



Type No. L17C0D081

ImageQuest Q17 Dual Function Monition User's Guide





U.S.A.

U.S.FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT INFORMATION TO THE USER

NEXT

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet of a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Connecting of peripherals requires the use of grounded shielded signal cables.

DECLARATION OF CONFORMITY

WE ImageQuest CO., LTD.

Ami-ri Bubal-Eub Ichon-Si Kyungki-Do

467-860 KOREA

declare under our sole responsibility that the product:

Kind of equipment : COLOR MONITOR

Type-Designation : L17C0D081

to which this declaration relates is in conformity with the following standard(s) or other normative document(s)

Safety : EN 60950 : 1992 + A1, A2, A3, A4, A11

EMC : EN 55022 : 1998, EN 55024 : 1998

EN 61000-3-2:1995+A1:1998+A2:1998

EN 61000-3-3:1995

following the provisions of the Low Voltage Directive 73/23/EEC, 93/68/EEC and the EMC Directive 89/336/EEC.

Accredited testlaboratory: TÜV Rheinland Am Grauen Stein 51105 Köln

KOREA / SApril178, 2002 (Place and date of issue)

HONG KI, KIM

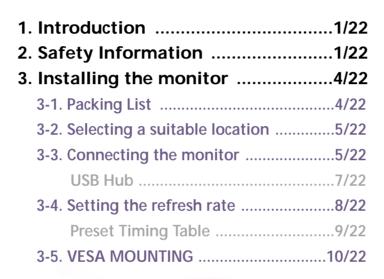
(Name and signature of authorized person)

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Q17 <u>17" TFT LCD Color Monitor</u>

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1. Introduction

This manual contains instructions for installing and operating ImageQuest Q17. ImageQuest Q17 is a highly ergonomic color display unit.

- 17" viewable SXGA I CD
- · High quality screen re-scaling capability
- Real Color™ flesh-tone adjustment and digital color control with innovative color management.
- 100-240V AC input voltage
- VESA DPMS (Display Power Management Signalling)
- VESA DDC1/2B compatibility
- Advanced digital On-Screen-Display controls
- Digital signal input by DVI-1.0 compatibility
- Fast and accurate auto adjustment
- Most advanced image scaling
- Supporting VESA Flat Panel Monitor Physical Mounting Interface
- USB (Universal Serial Bus) hub, Bus-Power mode hub

This Monitor has been engineered and manufactured to assure your safety. You can prevent serious electrical shock and other hazards by keeping in mind the following:



Do not place anything wet on the monitor or the power cord. Never cover the ventilation openings with any material and never touch them with metallic or inflammable materials.

2. Safety Information



NEXT

Avoid operating the monitor in extreme heat, humidity or areas affected by dust.

Temperature : 5~35°C Humidity : 30~80RH



Be sure to turn the monitor off before plugging the power cord into the socket. Make sure that the power cord and the other cords are securely and rightly connected.

Overloaded AC outlets and extension cords are dangerous, as are frayed power cords and broken plugs, which may cause electric shock or fire. Call your service technician for replacement.



Do not use sharp tools such as a pin or a pencil near the monitor, as they may scratch the LCD surface.

Do not use a solvent, such as benzene, to clean the monitor, as it will damage the LCD surface.





Q17 <u>17" TFT LCD Color Monitor</u>

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Cleaning and Maintenance

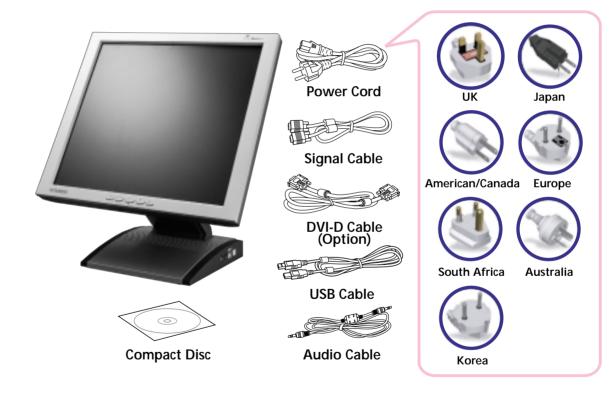
- To avoid risk of electric shock, do not disassemble the display unit cabinet. The
 unit is not user-serviceable. Remember to unplug the display unit from the
 power outlet before cleaning.
- Do not use alcohol (methyl, ethyl or isopropyl) or any strong dissolvent. Do not use thinner or benzene, abrasive cleaners or compressed air.
- Do not wipe the screen with a cloth or sponge that could scratch the surface.
- To clean your antistatic screen, use water and a special microfiber screen cleaning tissue used in optical lens cleaning, or lightly dampen a soft, clean cloth with water or a mild detergent.
- If the instructions above do not help in removing stains, contact an authorized service agent.



NEXT

3. Installing the monitor3-1. Packing List

The following items should be found in the packaging.



Above power cord can be changed upon different voltage areas. Please contact your dealer if anything is missing or damaged.

Other power cord except the cord packed in the product or longer than 3m may affect EMC of the product in operating condition.



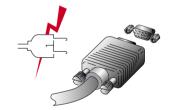
Q17 <u>17" TFT LCD Color Monitor</u>

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3-2. Selecting a suitable location

- 3-3. Connecting the monitor
 - 15 pin D-sub / DVI-D

- Place the monitor at least 30cm from other electrical or heat-emitting equipment and allow at least 10cm on each side for ventilation.
- Place the monitor in a position where no light shines directly onto or is reflected on the screen.
- To reduce eye strain, avoid installing the display unit against a bright background such as a window.
- Position the monitor so that the top of the screen is no higher than eye level.
- Position the monitor directly in front of you at a comfortable reading distance (around 45 to 90cm)
- Before you start cabling your monitor, check that the power is off on all units. To avoid any possibility of electric shock, always connect your equipment to properly earthed outlets.

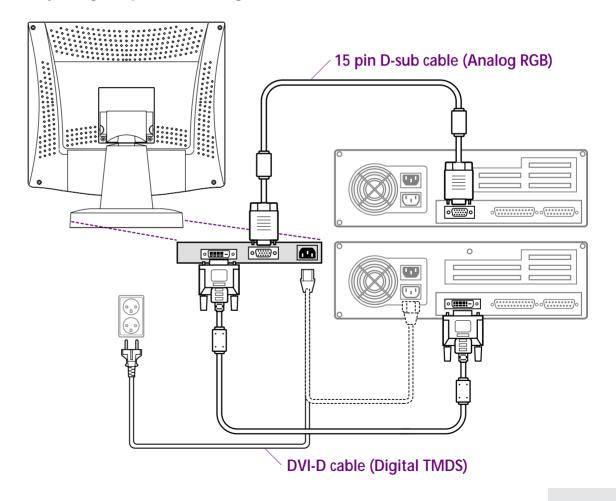


- Insert the other 15-pin/DVI-D signal cable connector into the 15-pin VGA/DVI-D connection on your computer and screw it down.
- 2. Plug the power cord connection to connection on the monitor.
- Plug the other end of the power cord to your computer's main supply or to a 100V-240V earthed electrical outlet.
- 4. Turn on the monitor using the power switch and check that the power LED is on. If not, repeat steps 1,2,3 and 4 or refer to the Troubleshooting section of this guide.



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5. Turn on the power to the computer. The picture will appear within about 10 seconds. Adjust the picture to obtain optimum picture quality. See section Adjusting the picture in this guide for more information.



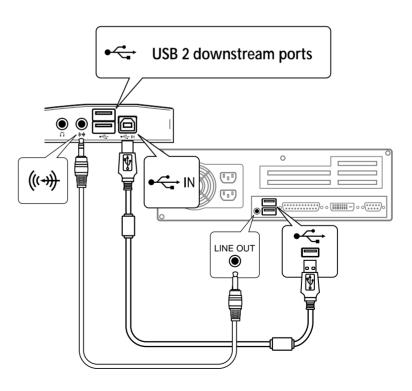


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USB hub / PC Audio

The USB hub(Bus-powerd mode hub) have 1 upstream port and 2 downstream ports. The upstream port can be connected to the root hub of host PC or other downstream port. Two(2) downstream ports allow to connect another USB device such as USB mouse, joystick, printer etc.

- 1) The maximum supply current of downstream port is 100mA each when buspowered mode hub.
- 2) To activate the USB hub, your host system should have USB capability.

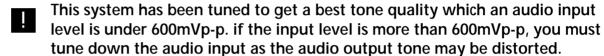




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Audio system

This monitor has an audio system including two micro loudspeakers. Each of two micro loudspeakers has an 1Wrms (max.) output power. This system also supports a headphone output jack.





NEXT



Power Switch / LED Indicator

3-4. Setting the refresh rate

Follow the instructions below to set your refresh rate in Windows 98.

- 1. Go to the configuration window(Start-Settings-Configuration window).
- 2. Double click on the 'Display' icon.
- 3. Click on the 'Settings' tab.
- 4. Click on the 'Advanced' button.
- 5. Click on 'Adapter' and select 60Hz from the list.
- 6. Click on 'Apply' to accept the selected value.



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Preset Timing Table

- If the signal from the system doesn't equal to the preset timing mode, adjust the mode with reference to the user guide of videocard because the screen may not be displayed.
- ► ANALOG R.G.B INPUT

The recommended setting is a resolution of 1280x1024 and a refresh rate of 60Hz.

| No. | Resolution | Horizontal Frequency | Refresh rate |
|-----|-------------|----------------------|--------------|
| 1 | 720 x 400 | 31.5 KHz | 70 Hz |
| 2 | 640 x 480 | 31.5 KHz | 60 Hz |
| 3 | 640 x 480 | 37.5 KHz | 75 Hz |
| 4 | 800 x 600 | 35.2 KHz | 56 Hz |
| 5 | 800 x 600 | 37.9 KHz | 60 Hz |
| 6 | 800 x 600 | 48.1 KHz | 72 Hz |
| 7 | 800 x 600 | 46.9 KHz | 75 Hz |
| 8 | 832 x 624 | 49.7 KHz | 75 Hz |
| 9 | 1024 x 768 | 48.4 KHz | 60 Hz |
| 10 | 1024 x 768 | 56.5 KHz | 70 Hz |
| 11 | 1024 x 768 | 60.0 KHz | 75 Hz |
| 12 | 1152 x 870 | 68.7 KHz | 75 Hz |
| 13 | 1280 x 1024 | 63.9 KHz | 60 Hz |
| 14 | 1280 x 1024 | 80.0 KHz | 75 Hz |



NEXT

DIGITAL R.G.B INPUT

| No. | Resolution | Horizontal Frequency | Refresh rate |
|-----|-------------|----------------------|--------------|
| 1 | 640 x 480 | 31.5 KHz | 60 Hz |
| 2 | 800 x 600 | 37.9 KHz | 60 Hz |
| 3 | 1024 x 768 | 48.4 KHz | 60 Hz |
| 4 | 1280 x 1024 | 63.9 KHz | 60 Hz |

Kensington Lock System

이 제품은 도난방지를 위한 Kensington Lock System을 지원합니다.

- * Kensington, Inc.
- · Address :
- · Tel :

· Fax :

E-mail:

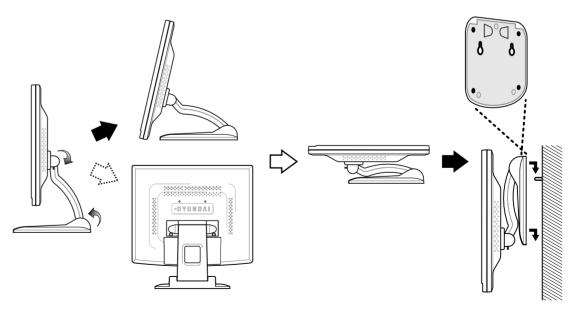


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3-5. User's Environment

With the double-hinge structure in the stand, this display unit is designed to Support the following user's environment.

- Without special Mounting Devices for VESA FPMPMI Standard, you can hang this display unit on the wall by using 4 holes in the bottom side of stand like the below picture.
- You can adjust the tilt angle and height at your suitable level and can fold the stand during carriage



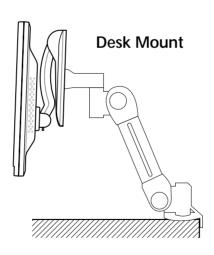
If you cannot fold the stand and the monitor fully, please pull the monitor a bit and then follow the above instruction again.

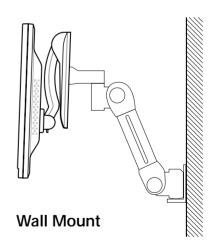


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VESA MOUNT'G

- This display unit supports VESA FPMPMI standard for 100mmx100mm screw mounting by giving 4 screw holes inside the base stand of the unit.
- For buying VESA Flat Panel Monitor Mounting Devices, please contact following information.
 - * Ergotron, Inc.
 - · Address : Ergotron Europe Kuiperbergweg 50 1101 AG Amsterdam The Netherlands
 - · Tel : +3 1 20 696 60 65 · Fax : +3 1 20 609 04 59 · E-mail : info.eu@ergotron.com





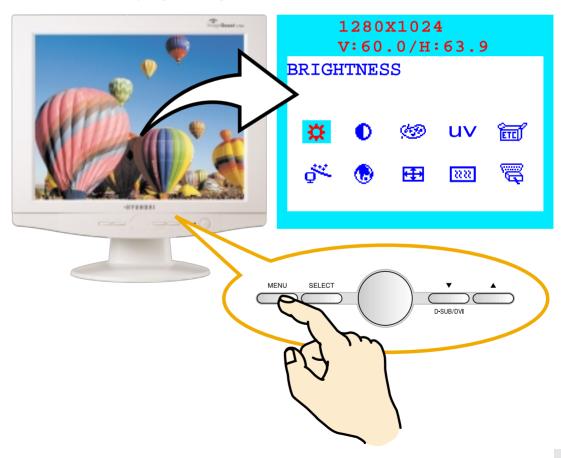


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4. Adjusting the picture

You can adjust the screen display by using the buttons located below the screen.

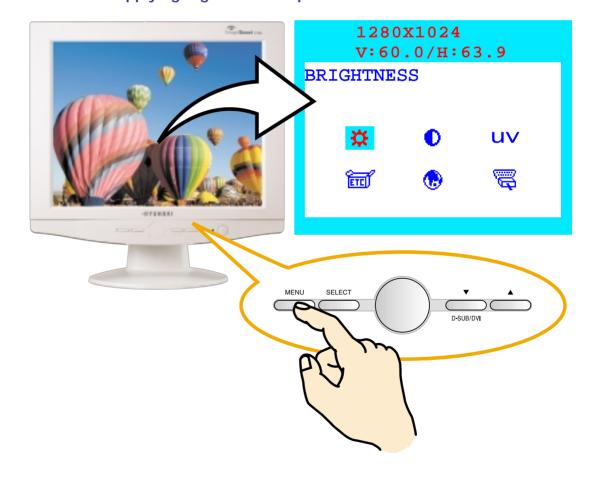
► In case of applying Analog RGB Input





NEXT

▶ In case of applying Digital TMDS Input





NEXT

4-1. Using the On Screen Display

- 1. Push the MENU button to call the OSD to the screen. The resolution and frequency are displayed at the top of the menu box for your information.
- 2. Push the ▲ or ▼ button to choose the item you want to adjust. The selected item is highlighted.
- 3. Push the SELECT button to adjust the highlighted item.
- 4. Use the ▲ or ▼ button to adjust the selection.
- 5. Push the MENU button to return to the previous menu if you are in a submenu.
- 6. The display unit automatically saves the new settings in 1 second after your last adjustments and the menu disappears. You can also push the MENU button to make the menu disappear.

4-2. Direct access buttons

SFI FCT AUTO ADJUST

At first display a full screen such as Window's back ground. Push the button SELECT(AUTO) to adjust the shape of screen automatically.

D-SUB/DVI INPUT SELECT

Push the button ▼ to choose the input select adjustment after choosing one of Analog Signal or Digital Signal.

LED Indicator will be displyed with Amber on processing.

MUTE **MUTE**

Push the button ▲ to audio mute on or off.

This button is toggled.



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4-3. OSD Adjustments

You can play the movie file to see how to adjust the picture image by clicking each icon or title hereunder.

The OSD adjustments available to you are listed below.



BRIGHTNESS

Adjust the brightness of the screen.



CONTRAST

Adjust the contrast of the screen.



COLOR CONTROL

Color temperature affects the tint of the image. With lower color temperatures the image turns reddish and with higher temperatures bluish.

There are three color settings available: Mode 1(a cool white), Mode 2(a warm white) or USER. With the USER setting you can set individual values for red, green and blue.

uV

YUV COLOR

In particular, color technology allows users to make the following color adjustment.

HUE

Adjust the hue of the video image.

FLESH TONE

Adjust the flesh Tone of the video image.



NEXT



MISCELLANEOUS

RECALL

Recall the saved color data.

OSD TIMER

You can set the displayed time of OSD Menu window on the screen by using this adjustment.

OSD POSITION

Adjust the OSD menu's horizontal or vertical position on the screen.

VOLUME

Adjust the audio volume level.

MUTE

This menu is used to audio mute on and off.



AUTO ADJUST

You can adjust the shape of screen automatically at the full screen pattern.



LANGUAGE

You can select the language in which adjustment menus are displayed. The following languages are available: English, French, German, Italian, Spanish and Japanese.



NEXT



H/V POSITION

H-POSITION

Adjusts the horizontal position of the entire screen image.

V-POSITION

Adjusts the vertical position of the entire screen image.



CLOCK PHASE

PHASE

Adjust the noise of the screen image.

CLOCK

Adjust the horizontal size of the entire screen image.



INPUT SELECT

This menu used to choose the desired input signal source. There are two available signal source.

• Analog R.G.B: 15 pin D-sub, Analog Signal

• Digital TMDS: 24 pin DVI-D, Digital Signal



In case of applying Digital TMDS Input, the functions of Color Control, Auto Adjust, H/V Position, Clock Phase are not supported.



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5. Display power management

Reducing power consumption

If the power management function of your computer is enabled, your monitor turns on and off automatically. You can control power management features from your computer.

Your computer may have power management features which enable the computer or monitor to enter a power saving mode when the system is idle. You can reactivate the system by pressing any key or moving the mouse.

| Mode | LED | Power consumption |
|-----------|-----------------|-------------------|
| Normal | Green | 45 W |
| off | Orange | ≤ 5 W |
| Unplugged | Not illuminated | o W |

The power button does not disconnect the monitor from the mains. The only way to isolate the monitor completely from the mains supply is to unplug the mains cable.



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6. Troubleshooting

If your monitor is not functioning properly, you may be able to solve the problem by following the suggestions below:

| Problem | Possible solution |
|--|---|
| Blank screen | If the power LED is not lit, push the Soft power switch or check the AC cord to turn the monitor on. If the display unit is powered through the computer, check that the computer is switched on. |
| | The display unit might be in standby mode. Push one of the keyboard keys. Check that the keyboard is properly connected to the computer. |
| | Check that the signal cable connector is properly connected and that the connection pins are not bent or damaged. If the connector is loose, tighten the connector's screws. |
| | Check that the power cable is correctly connected to the display unit and to the power outlet. |
| Error message: Video mode not | Check the resolution and the frequency on the video port of your computer. |
| supported | Compare these values with the data in the Preset Timing Table. |
| The display does not enter power management mode | The video signal from the computer does not comply with VESA DPMS standard. Either the computer or the graphics adapter is not using the VESA DPMS power management function. |



NEXT

| Problem | Possible solution |
|---|--|
| Color defects | Check that the signal cable connector is properly connected and that the connection pins are not bent or damaged. Try another color temperature. |
| Size, position, shape or quality unsatisfactory | Adjust the picture characteristics as described in the section <i>OSD</i> Adjustment(4-3). |
| Duplicated images | A problem with your graphics adapter or display unit. Contact your service representative. |
| Image is not stable | Check that the display resolution and frequency from your PC or graphic adapter is an available mode for your monitor. In your PC, you can check through Control panel, Display, Settings. |
| | If the setting is not correct, use your computer utility program to change the display settings. |
| Message : No signal | Check that the signal cabel connector is properly connected and that the connection pins are not bent or damaged. If the connector is loose, tighten the connector's screws. Check that the computer is switched on. |
| The power LED is a orange color | To enter a power saving mode. You can reactivate the system by pressing any key or moving the mouse. |



NEXT

| Problem | Possible solution |
|---------------------------------|---|
| The power LED is a orange color | LED Indicator can be orange color on changing of video mode or Input Signal(D-sub/DVI). |
| | Check the Resolution and the frequency on the video part of your computer. Compare these values with the data in the Preset Timing Table. |

Contacting service

If the above troubleshooting hints do not help you find a solution to the problem, contact an authorized service agent. If the monitor is sent for service, use the original package if possible.

Unplug the display unit from the power outlet and contact a service agent when:

- The monitor does not operate normally according to the operating instructions.
- The monitor exhibits a distinct change in performance.
- The monitor has been dropped or the cabinet has been damaged.
- The monitor has been exposed to rain, or water or liquid has been spilled onto the monitor.



7. Specifications

| LCD | 17"viewable, Diagonal, Pixel pitch 0.26 mm, A-Si TFT |
|---------------------------|--|
| Brightness | 250cd/m ² |
| Response Time | 25msec |
| Display area | 337.92 X 270.336 mm |
| Number of color | 16,7 million colors |
| Input signals | R.G.B Analog, Digital TMDS(DVI-D), |
| Frequency rate | Horizontal : 31.0 to 80.0KHz, Vertical : 56 to 75Hz |
| Maximum bandwidth | 135 MHz |
| Maximum resolution | Analog RGB : 1280X1024@75Hz |
| | Digital TMDS: 1280X1024@60Hz |
| Recommanded resolution | 1280X1024@60Hz |
| Input voltage | 100-240 VAC |
| Power consumption | 45W |
| Power management | VESA DPMS |
| Plug & Play | VESA DDC 1/2B |
| | BRIGHTNESS, CONTRAST, COLOR CONTROL, YUV COLOR, |
| OSD menu | MISCELLANEOUS, AUTO ADJUST, LANGUAGE, |
| | H./V. POSITION, CLOCK-PHASE, INPUT SELECT |
| Audio system | 2ch X 2 watts / Ear Phone Jack |
| USB | 1up X 2down (Bus-Powered Hub) |
| VESA FPMPMI | 100 mm X 100 mm screw mounting |
| Ergonomics, | TCO, FCC Class B, CE, |
| Safety and EMC | cULus, TÜV-GS, SEMKO |
| Operating Temperature | 5 ~ 35°C |
| Weight | 4.8Kg unpacked, 6.0Kg packed |
| Dimensions (W X H X D mm) | 396 X 414 X 200 mm |

[•] Specification is subject to change without notice for performance improvement.