

MPEG Test System

▶ AD951-II



▶ AD951P-II.

Stream Playout and Recording

- ▶ Record, play at 90 Mb/s
- ▶ Continuous playout of looped streams with automatic updating of timestamps
- ▶ Compatible with standard test stream libraries

Stream Multiplex/Creation

- ▶ Multiplexer/Demultiplexer to create multi-program transport streams with custom SI for both DVB and ATSC
- ▶ Import of transport packets containing DSM-CC sections

Stream Manipulation

- ▶ Stream cutter
- ▶ Packet editor
- ▶ PSI/SI/PSIP editor

Enhanced Hardware

- ▶ Fast Pentium III platform with 17" monitor and DVD/CD-ROM
- ▶ SCSI hard disk for stream storage (9 GB expandable) with sample test streams
- ▶ Wide range of interfaces including DVB-SPI, ASI, DHEI, M2S, SMPTE 310M, L-Band, etc.

▶ Features & Benefits

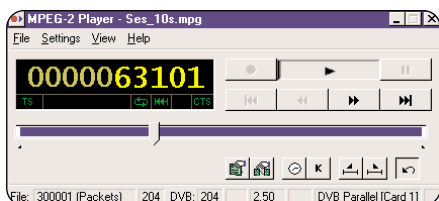
- Stream Playout and Recording
- Stream Multiplex/Creation
- Stream Manipulation
- Wide Range of Industry-standard Interfaces for Plug and Play Connectivity
- Modular Design Allows You to Purchase Only the Performance You Require Today. Easily Upgrade as Your Needs Change
- Enhanced Hardware with Pentium III Platform
- Microsoft NT Operating System Provides Robust Performance and Functionality

▶ Applications

- Development
- Production
- Transmission
- Satellite
- Cable
- Terrestrial

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▶ *Player application.*

Options

- ▶ Simultaneous play and record
- ▶ ES Analyzer
- ▶ AD953-II upgrade
- ▶ Real-time monitoring
 - PID and program-oriented dynamic bar charts
 - Moving PCR timing, TS rate and fullness plots
 - Display of PSI/SI/PSIP information
 - Flexible trigger-based capture of errors
 - Extensive logging with colored fault identifiers
 - TR101 290 and ATSC compliance checks

▶ Characteristics

Record

Maximum Record Time at the Rate of 60 Mb/s with Standard Hard Disk – 40 minutes.

Maximum Data Rate – 90 Mb/s.

(Trig Rec/Monitor – 60 Mb/s.)

Minimum Data Rate – 250 Kb/s.

Playout

Maximum Playout Time at 60 Mb/s – 40 minutes.

Maximum Data Rate – 90 Mb/s.

Minimum Data Rate – Using internal clock: 2.5 Mb/s.

Using external clock: 250 Kb/s.

Packet Handling

▶ Playout

Storage Format	Output Format		
	188 byte	204 byte	208 byte (GPSI)
188 byte	Y	Y (Dummy RS)	Y (Zero RS)
204 byte	Y	Y (Dummy RS)	

Receive and Monitoring

208 byte with GPSI interface option only. All other interfaces 188/204 byte.

Electrical

External Triggering – Input and output.

Triggering on Input – Edge sensitive.

Connector Format – 15 Way D type.

Specification –

TTL.

External clock.

Signal Input – AC couple.

Min. Signal Level – 200 mV.

Input Impedance – 50 Ω.

Connector Format – BNC.

Hardware Configuration

9 GB SCSI disk for stream storage DVD (tower only). Ultra wide SCSI port for external storage. 100Base-T Ethernet.

Display

Display AD951-II (tower) – 17" 1280x1024.

SVGA color. CRT monitor.

Display AD951P-II (portable) – SVGA TFT LCD.

Color 800x600.

Signal Input – AC couple –ve.

Power Requirement

Voltage Range – 90 to 135 or 180 to 265 V

switch selectable.

Frequency Range – 45 to 65 Hz.

Power Consumption (Max) – 300 VA.

▶ Environmental Specification

	Tower	Portable
Operating Temperature	10 °C minimum 40 °C maximum	0 °C minimum 40 °C maximum
Storage Temperature	-20 °C minimum 70 °C maximum	-40 °C minimum 70 °C maximum
Humidity	70% noncondensing	70% noncondensing

Electrical Interfaces

Transport stream.

Parallel input and output port.

Connector Format Input – 25 Way D type.

Connector Format Output – 25 Way D type.

Electrical Specification – LVDS (differential).

Input Impedance – 100 Ω.

Output Impedance – 100 Ω.

► Options

Interface Card Options	Modes	Bit Rate	Connector	Tolerance
GPSI Interface	SMPTE 310M	19.392 Mb/s and 38.785 Mb/s (support for 8 VSB & 16 VSB)	BNC in BNC out	±2.8 ppm
	DHEI	to 48 Mb/s		
GPSI-II (DHEI TX/RX)	ECL (AC) I	To 50 Mb/s		
	ECL (DC)	To 50 Mb/s	26 Way High Density D	
GPSI-II+ (DHEI TX/RX)	RS422 differential	To 40 Mb/s	26 Way High Density D	
	SSI (DVB serial)	1 to 44 Mb/s	BNC	Clock & data recovery
L-Band/RF input	See separate data sheet	15 to 30 Msymb/s	F-Type	
ASI	Data, packet burst	270 Mb/s transmission rate	BNC	
M2S (DIVICOM)		0 to 90 Mb/s data rate 100 Mb/s transmission rate		

Physical Characteristics

AD951-II (tower)

Dimensions	cm	in.
Width	23.5	9.3
Height	44	17.3
Depth	43	16.9
Weight (system unit)	kg	lb.
Net	16.9	37.3

AD951P-II (portable unit)

Dimensions	cm	in.
Width	36.6	14.4
Height	19.2	7.6
Depth	46.5	18.3
Weight	kg	lb.
Net	14	30.9

► Ordering Information

- NM – DVB/ATSC/ARIB Stream Player without Multiplexer.
- MICS – MIC 1.1S (with accurate clock circuit)
Only for tower platform applications mentioned below.
- ASI – ASI/ M2S Interface.
- LBND – L-Band + Card.
- GPSI – GPSI II Card (SMPTE 310M, RS422 Serial, DVB SSI, DHEI REC).
- GP/PL – GPSI II+ Card (DHEI TX and REC).
- DB – MPEG/DVB Carousel Analyzer.
- MPLUS – DVB/ATSC/ARIB Monitor Plus.
- DU – Duplex Operation Player/Monitor or Player/Recorder – Excluding portables.
- IN – ES Analyzer with AAC player and 608 CC and 708 CC.
- AA – AAC Player stand alone – no ES Analyzer.
- CC – CC stand alone – no ES Analyzer.
- BA/ZB – DVB/ATSC Buffer Analyzer Software.
- PA/ZP – DVB/ATSC PES Analyzer Software.
- SA/ZA – DVB/ATSC TS Analyzer Software.

- SM/ZM – DVB/ATSC Recorder/Monitor Software.
- IX – BS Digital Multiplexer (JAPAN).
- VI – Viaccess Analysis. Approved customers only.
- OP – OpenTV Analysis. Approved customers only.
- XS – XSI Analysis software.
- EX7 – Internal 7 GB Exabyte Tape Drive.
- 9GB – Internal 9 GB Disk Drive (in addition to standard drive).
- 18GB – Internal GB Disk Drive (replace current drive).
- 18GBA – Internal GB Disk Drive (in addition to standard drive).
- 36GB – Internal 36 GB Disk Drive (replace current drive).
- 36GBA – Internal 36 GB Disk Drive (in addition to standard drive).
- DAT – Internal DAT drive.
- CDW – Internal CD ROM Writer plus Adaptec Easy CD Creator software – excluding portables.
- FCT – Flight Case for AD951-II.
- FCP – Flight Case for AD951P-II (portable).

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