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ADTEC Digital

DTA 3050

Digital television service operators wishing to aggregate and process MPEG, ATSC, Digicypher, or DVB based services for traditional (satellite, cable, terrestrial) services will find the DTA ideal. It boasts 10 ASI inputs. Each supporting wire speed, a three-way mirrored ASI output, GIGE, and optional SMPTE-310. Redundancy for ASI and SMPTE-310 is supported with an intelligent built in relay-bypassed switch. The DTA-3050 is IPTV and BBTV ready today, it supports multicast and unicast configurations including SPTS/UDP, MPTS/UDP, MPEG and DVB tables. Encryption support includes DVB-CSA with Ethernet Simylcrypt, AES for use with Simylcrypt compatible Conditional Access management Servers (CAS) vendors. The DTA 3050 is ideal for traditional and next generation television networks.

Options & Accessories

DTA-ASI-KEY: The DTA-3050 comes standard with 5 unlocked ASI ports. Additional ports (up to 5 more) can be unlocked for use by purchasing a DTA-ASI-KEY.

DVB-CSA: Encryption Algorithm feature for DTA's. Capable of encrypting 210 Mbs and is supported via ASI and IP egress.

DVB-AES: AES Scrambling Algorithm feature for DTA's. Capable of encrypting 210 Mbs. Used for IPTV with Verimatrix server.

DTVGUIDE: Cloud based EIT scheduler and delivery service with over 100 networks providing FREE content for use by all DTA customers. Upload your own listings using convenient and intiutive templates, or pass through data from media service providers.   www.dtv-guide.tv

Related Products

mediaHUB-HD 422:
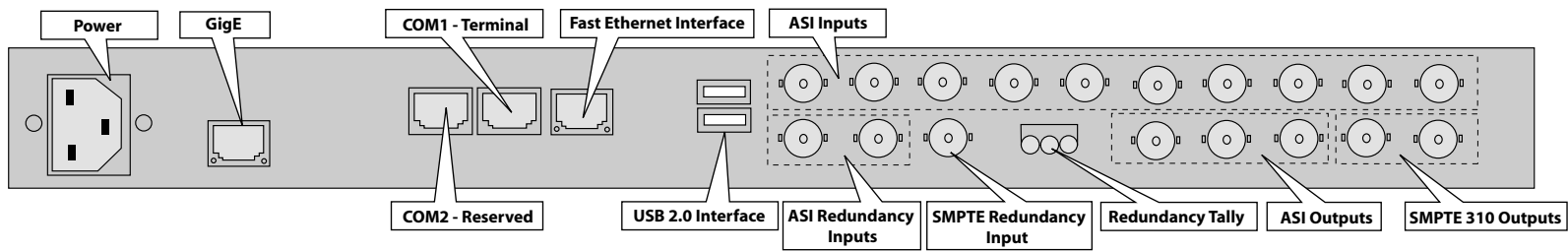**High and Standard Definition Multi-CODEC Contribution and Distribution Encoder**

mediaHUB-HD Pro:
High and Standard Definition Contribution and Distribution Encoder

edje-5110:
Real-Time Distribution Encoder

features

● **Conditional Access:** The DTA-3050 provides DVB-CSA and BISS encryption and AES conditional access encrypt capabilities. DVB-CSA encryption is available as fixed key BISS or Simulcrypt based interfaces compatible with most major DVB-CSA CAS vendors. AES encryption includes support for Adtec's OST for Transport and Verimatrix VCAS for residential set top and computer-based decryption.

● **Aggregation of ASI, or IP based SPTS or MPTS services:** The DTA-3050 provides ten ASI input ports enabling it to aggregate locally encoded SPTS or re-muxed MPTS from encoders, receivers, video servers or other devices providing MPEG 2 Transport via ASI and IP, or SMPTE310 and IP.

● **IPTV**: Gigabit Ethernet distribution of digital television services includes MPTS, SPTS over UDP for Set Top, or computer decoding and MPTS over UDP for bundled distribution (Digital Simulcast).

● **ASI**: Three port mirrored ASI output interface provides integration with traditional distribution methods including Cable, Satellite, and Terrestrial.

● **SMPTE-310:** An optional 2 port mirrored SMPTE-310 output interface provides integration with ATSC distribution.

● **Flexible Configuration & Control:** Controlling and configuring the DTA-3050 is easy. Whether using the integrated front panel keypad and LCD, Terminal or remote Web page interface.

● **DTV Electronic Program Guide:** Create and upload your own program listings for distribution over ATSC, DVB, and IPTV applications using our web-hosted DTVGuide electronic program guide generator service. A very economical way to instantly begin sending EIT data, DTVGuide requires no additional equipment when paired with the DTA and its built-in EIT injection carousel. The DTA fetches EIT data which has been uploaded to DTVGuide over the internet, and immediately begins to inject the data into the transport stream.

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DTA 3050 *Digital Turn Around Router*

Power:	70 – 240 VAC switching power supply; standard 3-pin computer power plug.
GigE:	Gigabit Ethernet used for IP Egress
COM2 - Reserved:	Reserved for redundancy switching
COM1 - Terminal:	Back end serial port for Adtec service technicians
Fast Ethernet:	10/100 base T ethernet used for connecting to control interface
USB 2.0:	Reserved for future use.
ASI Inputs (10):	Asynchronous Serial Inputs for receiving programming
ASI Redundancy Input:	Used to link 2 DTA-3050 units in tandem; one as primary, one as backup.
SMPTE Redundancy Input:	Used to link 2 DTA-3050 units in tandem; one as primary, one as backup. (Optional)
Redundancy Tally:	Used to hook up to an external alarm device
ASI Outputs (3):	Triple Mirrored ASI Outputs
SMPTE 310 Outputs (2)	Optional Mirrored SMPTE Output

DTA 3050 *Digital Turn Around Router* **Technical Specifications**

Front Panel
Tactile Raised Keypad Buttons:
   Mode, Select, Enter, Escape, Up, Down, Left, Right
Blue Translucent LCD:
   20 character by 2 row
Front Panel Host LEDs:
   Power, Alarm, Link, Busy, MPE
Front Panel LEDs :
   In: 1 - 10 ASI
   Out: Alarm, ASI, SMPTE 310, CA, GigE

ASI Inputs
   ASI x 10 (BNC)
   188 or 204 Byte mode
   SPTS or MPTS
   210 Mbps per input
   256 PIDs per input
   Fill scrubbing on input
   Input Modes:
      Auto (Remap all services)
      Manual (Add/Drop/Remap PID/Services)
      Pass (Pass all services as-is)
      MHP Injector SI Injector

Redundancy
   1+1 Input N + 1, N + 2 Input
   ASI x 2 (BNC inputs for auto switch)
   No external controller required

Outputs
   Gigabit Ethernet
    - SPTS over UDP
    - MPTS over UDP
    Very low jitter

   ASI (model is DTA 3050-ASI)
   Mirrored (BNC x 3) Byte or Burst Mode
      54 Mbs Byte
      210 Mbs Burst Jitter less than 150 (nS)

SMPTE-310 (model is DTA 3050-SMPTE-310)
   Mirrored (BNC x 2) Byte Mode only
      19.39 Mbs fixed
      SMPTE-310 option includes ASI

Table Processing
   MPEG Tables:
      PAT CAT (if CA is enabled) PMT
   DVB Tables:
      (Add/Drop/Remap DVB Services)
      NIT SDT TDT/TOT EIT
   ATSC Tables :
      (Add/Drop/Remap ATSC Services)
      VCT (Cable or Terrestrial) MGT STT RRT EIT (1-4)
   DCII Tables:
      (Add/Drop/Remap Digicypher services DVB/ATSC)

Conditional Access Encryption
   DVB-Common Scrambling Algorithm (CSA)
   DVB Simulcrypt TS 103 197 v 1.2.1
   FIPS 140-2 hardware based random number
      generator (RNG)
   Approved 3rd Party CA Vendors include:
      CSA: Irdeto, Conax, EuroCAS, KeyFly, Xcrypt
      AES: Verimatrix

Host Platform
   PowerPC
   Adtec optimized Linux Kernel
   10/100 Ethernet RJ-45 (Eth 0)
   10/100/1000 Ethernet RJ-45 (Eth 1)
   Serial Port (RJ-48)
   USB 2.0 (2)
   IEEE 1394 (Firewire)
   N.C. / N.O. Tally Interface
   XML Configuration
   HTTP, FTP, Telnet, IP Logging, XCP
      (Adtec encrypted layer 3 protocol)

Power
   70-240 VAC switching power supply
   50/60 Hertz
   Rated at 94 Watts return nominal usage 20 watts

Physical
   19 in. wide, 1.75 in. tall, 16 in. deep,
   (483 x 44.5 x 406 mm)
   1 Rack Unit
   Weight 13lbs.

Environmental
   Active cooling (Push pull Fans)
   Operating: 0 to +50 degrees C
   Storage: -30 to +65 degrees C
   Less than 70% RH
   Non-Condensing

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