# DTA 3050

## Digital Turn Around Router

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.

## 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.

ADTEC Digital



## 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

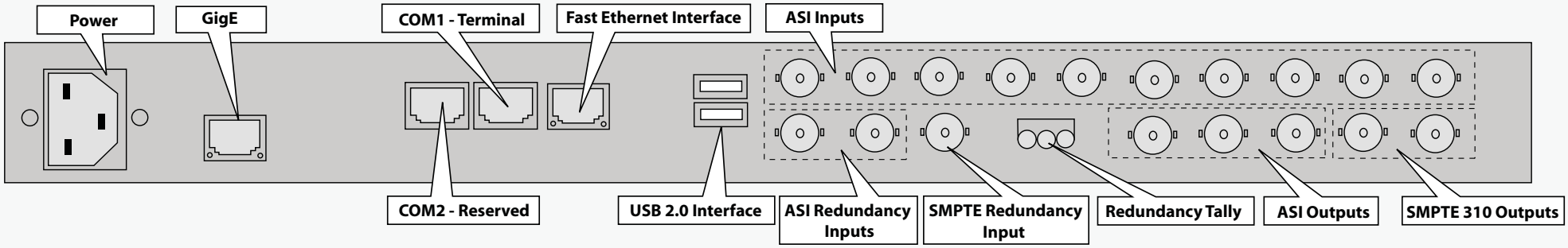
**mediaHUB-HD 422:**
**High and Standard Definition Multi-CODEC Contribution and Distribution Encoder**

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

**edje-5110:**
**Real-Time Distribution Encoder**

Buy Now!

# 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


Digisat

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