

SONY

HIGH DEFINITION TELEVISION:
YOU'VE GOT TO SEE IT ON A SONY.



FD Trinitron

WEGA



**SONY HIGH DEFINITION TV:
DON'T SETTLE FOR ANYTHING LESS.**

NOTHING YOU'VE SEEN IN HOME VIDEO — AND NOTHING YOU'VE WATCHED IN BROADCAST TV — WILL PREPARE YOU FOR HIGH DEFINITION TV. AS BROUGHT HOME BY THE NEW DIGITAL TELEVISION (DTV) BROADCASTING, HIGH DEFINITION IS A SENSORY EXPERIENCE UNLIKE ANY OTHER. YOU'LL BE AMAZED BY UP TO SIX TIMES THE PICTURE DETAIL. WIDESCREEN IMAGES. AND DIGITAL SOUND. TO SEE THE FULL GLORY OF HIGH DEFINITION DIGITAL TV, TURN TO THE PEOPLE WITH A FIRM GRASP OF DIGITAL TECHNOLOGY. SONY.

IF YOU WANT THE TELEVISION THAT'S DEFINING THE DIGITAL FUTURE™, CHOOSE SONY'S REMARKABLE KW-34HD1 FD TRINITRON® WEGA™ HIGH DEFINITION TELEVISION. IF YOU ALREADY OWN A MONITOR OR PROJECTOR CAPABLE OF HIGH-DEFINITION DISPLAY — OR YOU SIMPLY WANT TO WITNESS THE WONDERS OF DTV ON YOUR EXISTING, ANALOG TELEVISION, CHOOSE THE SONY DTR-HD1 DIGITAL TELEVISION RECEIVER/DECODER. EITHER WAY, SONY DTV OFFERS A WHOLE NEW WAY TO EXPERIENCE ENTERTAINMENT.

BOTH THE KW-34HD1 AND DTR-HD1 ARE DESIGNED TO BRING HOME THE EXCITEMENT OF FREE OVER-THE-AIR DTV CHANNELS WHEN CONNECTED TO AN OPTIONAL, EXTERNAL ANTENNA. THE DTV TUNING SECTIONS ARE DESIGNED FOR VHF AND UHF FREQUENCIES ONLY, AND DO NOT TUNE SOME CABLE FREQUENCIES. HOWEVER, THESE PRODUCTS MAY DISPLAY CABLE DTV CHANNELS WITH A DIGITAL CABLE BOX SUPPLIED BY YOUR CABLE OPERATOR. CHECK WITH YOUR CABLE OPERATOR FOR COMPATIBILITY.



A NEW GENERATION OF TELEVISION.

The system behind American television, called "NTSC," has remained essentially unchanged since its creation. Even the introduction of color did not alter the TV's fundamentals. Now over 50 years old, NTSC has put a limit on the TV picture's detail, color and clarity. Until now. Designed from a clean sheet of paper, DTV defines completely new and altogether higher standards of performance. Sony's KW-34HD1 High Definition Television and DTR-HD1 DTV Receiver/Decoder deliver all the picture performance you expect from Sony — to showcase DTV at its best.

HIGH DEFINITION. DTV gives broadcasters the option to transmit pictures with up to six times the detail of NTSC. So you can see the point guard's eyes widen as his three-point shot drops in. Or see the tiny flecks of blue in an actor's eyes. The Sony KW-34HD1 and DTR-HD1 can provide all 1080 scanning lines, for the full definition of High Definition. And only Sony offers the FD Trinitron® picture tube, for pinpoint corner-to-corner focusing, outstanding picture clarity and detail, minimal glare and accurate image reproduction.

WIDESCREEN. DTV can provide the same type of widescreen presentation that you see in movie theaters. That's why the Sony KW-34HD1 incorporates a widescreen FD Trinitron tube, with a width-to-height (or "aspect") ratio of 16:9. It's some 33% wider than conventional 4:3 TV. And Sony's Zoom, Full, Wide Zoom and Caption display modes make the most of any entertainment source: standard or widescreen.

CLEANER PICTURES. Digital reception means great reception. And Sony helps you make the most of it.

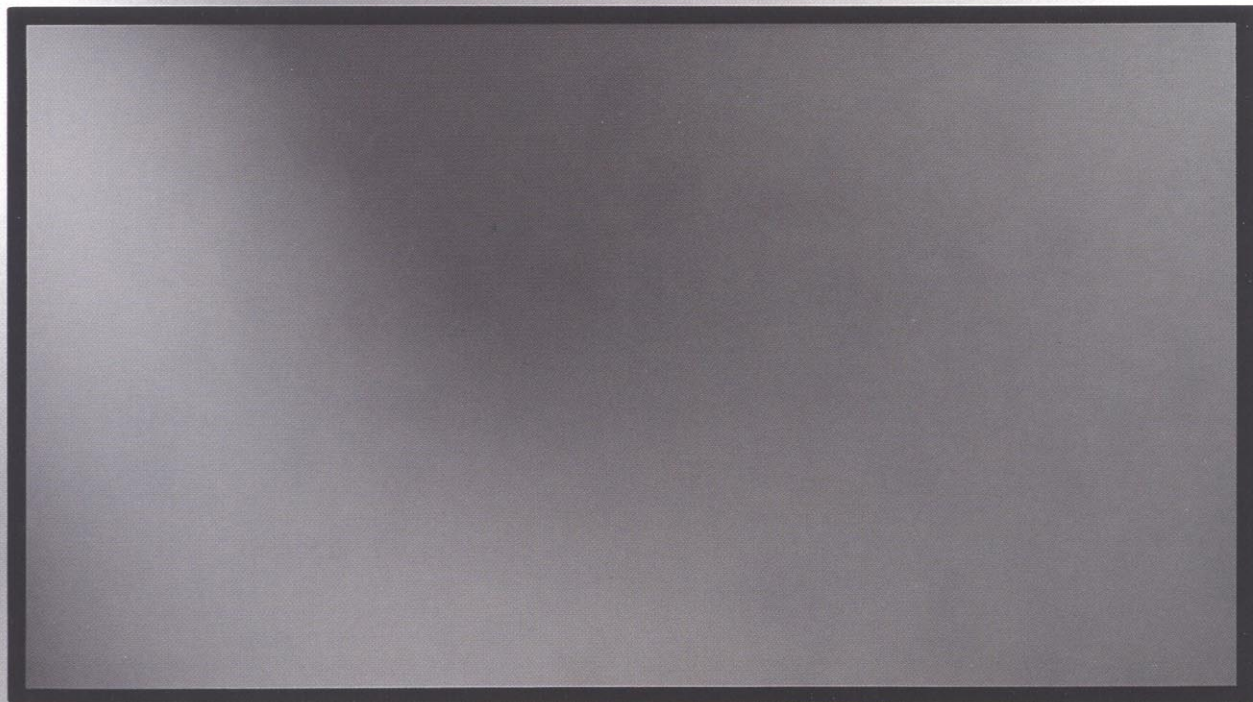
BETTER COLOR. Component digital transmission delivers vivid color — including subtle purples and reds without the tell-tale bleed at the edges. Thanks to Sony's patented Trinitron system, those colors will be spectacularly vivid.

MULTI-CHANNEL DIGITAL SOUND. DTV can provide highly advanced Dolby® Digital surround sound, for 5.1 channels of high-fidelity audio. The Sony KW-34HD1 and DTR-HD1 help bring it home with optical digital outputs for an external Dolby Digital Decoder. Hook up a Dolby Digital Receiver speaker system to hear the same surround sound you enjoyed in today's top movie theaters!

NEW OPTIONS. NTSC broadcasting was limited to a fixed number of scanning lines (480 viewable), a fixed "interlaced" scanning system, a fixed frame rate of 30 frames per second and a fixed aspect ratio of 4:3. In the new world of DTV broadcasting, all these areas are open to choice. In total, there are 18 formats available, giving broadcasters and viewers an exciting range of options. Both the Sony KW-34HD1 and DTR-HD1 not only receive all 18 DTV formats, they can provide High Definition 1080i broadcasts at a full 1080 lines. And with the KW-34HD1's widescreen FD Trinitron picture tube, you'll enjoy every nuance of Digital Television performance.

SONY AND DTV.

Behind the scenes, Sony is a driving force in DTV. Sony expertise extends throughout the Digital TV production chain, from the creation of Digital TV programming to the archiving of high-definition video transfers from film, from digital camcorders to digital control room equipment. And Sony's achievements in home television are legendary. Only Sony has the revolutionary FD Trinitron picture tube. Only Sony offers Digital Reality Creation™ circuitry and the Multi Image Driver system to help you get the most picture performance and flexibility from DTV. That's why there's no better way to enter the Digital Television era than Sony's KW-34HD1 Digital Television or the DTR-HD1 DTV Receiver/Decoder.



SONY

PAL
TruSurround
400000000

SETUP TV/VIDEO - VOLUME + - CHANNEL + STILLS EJECT POWER

**THE KW-34HD1 FD TRINITRON WEGA
HIGH DEFINITION TELEVISION.**

DIGITAL TELEVISION REPRESENTS A WHOLE NEW WORLD OF CRYSTAL-CLEAR IMAGES. IT'S A DEMANDING BROADCAST FORMAT THAT CHALLENGES THE RESOLUTION, GEOMETRIC ACCURACY AND SCANNING PERFORMANCE OF ANY TELEVISION DISPLAY. TO MEET THIS CHALLENGE, SONY ENGINEERS REEVALUATED EVERY ASPECT OF THE TRINITRON SYSTEM. THEY INVENTED NEW PROCESSES AND DISCOVERED NEW SOLUTIONS. THE RESULT IS INCORPORATED INTO THE KW-34HD1: A SPECIAL 34" WIDESCREEN VERSION OF THE FD (FLAT DISPLAY) TRINITRON PICTURE TUBE. IT'S THE SYSTEM THAT'S FLAT-OUT BETTER.

FD TRINITRON PICTURE TUBE

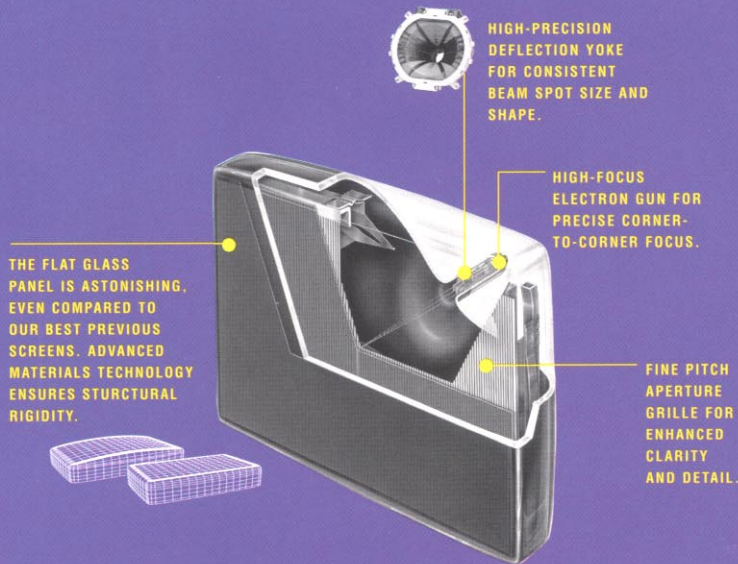


REDUCED GLARE. Contrast is the foundation of any TV picture, creating the richness of images on the screen.

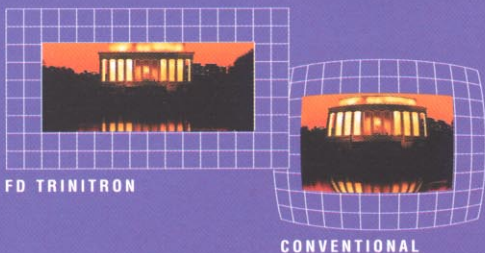
But contrast can be destroyed by glare — the reflection of room light. Curved screens increase glare. Sony's new FD Trinitron tube suppresses glare to the bare minimum.

You get a deeper, richer, more convincing picture.

BETTER DETAIL. High Definition is all about detail. The FD Trinitron tube has been thoroughly engineered to make detail come alive. The new **High-Focus Electron Gun** improves corner-to-corner focus by 20%. The **Fine Pitch Aperture Grille** uses higher tension and finer slots to maintain this focus. And the **High-Precision Deflection Yoke** assures that the beam spot is supremely consistent in size and shape. You get superb image detail from side to side, from top to bottom.



GREATER ACCURACY. Sony's visually flat screen achieves the ultimate in geometric accuracy. For the first time in a big CRT, squares look like squares. Circles appear circular. And straight lines are straight. The geometry of all on-screen objects is finally accurate. So everything appears more real, more convincing, more lifelike.



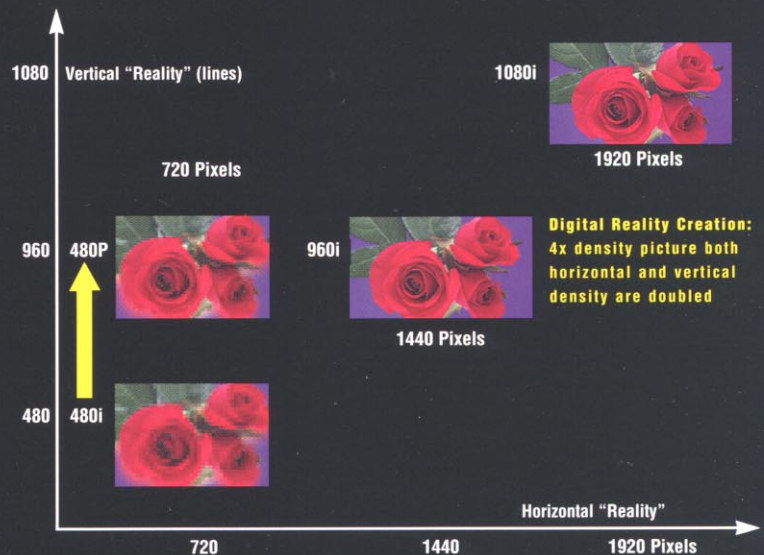
WIDER VIEWING ANGLE. You can view FD Trinitron television through almost a full 180° angle — without losing any picture information. There's no screen bulge to obscure parts of the picture.

DIGITAL REALITY CREATION (DRC) CIRCUITRY

The transition to Digital Television will take years. During that time, DTV receivers will need to handle both High Definition pictures (with up to 1080 scanning lines) as well as conventional television pictures (which originate with only 480 visible scanning lines). It's a tremendous difference, but Sony has found a way to bridge the gap! The KW-34HD1 actually enhances conventional TV pictures by doubling the number of active scanning lines — and doubling the number of pixels on each scanning line!

Based upon a massive analysis of over 10,000 High Definition TV picture patterns, Sony's Digital Reality Creation replaces the NTSC patterns with their correct High Definition counterparts. DRC circuitry provides four times the total picture density. So even conventional TV broadcasts have the apparent solidity of HDTV!

DRC Digital Reality Creation



FOR CONVENTIONAL, 480-LINE INTERLACED SOURCES, DRC DOUBLES BOTH VERTICAL AND HORIZONTAL DENSITY. YOU GET AN AMAZING FOUR TIMES THE TOTAL PICTURE DENSITY.

MULTI-IMAGE DRIVER (MID) CIRCUITRY

Before DTV, analog video was a world of interlace scanning, which displays first the odd-numbered scanning lines, then the even-numbered ones. In contrast, computers were a world of progressive scanning, which displays all the scanning lines at once. The good news is that DTV accommodates both systems. The bad news is that it's extremely difficult to incorporate both systems into a simultaneous picture-in-picture display. **Until now.**

Sony's new Multi-Image Driver (MID) circuitry contains a special Twin-View™ function that can display two signals together on the same screen. The first signal is conventional, NTSC interlace video (480i). The second signal can be DTV progressive (480p) or DTV interlaced (480i or 1080i). MID works by converting both signals to 480-line progressive display (480p). Thanks to Sony's Multi-Image Driver, you'll be able to see both images with exceptional quality and highly advanced Picture-in-Picture functionality.



MID Multi Image Driver

MID CIRCUITRY can place both the old and new television signals together on the same screen. One signal is conventional, NTSC video (480i), while the other can be 480p, 480i or 1080i scanning.



FLEXIBLE TWIN-VIEW™ FUNCTION. Not only can you view two images side-by-side, but you can continuously expand either picture, up to two times its normal size.



NEW FREEZE MODE. Lets you freeze a broadcast screen to write down a telephone number or website URL while the program continues as a side-by-side TwinView picture.

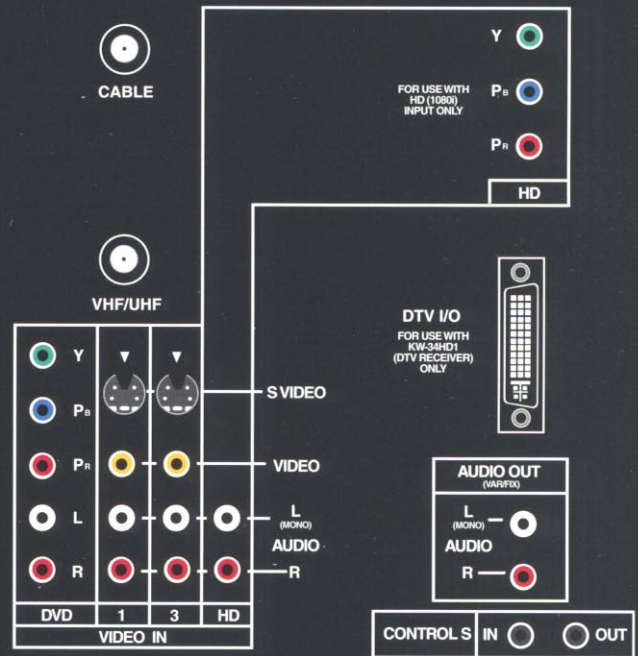
DOLBY® DIGITAL COMPATIBILITY

Just as DTV means more exciting, more vivid, more convincing pictures, it's also a revolution in digital sound. DTV broadcasts incorporate the Dolby Digital sound system.

5.1 CHANNEL SURROUND SOUND. The Dolby Digital system transmits completely separate channels for Left, Right, Center, Left Surround and Right Surround speakers. There's even a special "0.1" Low Frequency Effects channel for your subwoofer!

DIGITAL SOUND QUALITY. Digital sound is accurate sound. You'll hear deep, thunderous bass. Lucid, open highs. And crisp, vivid dynamics, free of background noise.

OPTICAL DIGITAL OUTPUT. To make DTV sound come alive, the KW-34HD1 incorporates an optical digital output. Connect an optical Dolby Digital Receiver and speakers for glorious surround sound playback. Built-in audio facilities include a powerful 2 channel amplifier and speakers.



THE KW-34HD1 OFFERS A COMPLETE RANGE OF INPUTS AND OUTPUTS, INCLUDING Y/P_B/P_R COMPONENT VIDEO, S-VIDEO AND COMPOSITE VIDEO CONNECTIONS.

DOLBY DIGITAL (AC-3) AUDIO OUT OPTICAL

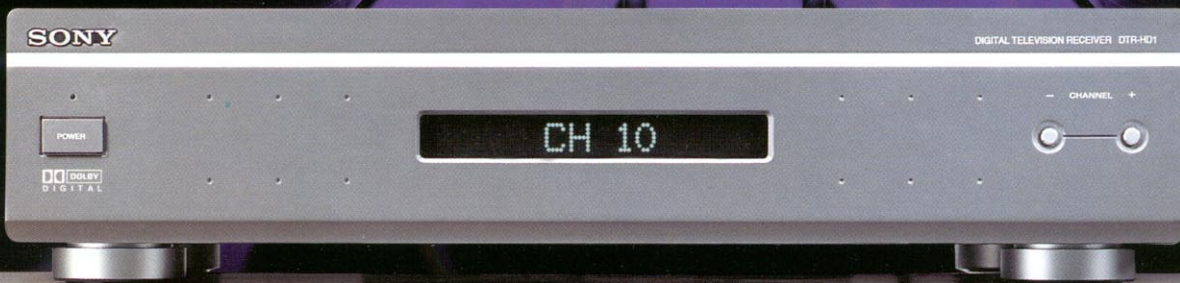


THE OPTICAL OUTPUT PROVIDES SUPERB DIGITAL-TO-DIGITAL CONNECTION TO AN OPTIONAL DOLBY DIGITAL RECEIVER.



THE DTR-HD1 CONNECTS TO EVERYTHING: CONVENTIONAL TELEVISIONS, HD-CAPABLE PROJECTORS, DOLBY DIGITAL SURROUND SOUND SYSTEMS AND CONVENTIONAL STEREO SYSTEMS.

ADD TRUE HIGH DEFINITION TO HD-CAPABLE MONITORS AND PROJECTORS. TRUE 1080i HIGH DEFINITION R/G/B OUTPUTS WITH VH SYNC ARE COMPATIBLE WITH MANY MULTI-SCAN FRONT PROJECTOR MODELS. CONSULT WITH YOUR PROFESSIONAL A/V SPECIALISTS INSTALLER FOR COMPATIBILITY.



Trinitron XBR

DTR-HD1 DIGITAL TELEVISION RECEIVER/DECODER

TWO SORTS OF PEOPLE WILL ABSOLUTELY ADORE THE SONY DTR-HD1. IF YOU ALREADY OWN A MONITOR OR VIDEO PROJECTION SYSTEM CAPABLE OF DISPLAYING HIGH DEFINITION IMAGES, THE DTR-HD1 DELIVERS THE FULL DTV CAPABILITY. CONNECT THE DTR-HD1 AND YOU'LL THRILL TO SPECTACULAR, 1080i-LINE HIGH DEFINITION IMAGES.

BUT THERE'S A SECOND SIDE TO THE STORY. SUPPOSE YOU OWN A HIGH-QUALITY CONVENTIONAL TELEVISION — LIKE A SONY TRINITRON TELEVISION. IF YOU WANT TO EXPERIENCE DIGITAL TELEVISION, THE DTR-HD1 MAKES IT HAPPEN. EVEN THOUGH YOU'LL BE LIMITED BY THE 480-LINE DISPLAY OF YOUR CURRENT TELEVISION, YOU WILL BE ABLE TO VIEW DIGITAL PROGRAMMING. YOU'LL WITNESS IMPROVED HORIZONTAL RESOLUTION. SHARPER, MORE VIVID COLOR. DIGITAL SOUND. AND YOU'LL ENJOY THE BENEFITS OF THE DTV PROGRAMMING ITSELF — SOME OF WHICH MAY ONLY BE AVAILABLE IN DIGITAL BROADCASTING. IT'S A TERRIFIC WAY TO FIND NEW VALUE IN THE TELEVISION YOU ALREADY OWN!

FEATURES AND SPECIFICATIONS

KW-34HD1 FD TRINITRON DIGITAL TELEVISION



Includes 34" DTV Monitor, DTV Receiver and matching A/V Cabinet.

DIGITAL AND ANALOG RECEPTION

- All-format reception; handles all 18 ATSC recommended DTV broadcasting formats
- Conventional, NTSC analog TV reception
- Display Format:
 - 1080i displayed as 1080i
 - 1080p displayed as 1080i
 - 720p displayed as 1080i
 - 480p displayed as 480p
 - 480i displayed as 960i via DRC circuitry
- Digital Tuning Frequencies:
 - VHF Channels 2 – 6 (54 – 88 MHz)
 - VHF Channels 7 – 13 (174 – 216 MHz)
 - UHF Channels 14 – 69 (470 – 806 MHz)

FD TRINITRON PICTURE TUBE

- 34" widescreen FD Trinitron picture tube
- 16:9 aspect ratio widescreen display
- FD Trinitron visually flat screen for reduced glare
- High-Focus Electron Gun for 20% sharper focus
- Fine Pitch Aperture Grille for accurate focus
- High-Precision Deflection Yoke maintains beam spot size and shape
- Greater geometric accuracy, wider viewing angle thanks to flat screen

VIDEO PERFORMANCE

- Multi-Image Driver (MID) circuitry supports simultaneous Twin View Picture-and-Picture display of NTSC interlace-scan and DTV progressive-scan images
- Digital Reality Creation (DRC™) circuitry quadruples the apparent picture density of conventional TV broadcasts
- 3D Digital Comb Filter
- Dynamic Picture circuitry
- Dynamic Focus® circuitry
- Velocity Modulation® scanning
- Magnetic Quadra Pole for beam spot accuracy in the corners

AUDIO PERFORMANCE

- Dolby Digital compatibility with optical digital output
- Built-in stereo amplifier with 15 watts x2 (both channels driven into 8 ohms, 50 — 20,000 Hz, 10% THD)
- Built-in stereo speakers
- TruSurround™ with SRS® circuitry generates multi-channel surround sound effect through stereo speakers

CONNECTIONS

- 2 rear A/V inputs, 1 front A/V input with composite and S-Video connections
- Component video (Y/P_B/P_R) input, 480i
- HD-capable component video (Y/P_B/P_R) input, 1080i
- Optical digital audio output for outboard Dolby Digital decoder
- 2-channel "mixdown" of 5.1-channel audio suitable for out board Dolby® Pro Logic decoders
- Control S connection to other Sony equipment

CONVENIENCE AND CONTROL

- Channel Guide for DTV, seamless A/D tuning
- Twin-View™ side-by-side Picture-and-Picture
- New Freeze Mode
- Flexible widescreen modes, including Zoom, Full, Wide Zoom and Caption, for enjoying conventional 4:3 and the new 16:9 widescreen programming
- CaptionVision (CC)
- Jump Channel
- Sleep Mode
- Remote Commander® remote control (RHY-158)

GENERAL

- Gray cabinet
- Dimensions (WHD):
 - Main Module: 37-3/4" x 24-1/8" x 23-1/4"
 - DTV Tuner Module: 17" x 4" x 11-7/8"
- Weight: 205lbs
- A/V Cabinet: SU-34HD1

DTR-HD1 DIGITAL TELEVISION RECEIVER/DECODER

- All-format reception; handles all 18 ATSC digital broadcasting formats
- High Definition Output:
 - 1080i output as 1080i
 - 1080p output as 1080i
 - 720p output as 1080i
 - 480p output as 1080i
 - 480i output as 480i
- NTSC Output:
 - All formats output as 480i
- HD Output: R/G/B connectors with VH sync (1080i, 480i)
- Compatible for High Definition display
- 2 A/V outputs with composite and S-Video connections (480i)
- Component video (Y/P_B/P_R) output (480i)
- Dolby Digital compatibility with optical digital output
- 2-channel "mixdown" of 5.1-channel audio suitable for outboard Dolby® Pro Logic decoders
- Control S connection to other Sony equipment
- Channel Guide for DTV
- Flexible widescreen modes, including Zoom, Full, Wide Zoom and Caption, for enjoying conventional 4:3 and the new 16:9 widescreen programming
- Parental Control using V Chip Technology
- Auto Clock Set
- Jump Channel
- Speed Surf™ tuning
- Bit mapped on-screen display
- Remote Commander remote control (RMY-158)
- Dimensions (WHD): 17" x 4" x 11-7/8"
- Weight: 3.7 lbs



Both the KW-34HD1 and DTR-HD1 are designed to display free over-the-air DTV channels when connected to an optional, external antenna. The DTV tuning sections are designed for VHF and UHF frequencies only, and do not tune some cable frequencies. However, these products may display cable DTV channels with a digital cable box supplied by your cable operator. Check with your cable operator for compatibility.

A FINAL WORD.

AFTER A LIFETIME OF VIEWING CONVENTIONAL, ANALOG TELEVISION, YOU'LL BE ASTONDED BY SONY DIGITAL TELEVISION. IT'S A BREAKTHROUGH YOU SIMPLY HAVE TO WITNESS FOR YOURSELF. SO IF YOU WANT TO UNDERSTAND JUST HOW EXCITING, HOW EMOTIONALLY COMPELLING, HOW TOTALLY ENVELOPING TELEVISION CAN BE, YOUR COURSE IS CLEAR. PROCEED DIRECTLY TO YOUR SONY RETAILER.

© 1998 Sony Electronics Inc. Reproduction in whole or in part without written permission is prohibited. All rights reserved. Features and specifications are subject to change without notice. Non-metric weights and measures are approximate. Sony, Defining the Digital Future, Digital Reality Creation, Dynamic Focus, Remote Commander, Speed Surf, Trinitron, Twin-View, Velocity Modulation and Wega are trademarks of Sony. Dolby is a registered trademark of Dolby Laboratories Licensing Corporation. SRS and TruSurround are trademarks of SRS Labs, Inc.

SONY

Sony Electronics Inc.
1 Sony Drive, Park Ridge, NJ 07656
<http://www.sony.com/wega>
CA1505