ELITE AUDIO/VIDEO COMPONENTS
PRODUCT REFERENCE GUIDE 2005/2006

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True to their name, Pioneer Elite components are designed for a very select group of users — those who settle for nothing less than the best in audio and video. The state-of-the-art performance and specifications of these high-end products are the result of uncompromising standards in engineering and manufacturing, painstaking selection of parts and devices, and careful testing of each and every component. Pioneer Elite is the single brand solution for discriminating home theater enthusiasts.

The latest lineup of Elite plasma display panels (PDPs) includes units with new PureDrive™ II technologies, which feature all-digital signal processing. These new panel driving technologies provide finer details and increased parameters for picture adjustment. The new Elite PDPs also feature the new display panel technologies, which delivers higher contrast and "blacker black" with highly efficient light emission. The media receiver for the new units comes with a card slot, which lets you view JPEG digital stills enlarged on the PDP screen. The new Elite PDPs are also compatible with TV Guide On Screen™ for enhanced convenience.

The Elite A/V receivers feature two new units that incorporate Phase Control technologies for synchronized phase among channels — a new concept for superior multi-channel sound. Pioneer's advanced technologies allow standing wave to be effectively controlled. In addition, the new Elite A/V receivers have greater convenience, including compatibility with iPod® and XM Radio. The lineup also includes the world's first THX Select2-certified A/V receivers.

In this Product Reference Guide to the Pioneer Elite Series, you'll find details about these and other technologies incorporated into Elite products. We hope you will find this guide useful and thank you for your interest.

PUREVISION PLASMA TELEVISIONS AND DISPLAYS

Elite Plasma Televisions and Displays: Technological Highlights for 2005/2006

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Pioneer Innovations in Panel-Driving Technologies

PureDrive™ II — Fully-Digitalized Video Signal Processing for Even Higher Picture Quality (PRO-1130HD/PRO-930HD)

With conventional plasma display panels (PDP), input signals are converted back and forth between analog and digital before being sent to the display panels. This tends to cause noise, degrading the quality of displayed pictures. As a leading manufacturer of PDPs, Pioneer developed PureDrive™ technology, featuring all-digital video signal processing. Now, the PRO-1130HD and PRO-930HD come with its new version — PureDrive™ II.

PureDrive™ II features new custom chipsets which ensure a wide range of picture-quality benefits, including lower noise, finer gradation, and more natural color reproduction. (See the figure at the top of the next page.)

ACE IV (PRO-1130HD/PRO-930HD)

ACE IV (Advanced Continuous Emission Technology IV) — newly built into the PRO-1130HD and PRO-930HD — is one of the biggest benefits of PureDrive™ II. In addition to the benefit of ACE II (see the next page for details), this new technology delivers the following advantages:

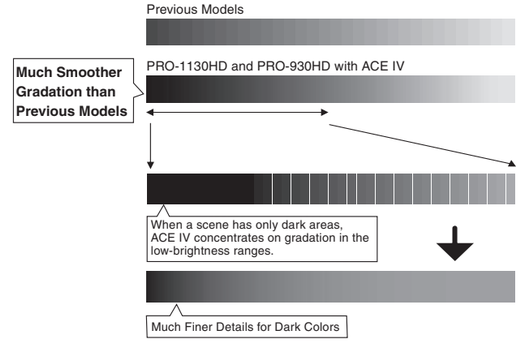
1. Smoother Gradation

The new technology allows even smoother gradation — with more steps than the previous version — letting you reproduce even more colors.

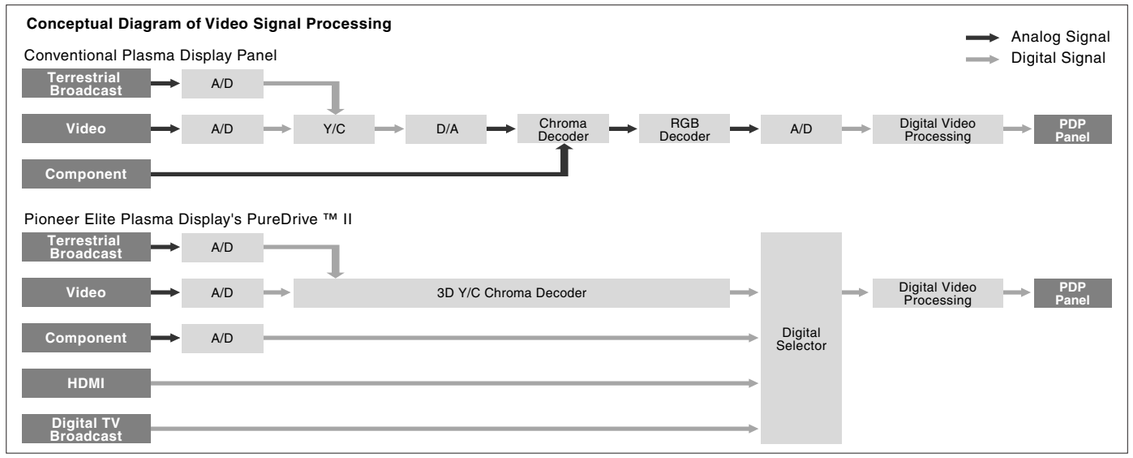
2. Finer Details in Low Brightness Ranges*

ACE IV automatically analyzes the overall picture to optimize gradation and brightness levels. When a scene has only dark areas, such as night views and low-lit rooms, ACE IV detects this and concentrates on gradation in the low-brightness ranges, to reproduce details much finer than usual for dark colors.

ACE IV



PureDrive™ II (PRO-1130HD/PRO-930HD)



Active DRE (PRO-1130HD/PRO-930HD)

PureDrive™ II provides yet another benefit — the Active DRE (Dynamic Range Expander). This new technology offers wider picture control options than the previous version (which only offers High, Mid, Low, and Off).

Active Dynamic Range Expander

Parameter	Function	Control Options
Dynamic Contrast	Emphasizes the contrast between dark and bright images, so that (for example) sunlight falling through trees looks brighter and edges of human faces become more distinct.	High/Mid/Low/Off
Black Level	Emphasizes dark areas for greater distinction from bright areas.	On/Off
Automatic Contrast Limiter	Automatically compensates to create the optimum contrast characteristics.	On/Off
Gamma Control	Controls gradation characteristics.	1/2/3

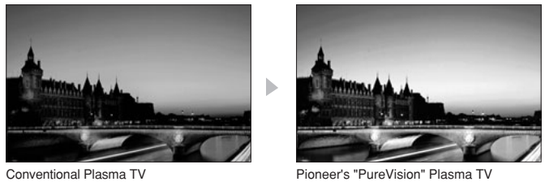
PureDrive™ — Fully-Digitalized Video Signal Processing (PRO-1010HD/PRO-810HD)

PureDrive™ features original custom chipsets — four in the media receiver and two in the panels themselves — that always keep video signals digital. Each block in the image processing circuit is directly connected, using the shortest signal path to minimize image-degrading noise and signal deterioration. This helps retain superior signal quality from input to output.

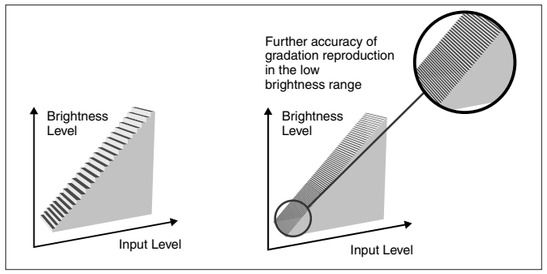
ACE II (PRO-1010HD/PRO-810HD)

ACE II (Advanced Continuous Emission Technology II) offers superior gradation accuracy in low brightness ranges, reproducing fine details of dark images. In addition, the ACE II also eliminates false contours (sharp edges where there should be smooth gradation) — a Pioneer-exclusive benefit, which is delivered by the new ACE IV as well.

More Gray Shades in the Low Brightness Range (ACE II)



Conventional Plasma TV — Pioneer's "PureVision" Plasma TV



Noiseless Pictures without False Contours (ACE IV and ACE II)

Conventional Plasma Display Panel
False contours lower the picture quality

Pioneer's Elite Plasma Display Panel
Smooth, natural image without false contours

DRE (PRO-1010HD/PRO-810HD)

With run-of-the-mill plasma display panels, highly contrasted colors — such as a white shirt and black hair — tend to affect each other and accurate reproduction of both colors is difficult. When the hair is a true black, the shirt will look dull off-white. Or the shirt will appear as pure white when the hair is not a true black. With enormous processing power, the DRE (Dynamic Range Expander) makes fuller use of video signal spectrum capacity to expand dynamic range. The results are blacker blacks, whiter whites, and outstanding overall contrast. With the Elite PDPs, three different levels — high, medium, and low settings — are available for getting the best results out of various pictures.

DRE

OFF — ON

Display Panel Technologies

PDP Technology

The PDP screen is actually two panels of glass with nearly a million pixels sandwiched between them. The pixels consist of tiny cells that hold gas, with electrodes on the top and bottom. Electrical discharges cause the gas to emit ultraviolet light that excites red, green and blue phosphors, which in turn radiate visible light to produce bold, color images.

Black Stripe Coating for Vivid Images

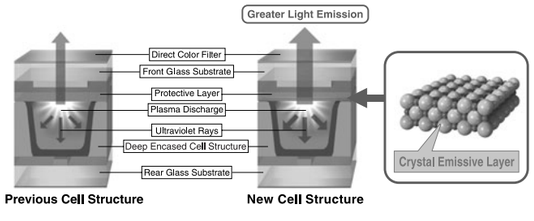
The additional black stripes help reduce the amount of external light reflected off the screen surface, which greatly improves contrast. Viewers can enjoy sharp, vivid pictures, even under bright ambient lighting, with no washed-out colors or poor contrast.

Deep Encased Cell Structure with Crystal Emissive Layer (PRO-1130HD/PRO-930HD)

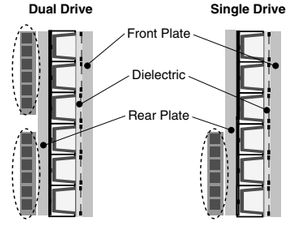
The PRO-1130HD and PRO-930HD create brighter pictures and "blacker black" while consuming less power. This is thanks to new display panel technologies, which work in synergy with the new video signal processing technology of PureDrive™ II. The two Elite PDPs feature Deep Encased Cell Structure with a new Crystal Emissive Layer. The Crystal Emissive Layer is a layer of crystal with a well-aligned structure, which is applied to the surface of the front glass substrate. This ensures higher efficiency for light emission — an improvement of 22 percent over models with irregularly-aligned crystal structure — for brighter pictures with lower voltage.

These new panel technologies also feature quick and efficient discharge of light, stopping unnecessary light emission. This allows higher contrast and "blacker black", with a black brightness level only one-third that of previous models. This feature also has lower power consumption.

Deep Encased Cell Structure with Crystal Emissive Layer



Energy-Saving Technologies for the "Single Drive" Display



These energy-saving display panel technologies allow the use of a "single panel drive" while conventional panels use "dual drive". In addition to lower power consumption, the new Elite PDPs also conserve material — another environmentally-friendly solution from Pioneer.

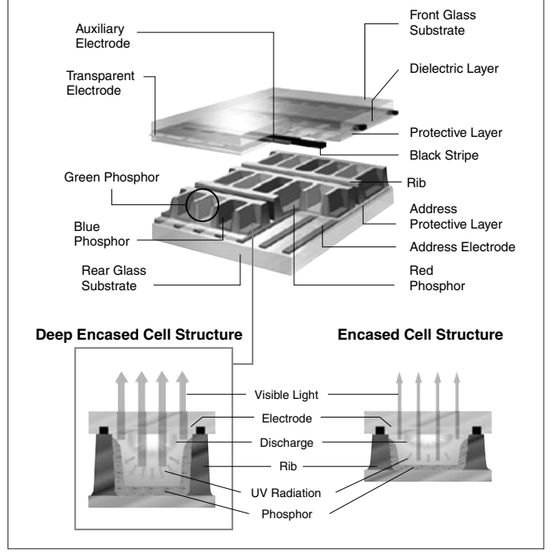
True Matrix Imaging with Deep Encased Cell Structure (PRO-1010HD/PRO-810HD)

The Deep Encased Cell Structure features a wide phosphor area and a reduced leakage of light to adjacent cells, which delivers a bright, clear image. The structure also increases light emission efficiency for superior brightness of the pictures.

Additionally, the green phosphor element features superior persistence characteristics, which help deliver the industry's highest level of brightness: 1,100 cd/m² for the PRO-810HD, and 1,000 cd/m² for the PRO-1010HD. The units also boast superior white reproduction for more subtle nuances, and improved clarity for more natural, precise rendering of characters and images.

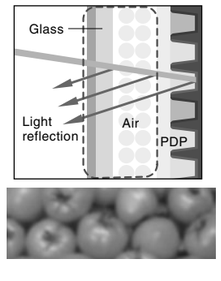
The PRO-1410HD, a 61-inch PDP from Pioneer, also features a special cell structure — New Encased Cell Structure.

Pioneer Deep Encased Cell Structure
(PRO-1010HD/PRO-810HD)

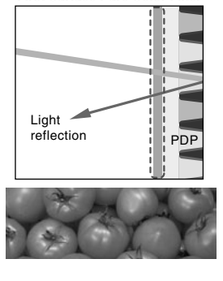


First Surface Pure Color Filter (PRO-1130HD/PRO-930HD)

Conventional Glass Filter



First Surface Pure Color Filter



The PRO-1130HD and PRO-930HD retain superior contrast even in bright environments thanks to the First Surface Pure Color Filter, which features a layer of film affixed to the glass panel covering the plasma cells. Unlike conventional glass filters, First Surface Pure Color Filters eliminate the space between the film and the glass which allows ambient light reflection to be reduced. This improves contrast ratio in bright environments by 20%. Additionally, the filter balances the colors of the passing light, producing color values that are closer to the true NTSC color standard than conventional TVs or monitors can display.

Capsulated Color Filter (PRO-1410HD) Pure Color Filter II (PRO-1010HD/ PRO-810HD)

The Elite PDPs come with special filters that greatly decrease external light reflectivity for higher contrast, providing an extremely clear image even in bright environments. The filters also optimize the primary colors (red, green, and blue) by filtering out undesired colors, to improve the quality of image reproduction.

Features for Higher-Level Entertainment

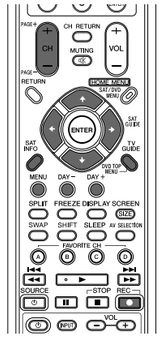
TV Guide On Screen™ System (PRO-1130HD/PRO-930HD)

The PRO-1130HD and PRO-930HD are compatible with the TV Guide On Screen™ — a free, interactive on-screen TV program guide that you can easily browse with the remote control. It shows you a list of programs broadcast now, or in the coming week, by channel or category. The system provides a wide range of convenient features, including:

(1) User-Friendly GUI

The system guides you through programs with user-friendly GUI. Easy-to-understand icons and a broad array of displayed information make it simple to use.

Remote Control Keys for TV Guide On Screen™



Screen Components for TV Guide On Screen™

1. TV GUIDE logo
2. Clock — Shows the current time.
3. Time slot — Time is divided into 30-minute slots and arranged horizontally.
4. Time tub — Indicates the currently selected time slot.
5. Current service label — Indicates the currently selected service.
6. Service bar — Gives access to various services of the program guide.
7. Title — Shows the TV program title.
8. Info bar — Various icons for getting information or the status of an item.
9. Video window — Lets you continue watching the current program while using the program guide.
10. Panel ads and panel menu entry — Space for show/product advertising and the panel menu.
11. Channel logo
12. Info box — Shows brief information about a selected program.
13. Channel ads — Space for program advertising.

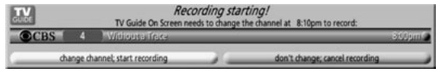
(2) Easy Recording Operations

Just choose a program from the list and press the REC button on the remote control — the program will automatically be recorded to a selected recorder. You can set recording frequency to, for example, "Once" or "Weekly" (every week at the same time). You can also set whether to start/end recording on time or up to 120 minutes before/after the scheduled time. TV Guide On Screen™ alerts you when the time for a scheduled recording overlaps with another you set previously. An alert is also displayed when recording is about to start, giving you the option of cancelling the recording, even when the TV Guide On Screen™ system is turned off.

On-Screen Alert (when scheduling overlaps for two programs)

Use the cursor to select "record anyway" or "don't record this show".

On-Screen Alert (when a scheduled recording is about to start)



To cancel the recording and stay on the current channel, select "don't change; cancel recording".

(3) Program Reminders

If you set a program reminder, the PDP alerts you when the program is about to be aired on another channel. Reminders can be set for individual episodes or every time a program airs. The "auto tune" function automatically changes the current channel to show you the program. This function also provides an on-screen alert when the chosen program overlaps another that you previously selected for auto tuning or scheduled recording.

Program Reminder Alert

(4) Program Search Functions

Program search is possible by category, such as Movies, Sports, or Children, or by keyword(s). Alphabetical search is also available, showing you all the programs whose titles start with a certain letter. When search results are displayed, scheduling a recording is as easy as pressing the REC button on the remote control. These functions are also available for HDTV programs.

Category Search Screen

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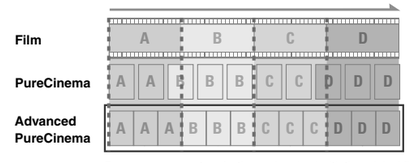
**TV Guide On Screen™ interactive program guide provides listings for cable-ready, cable box, and digital cable services as well as over-the-air broadcast. It does not provide listings for satellite services.

Home Gallery — Memory Card Slot for Still Picture Display (PRO-1130HD/PRO-930HD)

The media receiver for the PRO-1130HD and PRO-930HD includes a memory card slot, which supports Smart Media, Compact Flash, SD, MMC (MultiMedia Card), Memory Stick, Micro Drive, xD-Picture Card™, and Flash Memory. This allows you to view JPEG digital still photos (including those in DCF and 4:2:2 formats) stored in the memory card enlarged on the PDP screen, with high resolution of up to 2,400 x 1,800 pixels. You can also view photos as a slide show or in thumbnails. The units support up to 2,000 files per folder, with a max. 500 folders per memory card (256 folders for the slide show function). Supported file systems include FAT12, FAT16, FAT32, and VFAT.

Advanced PureCinema with 3-3 Pull-down (PRO-1130HD/PRO-930HD/PRO-1010HD/ PRO-810HD)

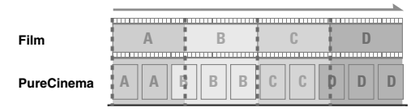
The Pioneer Elite PDPs feature Advanced PureCinema with 3-3 Pull-down. From 24fps film-based sources, this function creates three full copies of each frame for 72 progressive frames per second, which perfectly synchronizes the frame arrangement with original films, and eliminates the need for interpolations. As a result, film-based materials provide the natural representation unique to real films.



Frame arrangement perfectly synchronized with the original film

PureCinema Automatic Format Converter (PRO-1410HD)

Film (24 frames per second) doesn't always translate correctly to television (30 frames), so watching a movie at home can be frustrating for videophiles. Not true with the PRO-1410HD. The Pioneer-exclusive Automatic Format Converter analyzes a movie's signal and boosts picture quality eight times. PureCinema detects an NTSC 3/2 film-based source and instantly recreates each individual still frame to create a smooth, more natural presentation.



ISF Custom Calibration Configuration (C³)

ISF C³ is an Elite-exclusive feature that enables the PDP to be optimized for the specific room where it is placed. As an optional service available through Elite dealers, a specially-trained ISF professional can inspect the conditions of the viewing room and calibrate contrast, tint, sharpness, color levels, and other parameters to best fit the environment. Room layout and size, ambient light (for both day and night viewing), and other conditions that affect picture quality are measured and factored in. The result is unparalleled picture accuracy.

Once the ISF C³ calibrations are made, ISF becomes an additional preset mode for AV Selection, allowing you to revert back to the TV's original settings or make fine tuning adjustments. You can toggle the ISF mode back and forth whenever you want.

The PRO-1010HD, and PRO-810HD come with the second generation of this technology, which permits calibration via RS-232C interface.

The PRO-1130HD and PRO-930HD also allow more detailed 8-step Gamma control. These two PDPs make ISF C³ information more legible, with 4-line 24-character display in both capital and small letters.

ATSC Digital Broadcast Compatibility (PRO-1130HD/PRO-930HD)

The PRO-1130HD and PRO-930HD come with a built-in ATSC (Advanced Television Systems Committee) compatible tuner. In addition to regular TV (NTSC), the units show three types of ATSC digital broadcasts — Standard-Definition, Enhanced-Definition, and High-Definition — with a Pioneer technology that up-converts video signals for the highest-possible picture quality.

The units permit connection to D-VHS recorders via i.LINK (IEEE 1394) terminal for recording DTV programs while retaining the original picture quality.

Resolution at a Glance

BEST	**HD:** HIGH-DEFINITION	720p (progressive) or 1080i (interlaced) minimum *Digital Transmission*	About 5x better than conventional TV
GOOD	**ED:** Enhanced-Definition TV	480p (progressive) or 480i (interlaced) *Digital Transmission*	About 2x better than conventional TV
O.K.	**SD:** Standard TV Conventional TV	480i (interlaced) *Analog Transmission*	Standard for past 60 years

DCR (Digital Cable Ready) Tuner (PRO-1130HD/PRO-930HD)

The media receiver for PRO-1130HD and PRO-930HD features a built-in unidirectional digital cable tuner, which provides easy "plug and play" of basic cable channels without an external cable box.

*Requires use of a CableCARD™.

HDMI™ Input

HDMI (High Definition Multimedia Interface) is an uncompressed, all-digital interface for both audio and video signals — the first industry-supported interface of its kind. With a single-cable connection, it allows transmission of a huge amount of high-quality data — such as uncompressed HDTV signals — to be input at speeds up to 5GBps.

Another benefit of HDMI is its simplicity. It provides a straight digital path from point A to point B without affecting the signal in any way. Additionally, it doesn't perform unnecessary compression and re-compression steps, so the signal remains in a pure, digital state. This lossless process maintains a higher level of image quality than other connection systems.

HDMI provides plug and play capability and accommodates all of the current ATSC digital television formats. It also supports up to eight channels of audio. And despite its huge bandwidth power and ability to accommodate both audio and video, the plug itself is much smaller than a DVI plug.

The PRO-1130HD, PRO-930HD, PRO-1010HD, and PRO-810HD, moreover, come with two HDMI inputs. You can keep the PDP connected with both a DVD player and a STB, for example.

i.LINK (IEEE1394) Terminals for D-VHS Recorder Connection (PRO-1130HD/PRO-930HD)

The media receiver of the PRO-1130HD and PRO-930HD comes with two i.LINK (IEEE1394) terminals that allow connection with a D-VHS recorder*. i.LINK is a digital serial interface that can handle digital video and audio signals. This means you can record digital TV programs to the D-VHS recorder** retaining the original picture quality.

*D-VHS recorder only. Other devices cannot be connected.
**Only digital TV programs can be recorded.

i.LINK and i.LINK are the trademarks of Sony Corporation.

SR+ Terminal for A/V Receiver Control (PRO-1130HD/PRO-930HD/ PRO-1010HD/PRO-810HD)

Connect the Elite PDP to a Pioneer A/V receiver* via SR+ terminal, and the display automatically selects the receiver's signal source. This permits on-screen control of the receiver's sound level, surround mode, and other functions.

*Pioneer A/V receivers with a SR+ terminal only

Advanced Technologies for a Wide Array of Benefits

New "PURE" Mode for AV Selection (PRO-1130HD/PRO-930HD)

The PRO-1130HD and PRO-930HD feature the new "PURE" mode for AV Selection. This mode delivers pictures without any enhancement (Gamma, Color, Tint, Sharpness, etc), minimizing the artifacts of extra video processing.

10-bit 3D Digital Y/C Separation Circuit (PRO-1130HD/PRO-930HD/PRO-1010HD/ PRO-810HD)

NTSC (analog) video images consist of two signals, luminance (Y) signals for brightness information and chrominance (C) signals which contain color information. When analog video is played back, the Y and C signals must be kept separate or they will interfere with each other, which results in annoying video noise such as "cross color", or rainbow patterns in picture areas with fine detail, and "dot crawl" — distracting, visible dots moving along the edges of images. To combat these, Pioneer has developed the 10-bit 3D Digital Y/C Separation Circuit exclusively for use in plasma display panels. Powered by PureDrive, the circuit effectively keeps Y and C signals separate, reducing the annoying noise and improving the rendering of contoured objects and integrity of images.

Natural Re-Size (PRO-1130HD/PRO-930HD/ PRO-1010HD/PRO-810HD)

Many plasma display panels allow the user to select a screen mode best suited to the material being viewed — for example, when watching a regular 4:3 TV show on a 16:9 widescreen monitor, the image can be stretched to fill the entire screen. But with conventional plasma displays, that stretching process causes problems such as blocky, fuzzy, or over-stretched images. The Pioneer Elite plasma display panels have an exclusive Natural Re-Size function that re-shapes the picture and allows it to maintain a natural appearance without adding the artifacts that deteriorate picture quality.

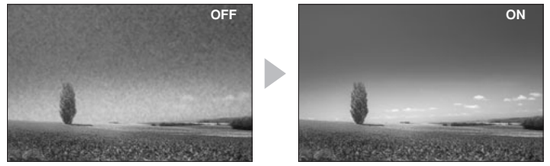
Digital Chroma Decoder (PRO-1130HD/PRO-930HD/PRO-1010HD)

Color noise is another form of analog video interference — noticeable speckled imperfections seen within solid colors on your screen. The new Elite plasma display panels feature a 10-bit Digital Chroma Decoder to reduce noise and provide better frequency response, for pure, clean colors.

Digital Noise Reduction Circuit and MPEG Noise Reduction Circuit

Special high-luminance cyclic Digital Noise Reduction circuitry reduces random digital noise, including color noise and inconsistency (especially seen in dark image areas) that arise in the signal reproduction process of terrestrial broadcasts, DVDs, and others. The PRO-1130HD, PRO-930HD, PRO-1010HD, and PRO-810HD also come equipped with MPEG Digital Noise Reduction, which cuts "mosquito noise" caused by MPEG video compression used in DVD.

Digital Noise Reduction



MPEG Noise Reduction

Dynamic HD Converter for Sharper Images (PRO-1130HD/PRO-930HD/PRO-1010HD/ PRO-810HD)

Interlaced signals of terrestrial broadcasts and DVD and PC video sources are up-converted into progressive signals for optimal viewing on the PRO-1130HD/PRO-1010HD (1,280 x 768-dot high-resolution) and the PRO-930HD/ PRO-810HD (1,024 x 768-dot high-resolution). With the number of on-screen detection points significantly increased to 84, HD converter offers sharper, more natural images free of jagged edges and distortion seen on displays with conventional converters.

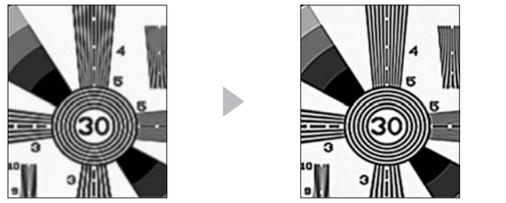
Dynamic HD Converter

Conventional PDP — Pioneer Elite PDP with Dynamic HD Converter

Natural Enhancer (PRO-1130HD/ PRO-930HD/PRO-1010HD/PRO-810HD)

Conventional contour image correction technologies effectively sharpen contours, but also affect picture qualities, causing annoying noises such as jagged edges. The Natural Enhancer takes contour image correction to the next level. On any source, analog or digital, the Natural Enhancer cleans up the jagged edges and wavy "moiré" patterns, and enhances the contrast at the edges of images to reproduce clean, detailed pictures.

Natural Enhancer



Conventional Plasma Display Panel — Pioneer Elite Plasma Display Panel

Digital CTI (PRO-1130HD/PRO-930HD/ PRO-1010HD/PRO-810HD)

Conventional plasma display panels have difficulty accurately rendering a colored image laid over another — a man in a dark blue jacket standing in front of a red wall, for example. The usual result is a dithered pattern and a muddy combination of colors where the two images intersect. With the Pioneer Elite PDPs, however, Digital Color Transient Improvement (CTI) smooths out edges of colored images so that they are more distinct, offering true color fidelity and color resolution.

Color Management

The Color Management function allows individual adjustment of six basic colors. Red, yellow, green, cyan, blue, and magenta can be fine-tuned according to your preference (see table below for details), without losing the natural color balance of the whole picture. Turn the golf course a more vivid shade of green, or make the sea a deeper blue, for example.

Color Management: Parameters and Adjustable Ranges

Parameter	Adjustable Ranges		
R (Red)	Closer to Magenta	⟷	Closer to Yellow
Y (Yellow)	Closer to Red	⟷	Closer to Green
G (Green)	Closer to Yellow	⟷	Closer to Cyan
C (Cyan)	Closer to Green	⟷	Closer to Blue
B (Blue)	Closer to Cyan	⟷	Closer to Magenta
M (Magenta)	Closer to Blue	⟷	Closer to Red

Selectable Screen Sizes (PRO-1130HD/ PRO-930HD/PRO-1010HD/PRO-810HD)

Whether you're watching conventional television, wide-screen DVDs, or widescreen movies, the Pioneer Elite PDPs have five selectable screen modes that can handle any format. You can watch conventional broadcasts in traditional 4:3 mode, or fill the entire screen with ZOOM or WIDE mode. When viewing DVDs and Digital TV, use the FULL Mode to perfectly match these widescreen (16:9) images to your screen. When watching widescreen movies, you can use CINEMA mode.

The Elite PDPs also come with a PC mode, which provides three selectable screen sizes for XGA signals. The PRO-1130HD and PRO-930HD come with a PC mode for non-XGA signals, too.

Multi-Window Display

Multi-Window Display of the Pioneer Elite PDPs takes dual-material viewing to new levels, letting you display a combination of NTSC, HDTV, and PC screens either as twin images (50/50 split screen) or as picture-in-picture, which allows you to position the subscreen upper left/right or lower left/right. The PRO-1010HD and PRO-810HD also permit "picture-out-picture" display, which shows the small subscreen on the right side of the main screen. Watch pro football on TV, for example, right alongside fantasy football on your PC.

The PRO-1130HD and PRO-930HD can even display a freeze frame of a broadcast. Just press the FREEZE button at the scene you want, and the screen is split to display a still image of the scene on the right, while continuing the broadcast on the left.

Multi-Window Display

2-screen (with PC) Picture-in-picture

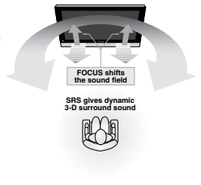
Closed Caption Compatibility (PRO-1130HD/PRO-930HD)

The Closed Caption works with television programs and home videos displaying the CC logo for closed captions. Closed captions allow the hearing-impaired to enjoy TV and videos on the PDPs through the use of subtitles displayed on screen.

The PRO-1130HD and PRO-930HD also offer the "On If Mute" function. Choose "On If Mute" on the closed captions setup screen, and subtitles will automatically appear on the screen whenever the sound is muted. You can conveniently follow a program's story, for example, while talking on the phone.

The units deliver closed captioning from digital TV programs, too.

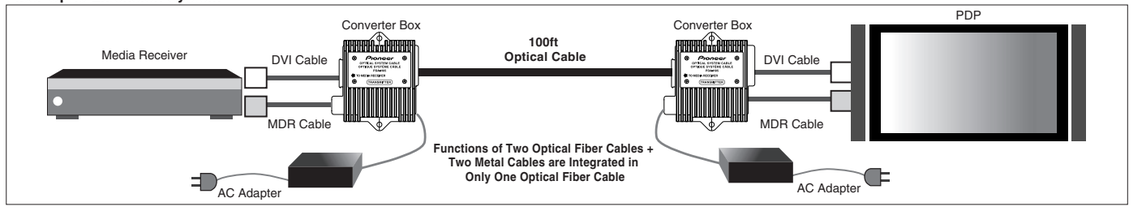
Three Surround Modes — SRS, TruBass, and FOCUS (PRO-1130HD/PRO-930HD)



To expand your sound options, the PRO-1130HD and PRO-930HD feature three surround modes: SRS, for dynamic 3-D surround throughout an expansive listening area; TruBass for surprisingly big, natural bass sound; and FOCUS, which enhances the surround effect and shifts the sound field upward. The units also permit simultaneous activation of TruBass and SRS.

* SRS, TruBass and FOCUS are trademarks of SRS Labs. INC.

Fiber-Optic Extension System



Subwoofer Output (PRO-1130HD/ PRO-930HD)

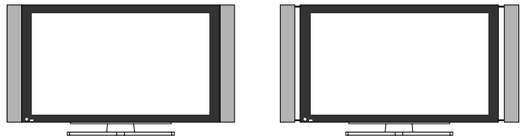
The media receiver for the PRO-1130HD and PRO-930HD comes with a subwoofer output terminal. This lets you enjoy deeper bass with easy connection.

Speaker Systems (Optional)

The optional speaker systems — PDP-S36 for 50" panels and PDP-S35 for 43" panels — match the slim designs of the display panels, while still delivering superior sound. The speakers can be installed in two different ways:

Flush: The speakers are fixed flat against the sides of the display panel.

Air: The speakers are mounted slightly separate from the sides of the display panel, delivering a wider sound field.



Flush Air

Fiber-Optic Extension System (Optional)

Do you want to install your Elite Plasma Display Panel at a distance from its receiver? The PDA-H05, Pioneer's fiber-optic extension system, makes it easier than ever — with high durability, improved cable strength, and stable signal transfer.

In conventional extension systems, converter boxes are connected by two fiber optic cables and two metal cables. Our extension system cuts through that troublesome wirework by integrating the functions of all four cables in just one 100ft fiber-optic cable (see illustration below). The cable combines a light, easy-to-handle weight with superior resistance to damage from bending. This is enabled by use of plastic optic fiber that boasts far better flexibility than conventional glass fiber.

In addition, plastic optic fiber helps create fantastic picture quality, because it is completely resistant to electric signal interference from other devices.

The package includes:

- 100ft Optical Cable
- MDR Cable (29-1/2 Inches) x 2
- DVI Cable (29-1/2 Inches) x 2
- AC Adapter x 2
- Converter Box x 2

■ RS-232C Command List (PRO-1130HD/PRO-930HD)

Command		Function	Note
AFT	S00	Enable AFT	
AFT	S01	Disable AFT	
AMT	S00	AUDIO Mute OFF	
AMT	S01	AUDIO Mute ON	
APW	S00	Turn OFF WB Correction (Based on the APL of Input Video Signals)	WB Function in Conjunction with APL
APW	S01	Turn ON WB Correction (Based on the APL of Input Video Signals)	WB Function in Conjunction with APL
AST		Auto Setup	
AVS	S01	AV Selection: STANDARD	
AVS	S02	AV Selection: DYNAMIC	
AVS	S03	AV Selection: MOVIE	
AVS	S04	AV Selection: GAME	
AVS	S06	AV Selection: PURE	
AVS	S07	AV Selection: USER	
AVS	S08	AV Selection: ISF-DAY	
AVS	S09	AV Selection: ISF-NIGHT	
BAL	***	Balance *** (Audio)	Audio Control
BAS	***	Bass *** (Audio)	Audio Control
BHI	***	User WB-B High Light ***	User WB Adjustment
BLW	***	User WB-B Low Light ***	User WB Adjustment
BRT	***	User WB Main Brightness ***	User WB Adjustment
BSL		Adjust Side Mask B	
CGB		Color Management: Blue	
CGC		Color Management: Cyan	
CGG		Color Management: Green	
CGM		Color Management: Magenta	
CGR		Color Management: Red	
CGY		Color Management: Yellow	
CHN	FWD/REV	Switch Preset Channel	Available Only When Combined with CHN
CNT		Adjust User WB Main Contrast	User WB Adjustment
COL		Color Adjustment	
DW0		Reduce Adjustment Value by 10	
DW1		Reduce Adjustment Value by 1	
DW2		Reduce Adjustment Value by 2	
DW3		Reduce Adjustment Value by 3	
DW4		Reduce Adjustment Value by 4	
DW5		Reduce Adjustment Value by 5	
DW6		Reduce Adjustment Value by 6	
DW7		Reduce Adjustment Value by 7	
DW8		Reduce Adjustment Value by 8	
DW9		Reduce Adjustment Value by 9	
DWF		Select the Minimum Adjustment Value	
ESV	S00	Energy Save Mode: Standard	Power Control
ESV	S01	Energy Save Mode: Save1	Power Control
ESV	S02	Energy Save Mode: Save2	Power Control
FWD		Preset ch (1 step forward)	Available Only When Combined with CHN
GDI		Get Command for Status	
GHI	***	User WB-G High Light ***	User WB Adjustment
INP	S01	Input 1 (Main Screen)	
INP	S02	Input 2 (Main Screen)	
INP	S03	Input 3 (Main Screen)	
INP	S04	Input 4 (Main Screen)	
INP	S05	Input 5 (Main Screen)	
INA	***	Input Antenna A *** ch (Analog/Digital Terrestrial Broadcast)	
INB	***	Input Antenna B *** ch (Analog Terrestrial Broadcast)	
ING		Input i.LINK	
MST	S00	Single-Window Display	
MST	S01	Multi-Window: 2-Screen (Main Screen Size: Normal)	
MST	S02	Picture-in-Picture (Lower Right)	
MST	S03	Picture-in-Picture (Upper Right)	
MST	S04	Picture-in-Picture (Upper Left)	
MST	S05	Picture-in-Picture (Lower Left)	
MST	S06	Multi-Window: 2-Screen (Main Screen Size: Medium)	
MST	S07	Multi-Window: 2-Screen (Main Screen Size: Large)	
MST	S08	SWAP (Switch Images between Main- and Sub-screens)	
MSP		Switch Audio Channel (Language) for Terrestrial Tuner (Cyclic)	
OSD	S00	OSD Display OFF	
OSD	S01	OSD Display ON	
PGM	S **	Switch Gamma to **	Gamma Control
POF		Power OFF	
PON		Power ON	
PUC	S01	STANDARD	PureCinema Setup
PUC	S02	ADVANCED	PureCinema Setup
REV		Preset ch (1 step backward)	Available Only When Combined with CHN
RHI	***	User WB-R High Light ***	User WB Adjustment
RLW	***	User WB-R Low Light ***	User WB Adjustment
SIP	S00	Assist Switching Input (Back to Default)	
SIP	S01	Assist Switching Input (Composite)	
SIP	S02	Assist Switching Input (S-Video)	
SIP	S03	Assist Switching Input (Component/D-Terminal)	
SIP	S04	Assist Switching Input (PC)	
SIP	S05	Assist Switching Input (HDMI)	
SIP	S06	Assist Switching Input (Teletext/Closed Caption/Text)	
SZM	S00	Screen Size: Dot by Dot/PARTIAL	
SZM	S01	Screen Size: 4:3	
SZM	S02	Screen Size: FULL/FULL1080i	
SZM	S03	Screen Size: ZOOM	
SZM	S04	Screen Size: CINEMA	
SZM	S05	Screen Size: WIDE	
TNT		Adjust Tint (ISF)	
UP0		Increase Adjustment Value by 10	
UP1		Increase Adjustment Value by 1	
UP2		Increase Adjustment Value by 2	
UP3		Increase Adjustment Value by 3	
UP4		Increase Adjustment Value by 4	
UP5		Increase Adjustment Value by 5	
UP6		Increase Adjustment Value by 6	
UP7		Increase Adjustment Value by 7	
UP8		Increase Adjustment Value by 8	
UP9		Increase Adjustment Value by 9	
UPF		Select the Maximum Adjustment Value	
VOL	***	Vol ***	Audio Control
VMT	S00	VIDEO Mute OFF	
VMT	S01	VIDEO Mute ON	

■ RS-232C Command List (PRO-1010HD/PRO-810HD)

Command		Function	Note
PON		Power ON	
POF		Power Off	
INP	S01	Input 1	
INP	S02	Input 2	
INP	S03	Input 3	
INP	S04	Input 4	
INP	S05	Input 5	
VOL	***	Volume***	
AMT	S00	Mute Off	
AMT	S01	Mute On	
SMZ	S00	Screen Size: DOT BY DOT	
SMZ	S01	Screen Size: 4:3	
SMZ	S02	Screen Size: FULL	
SMZ	S03	Screen Size: ZOOM	
SMZ	S04	Screen Size: CINEMA	
SMZ	S05	Screen Size: WIDE	
OSD	S00	OSD Display OFF	
OSD	S01	OSD Display ON	
UP *		Adjustment Digit * Plus	Adjustment support command
DW *		Adjustment Digit * Minus	Adjustment support command
		Auto Set Up	
		AV Selection Direct Switching	

■ RS-232C Command List (PRO-1410HD)

No.	Command1	Command2	Length	Function
1	9FH	4EH	00H	Power ON
2	9FH	4FH	00H	Power OFF
3	DFH	47H	01H	Input Switch Change
4	DFH	7FH	03H	VOLUME Gain Data
5	9FH	3EH	00H	AUDIO Mute ON
6	9FH	3FH	00H	AUDIO Mute OFF
7	DFH	7FH	03H	CONTRAST Gain Data
8	DFH	7FH	03H	BRIGHT Gain Data
9	DFH	7FH	03H	SHARPNESS Gain Data
10	DFH	7FH	03H	Color Gain Data
11	DFH	7FH	03H	TINT Gain Data
12	DFH	0AH	01H	PICTURE MODE Select
13	DFH	00H	01H	COLOR TEMP SELECT
14	DFH	7FH	04H	RED Gain Data
15	DFH	7FH	04H	GREEN Gain Data
16	DFH	7FH	04H	BLUE Gain Data
17	DFH	C0H	01H	NR MODE Set
18	DFH	7FH	03H	BASS Gain Data
19	DFH	7FH	03H	TREBLE Gain Data
20	DFH	7FH	03H	BALANCE Gain Data
21	DFH	51H	01H	SCREEN MODE Select
22	DFH	7FH	03H	V.POSITION Gain Data
23	DFH	7FH	03H	H.POSITION Gain Data
24	DFH	7FH	03H	V-HEIGHT Gain Data
25	DFH	7FH	03H	H-WIDTH Gain Data
26	DFH	7FH	03H	AUTO PICTURE Select
27	DFH	7FH	03H	PHASE Gain Data
28	DFH	7FH	03H	CLOCK Gain Data
29	DFH	1AH	02H	OSM ADJ. Gain Data
30	DFH	1AH	02H	POWER MGT Select
31	DFH	C6H	01H	GRAY LEVEL Set
32	DFH	C1H	01H	CINEMA MODE Set
33	DFH	6BH	03H	LONG LIFE Set
34	DFH	C8H	04H	SCREEN WIPER Set
35	1FH	54H	00H	RESET
36	DFH	70H	02H	Audio Select Set
37	DFH	8CH	01H	BNC INPUT
38	DFH	8BH	01H	RGB Select
39	DFH	8AH	01H	HD Select
40	DFH	5BH	01H	LANGUAGE Select
41	DFH	5CH	01H	COLOR SYSTEM Select
42	DFH	07H	01H	Multi (Split) Screen Select
43	1FH	26H	00H	FREQUENCY Request
44	1FH	41H	00H	Input MODE Request
45	1FH	45H	00H	VIDEO ADJ Request
46	1FH	6FH	00H	Audio Select Request
47	1FH	3FH	00H	Failure Mode Request
48	1FH	17H	00H	MODEL NAME Request
49	DFH	8DH	01H	D-SUB INPUT
50	DFH	0CH	01H	LOW TONE
51	DFH	0DH	08H	COLOR TUNE
52	DFH	13H	04H	GAMMA Gain Data
53	1FH	88H	00H	Running Sense
54	DFH	5FH	01H	OSM ORBITER
55	5FH	61H	01H	Input Skip
56	1FH	15H	00H	SERIAL No. Request
57	DFH	89H	01H	S1/S2 Select
58	DFH	65H	01H	SOFT FOCUS Select
59	DFH	7AH	01H	SUB.P DETECT
60	DFH	7BH	01H	ZOOM NAV
61	DFH	7CH	01H	PICTURE FREEZE
62	DFH	7DH	01H	PAUSE COMMAND
63	DFH	8FH	01H	BLACK LEVEL
64	DFH	37H	01H	OSM CONTRAST
65	DFH	38H	02H	PICTURE MEMORY
66	DFH	2DH	0CH	PICTURE MEMORY NOTE
67	DFH	35H	01H	SET UP LEVEL
68	DFH	36H	01H	BACK GROUND
69	1FH	3AH	00H	AUDIO HDMI INPUT Request

■ Specifications (Display Panels)

	PRO-1410HD	PRO-1130HD	PRO-930HD	PRO-1010HD	PRO-810HD
Light Emission Panel	61 inch plasma display panel	50 inch plasma display panel	43 inch plasma display panel	50 inch plasma display panel	43 inch plasma display panel
Number of Pixels	1365 x 768	1280 x 768	1024 x 768	1280 x 768	1024 x 768
Power Supply	AC 120V, 60Hz	AC 120V, 60Hz	AC 120V, 60Hz	AC 120V, 60Hz	AC 120V, 60Hz
Standby Power Consumption	0.9W	0.2W	0.2W	0.6W	0.6W
Power Consumption	540W	355W	296W	—	—
External Dimensions (W x H x D)	59-1/8" x 35-7/8" x 4-15/16" (1502 x 912 x 126mm)	48-3/16" x 28-1/4" x 3-5/8" (1224 x 717 x 92mm)	42-3/8" x 24-29/32" x 3-5/8" (1076 x 632 x 92mm)	49-3/16" x 29-3/8" x 4-1/8" (1250 x 746 x 105mm)	43-3/8" x 26-1/16" x 4-1/8" (1102 x 662 x 105mm)
Weight	149 lbs. 10 oz. (68.0kg)	70.1 lbs (31.8kg)	56.9 lbs. (25.8kg)	107 lbs. 13 oz (49kg)	85lbs. 13 oz (39kg)

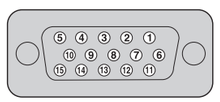
■ Media Receiver for PRO-1130HD and PRO-930HD

Reception System (Digital)			ATSC Digital TV System
	Circuit Type		8VSB/64QAM/256QAM/QPSK demodulation
	Tuner	VHF/UHF	VHF 2-13ch, UHF 14-69ch
		CATV	2-135ch
	Audio Format		Dolby Digital
Reception System (Analog)			American TV standard NTSC system
	Circuit Type		Video signal detection PLL full synchronous detection, PLL digital synthesizer system
	Tuner	VHF/UHF	VHF 2-13ch, UHF 14-69ch
		CATV	ANTENNA/CABLE A IN: 1-135ch ANTENNA B IN: 1-125ch
	Audio Multiplex		BTSC system
Terminals	Rear	ANTENNA/CABLE A Input	75 ohms UNBAL, F type for DTV/VHF/UHF/CATV in
		ANTENNA B Input	75 ohms UNBAL, F type for VHF/UHF/CATV in loop out
		i.LINK (TS)	S400 (2)
		Input 1	Component Video input, S-Video input, Video input, Audio input, HDMI input*
		Input 2	S-Video input, Video input, Audio input
		Input 3	Component Video input, Audio input, HDMI input*
		Monitor Out	Video output, Audio output
		Digital Audio Output	Optical (1)
		G-LINK	1
		CONTROL IN	1
		CONTROL OUT	1
		SUBWOOFER OUTPUT	Variable
		Cable CARD	Point of deployment
	Front	Input 4	Component Video input, S-Video input, Video input, Audio input (Audio input is shared with PC input)
		PC	Analog RGB input, Audio input
OSD			English/French/Spanish
Power Requirement			120V AC, 60Hz, 37W (26W during standby mode)
Dimensions (W x H X D)			16-9/16" x 3-9/16" x 11-13/16" (420 x 90 x 299mm)
Weight			9.9 lbs. (4.5kg)

* Supports HDMI 1.1 and HDCP 1.1. HDCP (High-bandwidth Digital Content Protection) is a technology used to protect copyrighted digital contents that use the Digital Visual Interface (DVI).

■ SIGNAL ASSIGNMENT OF INPUT 1 (Mini D-sub 15 pin socket connector) (PRO-1410HD/PRO-1010HD/PRO-810HD)

Pin No.	PRO-1410HD	PRO-1010HD/PRO-810HD
1	Red	Red
2	Green or sync-on-green	Green
3	Blue	Blue
4	No connection	No connection
5	Ground	Ground
6	Red ground	Ground
7	Green ground	Ground
8	Blue ground	Ground
9	No connection	DDC +5V
10	Sync signal ground	Ground
11	No connection	No connection
12	Bi-directional DATA (SDA)	DDC SDA
13	Horizontal sync or Composite sync	HD or H/V sync
14	Vertical sync	VD
15	Data clock	DDC SCL



Front View

■ Signal Assignment of PC Input (Mini D-sub 15 pin socket connector) (PRO-1130HD/PRO-930HD)

Pin No.	Input	Pin No.	Input
1	R	9	+5V
2	G	10	Ground
3	B	11	No connection
4	No connection	12	SDA
5	No connection	13	HD
6	Ground	14	VD
7	Ground	15	SCL
8	Ground		

■ DTV Set Top Box Connection (PRO-1010HD/PRO-810HD)

Type of Video Signal	Video Signal	Video Signal Format	Jacks where connection is possible					
			INPUT 1 (D-sub)	INPUT 1 (HDMI)	INPUT 2	INPUT 3	INPUT 4	INPUT 5
HDTV	1080i (1125i) 720p (750p)	Component	●					●
		RGB	●					●
		Digital		●	●			
SDTV	480i (525i)	Composite					●	
		S-Video				●		
		Component	●					●
		RGB	●					●
		Digital		●	●			
	480p (525p)	Component	●					●
		RGB	●					●
		Digital		●	●			

■ PC Signal Compatibility Table (PRO-1130HD/PRO-930HD)

Resolution	Frequency
720 x 400	70Hz
640 x 480	60Hz
	72Hz
	75Hz
800 x 600	56Hz
	60Hz
	72Hz
	75Hz
1024 x 768	60Hz
	70Hz
	75Hz
1280 x 768	56Hz
	60Hz
	70Hz

■ PC Signal Compatibility Table — Input 1 (D-sub) and Input 5 (PRO-1010HD/PRO-810HD)

() applies to the PRO-810HD where specs differ from the PRO-1010HD.

Resolution	Refresh rate		Screen size (dot x line)			Remarks
(dot x line)	Vertical	Horizontal	Dot by dot	4:3	Full	
640 x 400	56.4Hz	24.8kHz			†1280 (1024) x 768	NEC PC-9800
720 x 400	70.1Hz	31.5kHz				NEC PC-9800
	85.1Hz	37.9kHz				
640 x 480	60Hz	31.5kHz	*640 x 480	†1024 (768) x 768		
	66.7Hz	35.0kHz				Apple Macintosh 13"
	72.8Hz	37.9kHz				
	75Hz	37.5kHz				
	85Hz	43.3kHz				
848 x 480	60Hz	31.0kHz	*848 x 480			
800 x 600	56Hz	35.2kHz	*800 x 600	†1024 x 768[1] **768 x 768[2]		
	60Hz	37.9kHz				1072 x 600
	72Hz	48.1kHz				
	75Hz	46.9kHz				
	85Hz	53.7kHz				
832 x 624	74.6Hz	49.7kHz	*832 x 624			Apple Macintosh 16"
1024 x 768	60Hz	48.4kHz	*1024 x 768	**768 x 768[2]	†1280 x 768[1]	1376 x 768
	70Hz	56.5kHz				
	75Hz [74.9Hz]	60.0kHz [60.2kHz]				[] apply to Apple Macintosh 19"
	85Hz	68.7kHz				
1280 x 720	60Hz	44.7kHz	*1280 x 720[1]		†1280 x 768[1] **1024 x 768[2]	
1280 x 768	56Hz	45.1kHz	*1280 x 768[1]		**1024 x 768[2]	
	60Hz	47.8kHz				
	70Hz	56.1kHz				

* Optimal picture. Adjustment of picture position, refresh rate, phase, etc. may be necessary.
** Simple reproduction. Fine detail will not be reproduced.
† Picture will be enlarged, and some fine detail will be hard to see.
1) Available with the PRO-1010HD only.
2) Available with the PRO-810HD only.

■ PC Signal Compatibility Table (PRO-1410HD)

Supported resolution

When the screen size is 4:3, each signal is converted to a 1024 dots x 768 lines signal. (Except for *2, *3, *4)
When the screen size is D BY D, the picture is displayed in the original resolution.
When the screen size is FULL, each signal is converted to a 1365 dots x 768 lines signal. (Except for *3)

Model / Signal Type	Dots x Lines	Vertical Frequency (Hz)	Horizontal Frequency (Hz)	Sync Polarity		Presence		Screen Size			RGB Select*5	Memory
				Horizontal	Vertical	Horizontal	Vertical	4:3	D BY D	FULL (16:9)		
IBM PC/AT*8 compatible computers	640 x 400	70.1	31.5	NEG	NEG	YES	YES	YES*2	-	YES	-	4
	640 x 480	59.9	31.5	NEG	NEG	YES	YES	YES	-	YES	STILL	5
		72.8	37.9	NEG	NEG	YES	YES	YES	-	YES	-	7
		75.0	37.5	NEG	NEG	YES	YES	YES	-	YES	STILL	8
		85.0	43.3	NEG	NEG	YES	YES	YES	-	YES	-	9
		100.4	51.1	NEG	NEG	YES	YES	YES	-	YES	-	41
		120.4	61.3	NEG	NEG	YES	YES	YES	-	YES	-	42
	848 x 480	60.0	31.0	POS	POS	YES	YES	-	-	YES	WIDE2	19
	852 x 480*1	60.0	31.7	NEG	NEG	YES	YES	-	-	YES	WIDE1	17
	800 x 600	56.3	35.2	POS	POS	YES	YES	YES	-	YES	STILL	11
		60.3	37.9	POS	POS	YES	YES	YES	-	YES	STILL	12
		72.2	48.1	POS	POS	YES	YES	YES	-	YES	-	13
		75.0	46.9	POS	POS	YES	YES	YES	-	YES	-	14
		85.1	53.7	POS	POS	YES	YES	YES	-	YES	-	15
		99.8	63.0	POS	POS	YES	YES	YES	-	YES	-	43
		120.0	75.7	POS	POS	YES	YES	YES	-	YES	-	44
	1024 x 768	60.0	48.4	NEG	NEG	YES	YES	YES*3	-	YES	STILL	24
		70.1	56.5	NEG	NEG	YES	YES	YES*3	-	YES	-	25
		75.0	60.0	POS	POS	YES	YES	YES*3	-	YES	STILL	26
		85.0	68.7	POS	POS	YES	YES	YES*3	-	YES	-	27
		100.6	80.5	NEG	NEG	YES	YES	YES*3	-	YES	-	45
	1152 x 864	75.0	67.5	POS	POS	YES	YES	YES	-	YES	STILL	51
	1280 x 768	56.2	45.1	NEG	NEG	YES	YES	-	YES	YES	WIDE1	52
		59.8	48.0	NEG	POS	YES	YES	-	YES	YES	WIDE4	23
		69.8*9	56.0*9	NEG	POS	YES	YES	-	YES	YES	WIDE1	66
	1280 x 800*9	60.0	49.7	NEG	NEG	YES	YES	-	-	YES	WIDE1	21
	1280 x 854*9	60.0	53.1	NEG	NEG	YES	YES	-	-	YES	WIDE2	37
	1360 x 765	60.0	47.7	POS	POS	YES	YES	-	-	YES*3	WIDE1	22
	1360 x 768	60.0	47.7	POS	POS	YES	YES	-	-	YES*3	WIDE1	22
	1376 x 768	59.9	48.3	NEG	POS	YES	YES	-	-	YES	WIDE2	53
	1280 x 1024	60.0	64.0	POS	POS	YES	YES	YES*4	-	YES	STILL	29
		75.0	80.0	POS	POS	YES	YES	YES*4	-	YES	-	30
		85.0	91.1	POS	POS	YES	YES	YES*4	-	YES	-	40
		100.1	108.5	POS	POS	YES	YES	YES*4	-	YES	-	47
	1680 x 1050*9	60.0	65.3	NEG	NEG	YES	YES	-	-	YES	WIDE4	38
	1600 x 1200	60.0	75.0	POS	POS	YES	YES	YES	-	YES	-	54
		65.0	81.3	POS	POS	YES	YES	YES	-	YES	-	55
		70.0	87.5	POS	POS	YES	YES	YES	-	YES	-	56
		75.0	93.8	POS	POS	YES	YES	YES	-	YES	-	57
		85.0	106.3	POS	POS	YES	YES	YES	-	YES	-	58
	1920 x 1200*9	60.0	74.6	NEG	NEG	YES	YES	-	-	YES	WIDE2	81
	1920 x 1200RB*9	60.0	74.0	NEG	NEG	YES	YES	-	-	YES	WIDE3	88
Apple Macintosh*6*8	640 x 480	66.7	35.0	Sync on G	Sync on G	-	-	YES	-	YES	-	6
	832 x 624	74.6	49.7	Sync on G	Sync on G	-	-	YES	-	YES	-	16
	1024 x 768	74.9	60.2	Sync on G	Sync on G	-	-	YES*3	-	YES	WIDE1	28
	1152 x 870	75.1	68.7	Sync on G	Sync on G	-	-	YES	-	YES	WIDE1	39
	1440 x 900*9	60.0	56.0	NEG	NEG	YES	YES	-	-	YES	-	89
Work Station (EWS4800)*8	1280 x 1024	60.0	64.6	NEG	NEG	YES	YES	YES*4	-	YES	-	29
		71.2	75.1	NEG	NEG	YES	YES	YES*4	-	YES	-	48
Work Station (HP)*6	1280 x 1024	72.0	78.1	-	-	-	-	YES*4	-	YES	-	59
Work Station (SUN)*8	1152 x 900	66.0	61.8	C Sync	C Sync	-	-	YES	-	YES	-	60
		76.0	71.7	C Sync	C Sync	-	-	YES	-	YES	-	61
	1280 x 1024	76.1	81.1	C Sync	C Sync	-	-	YES*4	-	YES	-	30
Work Station (SGI)	1024 x 768	60.0	49.7	-	-	-	-	YES*3	-	YES	-	62
	1280 x 1024	60.0	63.9	-	-	-	-	YES*4	-	YES	-	29
IDC-3000G												
NTSC525P	640 x 480	59.9	31.5	NEG	NEG	YES	YES	YES*7	-	YES*7	MOTION	32

*1 Only when using a graphic accelerator board that is capable of displaying 852 x 480.
*2 This signal is converted to a 1024 dots x 640 lines signal.
*3 The picture is displayed in the original resolution.
*4 The aspect ratio is 5:4. This signal is converted to a 960 dots x 768 lines signal.
*5 Normally the RGB select mode suitable for the input signals is set automatically. If the picture is not displayed properly, set the RGB mode prepared for the input signals listed in the table above.
*6 To connect the monitor to Macintosh computer, use the monitor adapter (D-Sub 15-pin) to your computer's video port.
*7 Other screen modes (ZOOM and WIDE) are available as well.
*8 When viewing a moving picture at a vertical frequency greater than 65Hz, the picture may sometimes be unstable (jumpy). If this occurs, please set the refresh rate of the external equipment to 60Hz.
To view 480I@60Hz (480 interlaced lines, 60Hz refresh rate) when sync polarity is "Sync on Green", set "RGB SELECT" to "MOTION".
*9 CVT standard compliant.

NOTE:
• While the input signals comply with the resolution listed in the table above, you may have to adjust the position and size of the picture or the fine picture because of errors in synchronization of your computer.
• When a 1280 dots x 1024 lines signal or 1600 dots x 1200 lines signal is input to the monitor, the picture will be compressed.
• This monitor has a resolution of 1365 dots x 768 lines. It is recommended that the input signal should be XGA, wide XGA, or equivalent.
• With digital input some signals are not accepted.
• The sync may be disturbed when a nonstandard signal other than the aforementioned is input.
• If you are connecting a composite sync signal, use the HD terminal.
• "IBM PC/AT" and "XGA" are registered trademarks of International Business Machines, Inc. of the United States.
• "Apple Macintosh" is a registered trademark of Apple Computer, Inc. of the United States.

■ INPUT TERMINALS (PRO-1410HD)

PC	
Visual 1 (Analog)	Mini D-sub 15 pin x 1
Visual 2 (Analog)	BNC (R, G, B, H/CS, V) x 1*2
Video	
Visual 1	BNC x 1
Visual 2	RCA-pin x 1
Visual 3	S-Video: DIN 4-pin x 1
COMPONENT	
Visual 1	RCA-pin (Y, P_B [C_B], P_R [C_R]) x 1*1
Visual 2	BNC (Y, P_B [C_B], P_R [C_R]) x 1*1*2
HDMI	HDMI Connector*3
Audio	Stereo RCA x 3 (Selectable)
RS-232C	D-Sub 9-pin x 1

*1 COMPONENT input signals supported on this system include: 480p (60Hz), 480i (60Hz), 525p (60Hz), 525i (60Hz), 720p (60Hz), 1035i (60Hz), and 1080i (60Hz).

*2 The 5-BNC connectors are used as PC2 and COMPONENT2 input. Select one of them under "BNC INPUT".

*3 HDMI input signals supported on this system.

Supported Signals

- 640 x 480P @ 59.94/60Hz
- 1280 x 720P @ 59.94/60Hz
- 1920 x 1080I @ 59.94/60Hz
- 720 x 480P @ 59.94/60Hz
- 1440 (720) x 480I @ 59.94/60Hz

Note: In some cases a signal on the plasma monitor may not be displayed properly. The problem may be an inconsistency with standards from the source equipment (DVD, Set-top box, etc...). If you do experience such a problem please contact your dealer and also the manufacturer of the source equipment.

■ In/Outputs (PRO-1010HD/PRO-810HD)

Video	
INPUT 1	
Input	Mini D-sub 15 pin (Socket connector)
	(1) RGB signal (G on Sync compatible) RGB: 0.7Vp-p/75 ohms/no sync. HD/VS, VD: TTL level/positive and negative polarity/2.2k ohms G on Sync: 1Vp-p/75 ohms/negative sync *Compatible with Microsoft's Plug and Play (VESA DDC1/2B)
	(2) Component video signal Y: 1Vp-p/75 ohms/negative sync C_B/P_B, C_R/P_R: 0.7Vp-p (color 10%)/75 ohms
	HDMI
	*Digital Signal 3.3V T.M.D.S. /50 ohms
INPUT 2	
Input	HDMI
	*Digital Signal 3.3V T.M.D.S. /50 ohms
INPUT 3	
Input	S jack (Mini DIN 4 pin)
	*Y/C separate video signal Y: 1Vp-p/75 ohms/negative sync C: 0.286Vp-p/75 ohms (NTSC)
INPUT 4	
Input	BNC jack
	*Composite video signal (NTSC) 1Vp-p/75 ohms/negative sync
Output	BNC jack
	75 ohms/with buffer
INPUT 5	
Input	BNC jack (x5)
	(1) RGB signal (G on Sync compatible) RGB: 0.7Vp-p/75 ohms/no sync. HD/VS, VD: TTL level/positive and negative polarity/2.2k ohms G on Sync: 1Vp-p/75 ohms/negative sync
	(2) Component video signal Y: 1Vp-p/75 ohms/negative sync C_B/P_B, C_R/P_R: 0.7Vp-p (color 10%)/75 ohms
Audio	
Input	AUDIO INPUT (for INPUT 1)
	Pin jack (x 2) L/R: 500mVrms/more than 10k ohms
	AUDIO INPUT (for INPUT 2)
	Pin jack (x 2) L/R: 500mVrms/more than 10k ohms
	AUDIO INPUT (for INPUT 3/4)
	Pin jack (x 2) L/R: 500mVrms/more than 10k ohms
	AUDIO INPUT (for INPUT 5)
	Pin jack (x 2) L/R: 500mVrms/more than 10k ohms
Output	SPEAKER
	L/R: 8-16 ohms/7W + 7W (at 8 ohms)
Controls	
	RS-232C: D-sub 9 pin (Pin connector) CONTROL OUT: 4 pole mini jack

■ Video Signal Compatibility Chart — Input 1 (D-sub) and Input 5 (PRO-1010HD/PRO-810HD)

Refresh rate		Signal format	Screen size					Remarks
Vertical FV (Hz)	Horizontal FV (kHz)		4:3	FULL	ZOOM	CINEMA	WIDE	
60 (59.94)	15.734	Component	●	●	●	●	●	480i (525i)/SDTV
		RGB	●	●	●	●	●	
	31.5	Component	●	●	●	●	●	480p (525p)/SDTV
		RGB	●	●	●	●	●	
	33.75	Component		●				1080i (1125i)/HDTV
		RGB		●				
	45	Component		●				720p (750p)/HDTV
		RGB		●				

■ Video Signal Compatibility Chart — Input 1 (HDMI) and Input 2 (PRO-1010HD/PRO-810HD)

Vertical FV (Hz)	Aspect Ratio	Screen size					Remarks
		4:3	FULL	ZOOM	CINEMA	WIDE	
60 (59.94)	720 x 480i	●	●	●	●	●	480i (525i)/SDTV
	720 x 480p	●	●	●	●	●	480p (525p)/SDTV
	1280 x 720p		●			●	720p (750p)/HDTV
	1920 x 1080i		●			●	1080i (1125i)/HDT

■ Accessories (PRO-1010HD/PRO-810HD)

	Power cord x 1
	Remote control unit x 1
	AA (R6) battery x 2
	Cleaning cloth x 1
	Speed clamp x 2
	Bead band x 2
	Warranty x 1
	Operating instructions x 1

* Design and specifications are subject to change for improvements without notice.

■ Accessories (PRO-1130HD/PRO-930HD)

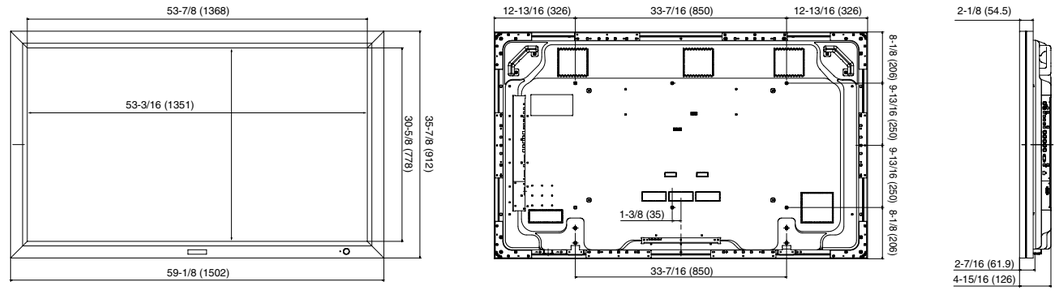
Plasma Display	Power cord x 1
	Cleaning cloth x 1
	Speed clamp x 3
	Bead band x 3
	Warranty x 1
Media Receiver	Power cord x 1
	Remote control unit x 1
	System cable x 1
	AA (R6) battery x 2
	G-LINK cable x 1
	Operating instructions x 1

* Design and specifications are subject to change for improvements without notice.

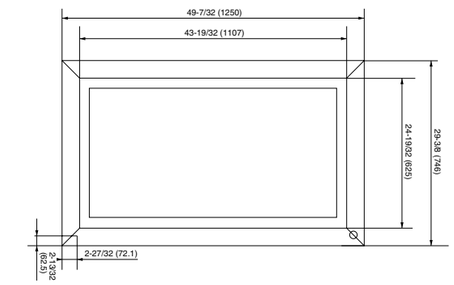
■ DIMENSIONS

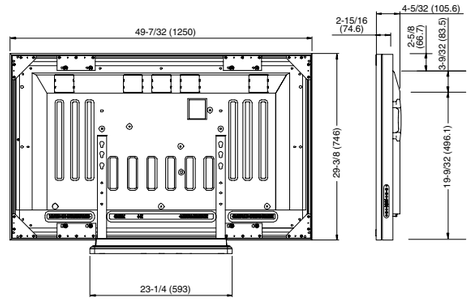
Unit: inch (mm)

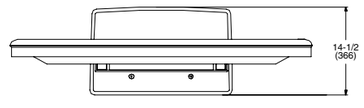
PRO-1410HD



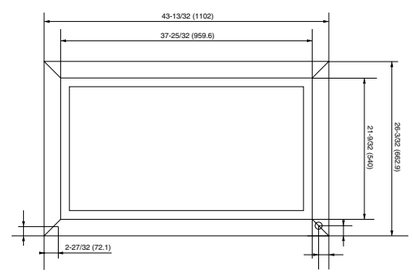
PRO-1010HD

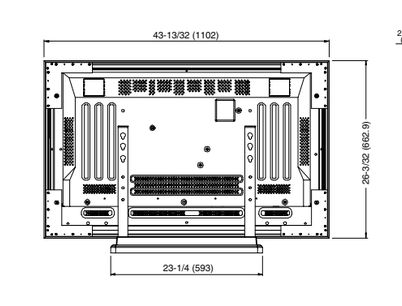


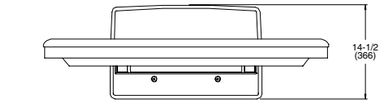




PRO-810HD



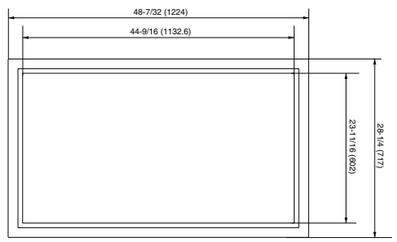




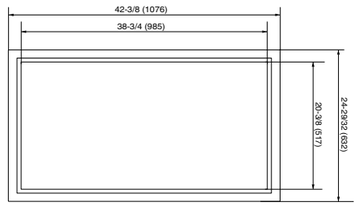
■ DIMENSIONS

Unit: inch (mm)

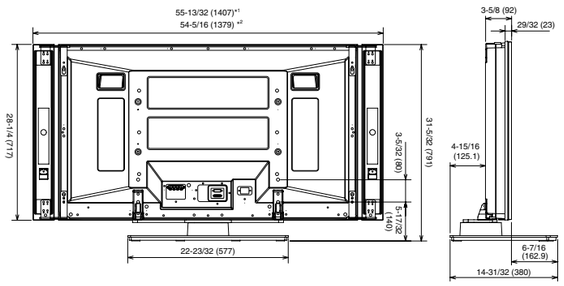
PRO-1130HD



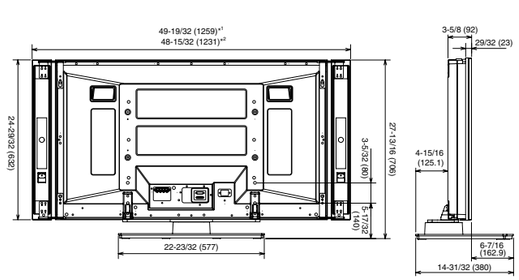
PRO-930HD



With PDP-S36 Speaker System (Optional)



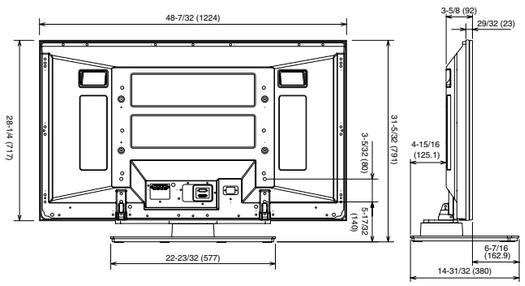
With PDP-S35 Speaker System (Optional)



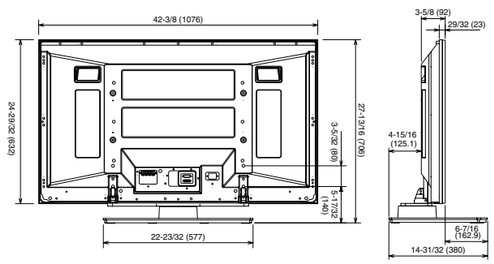
*1 In case of Air installation: approx. 9/16" (15mm) space between the speaker and the side of display
*2 In case of Flush installation: no space between the speaker and the display

*1 In case of Air installation: approx. 9/16" (15mm) space between the speaker and the side of display
*2 In case of Flush installation: no space between the speaker and the display

Without Speakers



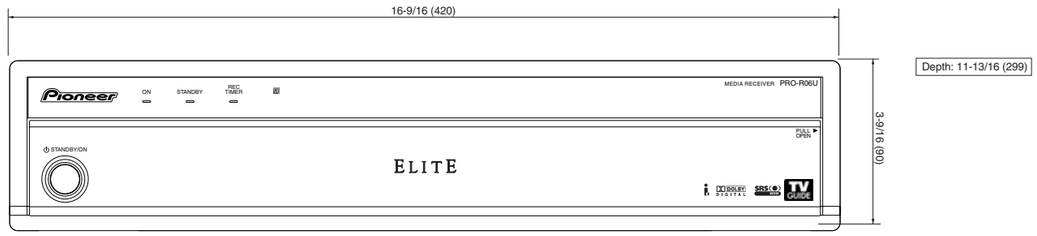
Without Speakers



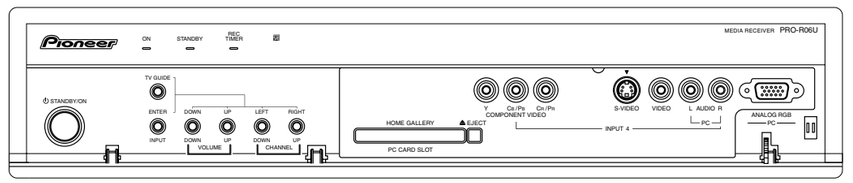
■ DIMENSIONS

Unit: inch (mm)

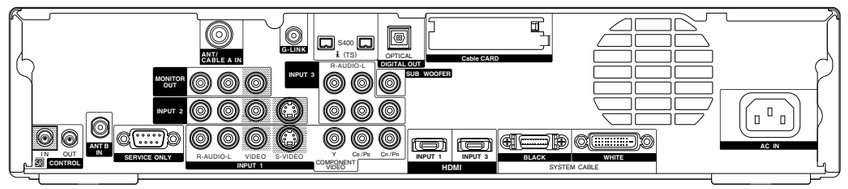
PRO-R06U (Media Receiver for PRO-1130HD and PRO-930HD)



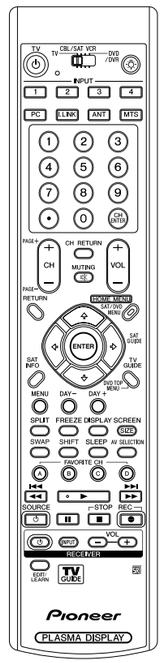
With the Front Cover Open



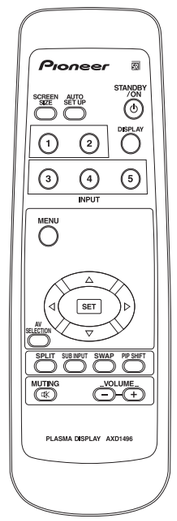
Rear Panel



■ REMOTE CONTROLS



PRO-1130HD/PRO-930HD



PRO-1010HD/PRO-810HD