

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 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 the other
- Watch two programs at the same time, even if the TV does not have picture-in-picture (PIP) capability
- Record TV programs without a VCR
- Expand storage through an optional external Serial ATA hard drive
- Easily access video/audio inputs and the USB port from the front panel, and access the coaxial audio S/PDIF connector on the back panel

8300HD DVR Features

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

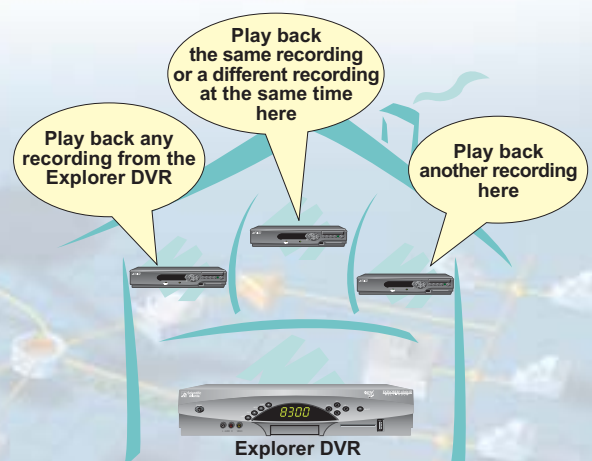
- Connect to the set-top through the YPbPr, HDMI™, or optional 1394 connectors
- Stretch and zoom the video picture to maximize its viewable area on the HDTV display
- Select the resolution (scan rate) best suited for the HDTV (480i, 480p, 720p, or 1080i)
- Utilize the optical S/PDIF connector to easily connect to higher-end audio equipment

8300 Multi-Room DVR Features

The Explorer 8300MR™ DVR* will deliver 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 (Explorer 2000™ rev. 3 set-top or later):

- Access the list of recorded shows stored on the Explorer 8300 MR-DVR server
- Playback, pause, rewind, and/or fast-forward any recording at any time

**The Explorer 8300MR-DVR is expected to be available in the summer of 2004.*



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 will allow up to 50 hours* of SD programs to be recorded and stored using DVR functions Will give subscribers complete control over watching, pausing, rewinding, replaying, and fast forwarding live programs using the remote control <i>*The total program hours that can be stored depends upon the format and data rate of the programming source.</i>
DAVIC Reverse Path Data Transmitter	Will allow IP-based, real-time, two-way communication between the Explorer 8300 Series DVR and the cable service provider's headend Will support interactive services such as xOD (anything-On-Demand), VOD, and subscription VOD (SVOD)
MPEG-2 MP@ML Standard Definition Digital Video Decompression	Will allow decompression and presentation of audio and video Will deliver 640 x 480 video resolution
Dual Analog and Digital Service Tuners (True Picture-In-Picture)	Will allow both analog and MPEG-2 digital channels to be tuned and displayed Will allow two programs to be displayed simultaneously using the PIP function
Dual Analog Encoders	Will allow two analog SD programs to be recorded and displayed simultaneously
Dolby Digital® Audio and MPEG-1 Audio Support	Will support leading digital audio standards
PowerKEY® Conditional Access System	Will provide digital security using an RSA encryption algorithm that mathematically matches pairs of keys Will encrypt all recordings on an internal hard disk drive or on an optionally attached external SATA hard disk drive Will allow upgrades using a network download
PowerTV® Operating System with HTML Client Engine	Will offer a stable operating system and open Application Programming Interfaces (APIs) to support native applications and third-party middleware applications
Enhanced Graphics Engine	Will display up to 65,000 colors simultaneously Will enable high-resolution 640 x 480 IPG graphics while simultaneously scaling MPEG-2 video
Powerful 32-bit RISC Processors	Will feature 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	Will support open standards for QAM delivery and demodulation
Both Internal Security Microprocessor and Smart Card Slot	Will provide hardware-assisted conditional access options with capability to upgrade the security, if ever needed

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



Base SD Model Features, continued	Description
Macrovision® Copy Protection Support (licensing fee required to activate)	Activation will allow 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	Will provide stereo sound on analog channels through the baseband left and right audio outputs
BTSC Encoder	Will provide stereo sound on the RF coaxial output
S/PDIF Coaxial Digital Audio Output	Will support coaxial interconnection with surround sound receivers (includes the encoding of analog audio)
Baseband Audio/Video Outputs	Will offer a baseband audio/video connection to a VCR or TV
RF Cable Out	Will offer a composite audio/video connection to a VCR or TV
Front Composite Audio/Video Inputs (will require a software enhancement download when available)	Will support 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	Will allow you to brand the Explorer 8300 series DVR with your company name and logo
External SATA Connector	External Serial ATA 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 5C Copy Protection (will require a software enhancement download when available)	Optional dual IEEE 1394 outputs with 5C copy protection 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 will allow up to 90 hours* of SD programs or up to 20 hours* of HD programs to be recorded and stored using DVR functions Will give subscribers complete control over watching, pausing, rewinding, replaying, and fast forwarding live programs using the remote control <i>*The total program hours that can be stored depends upon the format and data rate of the programming source.</i>
Analog Component HDTV Outputs	Will provide YPbPr outputs for quick and easy connection to most HDTV sets
YPbPr and Audio Left/Right Cable Kit	Will provide connection from the HD analog video and audio outputs to the HDTV set
S/PDIF Optical Digital Audio Output	Will support optical interconnection with surround sound receivers (includes the encoding of analog audio)
HDMI 1.0 Digital Audio/Video Output with HDCP Copy Protection	The High Definition Multimedia Interface (HDMI) will provide superior, 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 interface. HDMI is backward compatible with the DVI 1.0 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

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
4003980	Explorer 8300 DVR with 80GB Hard Drive
4007951	Explorer 8300 DVR with 80GB Hard Drive and Dual IEEE-1394 Ports
4007317	Explorer 8300 Multi-Room DVR with 80GB Hard Drive*
4007950	Explorer 8300 Multi-Room DVR with 80GB Hard Drive and Dual IEEE-1394 Ports*
4006190	Explorer 8300HD DVR with 160GB Hard Drive and HDMI
4006781	Explorer 8300HD DVR with 160GB Hard Drive, HDMI, and Dual IEEE 1394 Ports
4003610	Explorer 8300HD Multi-Room DVR with 160GB Hard Drive and HDMI*
4006775	Explorer 8300HD Multi-Room DVR with 160GB Hard Drive, HDMI, and Dual IEEE 1394 Ports*
752351	DVR Software License (line item on Explorer 8300 DVR Purchase Order)
4007961	Multi-Room DVR Software License (line item on Explorer 8300 Multi-Room or 8300HD Multi-Room DVR Purchase Order)
745684	AllTouch® 8400 Universal Remote Control
4007283	AllTouch 8450 Universal Remote Control
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 <i>Passive Splitter Isolation Module</i> datasheet, part number 7001717.

*Expected availability summer 2004



AllTouch, Explorer, PowerKEY, PowerTV, Scientific-Atlanta, and the Scientific-Atlanta logo are registered trademarks of Scientific-Atlanta, Inc.

2000, 8300, 8300HD, 8300MR, and Multi-Room are trademarks of Scientific-Atlanta, Inc.

Dolby is a registered trademark of Dolby Laboratories.

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Macrovision is a registered trademark of Macrovision Corp.

Specifications and product availability are subject to change without notice.

© 2004 Scientific-Atlanta, Inc. All rights reserved.

Scientific-Atlanta, Inc.
1-800-722-2009 or 770-236-6900
www.scientificatlanta.com

Part Number 7004920 Rev A
July 2004