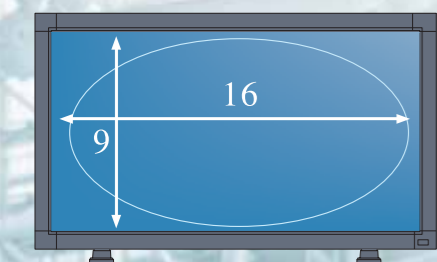## Accurately Displaying Variety of PC/Video Signals.
High-grade Display Required for Public Space Applications.

High quality screen with 16:9 aspect ratio precisely displays high-definition images. 461S 402S 321S

The high grade LCD panel with an aspect ratio of 16:9 and 3.15 million pixels is employed for 46"/40"/32" large screens. The native resolution of 1366x768 enables displaying the high-definition broadcasting without changing the aspect ratio. In addition, it flexibly supports the high resolution of WXGA and other resolutions including SXGA, UXGA.

High-spec LCD panel designed exclusively for professional use. 461S 402S 321S

MDT series carry new LCD panel designed for professional use, which brings superior brightness and colour uniformity from corner to corner. This also ensures high contrast ratio of 1000:1 (400:1 even under the bright environment of 750lx) and 450cd/m² brightness level, displaying clear pictures even in light public spaces.
※The values represent that of MDT402S.

Achieved fast response time of 8ms *(Average at Gray-to-Gray) to reproduce moving pictures clearly. 461S 402S

Fast response time of 8ms is realised for 46" and 40" as an average of Gray-to-Gray. This helps reproduce moving pictures clearly, and reduce blurring picture-outlines.
※Average of response time between the gray scale from 32 to 88, 64 to 88, 64 to 112 and 48 to 125.
※The response time of White/Black/White counts for 16ms.

Conventional   MDT461S/402S
              Photograph is just for a reference.

Wide viewing angle of 170° both in horizontal and vertical directions. 461S 402S 321S

The 170° of wide viewing angle both in horizontal and vertical directions is suitable for use in public space. This minimises colour shift even viewed from sideways providing vivid images with high contrast.
※MDT321S is for 176° viewing angles horizontally and vertically.

Wide viewing angles can accommodate a large audience.

Equipped with "DVI-D" connector, supporting with HDCP*¹. Reproduce DVD pictures accurately on screen. 461S 402S

"DVI-D" connector is provided supporting with HDCP signal from DVD. Digital signals can directly be displayed thus accurately reproduces*² high quality DVD images.
※1 HDCP: High-bandwidth Digital Content Protection
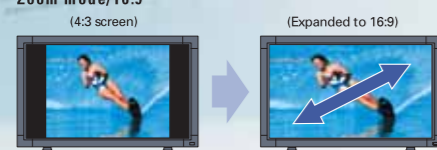※2 A DVD player with DVI-D output terminal for HDCP is required.
※Not applicable to MDT321S

Highly efficient backlight lowers power consumption. 461S 402S 321S

Both high brightness and low power consumption are achieved using the highly efficient backlight. Low cost operation is possible even when multiple screens are used, and for long term use.
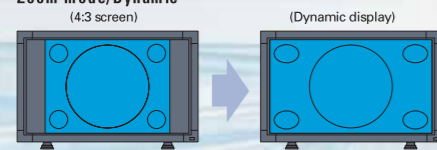
Zoom mode expands the screen from 4:3 to 16:9. 461S 402S 321S

Input signal with an aspect ratio of 4:3 can be stretched to 16:9 by setting in the Zoom mode. In addition, "Dynamic" stretches 4:3 pictures to the entire screen, providing natural-looking wide images, by applying a different expansion ratio to the central and outer areas.

Zoom mode/16:9
(4:3 screen)   (Expanded to 16:9)

Zoom mode/Dynamic
(4:3 screen)   (Dynamic display)

"Dual Picture Function" allows setting of versatile dual screen display. 461S 402S

Selected two pictures among connected signal sources can be displayed simultaneously on a screen. "PiP (Picture in Picture)" where the sub-screen is displayed in the main screen, "PoP (Picture out Picture)" where the sub-screen is displayed alongside the main screen, and "Side by Side" where the screen is divided in two sections are available as options.
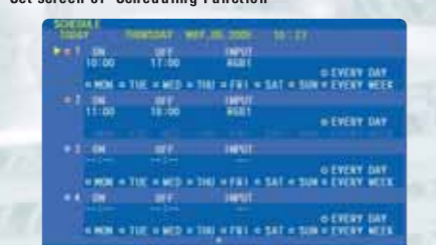※Only "PiP" possible for MDT321S.

「PiP」

「PoP」

「Side by Side」

"Scheduling Function" can automate the power ON/OFF control. 461S 402S 321S

"Scheduling Function" is available to automatically turn the power ON or OFF. It can be easily set by entering a desired time to turn on/off for everyday, certain day of the week or every week. The number of schedules that can be set is 7 at maximum. In addition, the power saving mode is provided which is activated automatically when there is no input signal.

Set screen of "Scheduling Function"

※MDT321S display differs.

"Natural Colour Matrix" enables to reproduce more natural colours on screen. 461S 402S

Mitsubishi's original colour conversion system, "Natural Colour Matrix" is installed. This system ensures an unique Six-axis colour control, which permits colour adjustment via Six-axis(R,G,B,C,M and Y) independently, rather than through the Three-axis(R,G,B) previously available.
※Not applicable to MDT321S.

Both vertical and horizontal placements are possible. 461S 402S 321S

Depending on applications, vertical or horizontal installation is available. Compliance with VESA Standards* facilitates ceiling suspension or wall mount installation. As the back surface of the panel can be mounted right onto the wall without any space, the wall-recessed installation will have a clean look.
※Screw hole: 600 x 200mm

Accessories to enhance usability. 461S 402S 321S

■Table-top stand
For table or counter-top installation

■Remote Controller
For turning the power ON/OFF, switching image sources and changing various settings

■Speaker output connectors
7W+7W external output connector. Voice messages can be clearly transmitted even in public places.

■ Specifications

	MDT461S (L464G7)	MDT402S (L404G6)	MDT321S (L325RM)
Display size	46" (1168mm diagonal)	40" (1016mm diagonal)	31.5" (800mm diagonal)
Viewable size	1018.4x572.4mm	885.2x497.7mm	697.7x392.3mm
Resolution	1366x768 dots (WXGA)		
Pixel pitch	0.746mm	0.648mm	0.511mm
Colour	16.7 Million		
Viewing angle	170°Hor. 170°Vert. (typ, Contrast Ratio>10)		176°Hor. 176°Vert (typ, Contrast Ratio>10)
Brightness	450cd/m²		500cd/m²
Contrast ratio	800:1 (typ)	1000:1 (typ)	600:1 (typ)
Response time (typical)	16ms(Tr+Tf), 10ms(Tr), 6ms(Tf)		20ms(Tr+Tf), 9ms(Tr), 11ms(Tf)
Input Connector / PC input	DVI-D(HDCP) x 1, Analog RGB x 1 <BNCx5>, Mini D-SUB 15pin x 1		DVI-D(no HDCP) x1, Analog RGB x1 <BNCx5>,Mini D-SUB 15pin x1
Input Connector / Video input	Video input x1<BNC, RCA terminal (S terminal priority/separate switchable)>, S terminal x 1, Component input x1<BNC>		
Input Connector / Audio input	RCA pin jack L/R x2, 3.5ϕ Stereo mini jack x1(PC Audio)		
Input Connector / Control input	RS-232C input x1		
Output Connector / PC output	Analog RGB x1<BNCx5>		Analog RGB x1<Mini D-SUB 15pin>
Output Connector / Video output	Video output x1 <BNCx1>		
Output Connector / Audio output	RCA pin jack L/Rx1		
Output Connector / External speaker output	Speaker terminal L/Rx1		
PC input / Horizontal frequency	15.625/15.734/31.5~91.1kHz (Analog), 31.5~91.1kHz (Digital)		
PC input / Vertical frequency	50/58~85Hz (Analog), 50/58~85Hz (Digital)		
PC input / Video signal	Digital RGB, Analog RGB		
PC input / Sync. signal	Separate: TTL level(Posi/Nega), Sync on green		
PC input / Supported Resoluton	VGA60, SVGA60, XGA60, WXGA60, SXGA60, UXGA60, SXGA(Scaled), UXGA(Scaled)		
Video signal	NTSC/PAL/SECAM/4.43NTSC/PAL60, Composit, Separate(S terminal), Component (HDTV)		
Control input	Based on RS232C standard		
Control output	Based on RS232C standard		——
Speaker / Audio output	External speaker terminal 8 ohm, External speaker jack 7W+7W, (Stereo), External speaker (option setting)		
Stand	Desktop stand (removable)		
Complied regulatory and guidelines / Power management	VESA DPM		
Complied regulatory and guidelines / Safety	UL60950-1/CSA C22.2 No.60950-1/TUV-GS/EN60950-1		
Complied regulatory and guidelines / EMC	FCC-B/DOC-B/EN55022-A/EN55024/EN61000-3-2/EN61000-3-3/CE		
Complied regulatory and guidelines / Others	WEEE, VESA DDC2B,DDC-CI		
Operational environment / Temperature	5~40℃		
Operational environment / Humidity	20~80% (without condensation)		
Power supply / Input	100~240 VAC 50/60Hz		
Power supply / Power consumption / Max	260W	230W	120W
Power supply / Power consumption / At power saving	Less than 5W(Power button OFF/Main power switch ON) 0W(Main power switch OFF)		
Weight / Display unit / Net with stand	Approx. 32.8kg	Approx. 29.0kg	Approx. 16.4kg
Weight / Display unit / Net without stand	Approx. 31.0kg	Approx. 27.5kg	Approx. 15.2kg
Packing weight / dimensions	Approx. 40.5kg / 1278(W) x 837(H) x 312(D)mm	Approx. 36.5kg / 1147(W) x 761(H) x 312(D)mm	Approx. 22.5kg / 944(W) x 652(H) x 312(D)mm
Accessory	Wireless remote controller, AA battery x 2, Power cord (3.0m), Signal cable,(4.0m : Mini D-SUB 15 pin/Mini D-SUB 15pin), CD-ROM(Utility etc.), Instruction manual, Self-standing stand, Main power switch cover, Clamper, Speaker plug, Ferrite core, Band		

●Power cord for North America & for EU are included. Please use a power cord that matches with the AC voltage of power outlet and complies with the safety standard of your particular country. ●LCD panels are manufactured using high precision technology; nevertheless there may be some missing pixels and some pixels might be always lit on. ●Displaying still pictures for long term may cause permanent image sticking. ●If you alter the original images either through compression or enlargement or something else, and show it on a display with commercial purpose or intention of showing to general public, it may infringe the copyright of the author which is protected by the copyright law. ●As a conversion adapter may be required to connect to Macintosh, check the configuration of the Macintosh connector beforehand. No conversion adapter is required for the models with Mini D-SUB 15pin VGA connector.●Windows® is a registered trademark of Microsoft Corporation of US in the territory of US and others. ●Macintosh is a registered mark of Apple Computer US in the territory of US and others. ●Other company and product names are a registered mark or trademark of the relative company.

MITSUBISHI ELECTRIC
MITSUBISHI LCD DISPLAY

Series of LCD Public Display from Mitsubishi

MDT461S / MDT402S / MDT321S

Offering High Precision Large Screen LCDs for Public Information Display

46" LCD Display
MDT46IS

40" LCD Display
MDT402S

32" LCD Display
MDT32IS

Mitsubishi's large sized LCD displays allows the presentation of beautiful and dynamic images with a choice of 32", 40" and 46" options.
Developed exclusively for public use, the high-spec LCD panel displays high-definition images accurately and vividly from DVDs and PCs.
Excellent features include multi-screen display, zooming functions, and centralised control and management from a host PC.*
Mitsubishi's LCD public displays allow image and information communication for any public space.

*Excluding MDT321S

1

Advanced Functions to Enable Various System Configurations. Assuring Easy Control/Management for Long Term Operation.

Easy colour setting in a wide range of colour temperature from 2,600K to 10,000K
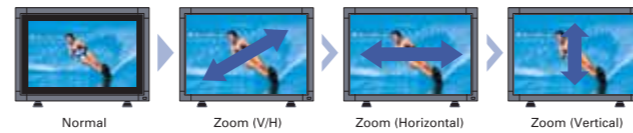46IS / 402S / 321S

Colour temperature can be set in a broad range from 2,600K to 10,000K. Particularly ideal when a picture on screen is shot over for broadcastings. It can be shown in natural colours without requiring troublesome colour adjustment work.

Zoom functions to expand the original image in any aspect ratio
46IS / 402S / 321S

By selecting "Custom" in Zoom mode, and simply increasing or decreasing Zoom slider, you can adjust the diagonal ratio of the original screen, or proportions in horizontal and vertical directions.
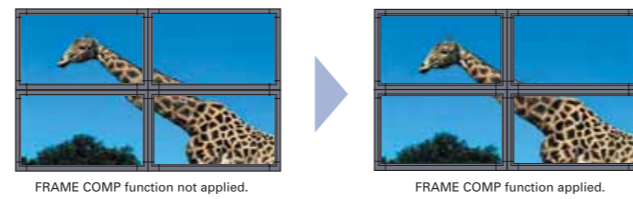
Zoom mode/Custom

Normal   Zoom (V/H)   Zoom (Horizontal)   Zoom (Vertical)

"Tiling" and "Frame Comp" demonstrates multi-screens with a smoothly continuous image
46IS / 402S / 321S

"Tiling" enables multi-screen operation up to 25 (5x5) screens, by simply setting the position of each divided screen in OSD. Working together with Tiling, "Frame Comp" allows smooth image of entire screen, by compensating for the bezel width.
*4 x 4 = 16 screens for MDT321S

Multi-screen display of 5 x 5 = 25 screens at maximum

FRAME COMP function not applied.   FRAME COMP function applied.

"Long Cable Compensation" prevents image degradation caused by cable length of up to approximately 100m
46IS / 402S

Even when a cable connection gets as long as 100m, by automatically adjusting the phase of R,G,B signals, colour shift is corrected and signal degradation is prevented. Furthermore, the new "Video Equalizing Function" compensates for dull signal caused by long cable, and optimizes the signal shape. These unique functions, specially considered for public space applications, expand the flexibility of system layout between signal source and display.

"Long Cable Compensation"

PC   ◄About 100m►

Long cable

*Applicable only to BNC input
*Manual correction up to 50m for MDT321S
*Compensation level depends on the quality of signal source and cable.

3

"Automatic input-signal selection" prevents manual work for signal set-up
46IS / 402S / 321S

By choosing a signal priority from the given 3 methods, a desired signal is automatically selected among the connected signal sources. This alleviates the manual selection work at signal source change.

FIRST DETECT — The first input signal detected is displayed. When this signal disappeared, another input signal will be automatically displayed. (applicable only to RGB1/2)

LAST DETECT — The last input signal detected is displayed. When another signal is detected newly, the display will automatically switchover. (applicable only to RGB1/2/3)

VIDEO DETECT — When DVD/HD or VIDEO input signal is present, the display will change and keep to the DVD/HD or VIDEO input, even when RGB1/2/3 is receiving signal.

Using "Self-diagnosis Function" a point of failure can be captured by host PC
46IS / 402S / 321S

"Self-diagnosis function" allows you to detect spots in trouble and grasp the thermal condition inside display. The detected data can be read through RS-232C by the host PC, thus enabling to conduct centralised control remotely.

Major detection contents of "Self-diagnosis function": Non-lighting of backlight due to inverter circuit trouble (excluding MDT321S)/Trouble of power supply circuit/Temperature rise inside body/Loss of input signal, etc.

Centralised / Remote control of multiple displays through RS-232C Daisy Chain
46IS / 402S

When a system is composed of multiple displays, daisy chain through RS-232C can be made. With this set-up, you can have effective centralised control: you can remotely change the setting of each display or operate self-diagnosis (up to 26 units). This also allows you to control multiple displays collectively with one remote controller.
*Not applicable to MDT321S
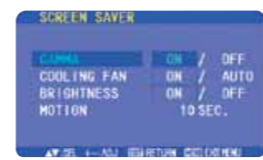*Connectable number of displays depends on system configuration.

in   out   in   out   in
RS-232C   RS-232C   RS-232C

Primary   Secondary   Secondary

IR Remote Controller

out   in   out   in
RS-232C   RS-232C

"Power ON Delay Function" can start multiple displays in a stable manner
46IS / 402S / 321S

Feeding power simultaneously to multiple displays by turning the breaker ON, may generate over-current at starting. With Power ON Delay Function, you can turn on power of each display in a staggered manner to avoid temporary over-current. The delay time for power ON can be selected in a range of 0~50 seconds

"Screen Saver Function" reduces load on LCD panel at long term operation
46IS / 402S / 321S

To reduce load given to LCD panel and the risk of image-persistence, various settings are available. The optional settings include selection of display gamma, operation of cooling-fan, brightness control for routinely lowering maximum brightness, and motion function to slightly move the screen vertically and horizontally. The optimum setting can be selected depending on the condition of your use
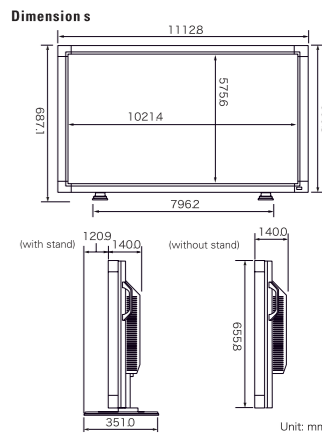
*Different display for MDT321S
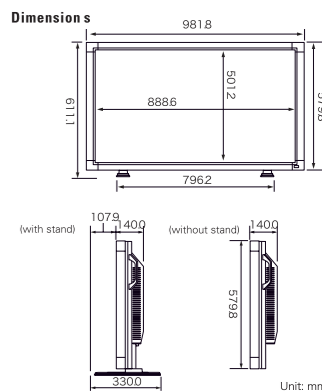

Large Screen Line-up from Mitsubishi

LCD Display
MDT461S [46"screen]

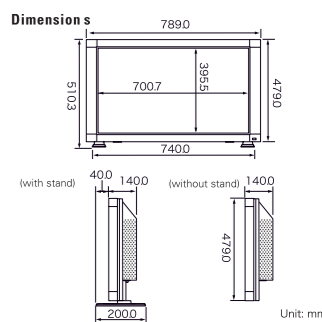|	
Brightness	450cd/m²
Contrast ratio	800 : 1
Viewing angle	170° horizontally / 170° vertically
Response time	16ms(Tr+Tf), 10ms(Tr), 6ms(Tf)
Resolution	1366 dots x 768 lines W-XGA

Dimensions Unit: mm

LCD Display
MDT402S [40"screen]

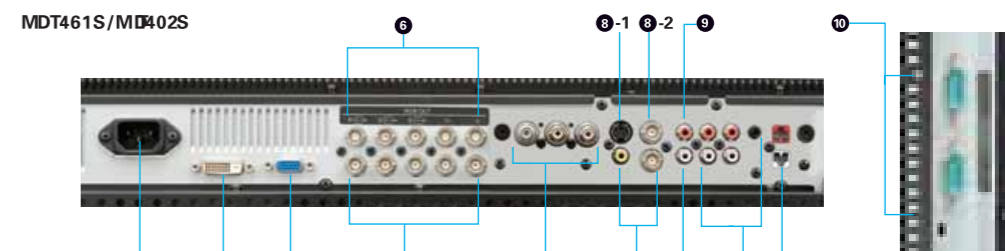|	
Brightness	450cd/m²
Contrast ratio	1000 : 1
Viewing angle	170° horizontally / 170° vertically
Response time	16ms(Tr+Tf), 10ms(Tr), 6ms(Tf)
Resolution	1366 dots x 768 lines W-XGA

Dimensions Unit: mm

LCD Display
MDT321S [32"screen]

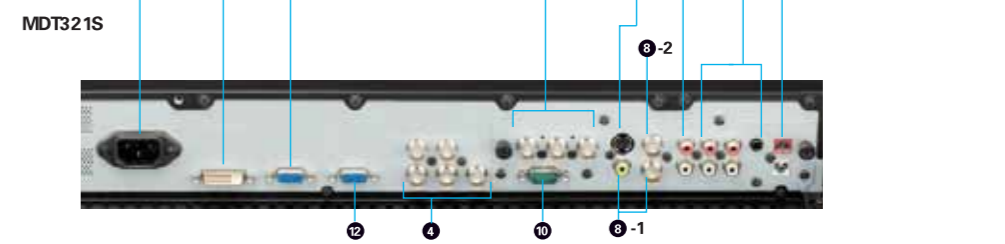|	
Brightness	500cd/m²
Contrast ratio	600 : 1
Viewing angle	176° horizontally / 176° vertically
Response time	20ms(Tr+Tf), 9ms(Tr), 11ms(Tf)
Resolution	1366 dots x 768 lines W-XGA

Dimensions Unit: mm

Connectivity

MDT461S/MDT402S

MDT321S

❶ **AC IN Connector** Connects with the power cord
❷ **RGB IN(DVI-D** Connects with digital RGB signals from PC or HDTV device having a digital RGB output
❸ **RGB2 IN (Mini D-SUB 15pin** Connects with analog RGB signals from PC or other RGB equipment.
❹ **RGB3 IN (R,G,B,H,V)(BNC** Connects with analog RGB signal or signal from other RGB equipment
❺ **DVD/HD Input Connector (BNC** Connects DVD, Laser-Disk player, etc
❻ **RGB3 Output Connector (BNC** Output from RGB3N
❼ **AUDIO IN 1,2,** Input for audio signal from external equipment such as PC, VCR, DVD player etc
❽-1 **VIDEO Input** VIDEO IN (BNC, RCA
S-VIDEO IN (DIN 4pin
❽-2 **VIDEO Output (BNC**
❾ **AUDIO OUT** Output of audio signal selected from AUDIO IN source
❿ **RS-232C Connector (D-SUB 9pin** IN input signal from control equipment such as PC or output from other MDT402S/MDT461S OUT connect to input of other MDT402S/MDT461S
⓫ **External Speaker Terminal** Connect external speaker
⓬ **RGB Output Connector** Outputs the signal entered from RGB2 (Mini D-SUB 15pin

4