Scientific Atlanta

Explorer® 8240™ Digital-Only DVR
for Standard, HD, and Multi-Room™ Capabilities

Description

The **Explorer® 8240™ DVR** provides subscribers with the latest enhancements in cable television viewing.

The **Explorer 8240HD™ DVR** provides HD subscribers with the latest HD DVR features.

The **Explorer 8240HD™ Multi-Room™ DVR** provides subscribers access to recorded programs in multiple rooms throughout the home on standard Explorer set-tops.

8240 DVR Series Features

The Explorer 8240 DVR is a standard definition, digital-only, two-tuner digital video recorder (DVR) that provides the DVR services your subscribers want:

- Record one program while watching another

- Watch two programs at the same time, using the picture-in-picture (PIP) capability of the Explorer 8240 DVR

- Record programs without a VCR

- Supports expanded storage through an optional external Serial ATA (eSATA) hard drive

- Coaxial Digital Audio Output supports connection to Home Theater Surround Sound
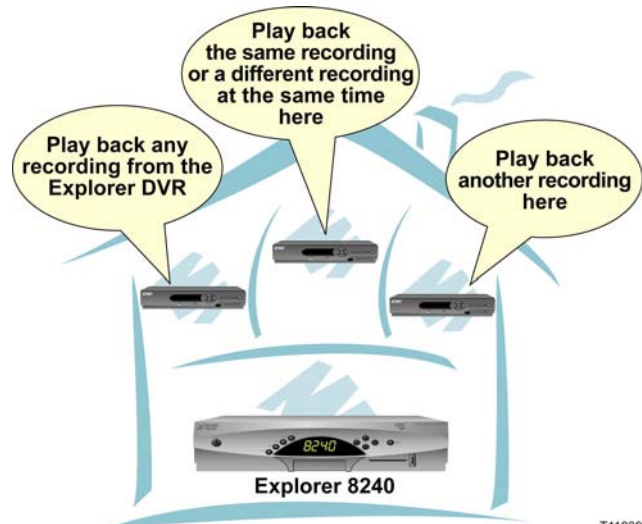
8240HD DVR Additional Features

The Explorer 8240HD DVR provides the same features as the standard definition 8240 DVR and more:

- Connect to the set-top through the YPbPr, HDMI™, or 1394 connectors

- Stretch and zoom the video picture to maximize its viewable area on the HDTV display

- Select the resolution (scan rate) best suited for the HDTV (480i, 480p, 720p, or 1080i)

- Utilize the optical Digital Audio Output connector to easily connect to higher-end audio equipment

8240HD Multi-Room DVR Additional Features

The Explorer 8240HD Multi-Room DVR delivers all the convenience and control of a two-tuner DVR—to as many as four televisions using existing wiring in the home and digital set-tops you already have:

- Access the list of recorded shows stored on the Explorer 8240HD Multi-Room DVR server and its optional eSATA hard drive

- Playback, pause, rewind, and/or fast-forward any recording at any time on set-tops in other rooms

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Specifications

8240 DVR Specifications

Base SD Model Features	Description
DVR with 80 GB Hard Drive (Larger hard drives are available. Contact your North American marketing manager for more information.)	The 80 GB model allows up to 50 hours* of SD programs to be recorded and stored using DVR functions Gives subscribers complete control over watching, pausing, rewinding, replaying, and fast forwarding live programs using the remote control *The total program hours that can be stored depends upon the format and data rate of the programming source.*
DAVIC Reverse Path Data Transmitter	Allows IP-based, real-time, two-way communication between the Explorer 8240 Series DVR and the cable service provider's headend Supports interactive services such as xOD (anything-On-Demand), VOD (video-on-demand), and SVOD (subscription VOD)
MPEG-2 MP@ML Standard Definition Digital Video Decompression	Allows decompression and presentation of audio and video Delivers up to 720 x 480i video resolution
Dual Digital Service Tuners (True Picture-In-Picture)	Allows MPEG-2 digital channels to be tuned and displayed Allows two programs to be displayed simultaneously using the PIP function
Dolby® Digital Audio and MPEG-1 Audio Support	Supports digital audio decoding of two-channel MPEG-1 Layers I & II and Dolby Digital with up to 5.1 channels of multi-channel surround sound. Also downmix multi-channel Dolby Digital programs to surround-compatible left/right outputs.
PowerKEY®Conditional Access System	Provides digital security using an RSA encryption algorithm that mathematically matches pairs of keys Encrypts all recordings on an internal hard disk drive or on an optionally attached external SATA hard disk drive Allows upgrades using a network download
PowerTV® Operating System with HTML Client Engine	Offers a stable operating system and open Application Programming Interfaces (APIs) to support native applications and third-party middleware applications
Enhanced Graphics Engine	Displays up to 65,000 colors simultaneously Enables high-resolution 640 x 480 IPG graphics while simultaneously scaling MPEG-2 video
Powerful 32-bit RISC Processors	Features two 250-MHz (500 MIPs total) processors to perform tasks and launch applications quickly
Over 96 MB Total Memory	Flash: 512 KB Applications DRAM: 64 MB Media DRAM: 16 MB MPEG encoding: 16 MB of DRAM NVM: 8 KB
64 and 256 ITU J.83 Annex B QAM Support	Supports open standards for QAM delivery and demodulation
Both Internal Security Microprocessor and Smart Card Slot	Provides hardware-assisted conditional access options with capability to upgrade the security, if ever needed

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Base SD Model Features, continued	Description
Macrovision® Copy Protection Support (licensing fee required to activate)	Activation allows cable service providers to add another layer of copy protection software, called Macrovision, that restricts unauthorized subscribers from making analog copies of digital transmissions, such as VOD and SVOD
BTSC Encoder	Provides stereo sound on the RF coaxial output
Coaxial Digital Audio Output	Supports coaxial interconnection with surround sound receivers
Baseband Audio/Video Outputs	Offers a baseband audio/video connection to a VCR or TV
RF Cable Out	Offers a composite audio/video connection to a VCR or TV
Provision for Name Branding	Allows you to brand the Explorer 8240 series DVR with your company name and logo
External SATA Connector	External Serial ATA (eSATA) connector provides a high-bandwidth connection to an External SATA hard disk drive for expanded storage space for recorded programs
Universal Serial Bus (USB) Port (will require a software enhancement download when available)	Front panel USB port for easy-to-access connection with home consumer devices such as USB keyboards
Optional DOCSIS® 1.0 cable modem	The internal DOCSIS 1.0 cable modem implements the Baseline Privacy Interface and DOCSIS SNMP MIBs. The upstream transmitter is able to send QPSK and 16-QAM bursts to any headend CMTS that implements DOCSIS 1.0 or DOCSIS 1.1 specifications.

8240 Series Dimensions

Dimensions (all 8240 models)	Description
Product Dimensions (WxDxH)	15.60 in. x 11.20 in. x 3.25 in. (39.7 cm x 28.5 cm x 8.3 cm)
Product Weight	8.3 lbs (3.8 kg)
Carton Dimensions (WxDxH)	18.00 in. x 14.00 in. x 6.12 in. (45.8 cm x 35.6 cm x 15.6 cm)
Weight Including Packaging	11.6 lbs (5.3 kg)

8240 Series Temperature Range and Placement

Room Temperature (Operating)*	40ºF to 105ºF (5C to 40C)

*Locate the 8240 with at least two inches of open space above and on each side

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8240HD and 8240HD Multi-Room DVR Specifications

Additional HD Model Features	Description
DVR with a 160 GB Hard Drive (Larger hard drives are available. Contact your North American marketing manager for more information.)	The 160 GB model allows up to 90 hours* of SD programs or up to 20 hours* of HD programs to be recorded and stored using DVR functions Gives subscribers complete control over watching, pausing, rewinding, replaying, and fast forwarding live programs using the remote control *The total program hours that can be stored depends upon the format and data rate of the programming source.*
Component HDTV Outputs	Provides YPbPr outputs for quick and easy connection to most HDTV sets
YPbPr and Audio Left/Right Cable Kit	Provides connection from the HD analog video and audio outputs to the HDTV set
Optical Digital Audio Output	Supports optical interconnection with surround sound receivers
MPEG-2 MP@HL High Definition Digital Video Decompression	Allows decompression and presentation of audio and video Delivers the following video resolutions: 1920 x 1080i 720 x 480p 1280 x 720p 720 x 480i
HDMI 1.0 Digital Audio/Video Output with HDCP Copy Protection	The High Definition Multimedia Interface (HDMI) provides uncompressed digital video and audio quality in a simple, user-friendly connector. HDMI, combined with HDCP (High-Bandwidth Digital Content Protection) provides the optimal, secure connection to an HDTV set that supports the HDMI with HDCP interface. HDMI is backward compatible with the DVI 1.0 with HDCP video interfaces on earlier versions of HDTVs.
Over 112 MB Total Memory	Flash: 512 KB Applications DRAM: 64 MB Media DRAM: 32 MB MPEG encoding: 16 MB of DRAM NVM: 8 KB
Dual IEEE 1394 Digital Outputs with Digital Transmission Content Protection (DTCP) (will require a software enhancement download when available)	Dual IEEE 1394 outputs with DTCP will provide a 400-Mbps interconnection to digital display devices (HDTVs)

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Ordering Information

Contact your Sales Representative for product availability in your area.

Part Number	Description
4010040	Explorer 8240 Digital-Only DVR with 80GB hard drive
4010036	Explorer 8240HD Digital-Only DVR with 160GB hard drive, HDMI, and Dual IEEE-1394 Ports
TBD	Explorer 8240HD Multi-Room Digital-Only DVR with 160GB hard drive, HDMI, and Dual IEEE-1394 Ports
752351	DVR Software License (line item on Explorer 8240 DVR Purchase Order)
4007961	Multi-Room DVR Software License (line item on 8240HD Multi-Room DVR Purchase Order)
4006369	AllTouch® 8550 Universal Remote Control
1002048	HDMI to HDMI Cable
1002056	HDMI to DVI Cable (for use in connecting the HDMI port to older, DVI equipped HDTVs)
4000633	Scientific-Atlanta Resident Application (SARA) DVR Software Installation CD (only order one CD for each headend)
4004725	4-Port Splitter Isolation Module (SIM) (required for MR-DVR installations). For more information refer to the *Passive Splitter Isolation Module* datasheet, part number 7001717.
749790	RGB adaptor and cables (for adapting Explorer HD set-tops to HDTV sets that are equipped with only RGB-type inputs) For more information refer to the *RGB Adapter and Cables* datasheet, part number 752184.