Explorer® 8300™ Series Digital Video Recorders Offer Standard, HD, and Multi-Room™ Capabilities

Description

The **Explorer® 8300™ DVR** provides subscribers with the latest enhancements in cable television viewing.

The **Explorer 8300HD™ DVR** provides HD subscribers with the latest HD DVR features.

The **Explorer 8300 Multi-Room™ DVR** provides subscribers access to recorded programs in multiple rooms throughout the home on standard Explorer set-tops.

8300 DVR Family Features

The Explorer 8300 DVR is a standard definition, 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 8300 DVR

- Record programs without a VCR

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

- Easily access video/audio inputs and the USB port from the front panel, and access the Coaxial Digital Audio Output connector on the back panel
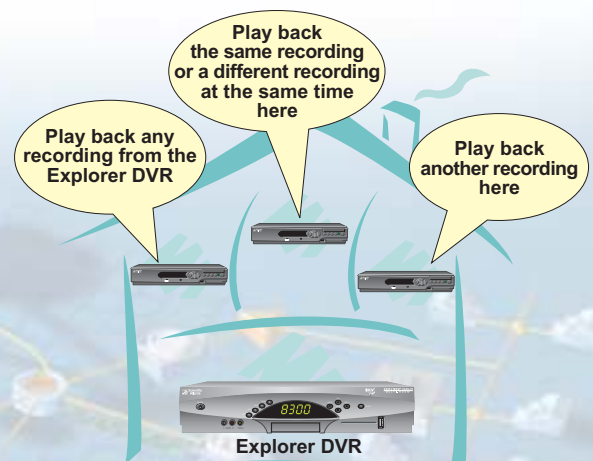
8300HD DVR Additional Features

The Explorer 8300HD DVR provides the same features as the standard definition 8300 DVR and more:

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

- 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

8300 Multi-Room DVR Additional Features

The Explorer 8300MR™ 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 may already have:

- Access the list of recorded shows stored on the Explorer 8300 MR-DVR server and its optional SATA hard drive

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

Play back the same recording or a different recording at the same time here

Play back any recording from the Explorer DVR

Play back another recording here

Explorer DVR

Explorer 8300 Series Digital Video Recorders Offer Standard, HD, and Multi-Room Capabilities

Specifications

8300 and 8300MR-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 8300 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)
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 can send QPSK and 16-QAM bursts to any headend CMTS that implements DOCSIS 1.0 or DOCSIS 1.1 specifications.
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 Analog and Digital Service Tuners (True Picture-In-Picture)	Allows both analog and MPEG-2 digital channels to be tuned and displayed Allows two programs to be displayed simultaneously using the PIP function
Dual Analog Encoders	Allows two analog SD programs to be recorded and displayed simultaneously
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 downmixes 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

Explorer 8300 Series Digital Video Recorders Offer Standard, HD, and Multi-Room Capabilities

Base SD Model Features, continued	Description
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
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/SAP Decoder	Provides stereo sound on analog channels through the baseband left and right audio outputs
BTSC Encoder	Provides stereo sound on the RF coaxial output
Coaxial Digital Audio Output	Supports coaxial interconnection with surround sound receivers (includes the encoding of analog audio)
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
Front Composite Audio/Video Inputs (will require a software enhancement download when available)	Supports interconnection to home consumer devices, such as VCRs, camcorders, or digital cameras for video and audio pass-through to the TV
Provision for Name Branding	Allows you to brand the Explorer 8300 series DVR with your company name and logo
External SATA Connector	External Serial ATA (SATA) connector provides a high-bandwidth connection to an External SATA hard disk drive for expanded storage space for recorded programs
Optional Dual IEEE 1394 Digital Outputs with Digital Transmission Content Protection (DTCP) (will require a software enhancement download when available)	Optional dual IEEE 1394 outputs with DTCP will provide a 400-Mbps interconnection to digital display devices (HDTVs)
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

Explorer 8300 Series Digital Video Recorders Offer Standard, HD, and Multi-Room Capabilities

8300HD and 8300HD Multi-Room DVR Specifications

Additional HD Model Features	Description
DVR with a 80 GB or 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.*
Analog 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 (includes the encoding of analog audio)
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
Optional Application Memory	Applications DRAM: 128MB

8300 Series Dimensions

Dimensions (all 8300 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)

8300 Series Placement and Temperature Range

Placement	
Placement Requirement	Locate the 8300 with at least two inches of open space above and on each side to provide adequate cooling.
Temperature Range	
Room Temperature Range (Operating)	The 8300 should be installed in an environment where the air temperature surrounding the unit is between 40ºF to 105ºF (5C to 40C).

Explorer 8300 Series Digital Video Recorders
Offer Standard, HD, and Multi-Room Capabilities

Ordering Information
Contact your Sales Representative for product availability in your area.

Part Number	Description	Availability
4003980	Explorer 8300 DVR with 80GB Hard Drive	Now
4007951	Explorer 8300 DVR with 80GB Hard Drive and Dual IEEE 1394 Ports	Now
4006190	Explorer 8300HD DVR with 160GB Hard Drive and HDMI	Discontinued*
4006781	Explorer 8300HD DVR with 160GB Hard Drive, HDMI, and Dual IEEE 1394 Ports	Now
4007317	Explorer 8300 Multi-Room DVR with 80GB Hard Drive	Now
4007950	Explorer 8300 Multi-Room DVR with 80GB Hard Drive and Dual IEEE 1394 Ports	Now
4003610	Explorer 8300HD Multi-Room DVR with 160GB Hard Drive and HDMI	Discontinued*
4006775	Explorer 8300HD Multi-Room DVR with 160GB Hard Drive, HDMI, and Dual IEEE 1394 Ports	Now
4008560	Explorer 8300 with 80GB Hard Drive and DOCSIS	Now
4008561	Explorer 8300HD with 160GB Hard Drive, HDMI, and DOCSIS	Discontinued*
4009287	Explorer 8300HD with 160GB Hard Drive, HDMI, DOCSIS, and Dual IEEE 1394 Ports	Now
4010581	Explorer 8300HD Multi-Room DVR with 160GB Hard Drive, HDMI, DOCSIS, and Dual IEEE-1394 Ports	Fourth Quarter, 2005
4011815	Explorer 8300HD DVR with 160GB Hard Drive, HDMI, DOCSIS, 128MB Application Memory, and Dual IEEE-1394 Ports	Fourth Quarter, 2005
4011816	Explorer 8300HD Multi-Room DVR with 160GB Hard Drive, HDMI, DOCSIS, 128MB Application Memory, and Dual IEEE-1394 Ports	Fourth Quarter, 2005

*As required by US Code of Federal Regulations, Title 47, §76.640 (www.gpoaccess.gov), these models are not produced or available after June 30, 2005.

Accessories

Part Number	Description
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)
4004725	4-Port Splitter Isolation Module (SIM) for MR-DVR installations. For more information, refer to datasheet part number 7001717
4008261	Passive Isolation Module (IM) for MR-DVR installations. For more information, refer to datasheet part number 7007588
4011635	Inline Single Port Isolation Module for MR-DVR installations
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 datasheet part number 752184.
4000633	Scientific-Atlanta Resident Application (SARA) DVR Software Installation CD (only order one CD for each headend)

Software

Part Number	Description
4000633	Scientific-Atlanta Resident Application (SARA) DVR Software Installation CD (only order one CD for each headend)
752351	DVR Software License (line item on Explorer 8300 DVR Purchase Order)