



VOYAGER HDTV
HIGH DEFINITION DIGITAL CABLE SET-TOP

VOYAGER 3000 FEATURES & SPECIFICATIONS

VOYAGER 3510HD ADVANCED PRODUCT FEATURES

Latest High-Definition Capabilities – Decodes HDTV/digital/analog cable TV formats to provide maximum picture quality to a variety of video displays (Plasma, HDTV-ready televisions, standard TV).

Advanced Chip Integration – Powered by **Broadcom's 7100** and **7021** processors, the Voyager 3510HD offers dedicated power for both graphics processing over HD video, and session-based applications. The 7100 multi-function CPU offers MPEG decoding and a higher level of DAVIC 1.2 implementation, all on one chip.

Enhanced Memory Configuration – The Voyager 3510HD is configured with 16MB RAM for applications/graphics, 2MB RAM for MPEG decoding (MP@ML or SD), 32MB RAM for HDTV MPEG decoding (MP@HL or HD), and 8MB Flash ROM.

Video Optimization – The Voyager 3510HD, through both hardware and software capabilities, is designed to optimize video output based on content format and monitor resolution selection.

Video Connections – The Voyager 3510HD supports DVI 1.0 with HDCP, S-video, Composite and Component video for a variety of video display formats.

Conditional Access and Signal Security – Uses PowerKEY™ multi-layer encryption system. Compliant with Harmony/DVB/and DES Decryptor Codecs.

Operating System	PowerTV™ OS
Processor	Broadcom™ BCM7100 Dual-Processor; 81MHz clock, 85MIPS BCM7021 Processor for HD decoding
Frequency Range	54 MHz to 860 MHz
Modulation Format	ITU-T J.63 Annex B., 64/256 QAM
Copy Protection	Macrovision
Digital Video Format	MPEG-2 Video Decompression MP@ML (ISO/IEC 13818-2) Variable bit-rate 1.5 to 15Mbps, with various levels of resolution: 704 X 480, 352 X 480 and 544 X 480, MP@HL.
Digital Audio Format	Digital Audio Decompression Dolby AC3 (ATSC A/52), Musicam
Downstream Control Signal	DAVIC, 70 MHz to 130 MHz agile QPSK modulation 1.544/3.088 Mbps 1/2 MHz bandwidth
Upstream Control Signal	DAVIC 8 MHz to 26.5 MHz agile QPSK modulation 1.544/3.088 Mbps 1/2 MHz bandwidth
Input/Output (Rear Panel)	USB S/PDIF Digital Audio output on analog and digital channels Baseband Audio – (L/R) input Baseband Video – Pass through to only Baseband output Two sets Baseband Audio (L/R) – output S-Video output Component (YPbPr connection) – output DVI 1.0 with HDCP Serial output port IR Blaster (for dongle) Smart Card slot
Memory	16MB SDRAM (Applications/Graphics), 8MB Flash ROM, 2MB MPEG (decoding MP@ML or SD), 32MB (HDTV MPEG decoding, MP@HL for HD)
Dimensions	380mm x 295mm x 48mm 15 in. x 11.6 in. x 2.7 in.



CONNECTING PEOPLE WITH ENTERTAINMENT.



KEY FEATURES



The Voyager 3510HD's full graphics over HD capability allows for the seamless integration of HD channels into a programming lineup.



The Voyager 3510HD boasts a robust memory configuration with 32MB of dedicated RAM for HD MPEG decoding.



The Broadcom 7100 & 7021 processor chips offer the multi-function CPU power to handle graphics processing, session-based applications, MPEG and HDTV decoding.



The Voyager 3510HD supports sixteen ATSC formats and six different preferred display choices; sidebars, letterbox, zoom, stretch, center and squeeze.

THE PICTURE PERFECT HIGH-DEFINITION SOLUTION.

The Voyager 3510HD is Pioneer's latest digital cable set-top box designed for high definition decoding. Based on our next generation Voyager architecture, this new set-top boasts high definition decoding capabilities along with advanced processing power, enhanced memory configurations, and industry renowned reliability.

Picture Perfect High Definition Cable

As the latest addition to Pioneer's Voyager series, this new feature rich, yet competitively priced HD enabled set-top offers superior high definition cable in multiple formats. In addition, the Voyager 3510HD has the ability to decode standard definition analog and digital cable sources.

To achieve optimum performance, the Voyager 3510HD features a built-in high definition decoder with a variety of video outputs that can pass native 1080i signals (1,080 lines of resolution) or down-convert those signals based on display capabilities.

High Definition. Beyond Definition.

Pioneer has developed the Voyager 3510HD with full graphics support over HD video to maximize the cable viewing experience and allow seamless integration of HD channels into a program lineup. HD monitor video formats are software selectable for multiple display options permitting the 3510HD's smart optimization technology to determine and pass the best HD signal based on content format.

The Definition of Performance.

Powered by Broadcom's™ BCM7100 Dual-Processor CPU with Broadcom's BCM7021 processor for HD decoding, the Voyager 3510HD offers "system-on-a-chip" functionality with dedicated processing power for graphics over HD capabilities, session-based applications and much more.

The Voyager 3510HD's expert design is a result of Pioneer's extensive experience with high definition products. Thousands of HD set-tops have already been deployed by Pioneer in Japan, and Pioneer is also a distinguished manufacturer of high definition plasma television screens.