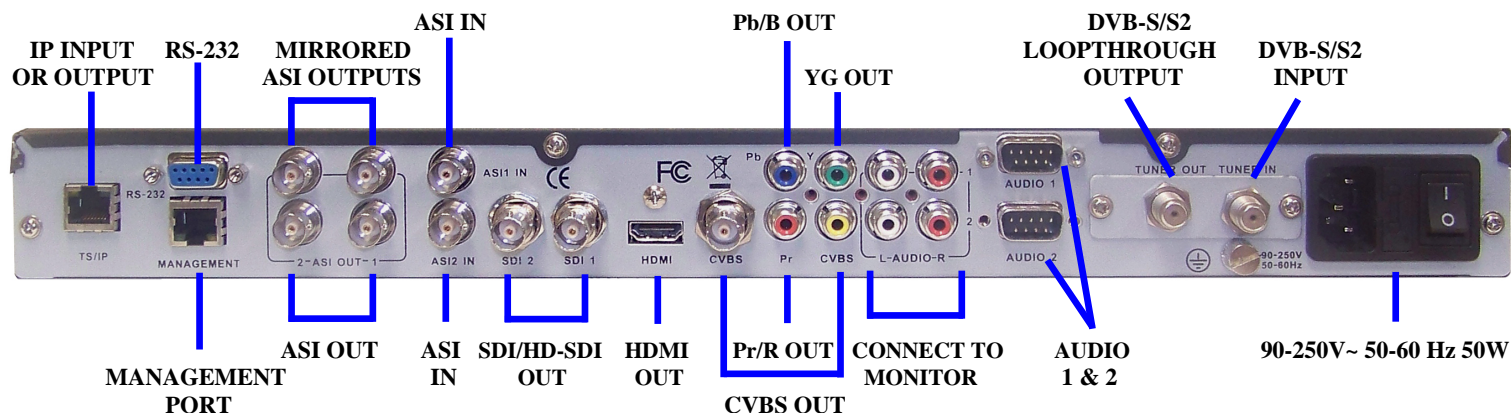


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Rear View



Specifications

DVB-S2/S RF Input

Frequency range:	950-2150 MHz
Input Level:	-25~-65dBm
Input Impedance:	75Ω
Connector:	F-type female
Symbol rate:	2~45 MBauds for QPSK 2~45 MBauds for 8PSK
Rolling off factor:	0.35 for QPSK; 0.35, 0.25, 0.2 for DVB-S2
Punctured rates:	DVB-S QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 DVB-S2 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10
LNB Level:	0, 13V, 18V adjustable
0/22 K:	0/22 KHz selectable
DiSEqC:	DiSEqC 1.0

DVB-ASI Input

Inputs:	One input, one loopthrough input
Connectors:	2 BNC female, 75 ohm

IP Input

Protocols:	UDP, RTP
Type:	Multicast, Unicast
Ethernet Connector:	RJ45, 100/1000 M

DVB-ASI Output

Outputs:	One output, one mirrored output
Connectors:	2 BNC female, 75 ohm

SDI/HD-SDI Output

Outputs:	Two SD-SDI/HD-SDI outputs – one for backup
Connectors:	2 BNC female, 75 ohm
Audio:	Embedded audio

HDMI Output

Output:	One HDMI output, HDMI 1.3 interface
Audio:	HDMI/AES Embedded – PCM or Compressed

Analog Outputs

YPbPr	One Component output
CVBS	Two Composite outputs – one BNC, one RCA

IP Output

Protocols:	UDP, RTP
Modes:	<u>DVB Mode</u> : The IP stream will include all the programs and will be sent to the specified multicast or unicast IP Address. <u>IPTV Mode</u> : The input transport stream is de-muxed into individual programs, each in a different IP stream. Up to 6 IPTV addresses may be set.
Type:	Multicast, Unicast
Ethernet Connector:	RJ45, 100/1000 Mbps

CI Slots

CA	Dual CI slots support four service CAM modules each
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Audio Outputs

Audio:	AES/EBU and balanced XRL audio output ports Two 9 pins D-sub connectors
Audio Modes:	Stereo, Left, Right, Mono
Audio Decoding:	MPEG-1 Layer II, Dolby Digital® AC-3 Passthrough

Control & Monitoring

Local:	Front panel operation, LCD display
Remote:	Remote control via RJ45 Ethernet port

Physical and Power

Power Supply:	90-250V~ 50-60 Hz, 50W
Altitude:	Up to 10,000 feet (3,048 meters)
Temperature:	Operating Temperature: 0° to +45°C Storage Temperature: -25° to +55°C
Humidity:	10 to 75%
Shock and Vibration:	Equal to mobile van or stationary rack
Dimensions	HxWxL: 2x8x8 inches (5.08x20.32x20.32 cm)
Weight	2 lbs. (.907 kg)
Conformities	FCC, CE, RoHS

Ordering Info

T-Ramp IP+DVB-S-S2+ASI/SDI+HDMI+ASI+IP
T-Ramp DS3: Optional DS3 input and output

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