www.philips.com/welcome
User Manual (English)
Safety Instructions

Safety precautions and maintenance

WARNING: Use of controls, adjustments or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards and/or mechanical hazards.

Read and follow these instructions when connecting and using your display:

Operation:

• Keep the display out of direct sunlight and away from stoves or any other heat sources.
• Remove any object that could fall into ventilation holes or prevent proper cooling of the display’s electronics.
• Do not block the ventilation holes on the cabinet.
• When positioning the display, make sure the power plug and outlet are easily accessible.
• When turning off the display by detaching the power cord, wait 6 seconds before re-attaching the power cord for normal operation.
• Ensure the use of an approved power cord provided by Philips at all times. If your power cord is missing, please contact your local service center.
• Do not subject the display to severe vibration or high impact conditions during operation.
• Do not knock or drop the display during operation or transportation.
• The eye bolt is for usage in short-time maintenance and installation. We suggest not to use the eye bolt for more than 1 hour. Prolong usage is prohibited. Please keep a clear safety area under the display while using the eye bolt.

Maintenance:

• To protect your display from possible damage, do not put excessive pressure on the LCD panel. When moving your display, grasp the frame to lift; do not lift the display by placing your hand or fingers on the LCD panel.
• Unplug the display if you are not going to use it for an extensive period of time.
• Unplug the display if you need to clean it with a slightly damp cloth. The screen may be wiped with a dry cloth when the power is off. However, never use organic solvent, such as, alcohol, or ammonia-based liquids to clean your display.
• To avoid the risk of shock or permanent damage to the set, do not expose the display to dust, rain, water or an excessively moist environment.
• Do not store or use the display in locations exposed to heat, direct sunlight or extreme cold.
• In order to maintain the best performance of your display and ensure a longer lifetime, we strongly recommend using the display in a location that falls within the following temperature and humidity ranges.
  - Temperature: 0-40°C  32-104°F
  - Humidity: 20-80% RH
• LCD panel temperature need to be 25 degrees Celsius at all time for better luminance performance.

IMPORTANT: Always activate a moving screen saver program when you leave your display unattended. Always activate a periodic screen refresh application if the unit will display unchanging static content. Uninterrupted display of still or static images over an extended period may cause “burn in”, also known as “after-imaging” or “ghost imaging”, on your screen. This is a well-known phenomenon in LCD panel technology. In most cases, the “burned in” or “after-imaging” or “ghost imaging” will disappear gradually over a period of time after the power has been switched off.

WARNING: Severe “burn-in” or “after-image” or “ghost image” symptoms will not disappear and cannot be repaired. This is also not covered under the terms of your warranty.

Service:

• The casing cover should be opened only by qualified service personnel.
• If there is any need for repair or integration, please contact your local service center.
• Do not leave your display under direct sunlight.

If your display does not operate normally, having followed the instructions set out in this document, please contact a technician or your local service center.
Read and follow these instructions when connecting and using your display:

- Unplug the display if you are not going to use it for an extensive period of time.
- Unplug the display if you need to clean it with a slightly damp cloth. The screen may be wiped with a dry cloth when the power is off. However, never use alcohol, solvents or ammonia-based liquids.
- Consult a service technician if the display does not operate normally when you have followed the instructions in this manual.
- The casing cover should be opened only by qualified service personnel.
- Keep the display out of direct sunlight and away from stoves or any other heat sources.
- Remove any object that could fall into the vents or prevent proper cooling of the display’s electronics.
- Do not block the ventilation holes on the cabinet.
- Keep the display dry. To avoid electric shock, do not expose it to rain or excessive moisture.
- When turning off the display by detaching the power cable or DC power cord, wait for 6 seconds before re-attaching the power cable or DC power cord for normal operation.
- To avoid the risk of shock or permanent damage to the set do not expose the display to rain or excessive moisture.
- When positioning the display, make sure the power plug and outlet are easily accessible.
- IMPORTANT: Always activate a screen saver program during your application. If a still image in high contrast remains on the screen for an extended period of time, it may leave an ‘after-image’ or ‘ghost image’ on the front of the screen. This is a well-known phenomenon that is caused by the shortcomings inherent in LCD technology. In most cases the afterimage will disappear gradually over a period of time after the power has been switched off. Be aware that the after-image symptom cannot be repaired and is not covered under warranty.

EU Declaration of Conformity


This product has been tested and found to comply with the harmonized standards for Information Technology Equipment, these harmonized standards published under Directives of Official Journal of the European Union.

ESD Warnings

When user close to the monitor may cause the equipment discharge and reboot to the display of main menu.

Warning:

This equipment is compliant with Class A of EN55032/CISPR 32. In a residential environment this equipment may cause radio interference.

Federal Communications Commission (FCC) Notice (U.S. Only)

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

Use only an RF shielded cable that was supplied with the display when connecting this display to a computer device.

To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or excessive moisture.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Envision Peripherals Inc.
490 N McCarthy Blvd, Suite #120
Milpitas, CA 95035
USA
Polish Center for Testing and Certification Notice

The equipment should draw power from a socket with an attached protection circuit (a three-prong socket). All equipment that works together (computer, display, printer, and so on) should have the same power supply source.

The phasing conductor of the room’s electrical installation should have a reserve short-circuit protection device in the form of a fuse with a nominal value no larger than 16 amperes (A).

To completely switch off the equipment, the power supply cable must be removed from the power supply socket, which should be located near the equipment and easily accessible.

A protection mark “B” confirms that the equipment is in compliance with the protection usage requirements of standards PN-93/T-42107 and PN-89/E-06251.

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**Electric, Magnetic and Electromagnetic Fields (“EMF”)**

1. We manufacture and sell many products targeted at consumers, which, like any electronic apparatus, in general have the ability to emit and receive electromagnetic signals.
2. One of our leading Business Principles is to take all necessary health and safety measures for our products, to comply with all applicable legal requirements and to stay well within the EMF standards applicable at the time of producing the products.
3. We are committed to develop, produce and market products that cause no adverse health effects.
4. We confirm that if its products are handled properly for their intended use, they are safe to use according to scientific evidence available today.
5. We play an active role in the development of international EMF and safety standards, enabling us to anticipate further developments in standardization for early integration in its products.
Information for U.K. only

WARNING - THIS APPLIANCE MUST BE EARTHED.

Important:
This apparatus is supplied with an approved moulded 13A plug. To change a fuse in this type of plug proceed as follows:

1. Remove fuse cover and fuse.
2. Fit new fuse which should be a BS 1362 5A, ASTA or BSI approved type.
3. Refit the fuse cover.

If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate 3-pin plug fitted in its place.

If the mains plug contains a fuse, this should have a value of 5A. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5A.

NOTE: The severed plug must be destroyed to avoid a possible shock hazard should it be inserted into a 13A socket elsewhere.

How to connect a plug
The wires in the mains lead are coloured in accordance with the following code:

- BLUE - “NEUTRAL” (“N”)
- BROWN - “LIVE” (“L”)
- GREEN & YELLOW - “EARTH” (“E”)

1. The GREEN & YELLOW wire must be connected to the terminal in the plug which is marked with the letter “E” or by the Earth symbol or coloured GREEN or GREEN & YELLOW.
2. The BLUE wire must be connected to the terminal which is marked with the letter “N” or coloured BLACK.
3. The BROWN wire must be connected to the terminal which marked with the letter “L” or coloured RED.

Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead - not simply over the three wires.

North Europe (Nordic Countries) Information

Placering/Ventilation

WARNING:
FÖRSÄKRA DIG OM ATT HUVUDBRYTARE OCH UTTAG ÄR LÄTÅTKOMLIGA, NÄR DU STÄLLER DIN UTRUSTNING PÅPLATS.

Placering/Ventilation

ADVAREL:
SØRG VED PLACERINGEN FOR, AT NETLEDNINGENS STIK OG STIKKONTAKT ER NEMT TILGÆNGELIGE.

Paikka/Ilmankierto

VAROITUS:
SIJOITA LAITE SITEN, ETTÄ VERKKOJOHTO VOIDAAAN TARVITTAESSA HELPOSTI IRROTTAA PISTORASIISTA.

Plassering/Ventilasjon

ADVARSEL:
NÅR DETTE UTSTYRET Plasseres, MÅ DU PASSE PÅ AT KONTAKTENE FOR STØMTILFØRSEL ER LETTE Å NÅ.
根据中国大陆《电子电气产品有害物质限制使用标识要求》，以下部分列出了本产品中可能包含的有害物质的名称和含量。

<table>
<thead>
<tr>
<th>部件名称</th>
<th>铅 (Pb)</th>
<th>汞 (Hg)</th>
<th>镉 (Cd)</th>
<th>六价铬 (Cr (VI))</th>
<th>多溴联苯 (PBB)</th>
<th>多溴二苯醚 (PBDE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>外壳</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>液晶显示屏</td>
<td>×</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>电路板组件*</td>
<td>×</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>电源适配器</td>
<td>×</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>电源线/连接线</td>
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<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>遥控器</td>
<td>×</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

本表格依据SJ/T 11364 的规定编制。
*：电路板组件包括印刷电路板及其构成的零部件，如电阻、电容、集成电路、连接器等。
○：表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572规定的限量要求以下。
×：表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572规定的限量要求。

上表中打“×”的部件，应功能需要，部分有害物质含量超出 GB/T 26572规定的限量要求，但符合欧盟RoHS法规要求（属于豁免部分）。

备注：上表仅做为范例，实际标示时应依照各产品的实际部件及所含有害物质进行标示。

环保使用期限

此标识指期限(十年)，电子电气产品中含有的有害物质在正常使用的条件下不会发生外泄或突变，电子电气产品用户使用该电子电气产品不会对环境造成严重污染或对其人身、财产造成严重损害的期限。
《废弃电器电子产品回收处理管理条例》提示性说明

为了更好地关爱及保护地球，当用户不再需要此产品或产品寿命终止时，请遵守国家废弃电器电子产品回收处理相关法律法规，将其交给当地具有国家认可的回收处理资质的厂商进行回收处理。

### 警告

此为A级产品。在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对干扰采取切实可行的措施。

<table>
<thead>
<tr>
<th>單元</th>
<th>限用物質及其化學符號</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>鉛 (Pb)</td>
</tr>
<tr>
<td>塑料外框</td>
<td>○</td>
</tr>
<tr>
<td>後殼</td>
<td>○</td>
</tr>
<tr>
<td>液晶面板</td>
<td>—</td>
</tr>
<tr>
<td>電路板組件</td>
<td>—</td>
</tr>
<tr>
<td>底座</td>
<td>○</td>
</tr>
<tr>
<td>電源線</td>
<td>—</td>
</tr>
<tr>
<td>其他線材</td>
<td>—</td>
</tr>
<tr>
<td>遙控器</td>
<td>—</td>
</tr>
<tr>
<td>喇叭（選配）</td>
<td>—</td>
</tr>
<tr>
<td>風扇（選配）</td>
<td>—</td>
</tr>
</tbody>
</table>

備考1. “○”係指該項限用物質之百分比含量未超出百分比含量基準值。
備考2. “—”係指該項限用物質為排除項目。

警語：使用過度恐傷害視力。

注意事項：

（1）使用30分鐘請休息10分鐘。
（2）未滿2歲幼兒不看螢幕，2歲以上每天看螢幕不要超過1小時。

警告使用者：

此為甲類資訊技術設備，於居住環境中使用時，可能會造成射頻擾動，在此種情況下，使用者會被要求採取某些適當的對策。

**Turkey RoHS:**

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

**Ukraine RoHS:**

Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057
End-of-Life Disposal

Your new Public Information Display contains materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and to minimize the amount to be disposed of.

Please find out about the local regulations on how to dispose of your old display from your local Philips dealer.

(For customers in Canada and U.S.A.)

This product may contain lead and/or mercury. Dispose of in accordance to local-state and federal regulations. For additional information on recycling contact www.eia.org (Consumer Education Initiative)

Waste Electrical and Electronic Equipment-WEEE

Attention users in European Union private households

This marking on the product or on its packaging illustrates that, under European Directive 2012/19/EU governing used electrical and electronic appliances, this product may not be disposed of with normal household waste. You are responsible for disposal of this equipment through a designated waste electrical and electronic equipment collection. To determine the locations for dropping off such waste electrical and electronic, contact your local government office, the waste disposal organization that serves your household or the store at which you purchased the product.

Attention users in United States:

Please dispose of according to all Local, State and Federal Laws. For the disposal or recycling information, contact: www.mygreenelectronics.com or www.eiae.org.

End of Life Directives-Recycling

Your new Public Information Display contains several materials that can be recycled for new users.

Please dispose of according to all Local, State, and Federal laws.

As an ENERGY STAR Partner, we have determined that this product meets the ENERGY STAR guidelines for energy efficiency.

(55BDL3010Q)

Restriction on Hazardous Substances statement (India)

This product complies with the “E-Waste (Management) Rules, 2016” CHAPTER V, rule 16, sub-rule (1). Whereas New Electrical and Electronic Equipment and their components or consumables or parts or spares do not contain Lead, Mercury, Cadmium, Hexavalent Chromium, polybrominated biphenyls and polybrominated diphenyl ethers beyond a maximum concentration value of 0.1% by weight in homogenous materials for lead, mercury, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ethers and of 0.01% by weight in homogenous materials for cadmium, except of exemptions set in Schedule 2 of the Rule.

E-Waste Declaration for India

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

For more information about E-waste please visit http://www.india.philips.com/about/sustainability/recycling/index.page and to know where you can drop off your waste equipment for recycling in India please contact on below given contact details.

Helpline number: 1800-425-6396 (Monday to Saturday, 9 a.m. to 5:30 pm)

E-mail: india.callcentre@tpv-tech.com
Batteries

For EU: The crossed-out wheeled bin implies that used batteries should not be put to the general household waste! There is a separate collection system for used batteries, to allow proper treatment and recycling in accordance with legislation.

Please contact your local authority for details on the collection and recycling schemes.

For Switzerland: The used battery is to be returned to the selling point.

For other non-EU countries: Please contact your local authority for correct method of disposal of the used battery.

According to EU directive 2006/66/EC, the battery can’t be disposed improperly. The battery shall be separated to collect by local service.

<table>
<thead>
<tr>
<th>Information for EAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month and year of manufacturing</td>
</tr>
</tbody>
</table>
| Name and location of manufacturer | ООО “Профтехника”

Адрес: 3-й Проезд Марьиной рощи, 40/1 офис 1. Москва, 127018, Россия |

<table>
<thead>
<tr>
<th>Importer and information</th>
</tr>
</thead>
</table>
| Наименование организации: ООО “Профтехника”

Адрес: 3-й Проезд Марьиной рощи, 40/1 офис 1. Москва, 127018, Россия |

Контактное лицо: Наталья Астафьева,
+7 495 640 20 20
nat@profdisplays.ru |
# Table Of Contents

1. Unpacking and Installation ....................................................... 1  
   1.1. Unpacking ......................................................................... 1  
   1.2. Package Contents ............................................................... 1  
   1.3. Installation Notes ............................................................... 1  
   1.4. Mounting on a Wall .......................................................... 2  

2. Parts and Functions ................................................................. 4  
   2.1. Control Panel ................................................................. 4  
   2.2. Input/Output Terminals ..................................................... 5  
   2.3. Using the remote sensor and power indicator ................. 8  
   2.4. USB Cover ....................................................................... 9  
   2.5. Remote Control .............................................................. 10  

3. Connecting External Equipment ....................................... 12  
   3.1. Connecting External Equipment (DVD/VCR/  
        VCD) .............................................................................. 12  
   3.2. Connecting a PC .............................................................. 12  
   3.3. Connecting Audio Equipment ......................................... 13  
   3.4. Connecting Multiple Displays in a Daisy-chain  
        Configuration ................................................................. 13  
   3.5. IR connection ................................................................. 14  
   3.6. IR Pass-through Connection ........................................... 14  

4. Operation ............................................................................. 15  
   4.1. Play multimedia files from USB device ....................... 15  

5. OSD Menu ........................................................................ 16  
   5.1. Navigating the OSD Menu ............................................. 16  
   5.2. OSD Menu Overview ..................................................... 16  

6. Supported Media Formats ................................................. 21  

7. Input Mode ........................................................................ 22  

8. Cleaning and Troubleshooting ...................................... 23  
   8.1. Cleaning ......................................................................... 23  
   8.2. Troubleshooting ............................................................ 24  

9. Technical Specifications .................................................... 26
1. Unpacking and Installation

1.1. Unpacking
• This product is packed in a carton, together with the standard accessories.
• Any other optional accessories will be packed separately.
• Due to the size and weight of this display it is recommended for two people to move it.
• After opening the carton, ensure that the contents are complete and in good condition.

1.2. Package Contents
Please verify that you received the following items with your package content:
• LCD display
• Quick start guide
• Remote control with AAA batteries
• Power cord
• RS232 cable
• RS232 daisy chain cable
• IR sensor cable
• USB cover and screw x1

* The supplied power cord varies depending on destination.

NOTES:
• For all other regions, apply a power cord that conforms to the AC voltage of the power socket and has been approved by and complies with the safety regulations of the particular country (Type H05W-F, 2G or 3G, 0.75 or 1 mm² should be used).
• Keep the packaging materials appropriately after unpacking the product.

1.3. Installation Notes
• Only use the power cable provided with this product. If an extension cord is required, please consult your service agent.
• The product should be installed on a flat surface, or the product may tip over. Leave a space between the rear of the product and the wall for proper ventilation. Do not install the product in a kitchen, bathroom or a place exposed to moisture, failure to do so may shorten the life of the internal parts.
• Do not install the product where it is 3000m and higher in altitude. Failure to do so may result in malfunctions.
1.4. Mounting on a Wall

To mount this display on a wall, a standard wall-mounting kit (commercially available) is required. It is recommended that you use a mounting interface that complied with TUV-GS and/or UL1678 standard in North America.

1. Spread a protective sheet on a flat surface, which is wrapped around the display when it was packed, beneath the screen surface to facilitate your operation without scratching the screen.
2. Ensure you have all accessories necessary for all types of mounting (wall mount, ceiling mount, table stand, etc).
3. Follow the instructions that came with the base mounting kit. Failure to follow the correct mounting procedures could result in damage to the equipment, or injury to the user or installer. The product warranty does not cover the damage caused by improper installation.
4. For the wall-mounting kit, use the M6 mounting screws (with a length 10 mm longer than the thickness of the mounting bracket) and tighten them securely.
5. The equipment and its associated mounting facilities still remain secure during the test. Use only the UL listed Wall Mount Bracket with a minimum weight/load of the weight of the unit without base.
6. Portrait orientation is not allowed.

1.4.1. VESA Grid

<table>
<thead>
<tr>
<th>Model</th>
<th>VESA Grid</th>
</tr>
</thead>
<tbody>
<tr>
<td>50BDL3010Q</td>
<td>400(H) x 400(V) mm</td>
</tr>
<tr>
<td>55BDL3010Q</td>
<td>400(H) x 400(V) mm</td>
</tr>
<tr>
<td>65BDL3010Q</td>
<td>400(H) x 200(V) mm</td>
</tr>
</tbody>
</table>

1.4.2. Weight of the unit

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50BDL3010Q</td>
<td>12.75</td>
</tr>
<tr>
<td>55BDL3010Q</td>
<td>15.82</td>
</tr>
<tr>
<td>65BDL3010Q</td>
<td>26.05</td>
</tr>
</tbody>
</table>
**Caution:**

To prevent the display from falling:

- For wall or ceiling installation, we recommend that you install the display with metal brackets which are commercially available. For detailed instructions about the installation, refer to the guide provided with the bracket.
- To prevent the display from falling in case of earthquake or other natural disaster, please consult the manufacturer of the bracket for the mounting location.

**Ventilation Requirements for enclosure locating**

Leave a space of 100 mm at the top, rear, right and left of the display for ventilation.
2. Parts and Functions

2.1. Control Panel

1. [MUTE] button
   - Turn the display On or turn the display to standby mode.

2. [MUTE] button
   - Mute the sound or reactivate sound.

3. [INPUT] button
   - Select an input source.

4. [+] button
   - Increase the audio output level
   - Enter into the submenu while OSD menu is on

5. [-] button
   - Decrease the audio output level
   - Back to previous menu while OSD menu is on

6. [A] button
   - Move the selected item one level up while the OSD menu is On
   - Increase the adjustment.

7. [▼] button
   - Move the selected item one level down while the OSD menu is On.
   - Decrease the adjustment.

8. [MENU] button
   - Return to the previous menu while the OSD menu is On. This button can also be used to activate the OSD menu when the OSD menu is Off.

9. Remote control sensor and power status indicator
   - Receives command signals from the remote control.
   - Indicates the operating status of the display without OPS:
     - Lights green when the display is turned On
     - Lights red when the display is in the standby mode
     - When [SCHEDULE] is enabled, the light blinks green and red
     - If the light blinks red, it indicates that a failure has been detected
     - Lights off when the main power of the display is turned off

* Use an IR sensor cable for better remote control performance. (Please refer to the instructions of 3.5)
2.2.  Input/Output Terminals
50BDL3010Q/SSBDL3010Q

1. **AC IN**
AC power input from the wall outlet.

2. **MAIN POWER SWITCH**
Switch the main power between on and off.

3. **DVI-I IN**
DVI/VGA video input.

4. **HDMI4 IN / HDMI3 IN / HDMI2 IN / HDMI1 IN**
HDMI video/audio input.

5. **RS232 IN / RS232 OUT**
RS232 network input/output for the loop-through function.

6. **IR IN / IR OUT**
IR signal input/output for the loop-through function.

**NOTES:**
- This remote control sensor of this display will stop working if the jack [IR IN] is connected.
- To remotely control your A/V device via this display, refer to page 14 for IR Pass Through connection.

7. **AUDIO OUT**
Audio output to external AV device.

8. **PC LINE IN**
Audio input for VGA source (3.5mm stereo phone).

9. **RJ-45**
LAN control function for using the remote control signal from the control center.

10. **USB 2.0 PORT**
Connect your USB storage device and service port.

11. **SECURITY LOCK**
Used for protecting the product from stealing.
### Connectors

<table>
<thead>
<tr>
<th>Number</th>
<th>Connector</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AC IN</td>
<td>AC power input from the wall outlet.</td>
</tr>
<tr>
<td>2</td>
<td>MAIN POWER SWITCH</td>
<td>Switch the main power between on and off.</td>
</tr>
<tr>
<td>3</td>
<td>AC OUT</td>
<td>AC power supply to the AC IN jack of a media player.</td>
</tr>
<tr>
<td>4</td>
<td>DVI-I IN</td>
<td>DVI/VGA video input.</td>
</tr>
<tr>
<td>5</td>
<td>HDMI4 IN / HDMI3 IN</td>
<td>HDMI video/audio input.</td>
</tr>
<tr>
<td>6</td>
<td>HDMI2 IN / HDMI1 IN</td>
<td>HDMI video/audio input.</td>
</tr>
<tr>
<td>7</td>
<td>RS232 IN / RS232 OUT</td>
<td>RS232 network input / output for the loop-through function.</td>
</tr>
<tr>
<td>8</td>
<td>IR IN / IR OUT</td>
<td>IR signal input / output for the loop-through function.</td>
</tr>
<tr>
<td>9</td>
<td>AUDIO OUT</td>
<td>Audio output to external AV device.</td>
</tr>
<tr>
<td>10</td>
<td>PC LINE IN</td>
<td>Audio input for VGA source (3.5mm stereo phone).</td>
</tr>
<tr>
<td>11</td>
<td>RJ-45</td>
<td>LAN control function for using the remote control signal from the control center.</td>
</tr>
<tr>
<td>12</td>
<td>USB 2.0 PORT</td>
<td>Connect your USB storage device and service port.</td>
</tr>
<tr>
<td>13</td>
<td>SECURITY LOCK</td>
<td>Used for protecting the product from stealing.</td>
</tr>
</tbody>
</table>

**NOTES:**

- This remote control sensor of this display will stop working if the jack [IR IN] is connected.
- To remotely control your A/V device via this display, refer to page 14 for IR Pass Through connection.
2.2.1. Inserting the batteries in the remote control

The remote control is powered by two 1.5V AAA batteries.

To install or replace the batteries:
1. Press and then slide the cover to open it.
2. Insert the batteries with the correct polarity (+) and (-).
3. Replace the cover.

Caution:
Incorrect use of batteries may cause leakage or explosion. Be sure to follow the instructions below:
• Insert “AAA” batteries with the correct polarity (+ and -).
• Do not mix battery types.
• Do not use a new battery with a used one together. Otherwise, it may cause leakage or shorten the life of the batteries.
• Remove the dead batteries immediately to avoid battery leakage in the battery compartment. Do not touch exposed battery acid, as it may cause injury to your skin.

NOTE: Remove the batteries from the battery compartment when not using for an extended period of time.

2.2.2. Handling the remote control

• Do not drop or apply shock to the remote control.
• Do not allow any liquid to get inside the remote control. If water has entered the remote control, wipe the remote control with a dry cloth immediately.
• Do not place the remote control near heat and steam sources.
• Do not attempt to disassemble the remote control, unless you need to place batteries in the remote control.

2.2.3. Operating range of the remote control

Point the top front of the remote control at the remote sensor on the display when you press the buttons.

Use the remote control within a distance of less than 6m (pull the lens down and use the remote control from the front) /19ft from the display’s sensor, and a horizontal and vertical angle of less than 20 degrees.

NOTE: The remote control may not function properly when the remote control sensor on the display is under direct sunlight or strong illumination, or when there is an object between the remote control and the remote sensor of the display.
2.3. **Using the remote sensor and power indicator**

1. Push down the lens to have better remote control performance and make it easy to observe the power status.
2. Pull up the lens before mounting the display for video wall application.
3. Pull/push the lens until a click sound is heard.

![Diagram showing lens expansion and collapse](image-url)
2.4. **USB Cover**

- Use the USB cover and screws to cover the USB stick and Micro SD card.

- Maximum USB stick size recommended:
  USB: 20(W) × 10(H) × 60(L) mm
2.5. Remote Control

2.5.1. General functions

1. [ ][ ] POWER button
   Turns the power On/Off.

2. [ ] buttons
   Control playback of media files.

3. [⟨⟩] SOURCE button
   Select an input source.

4. [ ] HOME button
   Access the OSD menu.

5. [ ] LIST button
   No function.

6. [ ] REMOTE CONTROL buttons
   Navigate through the menus and select an item.

7. [ ] OK button
   Confirm an entry or selection.

8. [ ] ADJUST button
   Go to Auto Adjust OSD for VGA only.

9. [ ] MUTE button
   Sound mute on or off.

10. [ ] COLOR buttons
    No functions.

11. [ ] NUMBER/ ID SET/ ENTER button
    Enter text for network setting.
    Press to set the display ID. Refer to 2.5.2. ID Remote Control for more detail.

12. [ ] FORMAT button
    Change the picture format.

13. [ ] BACK button
    Return to the previous page or exit from the previous function.

14. [ ] INFO button
    Display information about the current input signal.

15. [ ] OPTIONS button
    No functions.

16. [ ] [ ] VOLUME button
    Adjust volume level.
2.5.2. ID Remote Control
Set remote control ID number when using several displays.

Press the [ID] button and the red LED blinks twice.
1. Press the [ID SET] button for more than 1 second to enter the ID mode. The red LED lights up.
   Press the [ID SET] button again to exit from the ID mode. The red LED lights off.
Press the digit numbers [0] ~ [9] to select the display to be controlled.
For example: press [0] and [1] for display No.1, press [1] and [1] for display No.11.
The available numbers are [01] ~ [255].
2. If no button is pressed within 10 seconds, it will exit from the ID mode.
3. If a wrong button is pressed, wait for 1 second until the red LED lights off and then turns on again, then press the correct digits.
4. Press [ENTER] button to confirm your selection. The red LED blinks twice and then lights off.

NOTE:
• Press the [NORMAL] button. The green LED blinks twice, indicating that the display is under normal operation.
• It is necessary to set up the ID number for each display before selecting its ID number:
3. Connecting External Equipment

3.1. Connecting External Equipment (DVD/VCR/VCD)

3.1.1. Using HDMI video input

3.2. Connecting a PC

3.2.1. Using DVI input

3.2.2. Using HDMI input
3.3. Connecting Audio Equipment

3.3.1. Connecting an external audio device

![Stereo Amplifier Diagram]

3.4. Connecting Multiple Displays in a Daisy-chain Configuration

You can interconnect multiple displays to create a daisy-chain configuration for applications such as a menu board.

3.4.1. Display control connection

Connect the [RS232 OUT] connector of DISPLAY 1 to the [RS232 IN] connector of DISPLAY 2.
3.5. IR connection

NOTES:
1. The remote control sensor of this display will stop working if the [IR IN] is connected.
2. IR loop through connection can support up to 9 displays.
3. IR in daisy chain via RS232 connection can support up to 9 displays.

3.6. IR Pass-through Connection
4. **Operation**

**NOTE**: The control button described in this section is mainly on the remote control unless specified otherwise.

4.1. **Play multimedia files from USB device**

1. Connect your USB device to the USB port on the display.

2. Press the [ SOURCE ] button, choose [ USB ], and press [ OK ] button.

3. The connected USB device is detected automatically for all its playable files, which will be automatically sorted into 3 types: **Photo**, **Music** and **Movie**.

4. Press [ ] or [ ] button to choose the item. Press [ OK ] button to enter its play list.

5. Press [ ], [ ], [ ] or [ ] button to choose the file you want. Press [ OK ] or [ ] button to start playing.

6. Follow the on-screen instruction to control the play option.

7. Press [ PLAY ] buttons ( [ ] [ ] [ ] ) to control playing.

8. Press [ ], [ ], [ ] or [ ] button to choose “Return” item then press [ OK ] button to go up to the top layer in the screen.
5. **OSD Menu**

An overview of the On-Screen Display (OSD) structure is shown below. You can use it as a reference for further adjustment of your display.

5.1. **Navigating the OSD Menu**

5.1.1. **Navigating the OSD menu using the remote control**

1. Press [btn1] button on the remote control to display the OSD menu.
2. Press [btn2] or [btn3] button to select the item to adjust.
3. Press [OK] or [-] button to enter the submenu.
4. In the submenu, press [btn1] or [btn3] button to toggle between items, press [-] or [-] button to adjust the settings. If there is a submenu, press [OK] or [-] button to enter the submenu.
5. Press [btn4] button to return to the previous menu, or press [btn1] button to exit from the OSD menu.

5.1.2. **Navigating the OSD menu using the display’s control buttons**

1. Press [MENU] button to display the OSD menu.
2. Press [btn4] or [btn5] button to select the item to adjust.
3. Press [btn6] button to enter the submenu.
4. In the submenu, press [btn1] or [btn2] button to toggle between items, press [-] or [-] button to adjust the settings. If there is a submenu, press [-] button to enter the submenu.
5. Press [MENU] button to return to the previous menu, or keep pressing [MENU] button to exit from the OSD menu.

5.2. **OSD Menu Overview**

5.2.1. **Picture**

**Picture Mode**
Select a predefined picture setting.

**Brightness**
Adjust the brightness of this display’s backlight.

**Contrast**
Adjust the contrast ratio for the input signal.

**Sharpness**
This function is digitally capable to keep a distinct image at all times. Adjust the sharpness of the picture for each picture mode.

**Backlight**
Adjust the brightness of this display’s backlight.

**Tint (Hue)**
Adjust tint of the screen.

**Color (Saturation)**
Adjust color saturation.

**Noise Reduction**
Reduce picture noise.

**Gamma**
Adjust gamma. It refers to the brightness performance curve of signal input. Select from {Native} / {2.2} / {2.4} / {5 gamma} / {D-image}.

**Color Temperature**
Adjust color tone.

The image becomes reddish as the color temperature decreases, and becomes bluish as the color temperature increases.
Zoom mode

VGA/DVI-I/HDMI1/HDMI2/HDMI3/HDMI4: {Full} / {4:3} / {Real} / {16:9}. (50BDL3010Q/55BDL3010Q)
VGA/DVI-I/HDMI1/HDMI2/HDMI3/HDMI4/OPS: {Full} / {4:3} / {Real} / {16:9}. (65BDL3010Q)
USB: {Full} / {4:3} / {16:9}

Zoom Mode will be “Full” when tiling.

Full
This mode restores the correct proportions of pictures transmitted in 16:9 using the full screen display.

4:3
The picture is reproduced in 4:3 format and a black band is displayed on either side of the picture.

Real
This mode displays the image pixel-by-pixel on screen without scaling the original image size.

16:9
The picture is reproduced in 16:9 format and a black band at the top and bottom.

Scan mode
Change the display area of the image.

Picture reset
Reset all your picture settings to the factory defaults.
Select “Yes” and press “SET” button to restore to the factory preset data.
Press “EXIT” button to cancel and return to the previous menu.

5.2.2. Audio

Balance
Adjust to emphasize left or right audio output balance.

Treble
Adjust to increase or decrease higher-pitched sounds.

Bass
Adjust to increase or decrease lower-pitched sounds.

Volume
Adjust the volume.

Maximum volume
Adjust your own limitation for the maximum volume setting. This stops the volume at the sound level you set.

Minimum volume
Adjust your own limitation for the minimum volume setting.

Mute
Turn the mute function on/off.

Audio Out Sync
Enable/disable the audio out volume.

Audio reset
Reset all settings in the Audio menu to factory preset values.

5.2.3. Tiling

Create a single large-screen matrix (video wall) that consists of up to 225 sets of display (up to 15 sets in vertical side and 15 sets in horizontal side).

Enable
Enable or disable the Tiling function. If {On} is selected, the display will apply the settings in {H monitors}, {V monitors}, {Position}, and {Frame comp.}.

H monitors
Set how many displays in horizontal side.

V monitors
Set how many displays in vertical side.

Position
Set the position of this display in the screen matrix.

Example: 2 x 2 screen matrix (4 displays)

H monitors = 2 displays
V monitors = 2 displays

Balance
Adjust to emphasize left or right audio output balance.

Treble
Adjust to increase or decrease higher-pitched sounds.

Bass
Adjust to increase or decrease lower-pitched sounds.

Volume
Adjust the volume.
Example: 5 x 5 screen matrix (25 displays)
H monitors = 5 displays
V monitors = 5 displays

Frame comp.
Turn the frame compensation function On or Off. If you select {On}, the display will adjust the image to compensate for the width of the display bezels in order to accurately display the image. 
(On)

Frame comp. Top
Adjust the top frame compensation.

Frame comp. Bottom
Adjust the bottom frame compensation.

Frame comp. Left
Adjust the left frame compensation.

Frame comp. Right
Adjust the right frame compensation.

5.2.4. Network

DHCP
Select how this display should assign address to the network resource. (On: DHCP & Auto IP, Off: Static IP). If DHCP is set to On, the device will request and be assigned an address every time it is booted up. Otherwise, you need to ask your network administrator for the appropriate IP settings.

IP address/Netmask/Gateway/Set
Enter the IP address/Netmask/Gateway/Set.

5.2.5. Option

Language
Set OSD menu language.

Auto signal detection
This function allows the system to detect and display the available signal sources automatically.
- {Off} - Once an input is connected, it can only be selected manually. If the selected input has signal, set the system to display the image automatically according to the search order of each option.
The options are: (Auto) / (Failover)
- {Auto}: VGA->DVI-I->HDMI1->HDMI2->HDMI3->HDMI4->USB. (50BDL3010Q/55BDL3010Q)
  VGA->DVI-I->HDMI1->HDMI2->HDMI3->HDMI4->USB -> OPS. (65BDL3010Q)
- {Failover}

**Date and time**

Set the current date and time for the display's internal clock.

**NOTES:**

The definition and behavior of the Daylight saving time:

The current implementation of daylight saving is a reminder tool for the user who doesn't know how to adjust the clock of daylight saving. It does not adjust the real time clock automatically. The problem is that there are no standard rules on when to adjust the clock defined by region or country. To solve this problem, the user must be able to set the daylight saving start/end date. When daylight saving correction is on (user selectable) then the real time clock should be adjusted at the time set of the daylight saving on/off date. At the start date of daylight saving, the clock should be adjusted 1 hour forward at 2 o'clock. At the end date of daylight saving, the clock should be adjusted 1 hour backward at 2 o'clock.

The existing daylight on/off menu should be replaced by the following menu structure:

The menu item **(Daylight saving)** opens the submenu that contains the following items:

1. Menu item **(Daylight saving start date)** Selection item {1st, 2nd, 3rd, 4th, last} Sunday of selection item {1-12 month}
2. Menu item **(Daylight saving stop date)** Selection item {1st, 2nd, 3rd, 4th, last} Sunday of selection item {1-12 month}
3. Menu item **(Correction time)** Selection item {0.5, 1.0, 1.5, 2.0} hour
4. Menu item **(Daylight saving)** Selection item **[on, off]**

When "daylight saving" is "on", the real time clock will be adjusted automatically at the daylight saving time (e.g. April 5, 2015, 02.00 o'clock: time will be set 1 hour later or October 25, 2015, 02.00 o'clock: time will be set 1 hour earlier).

**Schedule**

This function allows you to program up to 7 (seven) different scheduled time intervals for the display to activate.

You can select:

- The time for the display to turn On and Off.
- The days in a week for the display to activate.
- Which input source the display will use for each scheduled activation period.

**NOTE:** It is recommended that you set up the current date and time in the **(Date and time)** menu before using this function.

1. Press [OK] or [→] button to enter the submenu.
2. Press [↓] or [↑] button to select a schedule item (item number 1 ~ 7), and press [OK] or [→] button to enter the submenu.

**HDMI EDID**

Switch HDMI EDID type: {HDMI 1.4}, {HDMI 2.0}.

**HDMI with One Wire**

CEC control.

- **(Off)** - Disable CEC.(Default)
- **(On)** - Enable CEC.

**Power LED Light**

Select **(Off)** to turn off the indicator.

**Logo**

Select **(Off)** and the display will not display the PHILIPS logo when you switch on.

**Monitor ID**

Set ID number for controlling the display via the RS232C connection. Each display must have a unique ID number when multiple sets of display are connected. Monitor ID number range is between 1 to 255.
• {Monitor group}
  • {1-255} – {Monitor group} are supported. The default setting is 1.

**Network control port.**
Select from: {RS232} / {LAN}.

**Boot on source**
Select the input source when booting.
Input: select the input source when booting.
No failover function, the system will keep the source even the source has no signal input.

**Monitor information**
Show information about your display, including Input source, Resolution, Model name, SW version, Serial number and MAC address.

**Power Save**
Mode 1 [TCP off, auto off]
Mode 2 [TCP on, auto on/off]
Power save modes
Mode 1: DC off -> Power off, LED: Red.
Power Save -> Power off, LED: Red
Mode 2: DC off -> Power off, LED: Red.
Power Save -> Power Saving. LED: Orange. Can be wake up.

<table>
<thead>
<tr>
<th>RCU Power</th>
<th>No Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode 1 [TCP off, auto off]</td>
<td>DC OFF</td>
</tr>
<tr>
<td>Mode 2 [TCP on, auto on/off]</td>
<td>DC OFF</td>
</tr>
</tbody>
</table>

**Firmware update**
Update scalar firmware by USB.

**OPS Settings (65BDL3010Q)**
Select from: {Auto} / {On} / {Off}

**Factory Reset**
Reset all your customized settings to the factory default values.

**Option Reset**
Reset all settings in the option menu to the factory preset values.
6. **Supported Media Formats**

**USB Multimedia Formats**

<table>
<thead>
<tr>
<th>Video Codec</th>
<th>Resolution</th>
<th>Bit Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPEG1/2</td>
<td>1080P@30fps</td>
<td>40Mbps</td>
</tr>
<tr>
<td>H.264</td>
<td>1080P@30fps</td>
<td>50Mbps</td>
</tr>
<tr>
<td>WMV3</td>
<td>1080P@30fps</td>
<td>40Mbps</td>
</tr>
<tr>
<td>Motion JPEG</td>
<td>640x480@30fps</td>
<td>40Mbps</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audio Codec</th>
<th>Sampling Rate:</th>
<th>Channel</th>
<th>Bit Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPEG1/2 Layer1</td>
<td>16KHz~48KHz</td>
<td>Up to 2</td>
<td>32Kbps~448Kbps</td>
</tr>
<tr>
<td>MPEG1/2 Layer2</td>
<td>16KHz~48KHz</td>
<td>Up to 2</td>
<td>8Kbps~384Kbps</td>
</tr>
<tr>
<td>MPEG1/2 Layer3</td>
<td>16KHz~48KHz</td>
<td>Up to 2</td>
<td>8Kbps~320Kbps</td>
</tr>
<tr>
<td>AAC, HEAAC</td>
<td>8KHz~48KHz</td>
<td>Up to 5.1</td>
<td>32Kbps~448Kbps</td>
</tr>
<tr>
<td>WMA</td>
<td>8KHz~48KHz</td>
<td>Up to 2</td>
<td>128Kbps~320Kbps</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Image</th>
<th>Photo</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPEG</td>
<td>Base-line</td>
<td>15360x8640</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1920x8 x 1080x8)</td>
</tr>
<tr>
<td></td>
<td>Progressive</td>
<td>1024x768</td>
</tr>
<tr>
<td>PNG</td>
<td>non-interlace</td>
<td>9600x6400</td>
</tr>
<tr>
<td></td>
<td>interface</td>
<td>1200x800</td>
</tr>
<tr>
<td>BMP</td>
<td></td>
<td>9600x6400</td>
</tr>
</tbody>
</table>

**NOTES:**
- Sound or video may not work if the contents have a standard bit rate/frame rate above the compatible Frame/sec listed in the table above.
- Video content with a Bit rate or Frame rate larger than the rate specified in the table above can cause choppy video during playback.
7. **Input Mode**

**Timing support:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Resolution</th>
<th>H.Freq. (KHz)</th>
<th>VFreq. (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>720×400 @70Hz DOS</td>
<td>31.469</td>
<td>70.087</td>
</tr>
<tr>
<td>2</td>
<td>640×480 @60Hz DMT</td>
<td>31.469</td>
<td>59.94</td>
</tr>
<tr>
<td>3</td>
<td>640×480 @67Hz MAC</td>
<td>35</td>
<td>66.667</td>
</tr>
<tr>
<td>4</td>
<td>640×480 @72Hz DMT</td>
<td>37.861</td>
<td>72.809</td>
</tr>
<tr>
<td>5</td>
<td>640×480 @75Hz DMT</td>
<td>37.5</td>
<td>75</td>
</tr>
<tr>
<td>6</td>
<td>800×600 @56Hz DMT</td>
<td>35.156</td>
<td>56.25</td>
</tr>
<tr>
<td>7</td>
<td>800×600 @60Hz DMT</td>
<td>37.879</td>
<td>60.317</td>
</tr>
<tr>
<td>8</td>
<td>800×600 @72Hz DMT</td>
<td>48.077</td>
<td>72.188</td>
</tr>
<tr>
<td>9</td>
<td>800×600 @75Hz DMT</td>
<td>46.875</td>
<td>75</td>
</tr>
<tr>
<td>10</td>
<td>832×624 @75Hz MAC</td>
<td>49.725</td>
<td>74.5</td>
</tr>
<tr>
<td>11</td>
<td>1024×768 @60Hz DMT</td>
<td>48.363</td>
<td>60.004</td>
</tr>
<tr>
<td>12</td>
<td>1024×768 @70Hz DMT</td>
<td>56.476</td>
<td>70.069</td>
</tr>
<tr>
<td>13</td>
<td>1024×768 @75Hz DMT</td>
<td>60.023</td>
<td>75.029</td>
</tr>
<tr>
<td>14</td>
<td>1152×864 @75Hz DMT</td>
<td>67.5</td>
<td>75</td>
</tr>
<tr>
<td>15</td>
<td>1152×870 @75Hz MAC</td>
<td>68.681</td>
<td>75.062</td>
</tr>
<tr>
<td>16</td>
<td>1280×720 @60Hz CVT16:9</td>
<td>44.772</td>
<td>59.855</td>
</tr>
<tr>
<td>17</td>
<td>1280×800 @60Hz CVT16:10</td>
<td>49.702</td>
<td>59.81</td>
</tr>
<tr>
<td>18</td>
<td>1280×1024 @60Hz DMT</td>
<td>63.981</td>
<td>60.02</td>
</tr>
<tr>
<td>19</td>
<td>1440×900 @60Hz CVT16:10 R</td>
<td>55.469</td>
<td>59.901</td>
</tr>
<tr>
<td>20</td>
<td>1440×900 @60Hz CVT16:10</td>
<td>55.935</td>
<td>59.887</td>
</tr>
<tr>
<td>21</td>
<td>1600×1200 @60Hz CVT16:9</td>
<td>75</td>
<td>60</td>
</tr>
<tr>
<td>22</td>
<td>1680×1050 @60Hz CVT16:9 R</td>
<td>64.674</td>
<td>59.883</td>
</tr>
<tr>
<td>23</td>
<td>1680×1050 @60Hz CVT16:9</td>
<td>65.29</td>
<td>59.954</td>
</tr>
<tr>
<td>24</td>
<td>1920×1080 @60Hz CVT-RB / XBOX360</td>
<td>66.7</td>
<td>60</td>
</tr>
<tr>
<td>25</td>
<td>1920×1080 @60Hz DMT-RB</td>
<td>67.5</td>
<td>60</td>
</tr>
<tr>
<td>26</td>
<td>480@60Hz</td>
<td>15.734</td>
<td>59.94</td>
</tr>
<tr>
<td>27</td>
<td>480P@60Hz</td>
<td>31.469</td>
<td>59.94</td>
</tr>
<tr>
<td>28</td>
<td>720P@60Hz</td>
<td>44.955</td>
<td>59.94</td>
</tr>
<tr>
<td>29</td>
<td>1080@60Hz</td>
<td>33.716</td>
<td>59.94</td>
</tr>
<tr>
<td>30</td>
<td>1080P@60Hz</td>
<td>67.433</td>
<td>59.94</td>
</tr>
<tr>
<td>31</td>
<td>576@50Hz</td>
<td>15.625</td>
<td>50</td>
</tr>
<tr>
<td>32</td>
<td>576P@50Hz</td>
<td>31.25</td>
<td>50</td>
</tr>
<tr>
<td>33</td>
<td>720P@50Hz</td>
<td>37.5</td>
<td>50</td>
</tr>
<tr>
<td>34</td>
<td>1080@50Hz</td>
<td>28.125</td>
<td>50.08</td>
</tr>
<tr>
<td>35</td>
<td>1080P@50Hz</td>
<td>56.25</td>
<td>50</td>
</tr>
<tr>
<td>36</td>
<td>3840x2160@30</td>
<td>67.5</td>
<td>30</td>
</tr>
<tr>
<td>37</td>
<td>3840x2160@60</td>
<td>135</td>
<td>60</td>
</tr>
</tbody>
</table>

- The PC text quality is optimum in UHD mode (3840 x 2160, 60Hz).
- Your PC display screen might appear different depending on the manufacturer (and your particular version of Windows).
- Check your PC instruction book for information about connecting your PC to a display.
- If a vertical and horizontal frequency-select mode exists, select 60Hz (vertical) and 31.5KHz (horizontal). In some cases, abnormal signals (such as stripes) might appear on the screen when the PC power is turned off (or if the PC is disconnected). If so, press the [INPUT] button to enter the video mode. Also, make sure that the PC is connected.
- When horizontal synchronous signals seem irregular in RGB mode, check PC power saving mode or cable connections.
- The display settings table complies to the IBM/VESA standards, and based on the analog input.
- The DVI support mode is regarded as same to the PC support mode.
- The best timing for the vertical frequency to each mode is 60Hz.
8. Cleaning and Troubleshooting

8.1. Cleaning

Caution When Using the Display

- Do not bring your hands, face or objects close to the ventilation holes of the display. The top of the display is usually very hot due to the high temperature of exhaust air being released through the ventilation holes. Burns or personal injuries may occur if any body parts are brought too close. Placing any object near the top of the display could also result in heat related damage to the object as well as the display itself.
- Be sure to disconnect all cables before moving the display. Moving the display with its cables attached may damage the cables and thus cause fire or electric shock.
- Disconnect the power plug from the wall outlet as a safety precaution before carrying out any type of cleaning or maintenance procedure.

Front Panel Cleaning Instructions

- The front of the display has been specially treated. Wipe the surface gently using only a cleaning cloth or a soft, lint-free cloth.
- If the surface becomes dirty, soak a soft, lint-free cloth in a mild detergent solution. Wring the cloth to remove excess liquid. Wipe the surface of the display to remove dirt. Then use a dry cloth of the same type to dry.
- Do not scratch or hit the surface of the panel with fingers or hard objects of any kind.
- Do not use volatile substances such as insert sprays, solvents and thinners.

Cabinet Cleaning Instructions

- If the cabinet becomes dirty, wipe the cabinet with a soft, dry cloth.
- If the cabinet is extremely dirty, soak a lint-free cloth in a mild detergent solution. Wring the cloth to remove as much moisture as possible. Wipe the cabinet. Use another dry cloth to wipe over until the surface is dry.
- Do not allow any water or detergent to come into contact with the surface of the display. If water or moisture gets inside the unit, operating problems, electrical and shock hazards may result.
- Do not scratch or hit the cabinet with fingers or hard objects of any kind.
- Do not use volatile substances such as insert sprays, solvents and thinners on the cabinet.
- Do not place anything made from rubber or PVC near the cabinet for any extended periods of time.
## 8.2. Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No picture is displayed</strong></td>
<td>1. The power cord is disconnected.</td>
<td>1. Plug in the power cord.</td>
</tr>
<tr>
<td></td>
<td>2. The main power switch on the back of the display is not switched on.</td>
<td>2. Make sure that the power switch is switched on.</td>
</tr>
<tr>
<td></td>
<td>3. The selected input has no connection.</td>
<td>3. Connect a signal connection to the display.</td>
</tr>
<tr>
<td></td>
<td>4. The display is in the standby mode.</td>
<td></td>
</tr>
<tr>
<td><strong>Interference displayed on the display or an audible noise is heard</strong></td>
<td>Caused by surrounding electrical appliances or fluorescent lights.</td>
<td>Move the display to another location to see if the interference is reduced.</td>
</tr>
<tr>
<td><strong>Color is abnormal</strong></td>
<td>The signal cable is not connected properly.</td>
<td>Make sure that the signal cable is attached firmly to the back of the display.</td>
</tr>
<tr>
<td><strong>Picture is distorted with abnormal patterns</strong></td>
<td>1. The signal cable is not connected properly.</td>
<td>1. Make sure that the signal cable is attached firmly.</td>
</tr>
<tr>
<td></td>
<td>2. The input signal is beyond the capabilities of the display.</td>
<td>2. Check the video signal source to see if it is beyond the range of the display. Please verify its specifications with this display's specification section.</td>
</tr>
<tr>
<td><strong>Display image doesn't fill up the full size of the screen</strong></td>
<td>1. The zoom mode is not set correctly.</td>
<td>Use the Zoom mode or Custom zoom function in the Screen menu to fine tune display geometry and time frequency parameter.</td>
</tr>
<tr>
<td></td>
<td>2. Scan Mode may be set incorrectly to underscan.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. If the image exceeds the screen size, Scan Mode may need to be set to Underscan.</td>
<td></td>
</tr>
<tr>
<td><strong>Can hear sound, but no picture</strong></td>
<td>Source signal cable is connected improperly</td>
<td>Make sure that both video inputs and sound inputs are connected correctly.</td>
</tr>
<tr>
<td><strong>Can see picture but no sound is heard</strong></td>
<td>1. Source signal cable is connected improperly</td>
<td>1. Make sure that both video inputs and sound inputs are connected correctly.</td>
</tr>
<tr>
<td></td>
<td>2. Volume is turned all the way down.</td>
<td>2. Press [+] or [−] button to hear sound.</td>
</tr>
<tr>
<td></td>
<td>3. {Mute} is turned on.</td>
<td>3. Switch MUTE off by using the [MUTE] button.</td>
</tr>
<tr>
<td></td>
<td>4. No external speaker is connected.</td>
<td>4. Connect external speakers and adjust the volume to a suitable level.</td>
</tr>
<tr>
<td><strong>Some picture elements do not light up</strong></td>
<td>Some pixels of the display are off.</td>
<td>This display is designed using an extremely high level of precision technology; however, sometimes some pixels of the display may not display. This is not a malfunction.</td>
</tr>
<tr>
<td><strong>After-Images can still be seen on the display after the display is powered off. (Examples of still pictures include logos, video games, computer images, and images displayed in 4:3 normal mode)</strong></td>
<td>A still picture is displayed for an over extended period of time</td>
<td>Do not allow a still image to be displayed for an extended period of time as this can cause a permanent after-image to remain on the display.</td>
</tr>
</tbody>
</table>
| How to setup the settings in the menu to control all the monitors at the same time and individually via RC? | Daisy chained by RS232 and no IR cable | 1. The first display sets as “Primary” on OSD (Advanced option/IR control item), others set as “Secondary”.  
2. The setup OSD will show on top left side of the display. (Toggle MENU will show again if it disappears)  
3. Default setting: ID NO: 0, GP NO: 0, this setting can control all displays by IR.  
   The “+”, “-” can change “ID NO” to control signal display by “Monitor ID”.  
   The “UP”, “DOWN” can change “GP NO” to control multi-display by “Group ID”.  
   *The first display is always controlled by IR.  

| How does the RC work? | Daisy chain: no connection of RS232 and IR cable | No setting is required. Connect with IR cables and control by IR.  
*This may cause out-of-synchronizm phenomenon. It is suggested to use the above settings with RS-232 cable. |
9. Technical Specifications

Display:

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Size (Active Area)</td>
<td>1257 mm / 49.5 inch</td>
</tr>
<tr>
<td></td>
<td>1387 mm / 54.6 inch</td>
</tr>
<tr>
<td></td>
<td>1639 mm / 64.5 inch</td>
</tr>
<tr>
<td>Aspect Ratio</td>
<td>16:9</td>
</tr>
<tr>
<td></td>
<td>16:9</td>
</tr>
<tr>
<td></td>
<td>16:9</td>
</tr>
<tr>
<td>Number of pixels</td>
<td>1280 (H) x 1024 (V)</td>
</tr>
<tr>
<td></td>
<td>1366 (H) x 768 (V)</td>
</tr>
<tr>
<td></td>
<td>1600 (H) x 900 (V)</td>
</tr>
<tr>
<td>Pixel pitch</td>
<td>0.2854 (H) x 0.2854 (V) [mm]</td>
</tr>
<tr>
<td></td>
<td>0.315 (H) x 0.315 (V) [mm]</td>
</tr>
<tr>
<td></td>
<td>0.372 (H) x 0.372 (V) [mm]</td>
</tr>
<tr>
<td>Displayable colors</td>
<td>8 bits+FRC, 1.07 Billion colors</td>
</tr>
<tr>
<td></td>
<td>8 bits+FRC, 1.07 Billion colors</td>
</tr>
<tr>
<td></td>
<td>8 bits+FRC, 1.07 Billion colors</td>
</tr>
<tr>
<td>Brightness (typical)</td>
<td>350 cd/m²</td>
</tr>
<tr>
<td></td>
<td>350 cd/m²</td>
</tr>
<tr>
<td></td>
<td>350 cd/m²</td>
</tr>
<tr>
<td>Contrast ratio (typical)</td>
<td>4000:1</td>
</tr>
<tr>
<td></td>
<td>4000:1</td>
</tr>
<tr>
<td></td>
<td>4000:1</td>
</tr>
<tr>
<td>Viewing angle</td>
<td>178 degrees</td>
</tr>
<tr>
<td></td>
<td>178 degrees</td>
</tr>
<tr>
<td></td>
<td>178 degrees</td>
</tr>
</tbody>
</table>

In/Out Terminals:

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaker Output</td>
<td>Internal Speakers</td>
</tr>
<tr>
<td>Audio Output</td>
<td>RCA R/L x 1</td>
</tr>
<tr>
<td>Audio Input</td>
<td>3.5mm phone jack x 1</td>
</tr>
<tr>
<td>RS232C</td>
<td>2.5mm Phone jack x 2</td>
</tr>
<tr>
<td>RJ-45</td>
<td>RJ-45 Jack x 1 (8 pin)</td>
</tr>
<tr>
<td>HDMI Input</td>
<td>HDMI Jack x 4 (Type A) (19 pin)</td>
</tr>
<tr>
<td>DVI-I Input</td>
<td>DVI-I Jack</td>
</tr>
<tr>
<td>IR Input/Output</td>
<td>3.5mm x 2</td>
</tr>
<tr>
<td>USB Input</td>
<td>USB x 1 (Type A)</td>
</tr>
</tbody>
</table>

- **Speaker Output**: Internal Speakers
  - 10W (L) + 10W (R) [RMS]/8Ω
  - 82 dBW/M/160 Hz ~ 13 KHz
- **Audio Output**: RCA R/L x 1
  - 0.5V [rms] (Normal) / 2 Channel (L+R)
- **Audio Input**: 3.5mm phone jack x 1
  - 0.5V [rms] (Normal) / 2 Channel (L+R)
- **RS232C**: 2.5mm Phone jack x 2
- **RJ-45**: RJ-45 Jack x 1 (8 pin)
- **HDMI Input**: HDMI Jack x 4 (Type A) (19 pin)
  - Digital RGB:TMDS (Video + Audio)
  - MAX: Video - 720p, 1080p, 3840 x 2160/60 Hz
  - Audio - 48 kHz/ 2 Channel (L+R)
  - Supports LPCM only
- **DVI-I Input**: DVI-I Jack
  - Digital RGB:TMDS (Video)
- **IR Input/Output**: 3.5mm x 2
  - IR pass through or IR daisy chain
- **USB Input**: USB x 1 (Type A)
  - USB 2.0, Multimedia play and service port
### General:

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Input</strong></td>
<td>100 - 240V~, 50/60Hz</td>
</tr>
<tr>
<td><strong>Power Consumption (Max)</strong></td>
<td>150 W</td>
</tr>
<tr>
<td><strong>Power Consumption (typ.)</strong></td>
<td>115 W</td>
</tr>
<tr>
<td><strong>Power Consumption (Standby &amp; Off)</strong></td>
<td>&lt;0.5 W</td>
</tr>
<tr>
<td><strong>Dimensions [W x H x D]</strong></td>
<td>1123.60 x 646.70 x 69.20 mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>12.75 Kg</td>
</tr>
<tr>
<td><strong>Gross Weight</strong></td>
<td>17.40 Kg</td>
</tr>
<tr>
<td><strong>Energy Efficiency Class</strong></td>
<td>B</td>
</tr>
<tr>
<td><strong>Visible Screen Size</strong></td>
<td>1257 mm / 49.5 inch</td>
</tr>
<tr>
<td><strong>On Mode Power Consumption (W)</strong></td>
<td>115 W</td>
</tr>
<tr>
<td><strong>Annual Energy Consumption (kWh)</strong></td>
<td>168 kWh</td>
</tr>
<tr>
<td><strong>Standby Power Consumption (W)</strong></td>
<td>0.5 W</td>
</tr>
<tr>
<td><strong>Off Mode Power Consumption (W)</strong></td>
<td>0.3 W</td>
</tr>
<tr>
<td><strong>Display Resolution (Pixels)</strong></td>
<td>3840 x 2160</td>
</tr>
</tbody>
</table>

### Environmental Condition:

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Temperature</strong></td>
<td>Operational 0 ~ 40°C</td>
</tr>
<tr>
<td><strong>Humidity</strong></td>
<td>Operational 20 ~ 80% RH (No condensation)</td>
</tr>
<tr>
<td><strong>Altitude</strong></td>
<td>Operational 0 ~ 3,000 m</td>
</tr>
</tbody>
</table>

| **Storage**                               | -20 ~ 60°C                                         |
| **Storage**                               | 5 ~ 95% RH (No condensation)                       |
| **Storage / Shipment**                    | 0 ~ 9,000 m                                        |