

Turbo/Turbo-R iDDR

Intelligent Digital Disk Recorder



The Grass Valley™ Turbo™ iDDR is a VTR replacement device that leverages the digital storage, networking, and media-management capabilities of our Emmy® award-winning Profile® video servers. A cost-effective, compact digital recording, editing, and playback device, it is designed for immediate productivity and will reshape the way you look at your professional-video infrastructure investments.

The Turbo system fits right into your existing environment, letting you load content as video or files from removable media. Its front-panel transport controls look very much like those of traditional VTRs. And its output channels support standard- or high-definition (SD or HD) content.

Featuring extensive rear-panel audio/video connectivity, you can record into the Turbo iDDR from a camera or other media source through a FireWire (IEEE 1394) connection. The system accepts files via data transfer over standard Gigabit Ethernet networks. It also accepts media from other applications, including AVI, HDV, MPEG-2, QuickTime, Windows Media, and WMV HD files.

Using the Turbo iDDR system, you can exchange content at high speeds over a network with desktop applications. Further, the Turbo iDDR can be controlled by our Indigo™ AV mixer—which combines features normally found in video production switchers, presentation mixers, and audio mixers—to create a powerful presentation system.

With a software application suite for managing and selecting media clips, clip editing and trimming, and playout (including playlist creation), the Turbo iDDR is a complete AV center. It offers two playout channels for independent editing and previewing, or for delivering content to two different display systems simultaneously. And either or both can be played out with HD and SD content on the same playlist.

Designed to integrate into a variety of applications and facilities, you can drive your production from the Turbo iDDR directly or via external show automation systems such as those from AMX and Crestron.

The Turbo line also lets you take advantage of the latest removable-media technology. The Turbo-R model integrates the REV removable-disk technologies. These standards-based media and drives feature high speeds and large storage capacities at an affordable price. This combination allows you to further streamline your content-transfer workflows by eliminating videotape for archiving and distributing file-based content.

key features

- **Simultaneous record/playout design does the work of multiple systems**
 - HD and SD video content capabilities
 - One record/two playback channels
- **Extensive control via external systems (AMX, Creston compatible)**
- **Can be controlled by Grass Valley Indigo AV mixer to form a powerful presentation system**
- **Software suite features applications for:**
 - Basic clip editing
 - Media management/arrangement
 - Dynamic playlist creation with live control options
- **Extensive standard audio/video connectivity**
 - Video: SDI, component, composite, S-Video, analog/digital DVI video
 - Audio: analog, S/PDIF digital audio
- **Front-panel VTR-like transport control interface with touch panel**
- **Robust data connectivity:**
 - 1000Base-T (Gigabit Ethernet)
 - FireWire (IEEE 1394)
 - USB 2.0
- **Media exchange support for AVI, HDV, QuickTime*, MPEG-2, Windows Media, WMV HD**
 - Hard-drive storage capabilities
 - 10 to 40 hours depending on bit rate
- **Enterprise-class, high-performance SATA drive technology**
- **REV media storage: more than two hours of 25 Mb/s SD or HD video (Turbo-R model)**

*QuickTime Input Only

Specifications

Video

SD record channel:

- SD-SDI, composite, S-Video
- Component Y, Pb, Pr-BNC connectors

SD/HD playback channels:

- Two each SD-SDI, composite, S-Video
- HD playback through DVI-I connectors:
 - SD at 720 x 480 or 576 x 480
 - Full 1920 x 1080i output available
 - PC type at 1024 x 768 or 1365 x 768
 - Two component RGB/Y, Pb, Pr – DVI connectors
- Analog/digital DVI

Video standards:

- 525-line NTSC or 625-line PAL
- SMPTE 170M for NTSC and CCIR624 for PAL
- SDI-SMPTE 259M, ITU-601

Audio

Analog audio inputs:

- Two input channels for record channel
- XLR connectors

Analog audio outputs:

- Two output channels per playback channel
- XLR connectors

Digital audio input:

- S-PDIF on BNC connectors

Digital audio outputs:

- Two sets S-PDIF on BNC connectors

Genlock Reference

- Loop-thru – BNC, 75Ω, composite video

Storage

- ~10 hours at 25 Mb/s
- ~40 hours at 4 Mb/s

Compression Formats

- MPEG-2 to 25 Mb/s

Note: SD record can be set for 4-, 8-, 12-, and 15 Mb/s; HD playback is typically 25 Mb/s

Front Panel

- VTR-type transport control buttons
- LCD touch screen
- Headphone jack with volume control
- USB 2.0 connector
- FireWire (IEEE 1394) connection
- DVD-ROM drive
- REV media drive (Turbo-R)
- Slim-line DVD-ROM drive (Turbo-R)

PC Connections

- Ethernet 100/1000Base-T
- FireWire (IEEE 1394)
- USB 2.0

Media Exchange

- AVI
- MPEG-2
- QuickTime (import only)
- Windows Media
- GXF (SMPTE 360M)

Still-File Imports

- BMP, JPEG, TIF

Machine and Protocol Control

- Three RS-422 control ports – 9-pin D-sub (one per channel)
- Ethernet 100/1000Base-T
- AMP advanced media protocol
- BVW type protocol

GPI ports

- Six inputs (15-pin D connector)
- Six outputs (15-pin D connector)

Time Code

- LTC longitudinal time code
- BNC connectors, input, outputs

Power Supply

- 300W, auto sensing 50-60 Hz, 100-127 VAC, 200-240 VAC

Physical

- Dimensions: (HxWxD): 5.25 x 17.5 x 20 in. (133.4 x 444.5 x 508.0 mm)
- Mounts in standard 19-inch wide racks with optional adapter kit
- Weight (approx.): 28 lbs. (12.7 kg)
- Operating temperature (continuous play/record): 50° to 104°F (10° to 40°C) @ 5% to 95% non-condensing relative humidity
- Non-operating temperature: -40° to 140°F (-40° to 60°C) @ 5% to 95% non-condensing relative humidity

Warranty

- Fifteen-month limited warranty with service provided through local resellers. Additional support available on a contractual basis.



Ordering Information

TURBO-1

iDDR: one record/two playback channels

TURBO-R

iDDR: one record/two playback channels with integrated REV drive; includes one REV 35 GB removable disk

Options and Accessories

TURBO-RACK: rackmount adapter kit

TURBO-DVI-2-BNC: DVI-to-BNC adapter cable, Two cables per package

Support Services & Training

The Grass Valley Support Services & Training team delivers complete service solutions that enhance your return on Grass Valley products and global systems solutions. Advanced training and proactive support, by reducing down time, keeps your equipment and staff performing at optimum productivity and quality.

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For specific requests, our worldwide experienced Support Services & Training experts can build and assist you with customized solutions.

For more information contact your authorized Grass Valley representative or visit us online at www.thomsongrassvalley.com/support.

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