55LP1M

User's Guide
Manuel d'utilisation
Guía del usuario
Guia do usuário

Please read this user's guide carefully before operating your set.
Retain it for future reference.
Record model number and serial number of the set.
See the label attached on the product and give the information to your dealer when you ask for service.

http://www.lge.com

P/NO. : 38289U0020A(0510-REV00)
Printed in Korea

Table of Contents

ENGLISH

Safety Precautions

Please read these safety precautions carefully before using the product.

⚠ **Warning**	If you ignore the warning message, you may be seriously injured or there is a possibility of accident or death.
⚠ **Caution**	If you ignore the caution message, you may be slightly injured or the product may be damaged.

Precautions in installing the Product

⚠ Warning

■ **Keep away from heat sources like electrical heaters.**
- Electrical shock, fire, malfunction or deformation may occur.

■ **Keep the packing anti-moisture material or vinyl packing out of the reach of children.**
- Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.

■ **Do not put heavy objects on the product or sit upon it.**
- If the product collapses or is dropped, you may be injured. Children must pay particular attention.

■ **Do not leave the power or signal cable unattended on a pathway.**
- The passerby can trip, which can cause electrical shock, fire, product breakdown or injury.

■ **Install the product in a neat and dry place.**
- Dust or moisture can cause electrical shock, fire or product damage.

■ **If you can smell smoke or other odors or hear a strange sound unplug the power cord and contact the service center.**
- If you continue to use without taking proper measures, electrical shock or fire can occur.

■ **If you dropped the product or the case is broken, turn off the product and unplug the power cord.**
- If you continue to use without taking proper measures, electrical shock or fire can occur. Contact the service center.

■ **Do not drop metallic objects such as coins, hair pins, chopsticks or wire into the product, or inflammable objects such as paper and matches. Children must pay particular attention.**
- Electrical shock, fire or injury can occur. If a foreign object is dropped into the product, unplug the power cord and contact the service center.

⚠ Caution

■ **Make sure the product ventilation holes are not blocked. Install the product in a suitably wide place (more than 10cm from the wall)**
- If you install the product too close to the wall, it may be deformed or fire can break out due to internal heat.

■ **Do not block the ventilation hole of the product by a tablecloth or curtain.**
- The product can be deformed or fire can break out due to overheating inside the product.

■ **Install the product on a flat and stable place that has no risk of dropping the product.**
- If the product is dropped, you may be injured or the product may be broken.

■ **Install the product where no EMI occurs.**

■ **Keep the product away from direct sunlight.**
- The product can be damaged.

Electrical Power Related Precautions

⚠ Warning

■ **Make sure the circuit is well grounded.**
- You may be electrocuted or injured.

■ **Use rated voltage only.**
- The product can be damaged, or you may be electrocuted.

■ **During a thunder or lightning storm, unplug the power cable or signal cable.**
- You may be electrocuted or a fire can break out.

■ **Do not connect several extension cords, electrical appliances or electrical heaters to a single outlet. Use a power bar with a grounding terminal designed for exclusive use with the computer.**
- A fire can break out due to overheating.

■ **Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off.**
- You may be electrocuted due to excess moisture.

■ **If you don't intend to use the product for a long time, unplug the power cable from the product.**
- Covering dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.

■ **Connect the power cable completely.**
- If the power cable is not connected completely, a fire can break out.

■ **Hold the plug when pulling out the power cable. Do not bend the power cord with excessive force or put heavy objects on the power cord.**
- The power line can be damaged, which may cause electric shock or fire.

■ **Do not insert a conductor (like a metal chopstick) into one end of the power cable while the other end is connected to the input terminal on the wall. Additionally, do not touch the power cable right after plugging into the wall input terminal.**
- You may be electrocuted.

■ **The power supply cord is used as the main disconnection device. Ensure that the socket-outlet is easily accessible after installation.**

⚠ Caution

■ **Do not unplug the power cord while the product is in use.**
- Electrical shock can damage the product.

Precautions in Moving the Product

⚠ Warning

■ **Make sure to turn off the product.**
- You may be electrocuted or the product can be damaged.

■ **Make sure to remove all cables before moving the product.**
- You may be electrocuted or the product can be damaged.

Safety Precautions

⚠ Caution

■ **Do not shock the product when moving it.**
- You may be electrocuted or the product can be damaged.

■ **Do not dispose the product-packing or box. Use it when you move.**

■ **Make the panel face forward and hold it with both hands to move.**
- If you drop the product, the damaged product can cause electric shock or fire. Contact with the service center for repair.

Precautions in Using the Product

⚠ Warning

■ **Do not disassemble, repair or modify the product at your own discretion.**
- Fire or electric shock accident can occur.
- Contact the service center for check, calibration or repair.

■ **Do not spray water on the product or scrub with an inflammable substance (thinner or benzene). Fire or electric shock accident can occur.**

■ **Keep the product away from water.**
- Fire or electric shock accident can occur.

⚠ Caution

■ **Do not put or store inflammable substances near the product.**
- There is a danger of explosion or fire due to careless handling of the inflammable substances.

■ **When cleaning the brown tube surface, unplug the power cord and scrub with soft cloth to prevent scratching. Do not clean with a wet cloth.**
- The water can sink into the product, which can cause electric shock or serious malfunction.

■ **Take a rest from time to time to protect your vision.**

■ **Keep the product clean at all times.**

■ **Take a comfortable and natural position when working with a product to relax the muscles.**

■ **Take a regular break when working with a product for a long time.**

■ **Do not press strongly upon the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.**

■ **Keep proper distance from the product.**
- Your vision may be impaired if you look at the product too closely.

■ **Set the appropriate resolution and clock by referring to the User's Guide.**
- Your vision can be impaired.

■ **Use authorized detergent only when cleaning the product. (Do not use benzene, thinner or alcohol.)**
- Product can be deformed.

On Disposal

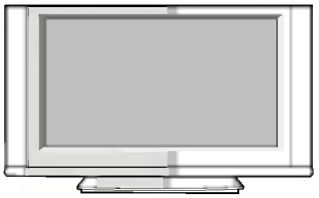
■ The fluorescent lamp used in this product contains a small amount of mercury.
■ Do not dispose of this product with general household waste.
Disposal of this product must be carried out in accordance to the regulations of your local authority.

Accessories

ENGLISH

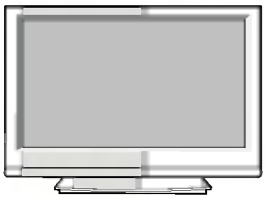
Please check the accessories in the product package.
*** The product and the accessories can be different from the figures shown here.**

Desktop Speaker / Stand Type

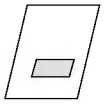


OR

Desktop Stand Type



Product



User's Guide

15-pin D-Sub Signal Cable

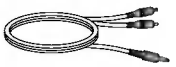
DVI-D Signal Cable

2-TV Bracket Bolts

2-TV Brackets, 2-Wall Bracket

Power Cord

Audio Cable (PC)
(Applicable only for models that support the speakers)



RCA-PC Audio Cable
(Applicable only for models that support the speakers)

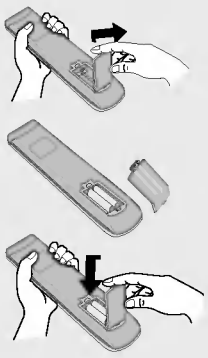
Remote Control/ Batteries

Twister Holder

Optional

Wall-mount Rack
Please refer to the enclosed "Installation Guide" when installing the wall-mount rack.

Inserting batteries into remote Control.



1. Take out the battery cap.

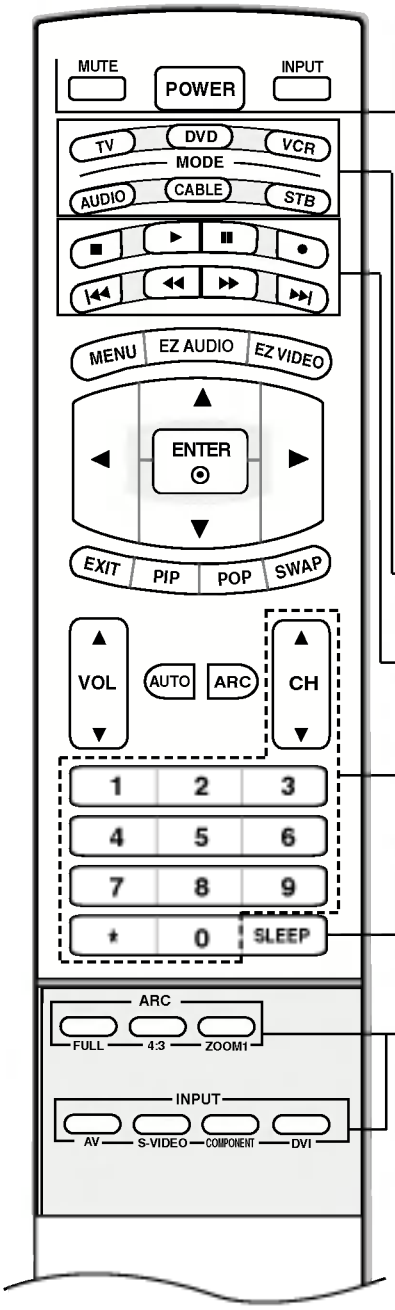
2. Insert batteries with correct polarity (+/-).

3. Close the battery cap.

- You can use a remote Control 7 meter distance and 30 degree (left/right) within the receiving unit scope.
- Dispose of used batteries in the recycle bin to prevent environmental pollution.

Using the Remote Control

Name of the Remote Control Buttons

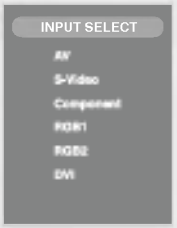


MUTE
Switches the sound on or off.

POWER
Power On/Off Button

INPUT
Select an input signal.

INPUT → ▼▲ → ENTER



MODE
Selects the remote operating modes. :TV, DVD, VCR, AUDIO, CABLE or STB

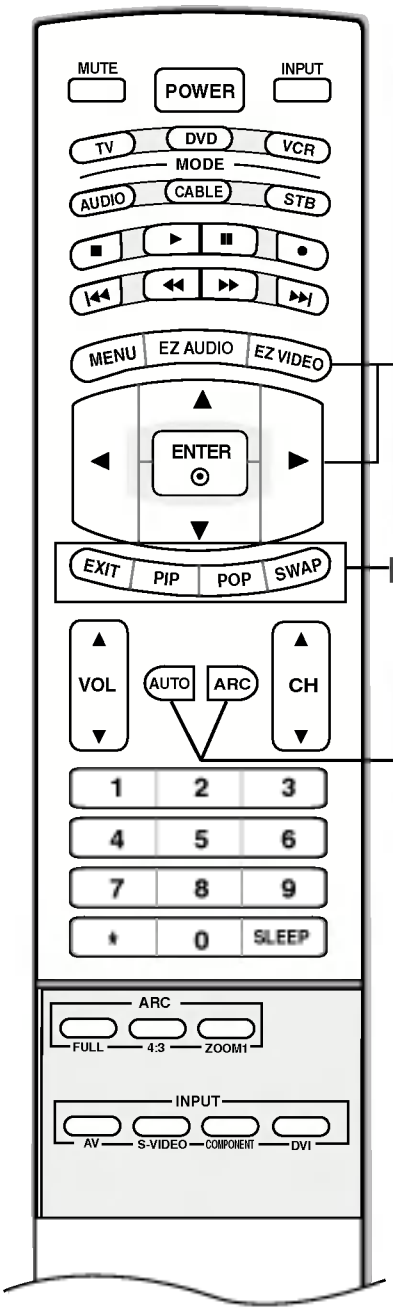
Video Operation Button
Applicable for LG products only

* There is not a function which is supported

SLEEP
When watching **AV/S-Video/Component**
- The product will be automatically turned off after a certain period of time.
  Press this button repetitively to select an appropriate time duration

ARC
Selects your desired picture format.

INPUT
Selects an input signal.



MENU
Selects a menu.

EZ AUDIO
Recalls your preferred sound setting.

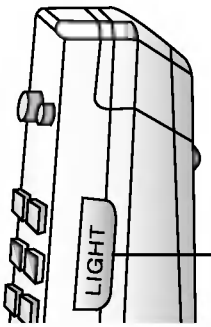
EZ VIDEO
Recalls your preferred picture setting.

▲ / ▼ / ◄ / ► (up / down / left / right)
- Selects or adjusts an item in the menu.
- Use these buttons to directly control brightness and contrast of the PC signal (RGB1, RGB2 / DVI).

ENTER
Accepts your selection or displays the current mode.

AUTO
- PC: Automatic adjustment function (Operational for the analog signal only).

ARC
Selects your desired picture format (See A28).



LIGHT
Illuminates the remote control buttons.

Using the Remote Control

1 **EXIT**
Exit the OSD by pressing the **EXIT** Button.

PIP (Picture in Picture) Button

The sub-screen moves to the next mode whenever you press this button.
: SMALL -> MEDIUM -> LARGE -> OFF

PIP

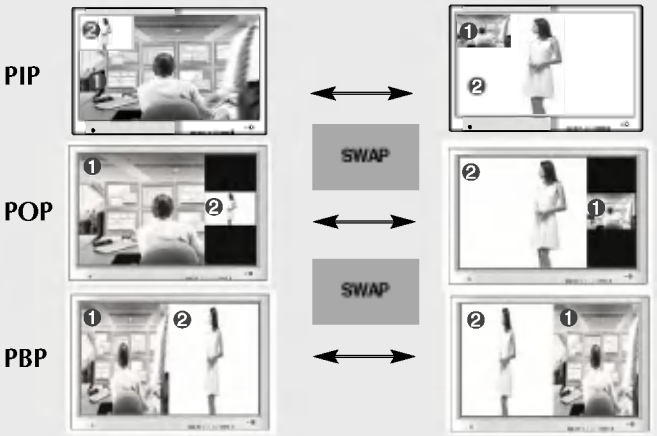
POP (Picture out Picture) Button

The sub-screen moves to the next mode whenever you press this button.
: POP ON -> PBP(FULL) -> PBP(4:3) -> OFF

POP ON PBP (FULL) PBP (4:3)

SWAP Button

You can swap the main screen and the sub-screen when the PIP/POP/PBP function is used.



When '**Input Signal 1**' comes on in the main screen, only '**Input Signal 2**' can be displayed on the sub-screen. On the contrary, if the main screen displays '**Input Signal 2**', the sub-screen can display '**Input Signal 1**' only. You can swap '**Input Signal 1**' and '**Input Signal 2**' using the SWAP button.

***PIP** function is not supported in 480i, 576i and 1080i modes.

<Table of PIP/POP/PBP Function Support>

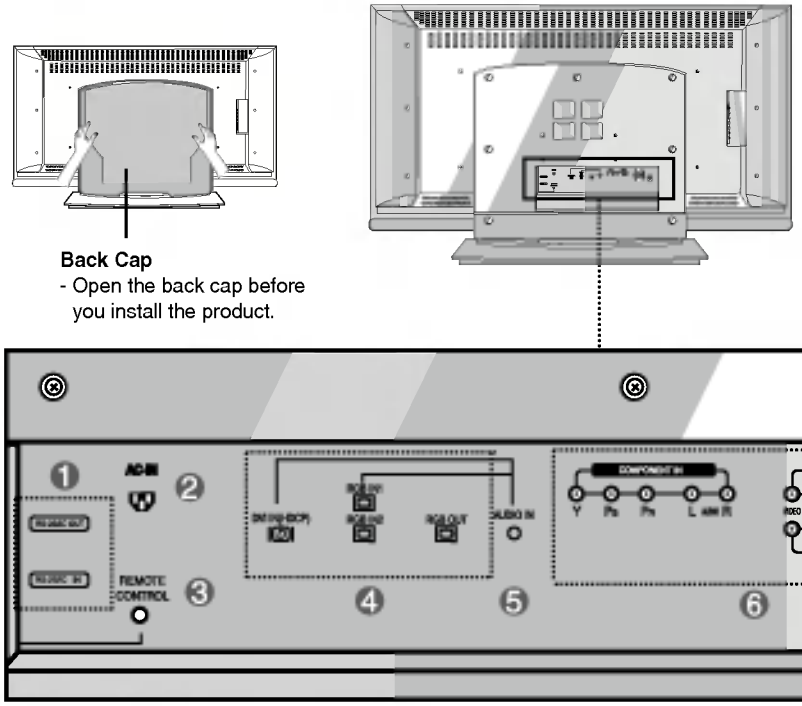
Main Screen / Sub-Screen	AV	S-Video	COMPONENT	RGB1	RGB2	DVI
AV	X	X	X	●	●	●
S-Video	X	X	X	●	●	●
COMPONENT	X	X	X	●	●	●
RGB1	●	●	●	X	X	●
RGB2	●	●	●	X	X	●
DVI	●	●	●	●	●	X

Name and Function of the Parts

*** The product image in the user's guide could be different from the actual image.**

ENGLISH

Rear View



1. **RS-232C Serial Ports**
2. **Power Connector : Connect the power cord**
3. **Wired Remote Control Port**
4. **PC Signal Inputs**
5. **PC Sound Jack**
   : Connect the audio cable to the *LINE OUT jack of the PC sound card.
6. **AV Ports**

***LINE OUT**

A terminal used to connect to the speaker including a built-in amplifier (Amp). Make sure that the connecting terminal of the PC sound card is checked before connecting. If the Audio Out of PC sound card has only Speaker Out, reduce the PC volume.

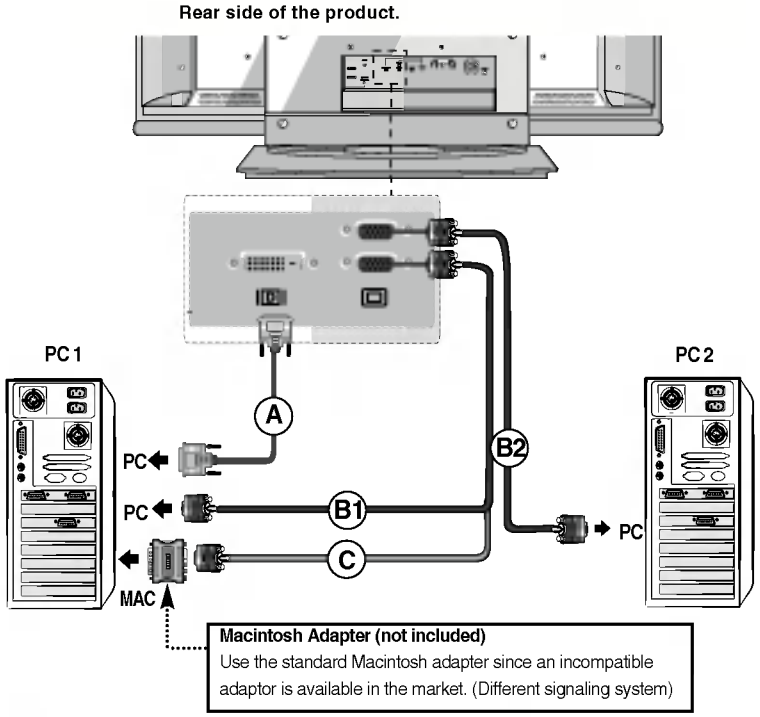
If the Audio Out of the PC sound card supports both Speaker Out and Line Out, convert to Line Out using the card jumper of the program (Refer to the Sound Card Manual).

Connecting to External Devices

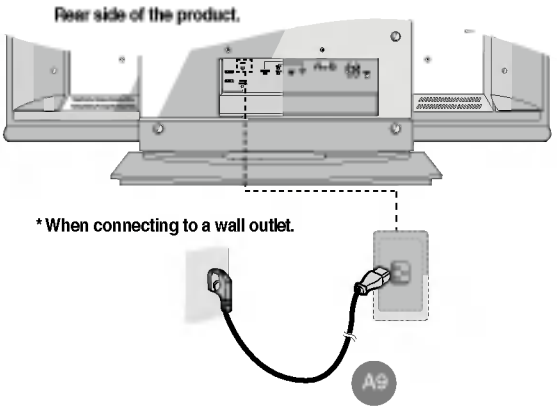
When Connecting to your PC

1 First of all, see if the computer, product and the peripherals are turned off. Then, connect the signal input cable.

- (A) When connecting with the DVI signal input cable.
- (B1) When connecting with the D-Sub signal input cable. (IBM compatible PC1)
- (B2) When connecting with the D-Sub signal input cable. (IBM compatible PC2)
- (C) When connecting with the D-Sub signal input cable. (Macintosh)

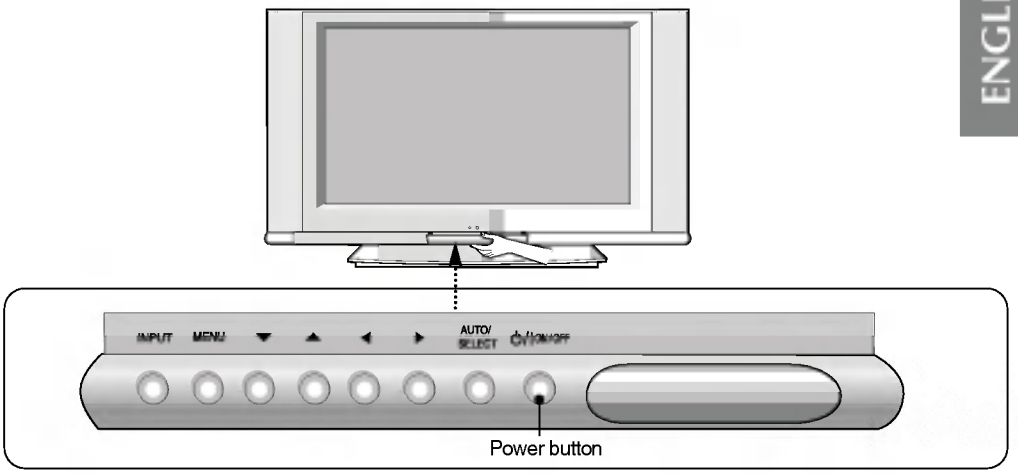


2 Connect the power cord.



ENGLISH

3 (A) Turn on power by pressing the power button on the product.



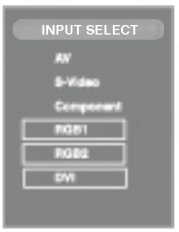
(B) Turn on the PC.

4 Select an input signal.
Press the INPUT button on the remote control to select the input signal.

INPUT → ▼▲ → ENTER

Or, press the INPUT button at the front side of the product.

INPUT → ▼▲ → SELECT



(A) When connecting with a DVI-D signal input cable.
• Select **DVI** : DVI-D digital signal.

When connecting with a D-Sub signal input cable.

(B1) (C) • Select **RGB1** : 15-pin D-Sub analog signal.

(B2) • Select **RGB2** : 15-pin D-Sub analog signal.

Note

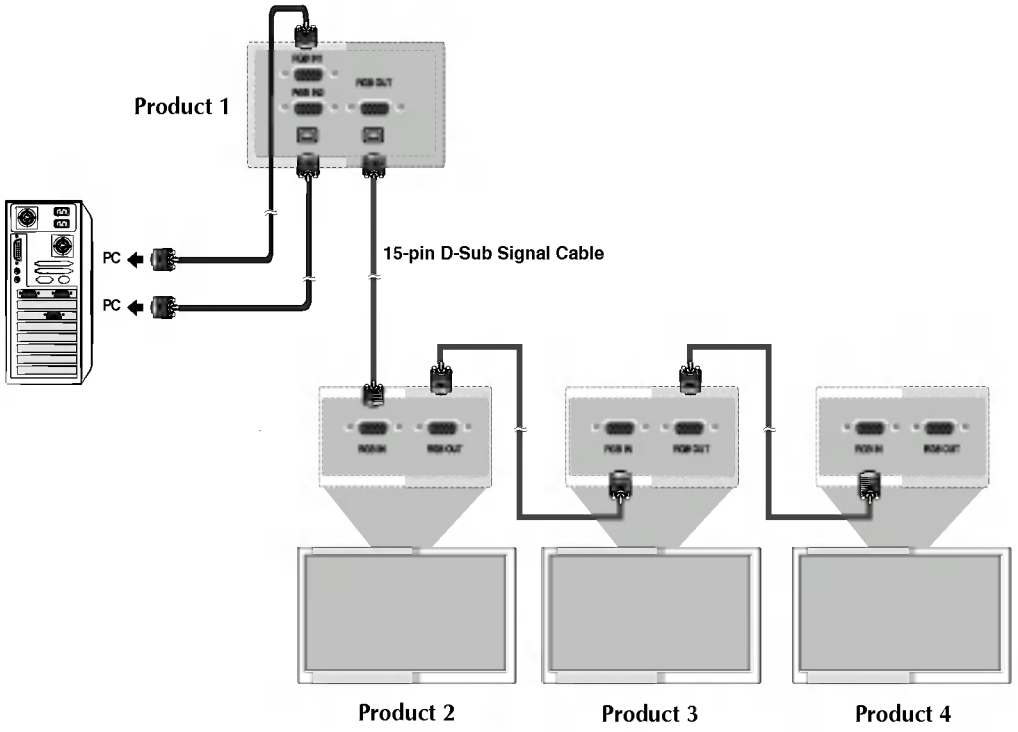
- **How to connect to two computers.**
  Connect the signal cables (DVI and D-Sub) to each computer.
  Press the **INPUT** button in a remote control to select the computer to use.
- **Directly connect to a grounded power outlet on the wall or a power bar with a ground wire.**

Connecting to External Devices

Watching RGB Outputs

Use this function when displaying ANALOG RGB inputs of a PC to the other product.

- **To use different products connected to each other**
  Connect one end of the signal input cable(15-pin D-Sub Signal Cable) to the **RGB OUT** connector of **product 1** and connect the other end to the RGB INPUT connector of other products.
  - Change source to **RGB1** when desiring to see input signal of the **RGB1**, and select **RGB2** when desiring to input signal of the **RGB2**.

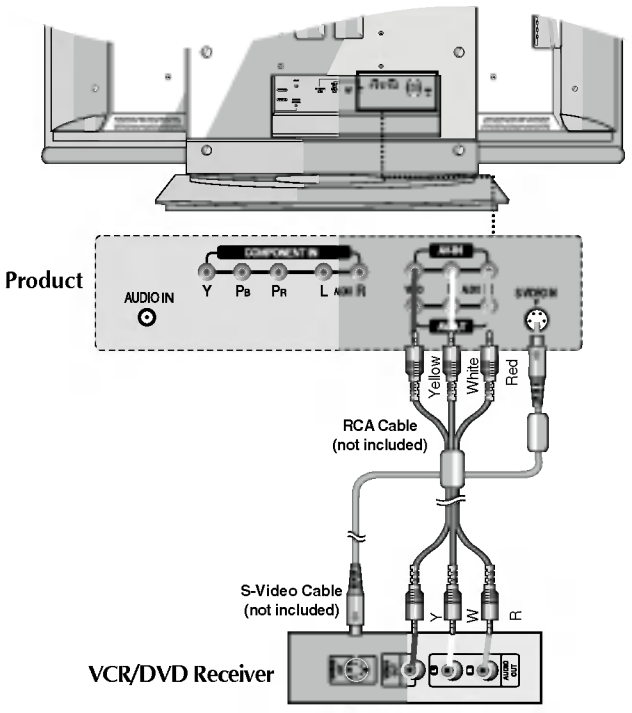


When watching VCR / DVD

1 Connect the video cable as shown in the below figure and then connect the power cord (See page A9).

(A) When connecting with a RCA cable.
- Connect the input terminal with a proper color match.
  (Video – Yellow, Sound (left) – White, Sound (right) – Red)

(B) When connecting with a S-Video cable.
- Connect to the S-Video input terminal to watch high image quality movies.

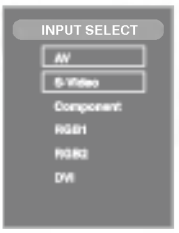


2 Select an input signal.
Press the INPUT button on the remote control to select the input signal.

INPUT → ▼▲ → ENTER

Or, press the INPUT button at the front side of the product.

INPUT → ▼▲ → SELECT



(A) When connecting with an RCA cable.
- Select **AV.**

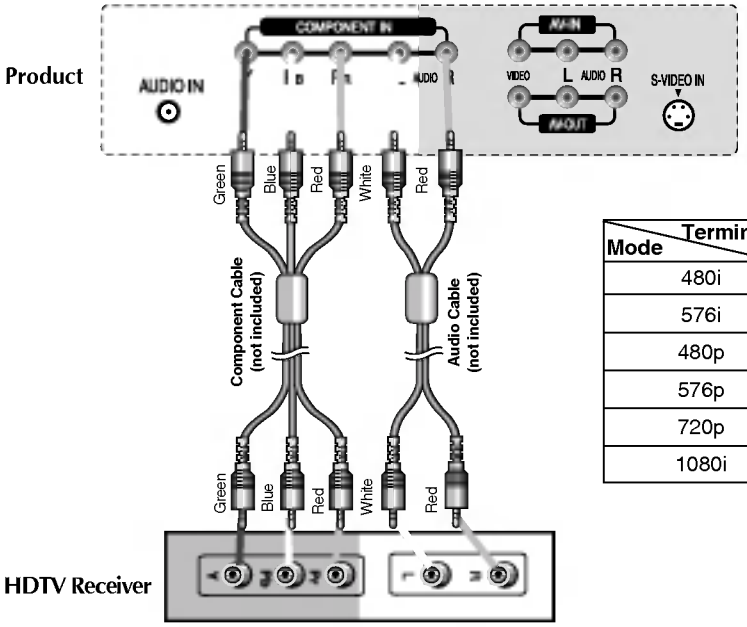
(B) When connecting with an S-Video cable.
- Select **S-Video.**

Connecting to External Devices

When watching HDTV(STB)/DVD

1 Connect the video/audio cable as shown in the below figure and then, connect the power cord (See page A9).

• Connect the input terminal with a proper color match.



Mode \ Terminal	Component
480i	o
576i	o
480p	o
576p	o
720p	o
1080i	o

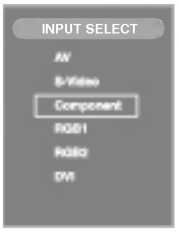
2 Select an input signal.
Press the INPUT button on the remote control to select the input signal.

INPUT → ▼▲ → ENTER

Or, press the INPUT button at the front side of the product.

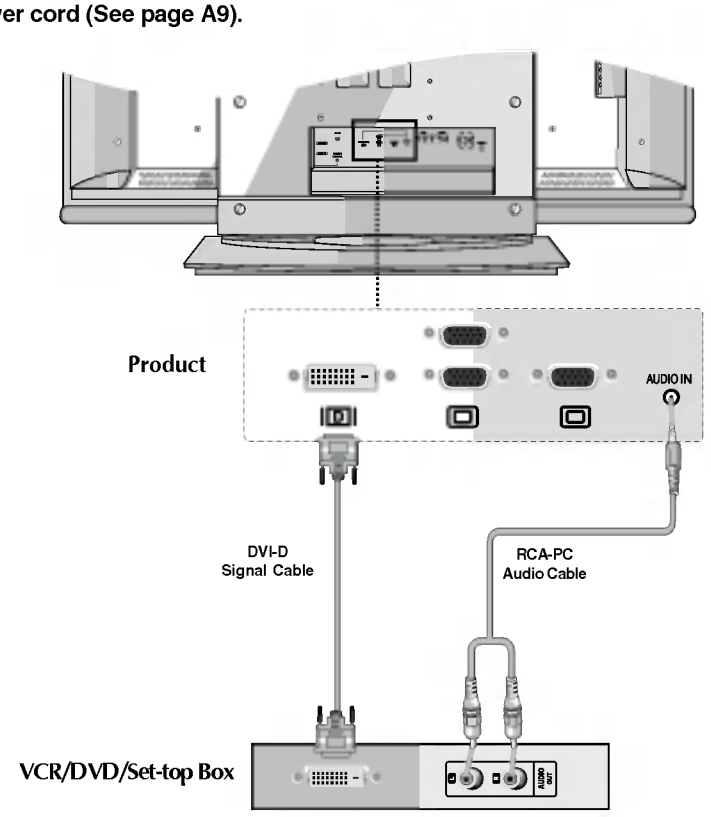
INPUT → ▼▲ → SELECT

• Select COMPONENT.



When watching DVI-D(HDCP) from the VCR/DVD/Set-top Box

1 Connect the video/audio cable as shown in the below figure and then connect the power cord (See page A9).



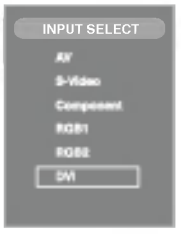
2 Select an input signal.
Press the INPUT button on the remote control to select the input signal.

INPUT → ▼▲ → ENTER

Or, press the INPUT button at the front side of the product.

INPUT → ▼▲ → SELECT

• Select DVI.

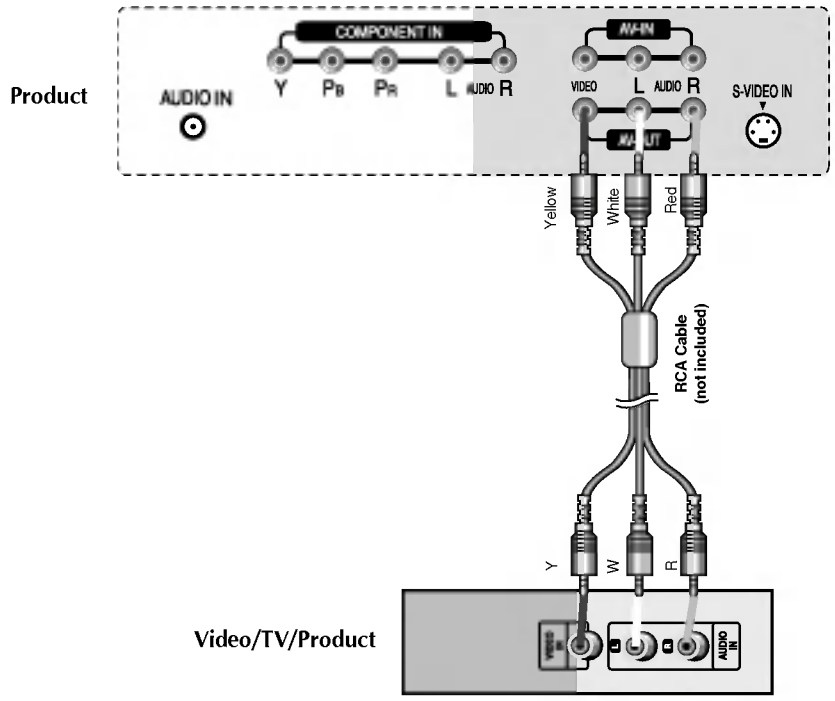


Connecting to External Devices

Watching AV Outputs

Connect to the external device if you record the broadcasting.

- When you set the input signal of the main screen as '**AV (CVBS)**', you can transmit the signal that you're watching to the AV output terminal.



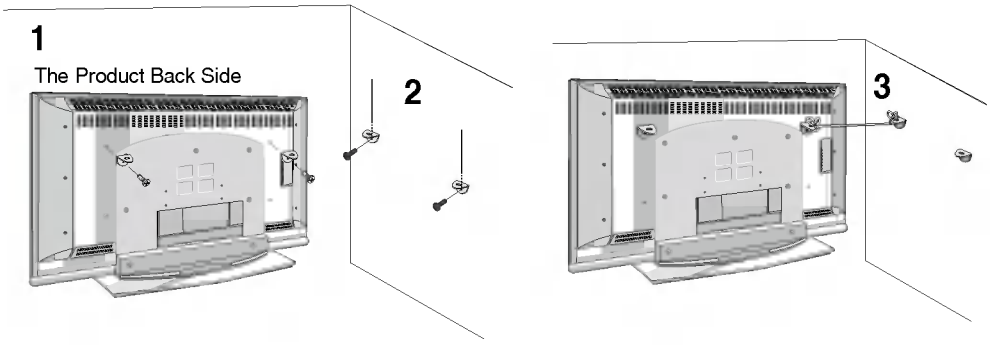
How to mount the product assembly to the wall to protect the set tumbling

ENGLISH

Please set it up carefully so the product doesn't fall over.

Set it up close to the wall so the product doesn't fall over when it is pushed backwards.

The instructions shown below is a safer way to set up the product, which is to fix it on the wall so the product does-n't fall over when it is pulled in the forward direction. It will prevent the product from falling forward and hurting peo-ple. It will also prevent the product from damage caused by fall. Please make sure that children don't climb on or hang from the product.



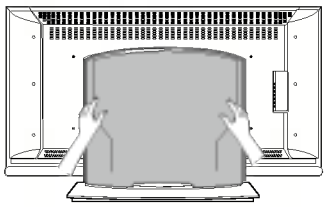
1. Use the bracket and the bolt to fix the product to the wall as shown in the picture.
2. Secure the bracket with the bolt (not provided as parts of the product, must purchase separately) on the wall.
3. Use a sturdy rope (not provided as parts of the product, must purchase separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

Notes

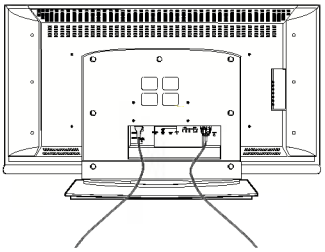
- When moving the product to another place undo the ropes first.
- Use a product holder or a cabinet that is big and strong enough for the size and weight of the product.
- To use the product safely make sure that the height of the bracket that is mounted on the wall is same as that of the product.

To arrange cables in order - Optional

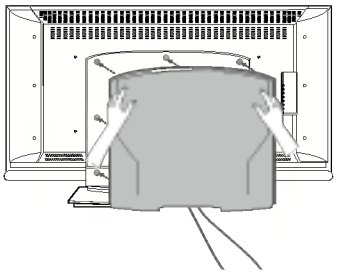
1. Pull out the back panel cover using both hands by holding the sides of the cover.

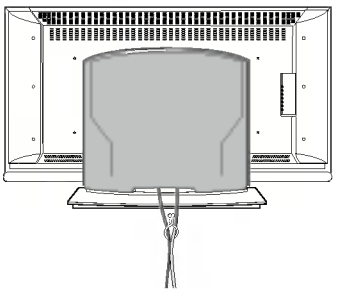


2. Connect the cables.



3. Use the holes in the back panel to close the back cover.
   Pull the cables through the hole on the set and bundle the cables using the supplied twister holder.

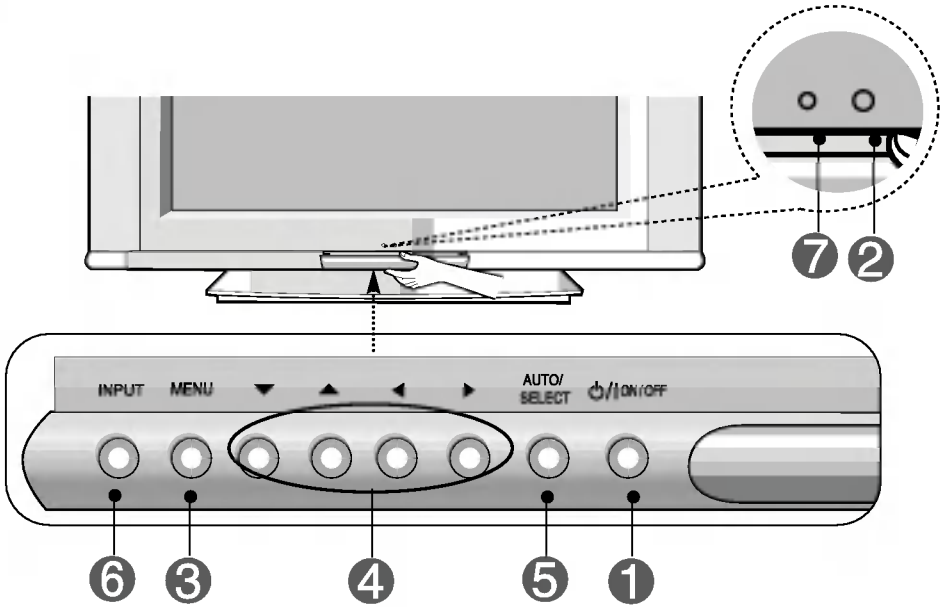




Selecting and Adjusting the Screen

ENGLISH

Name of the Buttons on front of the Unit



1	**Power Button**	• Press this button to turn on the power. Press this button again to turn it off.
2	**Power Indicator**	• This indicator lights up green when the display operates normally(on mode). If the display is in sleep (Energy Saving) mode, this indicator color changes to amber.
3	**MENU Button**	• Use this button to show/hide the OSD (On Screen Display) menu screen.
4	**OSD Select / Adjust Button**	• Use this button to select an icon or adjust the setting in the OSD screen.
	▼▲	• Use these buttons to directly control brightness and contrast of the PC signal (RGB1, RGB2 / DVI). 
	◀ ▶	• Adjust the volume. 

Selecting and Adjusting the Screen

Name of the Buttons on front of the Unit

5 **AUTO/SELECT Button**

[For PC Analog signal]

1) 

(Only 1920X1080 Mode)

2) 

[Other signals]

• The current signal and mode information will be displayed.

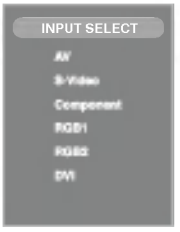
---

6 **INPUT Button**

INPUT → ▼▲ → AUTO/SELECT

• Select the input signal

AV	Composite Video
S-Video	Separate Video
Component	HDTV/ DVD
RGB1	15-pin D-Sub analog signal
RGB2	15-pin D-Sub analog signal
DVI	DVI digital signal



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7 • The unit that receives the signal from the remote control.

OSD Menu

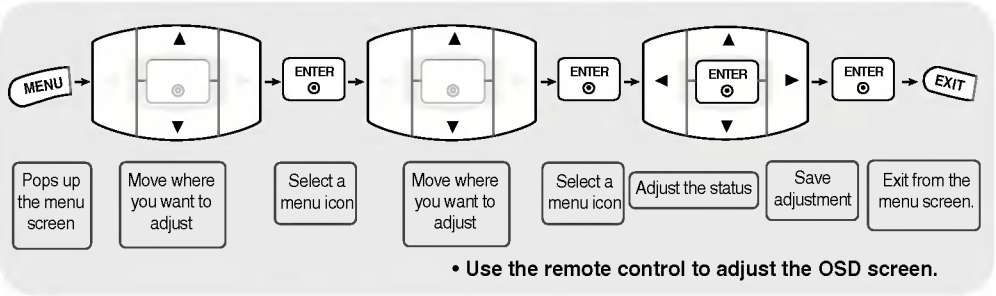
Icon	Function Description
 PICTURE	Adjusts screen brightness, contrast and color that you prefer.
 SOUND	Adjusts the audio function.
 SPECIAL	Adjusts the screen status according to the circumstances.
 SCREEN	Adjusts the screen video.
 PIP/POP/PBP	Adjusts PIP/POP/PBP mode function.

Note

OSD(On Screen Display)
The OSD function enables you to adjust the screen status conveniently since it provides graphical presentation.

Selecting and Adjusting the Screen

How to adjust the OSD (On Screen Display) screen



• **Use the remote control to adjust the OSD screen.**

1. Press the **MENU** Button, then the main menu of the OSD appears.
2. To access a control, use the ▼ ▲ Buttons.
3. When the icon you want becomes highlighted, press the **ENTER** Button.
4. To access a control, use the ▼ ▲ Buttons.
5. When the icon you want becomes highlighted, press the **ENTER** Button.
6. Use the ▼ ▲ ◄ ► Buttons to adjust the item to the desired level.
7. Accept the changes by pressing the **ENTER** Button.
8. Exit the OSD by pressing the **EXIT** Button.

How to adjust the screen automatically

You need to adjust the screen display when connecting the product to a new computer or changing the mode. Refer to the following section to set an optimal product screen.

Press the AUTO/SELECT button (**AUTO button** in a remote Control) in the PC analog signal. Then, an optimal screen status will be selected that fits into the current mode.

If adjustment is not satisfactory, you need to adjust screen position, clock and phase in the OSD menu.

Adjusting Screen Color

EZ Video

AV/S-Video/Component input only

The **EZ Video** function automatically adjusts the screen image quality depending on the AV usage environment.

- **Dynamic** : Select this option to display with a sharp image.
- **Standard** : The most general and natural screen display status.
- **Mild** : Select this option to display with a mild image.
- **Game** : Select this option to enjoy dynamic image when playing a game.
- **User** : Select this option to use the user-defined settings.

Contrast
To adjust the contrast of the screen.

Brightness
To adjust the brightness of the screen.

Color
To adjust the color to desired level.

Sharpness
To adjust the cleaness of the screen.

Tint
To adjust the tint to desired level.

ACC

Selecting a factory setting color set.

- **Warm** : Slightly reddish white.
- **Normal** : Slightly bluish white.
- **Cool** : Slightly purplish white.

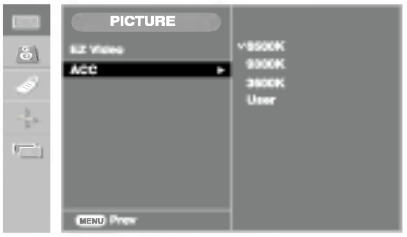
Note

If the input is **RGB1, 2**(D-Sub analog)/**DVI**(DVI Digital), the adjustable items in the ACC function are color temp (6500K / 9300K / 3600K).
If the '**EZ Video**' setting in the **PICTURE** menu is set to **Dynamic, Standard, Mild** or **Game** the subsequent menus will be automatically set.

Selecting and Adjusting the Screen

Adjusting Screen Color

ACC



RGB1, 2 / DVI input only

- **6500K/9300K/3600K**
  Selecting a factory setting color set.
  6500K: Slightly reddish white.
  9300K: Slightly bluish white.
  3600K: Slightly yellowish white.
- **User** : Select this option to use the user-defined settings.

Contrast
To adjust the contrast of the screen.

Brightness
To adjust the brightness of the screen.

Red / Green / Blue
Set your own color levels.

Adjusting the audio function

- The function is only available on the products that come with speakers.

EZ Audio

The best sound tone quality will be selected automatically depending on the video type that you're currently watching.

- **Flat**
  The most commanding and natural audio.
- **Music**
  Select this option to enjoy the original sound when listening to the music.
- **Movie**
  Select this option to enjoy sublime sound.
- **Speech**
  Select this option to watch sports broadcasting.
- **User**
  Select this option to use the user-defined audio settings.

Balance Use this function to balance sound from the left and right speakers.

AVL To adjust uneven sound volumes across all channels or signals automatically to the most appropriate level. To use this feature, select On.

SRS WOW Set the SRS WOW menu on.
The SRS WOW function plays back the mono or stereo sound input with the dynamic surround effects. It will provide rich and profound sound tone. If you set the SRS WOW on, user audio setting can not be adjusted.

Note

When connected to your computer and the **'EZ Audio'** setting in the audio menu is one of **Flat**, **Music**, **Movie** or **Speech**, the available menus are Balance, **AVL** and **SRS WOW** .

Selecting the options

Input

If you press the button once, the following Input Signal Window will appear. Select the signal type you want using the ▼▲ button.

Child Lock Use the ▼▲ buttons to select **On** or **Off**. The Set can be set up so that it can only be used with the remote control. This feature can prevent unauthorized viewing.

In order to lock the OSD screen adjustment, set the **Child Lock** tab to the '**On**' position.
In order to unlock it, do the following :
1) Push the **MENU** button on the remote control and set **Child Lock** to the '**Off**' position.

Language To choose the language in which the control names are displayed.

Power Indicator Use this function to set the power indicator on the front side of the product to **On** or **Off**. If you set **Off**, it will go off. If you set **On** at any time, the power indicator will automatically be turned on.

Transparency To adjust the transparency of the OSD menu screen.

Selecting and Adjusting the Screen

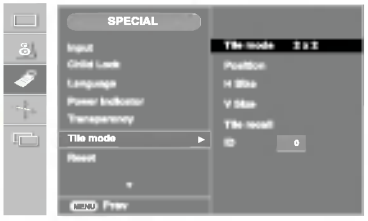
Selecting the options

• To use this function

- You can connect the product with several other products and use the Tile mode function.

Tile mode

It is used to enlarge the screen and also used with several products to view screen,



Tile mode and choose Tile alignment and set the ID of the current product to set location.

* Only after pressing the **ENTER** button the adjustments made to the settings will be saved.

• Position

The location of the screen can be adjusted at the Position menu and can be set by adjusting the size of the bezel.

* If you exit the menu after making the changes to the settings the adjustments will be saved.

• H Size

Adjust the horizontal size of the screen taking into account the size of the bezel.

• V Size

Adjust the vertical size of the screen taking into account the size of the bezel.

• Tile recall

Function to initialize and release Tile.
All Tile setting are released when selecting. Tile recall and the screen returns to Full screen.

• ID

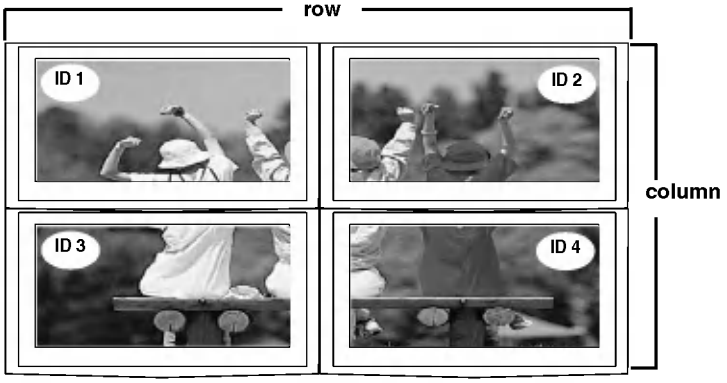
Select the location of the Tile by setting an ID.

Selecting the options

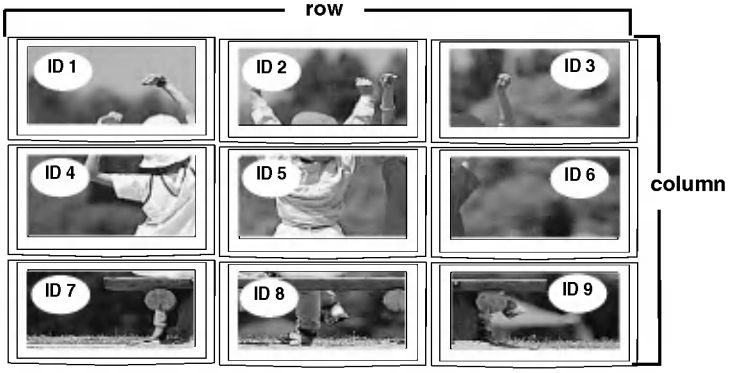
• **Tile mode**

- Tile mode : row x column (r = 1, 2, 3, 4 c = 1, 2, 3, 4)
- 4 x 4 available.
- Configuration of an integration screen is also available as well as configuration of one by one Display.

- **Tile mode (product 1 ~ 4) : r(2) x c(2)**



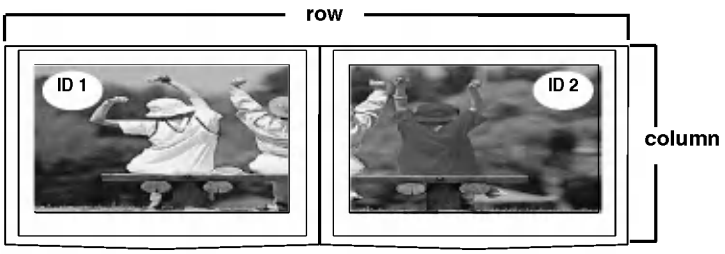
- **Tile mode (product 1 ~ 9) : r(3) x c(3)**



Selecting and Adjusting the Screen

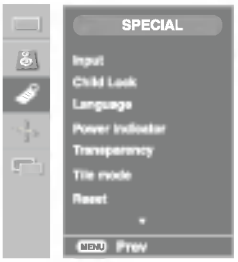
Selecting the options

- Tile mode (product 1 ~ 2) : r(2) x c(1)



Reset Use this function to reset the product to the factory default. However, language selection will not be initialized.

Selecting the options



Set ID

You can assign a unique **Set ID** NO (name assignment) to each product when several products are connected for display. Specify the number (0~99) using the ▼▲ button and exit. Use the assigned Set ID to individually control each product using the Product Control Program.

Logo Display Lamp Use this function to set the Logo Dispaly Lamp on the front side of the product to **On** or **Off**. If you set it to **On**, the lamp will automatically be turned on.

Light Sensor Use this function to set the Light Sensor on the front side of the product to **On** or **Off**. If you set it to **On**, the sensor will automatically be turned on.

Adjusting Screen CLOCK/PHASE and Position

ENGLISH

ARC

To select the image size of the screen.

<**AV/S-Video/Component** input only>

<**RGB1, 2 / DVI** input only>

*When the **component** input signal is 720p or 1080i, the spectacle function is not supported.

Auto config.

This button is for the automatic adjustment of the screen position, clock and phase.
This function is suitable for analoge singnal input only(RGB PC input only).

Clock

To minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change. This function is suitable for analoge singnal input only(RGB PC input only).

Phase

To adjust the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters. This function is suitable for analoge singnal input only(RGB PC input only).

Position

To adjust position of the screen
(RGB PC input only).
Press the ▶ button to display the submenu for position.

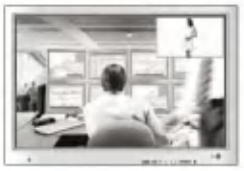
◀ Left ▶ Right — Moving the screen position horizontally.

▲ Up ▼ Down — Moving the screen position vertically.

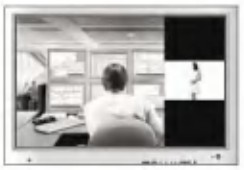
Selecting and Adjusting the Screen

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

On/Off



PIP
After selecting **PIP** in the **PIP On/Off** menu, the following menu items can be adjusted.



POP
After selecting **POP** in the **POP On/Off** menu, the following menu items can be adjusted.

PBP
After selecting **PBP** in the **PBP On/Off** menu, the following menu items can be adjusted.

PIP input To select an input signal for PIP/POP/PBP.

Size To adjust the size of the PIP/POP/PBP screen. (PIP : Small, Medium, Large / PBP : Full, 4:3)

Image To adjust the image of the PIP/POP/PBP screen; Press the ► button to display the submenu for PIP/POP/PBP image. Use the ◄ ► buttons to adjust the item to the desired level. The items of the sub-menu may vary depending on the type of the source.

■ **Contrast**
Adjust PIP/POP/PBP screen contrast.

■ **Brightness**
Adjust PIP/POP/PBP screen brightness.

■ **Color**
Adjust the PIP/POP/PBP screen color.

■ **Tint**
To adjust the tint to desired level.
This function is available only in NTSC

* The sub-menu can differ according to the type of the input signal.

Sound To turn the PIP/POP/PBP sound on/off.

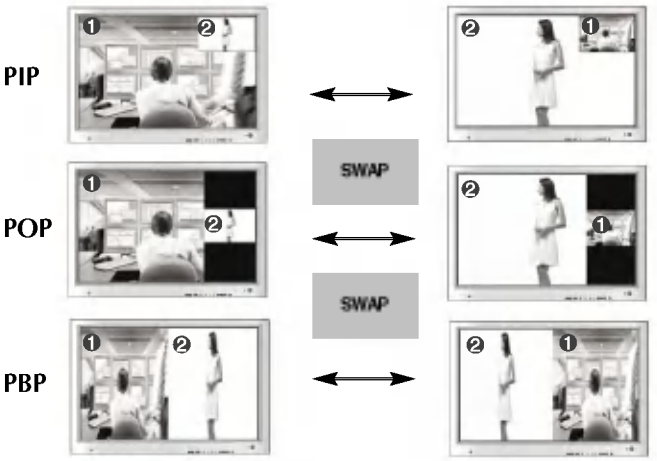
Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

Position

To adjust the position to PIP screen.

Swap

To switch the main-screen and sub-screen in PIP/POP/PBP mode.



Troubleshooting

No image is displayed

● Is the product power cord connected?	• See if the power cord is properly connected to the outlet.
● Is the power indicator light on?	• See if the power switch is turned on.
● Power is on, power indicator is green but the screen appears extremely dark.	• Adjust brightness and contrast again.
● Is the power indicator amber?	• If the product is in power saving mode, move the mouse or press any key.
● Does the 'Out of range' message appear?	• The signal from the PC (video card) is out of the vertical or horizontal frequency range of the product. Adjust the frequency range by referring to the Specifications in this manual. *** Maximum resolution** RGB1 / RGB2 : 1920 X 1080 @60Hz DVI : 1920 X 1080 @60Hz
● Does the 'Check signal cable' message appear?	• The signal cable between PC and product is not connected. Check the signal cable. • Press the 'INPUT' menu in the remote Control to check the input signal.

'Controls locked' message appears.

● The 'Controls locked' message appears when pressing the Menu button.	• The control locking function prevents unintentional OSD setting change due to careless usage. To unlock the controls, simultaneously press the Menu button and ▶ button for several seconds. (You cannot set this function using the remote control buttons. You can set this function in the product only.)

Note

*** Vertical frequency:** To enable the user to watch the product display, screen image should be changed tens of times every second like a fluorescent lamp. The vertical frequency or refresh rate is the times of image display per second. The unit is Hz.

*** Horizontal frequency:** The horizontal interval is the time to display one vertical line. When 1 is divided by the horizontal interval, the number of horizontal lines displayed every second can be tabulated as the horizontal frequency. The unit is kHz.

The screen image looks abnormal.

● Is the screen position wrong?	• D-Sub analog signal – Press the "AUTO" button in the remote control to automatically select the optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Position OSD menu. • See if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution in the Control Panel – Display – Setting menu.
● Do thin lines appear on the background screen?	• D-Sub analog signal – Press the "AUTO" button in the remote control to automatically select an optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Clock OSD menu.
● Horizontal noise appears or the characters look blurred.	• D-Sub analog signal – Press the "AUTO" button in the remote control to automatically select an optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Phase OSD menu.
● Screen size is automatically adjusted when connected to the PC.	• If the screen size is not full when connected to the PC, execute the PIP/POP/PBP to change to full screen mode.
● Brightness differs in the main and sub screen when connected to the PC.	• You cannot adjust brightness and tint in the PIP/POP/PBP Screen menu for the sub-screen among PIP/POP/PBP menus. Therefore, brightness can be different for the sub-screen.
● The screen is displayed abnormally.	• The proper input signal is not connected to the signal port. Connect the signal cable that matches with the source input signal.

After-image appears on the product.

● After-image appears when the product is turned off.	• If you use a fixed image for a long time, the pixels may be damaged quickly. Use the screensaver function.

Troubleshooting

The audio function does not work.

● No sound?	• See if the audio cable is connected properly. • Adjust the volume. • See if the sound is set properly.
● No sound is available when the PIP/POP/PBP mode is engaged.	• See if the Sound is set to On in the PIP/POP/PBP menu.
● Sound is too dull.	• Select the appropriate equalize sound.
● Sound is too low.	• Adjust the volume.

The screen size function in the OSD menu does not work.

● The screen size function in the OSD menu does not work.	• See if the PIP/POP/PBP function is in use. If the PIP/POP/PBP function is in use, the screen size function may not work.

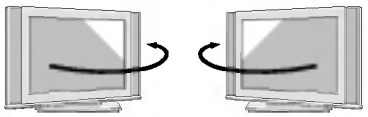
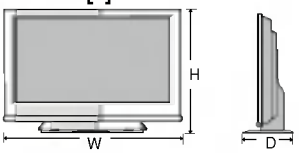
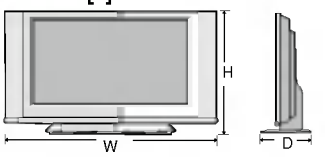
Screen color is abnormal.

● Screen has poor color resolution (16 colors).	• Set the number of colors to more than 24 bits (true color) Select Control Panel – Display – Settings – Color Table menu in Windows.
● Screen color is unstable or mono-colored.	• Check the connection status of the signal cable. Or, re-insert the PC video card.
● Do black spots appear on the screen?	• Several pixels (red, green, white or black color) may appear on the screen, which can be attributable to the unique characteristics of the LCD panel. It is not a malfunction of the LCD.

Specifications

The product specifications can change without prior notice for product improvement.

ENGLISH

LCD Panel	55 inches (139.7 cm) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size: 139.7 cm 0.630 mm (Pixel Pitch)
Power	**Rated Voltage** AC 100-240V~ 50/60Hz 3.5A **Power Consumption** On Mode : 350W Sleep Mode : ≤ 3W Off Mode : ≤ 3W
Stand range	-30°~ 30° 
Dimensions &Weight	[1]  [2] 

Width x Height x Depth

[1] 1375.4 cm (541.5 inches) x 943.2 cm (371.34 inches) x 320.0 cm (125.98 inches)
[2] 1612.0 cm (634.6 inches) x 943.2 cm (371.34 inches) x 320.0 cm (125.98 inches)

Net
[1] 68.5 kg (151.01 lbs)
[2] 72.9 kg (160.71 lbs)

NOTE
- Information in this document is subject to change without notice.

Specifications

The product specifications can change without prior notice for product improvement.

Video Signal	**Max. Resolution**	RGB1 / RGB2 : 1920 X 1080 @60Hz DVI : 1920 X 1080 @60Hz – It may not be supported depending on the OS or video card type.
	Recommended Resolution	RGB1 / RGB2 : WSXGA 1920 X 1080 @60Hz DVI : WSXGA 1920 X 1080 @60Hz – It may not be supported depending on the OS or video card type.
	Horizontal Frequency	30 - 83 kHz
	Vertical Frequency	56 - 85 Hz
	Synchronization Type	Separate/Composite/SOG (Sync On Green)/Digital
Input Connector		15-pin D-Sub type, DVI-D (digital), S-Video, Composite Video, HDTV, DVD, RS-232C
Environmental Conditions	**Operational Condition**	Temperature: 5˚C ~ 35˚C , Humidity: 10% ~ 80%
	Storage Condition	Temperature: -20˚C ~ 60˚C , Humidity: 5% ~ 95%

*** Applicable only for models that support the speakers**

Audio	RMS Audio Output	10W+10W(R+L)
	Input Sensitivity	0.7Vrms
	Speaker Impedance	8Ω

NOTE

- Information in this document is subject to change without notice.

PC Mode – Preset Mode

	Preset mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)		Preset mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
1	VGA 640 x 350	31.469	70	11	VESA 1024 x 768	60.123	75
2	VGA 720 x 400	31.468	70	12	VESA 1024 x 768	68.68	85
3	VGA 640 x 480	31.469	60	13	VESA 1360 x 768	47.72	60
4	VESA 640 x 480	37.500	75	14	VESA 1280 x 1024	63.981	60
5	VESA 640 x 480	43.269	85	15	VESA 1280 x 1024	79.98	75
6	VESA 800 x 600	37.879	60	16	VESA 1920 x 1080	66.587	60
7	VESA 800 x 600	46.875	75				
8	VESA 800 x 600	53.674	85				
9	MAC 832 x 624	49.725	75				
10	VESA 1024 x 768	48.363	60				

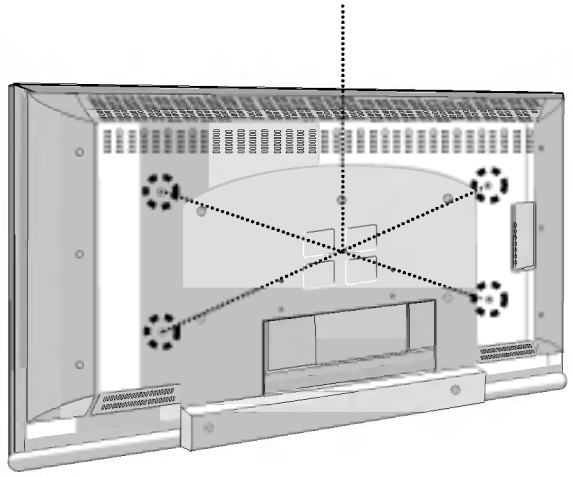
Power Indicator

Mode	Product
On Mode	Green
Sleep Mode	Amber
Off Mode	-

Specifications

VESA wall mounting

Connected to another object (stand type and wall-mounted type.)
This product accepts a VESA-compliant mounting interface pad.- (**optional**)
For further information, refer to the VESA Wall Mounting Instruction Guide.



RS - 232C GUIDE

To remote control the Product

LG

RS-232C

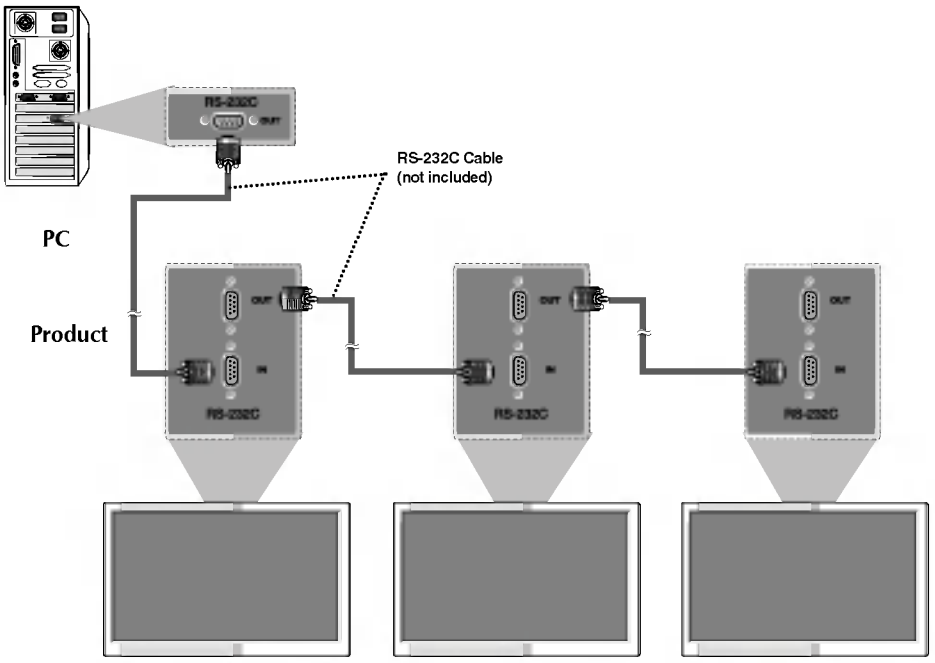
Controlling Multiple Product

Use this method to connect several products to a single PC.
You can control several products at a time by connecting them to a single PC.

Connecting the cable

Connect the RS-232C cable as shown in the picture.

* The RS-232C protocol is used for communication between the PC and product. You can turn the product on/off, select an input source or adjust the OSD menu from your PC.



Communication Parameter

- Baud Rate : 9600bps (UART)
- Data Length : 8bits
- Parity Bit : None
- Stop Bit : 1bit
- Flow Control : None
- Communication Code : ASCII code

Command Reference List

	COMMAND1	COMMAND2	DATA(Hexa)
01. Power	k	a	00H - 01H
02. Input Select	k	b	02H - 08H
03. Aspect Ratio	k	c	01H - 06H
04. Screen Mute	k	d	00H - 01H
05. Volume Mute	k	e	00H - 01H
06. Volume Control	k	f	00H - 64H
07. Contrast	k	g	00H - 64H
08. Brightness	k	h	00H - 64H
09. Color	k	i	00H - 64H
10. Tint	k	j	00H - 64H
11. Sharpness	k	k	00H - 64H
12. OSD Select	k	l	00H - 01H
13. Remote Lock On/Off	k	m	00H - 01H
14. PIP/PBP/POP On/Off	k	n	00H - 03H
15. PIP Position	k	q	00H - 03H
16. Balance	k	t	00H - 64H
17. ACC	k	u	00H - 04H
18. PIP/PBP/POP SOURCE	k	y	00H - 08H
19. Auto Configure	j	u	01H
20. Key	m	c	Key Code
21. Tiling Mode	d	d	00H - 0FH
22. Tile H Position	d	e	00H - 64H
23. Tile V Position	d	f	00H - 64H
24. Tile H Size	d	g	00H - 64H
25. Tile V Size	d	h	00H - 64H
26. Tile ID Set	d	i	00H - 63H
27. Elapsed time return	d	l	FFH
* 28. Light Sensor value return	d	m	FFH
* 29. Temperature value return	d	n	FFH
* 30. Fan On/Off	d	o	00H - 01H
* 31. Lamp fault check	d	p	FFH
* 32. Video input fault return	d	q	FFH

*** : Optional**

Controlling Multiple Product

Transmission / Receiving Protocol

Transmission

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Command 1]: First command. (j , k, m, d)
* [Command 2]: Second command.
* [Set ID]: You can adjust the set ID to choose desired product ID number in Special menu. Adjustment range is 0 ~ 99. When selecting Set ID '0', every connected TV set is controlled. Set ID is indicated as decimal (0~99) on menu and as Hexa decimal (0x0~0x64) on transmission/receiving protocol.
* [DATA]: To transmit command data. Transmit 'FF' data to read status of command.
* [Cr]: Carriage Return ASCII code '0x0D'
* [ ]: ASCII code Space (0x20)'

OK Acknowledgement

[Command2][ ][Set ID][ ][OK][Data][x]

* The Product transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

Error Acknowledgement

[Command2][ ][Set ID][ ][NG][Data][x]

* The Product transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

Data 1: Illegal Code
2: Not supported function
3: Wait more time

Transmission / Receiving Protocol

01. Power On(Command : a)

G To control Power On/Off of the Set.

Transmission

[k][a][ ][Set ID][ ][Data][Cr]

Data 0 : Power Off 1 : Power On

Acknowledgement

[a][ ][Set ID][ ][OK][Data][x]

G To show the status of Power On/Off.

Transmission

[k][a][ ][Set ID][ ][FF][Cr]

Data 0 : Power Off 1 : Power On

Acknowledgement

[a][ ][Set ID][ ][OK][Data][x]

* The Product transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

02. Input Select(Command : b) (Main Picture Input)

G To select input source for the Set.
You can also select an input source using the INPUT button on the remote control.

Transmission

[k][b][ ][Set ID][ ][Data][Cr]

Data 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Acknowledgement

[b][ ][Set ID][ ][OK][Data][x]

03. Aspect Ratio(Command : c)

G To adjust the screen format.
You can also adjust the screen format using the ARC (Aspect Ratio Control) button on remote control or in the Screen menu.

Transmission

[k][c][ ][Set ID][ ][Data][Cr]

Data 1 : 4:3 (Video)
2 : Full (PC, Video)
3 : Spectacle (Video)
4 : Zoom1 (PC, Video)
5 : Zoom2 (Video)
6 : 1:1 (PC)

Acknowledgement

[c][ ][Set ID][ ][OK][Data][x]

04. Screen Mute(Command : d)

G select screen mute on/off.

Transmission

[k][d][ ][Set ID][ ][Data][Cr]

Data 0 : Screen mute off (Picture on)
1 : Screen mute on (Picture off)

Acknowledgement

[d][ ][Set ID][ ][OK][Data][x]

Transmission / Receiving Protocol

05. Volume Mute (Command : e)

- To control On/Off of the Volume Mute.

Transmission

[k][e][ ][Set ID][ ][Data][Cr]

Data 0 : Volume Mute On (Volume Off)
1 : Volume Mute Off (Volume On)

Acknowledgement

[e][ ][Set ID][ ][OK][Data][x]

Data 0 : Volume Mute On (Volume Off)
1 : Volume Mute Off (Volume On)

06. Volume Control (Command : f)

- To adjust Volume .

Transmission

[k][f][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
(Hexadecimal code)

Acknowledgement

[f][ ][Set ID][ ][OK][Data][x]

Data Min : 00H ~ Max : 64H

* Real data mapping
0 : Step 0
:
A : Step 10
:
F : Step 15
10 : Step 16
:
64 : Step 100

07. Contrast (Command : g)

- To adjust screen contrast.
You can also adjust the contrast in the Picture menu.

Transmission

[k][g][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
• Refer to 'Real data mapping' as shown below.

Acknowledgement

[g][ ][Set ID][ ][OK][Data][x]

* Real data mapping
0 : Step 0
:
A : Step 10
:
F : Step 15
10 : Step 16
:
64 : Step 100

08. Brightness (Command : h)

- To adjust screen brightness.
You can also adjust the brightness in the Picture menu.

Transmission

[k][h][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
• Refer to 'Real data mapping' as shown below.

Acknowledgement

[h][ ][Set ID][ ][OK][Data][x]

* Real data mapping
0 : Step
:
A : Step 10
:
F : Step 15
10 : Step 16
:
64 : Step 100

Transmission / Receiving Protocol

09. Color (Command : i) (Video only)

- To adjust the screen color.
  You can also adjust the color in the Picture menu.

Transmission

[k][i][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
(Hexadecimal code)

Acknowledgement

[i][ ][Set ID][ ][OK][Data][x]

Data Min : 00H ~ Max : 64H

10. Tint (Command : j)(AV/S-Video: NTSC only)

- To adjust the screen tint.
  You can also adjust the tint in the Picture menu.

Transmission

[k][j][ ][Set ID][ ][Data][Cr]

Data Red: 00H ~ Green: 64H
(Hexadecimal code)

Acknowledgement

[j][ ][Set ID][ ][OK][Data][x]

Data Red: 00H ~ Green: 64H

* Tint : -50 ~ +50

11. Sharpness(Command : k) (Video only)

- To adjust the screen Sharpness.
  You can also adjust the sharpness in the Picture menu.

Transmission

[k][k][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
(Hexadecimal code)

Acknowledgement

[k][ ][Set ID][ ][OK][Data][x]

Data Min : 00H ~ Max : 64H

12. OSD Select(Command : l)

- To control OSD on/off to the set.

Transmission

[k][l][ ][Set ID][ ][Data][Cr]

Data 0 : OSD Off 1 : OSD On

Acknowledgement

[l][ ][Set ID][ ][OK][Data][x]

Data 0 : OSD Off 1 : OSD On

13. Remote Control Lock/key Lock (Command : m)

- To lock the remote control and the front panel controls on the set.

Transmission

[k][m][ ][Set ID][ ][Data][Cr]

Data 0 : Lock Off 1 : Lock On

Acknowledgement

[m][ ][Set ID][ ][OK][Data][x]

Data 0 : Lock Off 1 : Lock On

- If you're not using the remote control and front panel controls on the set, use this mode.
  When main power is on/off, remote control lock is released.

Transmission / Receiving Protocol

14. PIP/PBP/POP On/Off(Command : n)

- To control PIP/PBP/POP On/Off of the Set.

Transmission

[k][n][ ][Set ID][ ][Data][Cr]

Data 0 : OFF
1 : PIP
2 : PBP
3 : POP

Acknowledgement

[n][ ][Set ID][ ][OK][Data][x]

Data 0 : OFF
1 : PIP
2 : PBP
3 : POP

15. PIP Position(Command : q)

- To adjust PIP position.

Transmission

[k][q][ ][Set ID][ ][Data][Cr]

Data 0 : Bottom of the right side on screen
1 : Bottom of the left side on screen
2 : Top of the left side on screen
3 : Top of the right side on screen

Acknowledgement

[q][ ][Set ID][ ][OK][Data][x]

Data 0 : Bottom of the right side on screen
1 : Bottom of the left side on screen
2 : Top of the left side on screen
3 : Top of the right side on screen

16. Balance(Command : t)

- To adjust the sound balance.

Transmission

[k][t][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
(Hexadecimal code)

Acknowledgement

[t][ ][Set ID][ ][OK][Data][x]

Data Min : 00H ~ Max : 64H

* Balance : -50 ~ +50

17. ACC(Command : u)

- To adjust the screen color temperature.

Transmission

[k][u][ ][Set ID][ ][Data][Cr]

Data 0 : Normal (9300K) 4 : 3600K
1 : Cool PC : 0, 2, 3, 4
2 : Warm (6500K) Video : 0, 1, 2
3 : User

Acknowledgement

[u][ ][Set ID][ ][OK][Data][x]

Data 0 : Normal (9300K) 4 : 3600K
1 : Cool PC : 0, 2, 3, 4
2 : Warm (6500K) Video : 0, 1, 2
3 : User

Transmission / Receiving Protocol

18. PIP/PBP/POP SOURCE(Command : y)

G To select the sub-screen source.

Transmission

[k][y][ ][Set ID][ ][Data][Cr]

Data 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Acknowledgement

[y][ ][Set ID][ ][OK][Data][x]

Data 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

19. Auto Configure(Command: j u)

G To adjust picture position and minimize image shaking automatically. it works only in RGB(PC) mode.

Transmission

[j][u][ ][Set ID][ ][Data][Cr]

Data 1 : To set

Acknowledgement

[u][ ][Set ID][ ][OK][Data][x]

20. Key(Command : m c)

G To send IR remote key code.

Transmission

[m][c][ ][Set ID][ ][Data][Cr]

Data Key code

Acknowledgement

[c][ ][Set ID][ ][OK][Data][x]

21. Tiling Mode(Command : d d)

G Change a Tiling Mode.

Transmission

[d][d][ ][Set ID][ ][Data][x]

Data	Description
00	Tiling mode is off.
12	1 x 2 mode(column x row)
13	1 x 3 mode
14	1 x 4 mode
...	...
44	4 x 4 mode

* The data can not be set to 0X or X0 except 00.

Acknowledgement

[d][ ][00][ ][OK/NG][Data][x]

22. Tile H Position(Command : d e)

G To set the horizontal position .

Transmission

[d][e][ ][Set ID][ ][Data][x]

* The data range is from 00 to 64(in Hex).

Acknowledgement

[e][ ][Set ID][ ][OK/NG][Data][x]

Transmission / Receiving Protocol

23. Tile V Position(Command : d f)

- To set the Vertical position.

Transmission

[d][f][ ][Set ID][ ][Data][x]

* The data range is from 00 to 64(in Hex).

Acknowledgement

[f][ ][Set ID][ ][OK/NG][Data][x]

24. Tile H Size(Command : d g)

- To set the Horizontal size.

Transmission

[d][g][ ][Set ID][ ][Data][x]

* The data range is from 00 to 64(in Hex).

Acknowledgement

[g][ ][Set ID][ ][OK/NG][Data][x]

25. Tile V Size(Command : d h)

- To set the Vertical size.

Transmission

[d][h][ ][Set ID][ ][Data][x]

* The data range is from 00 to 64(in Hex).

Acknowledgement

[h][ ][Set ID][ ][OK/NG][Data][x]

26. Tile ID Set(Command : d i)

- To assign the Tile ID for Tiling function .

Transmission

[d][i][ ][Set ID][ ][Data][x]

* The data range is from 00 to 00 x 10 tile mode.

Acknowledgement

[i][ ][Set ID][ ][OK/NG][Data][x]

27. Elapsed time return(Command : d l)

- To read the elapsed time.

Transmission

[d][l][ ][Set ID][ ][Data][x]

* The data is always FF(in Hex).

Acknowledgement

[l][ ][Set ID][ ][OK/NG][Data][x]

***28. Light Sensor value Return(Command : d m) - Optional**

- To read the light sensor value for adjusting the product brightness depending on the surrounding brightness .

Transmission

[d][m][ ][Set ID][ ][Data][x]

* The data is always FF(in Hex).

Acknowledgement

[m][ ][Set ID][ ][OK/NG][Data][x]

Transmission / Receiving Protocol

***29. Temperature value Return(Command : d n) - Optional**

- To read the inside temperature value.

Transmission

[d][n][ ][Set ID][ ][Data][x]

* The data is always FF(in Hex).

Acknowledgement

[n][ ][Set ID][ ][OK/NG][Data][x]

Data are 1 byte long in Hex ASCII format.

***30. Fan On/Off(Command : d o) - Optional**

- To control Fan On/Off to set.

Transmission

[d][o][ ][Set ID][ ][Data][x]

Data 0 : Fan Off 1 : Fan On

Acknowledgement

[o][ ][Set ID][ ][OK/NG][Data][x]

*** 31. Lamp fault Check(Command : d p) - Optional**

- To check lamp fault.

Transmission

[d][p][ ][Set ID][ ][Data][x]

* The data is always FF(in Hex).

Acknowledgement

[p][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

***32. Video input fault return(Command : d q) - Optional**

- To check Video input fault.

Transmission

[d][q][ ][Set ID][ ][Data][x]

* The data is always FF(in Hex).

Acknowledgement

[q][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

IR Codes

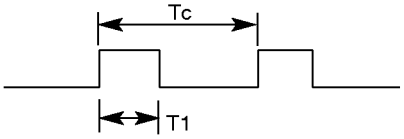
How to connect

- Connect your wired remote control to Remote Control port on the Product.

Remote Control IR Code

- **Output waveform**

  single pulse, modulated with 37.917KHz signal at 455KHz

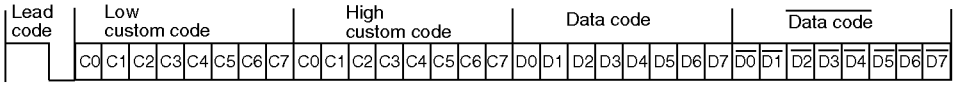


Carrier frequency

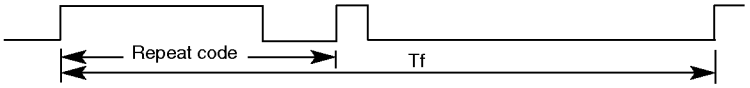
FCAR = 1/Tc = fosc/12
Duty ratio = T1/Tc = 1/3

- **Configuration of frame**

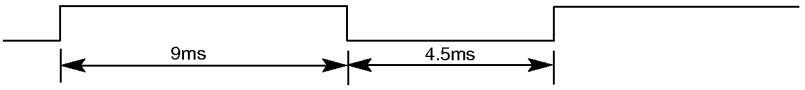
  • 1st frame



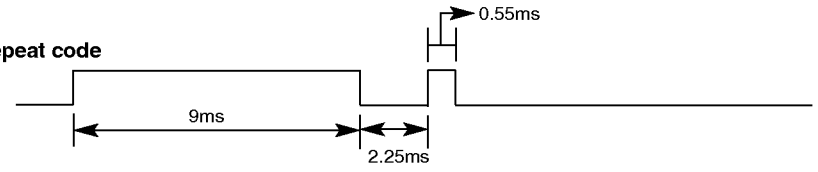
  • Repeat frame



- **Lead code**

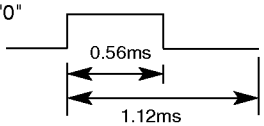


- **Repeat code**

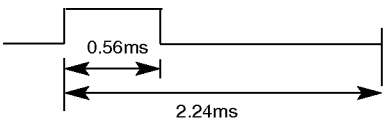


- **Bit description**

  • Bit "0"

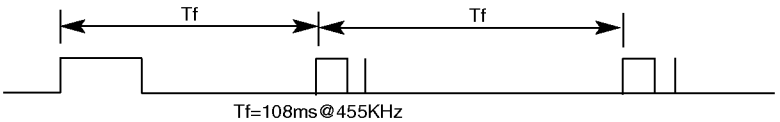


  • Bit "1"



- **Frame interval : Tf**

  • The waveform is transmitted as long as a key is depressed.



Code (Hexa)	Function	Note
02	VOL (D)	R/C Button
03	VOL (E)	R/C Button
40	D	R/C Button
41	E	R/C Button
06	G	R/C Button
07	F	R/C Button
08	POWER ON/OFF	R/C Button (POWER On/Off)
5B	EXIT	R/C Button
09	MUTE	R/C Button
4D	EZ VIDEO(PSM)	R/C Button
52	EZ AUDIO(SSM)	R/C Button
98	INPUT(Source)	R/C Button
5A	AV	R/C Button
D8	S-VIDEO	R/C Button
BF	COMPONENT	R/C Button
C6	DVI	R/C Button
0E	SLEEP	R/C Button
43	MENU	R/C Button
44	ENTER	R/C Button
60	PIP	R/C Button
61	POP	R/C Button
63	SWAP	R/C Button
79	ARC	R/C Button
76	ARC(4:3)	R/C Button
77	ARC(Full)	R/C Button
AF	ARC(ZOOM1)	R/C Button
54	AUTO	R/C Button

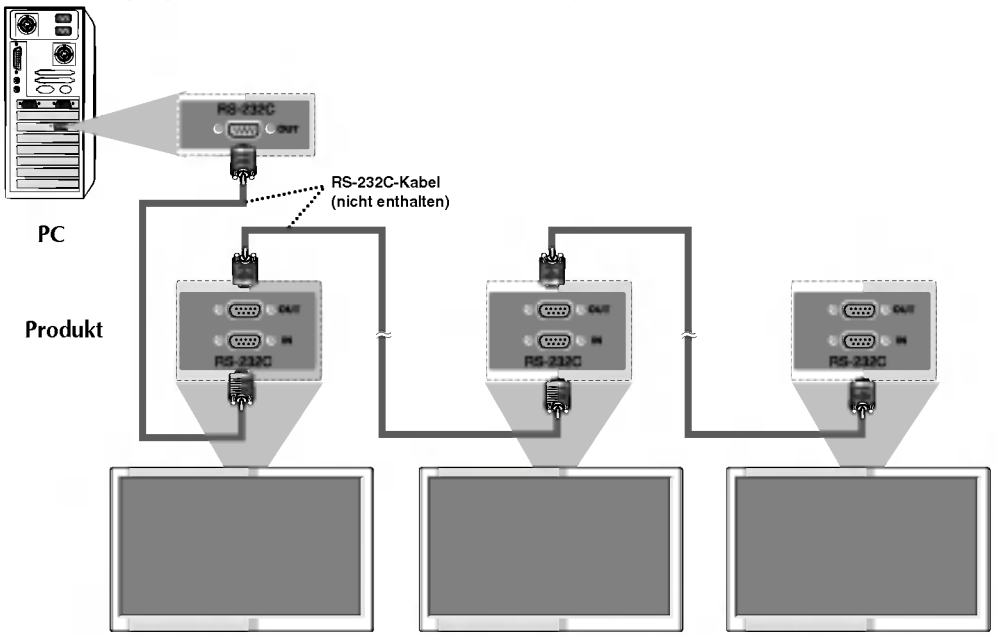
Verwenden mehrerer Produkte

Verwenden Sie dieses Verfahren, um mehrere Produkte an einen einzelnen PC anzuschließen. Sie können mehrere Produkte gleichzeitig verwenden, wenn Sie sie an einen einzelnen PC anschließen.

Anschließen des Kabels

Schließen Sie das RS-232C-Kabel wie im Bild gezeigt an.

* Das RS-232C-Protokoll wird für die Kommunikation zwischen PC und Produkt verwendet. Von Ihrem PC aus, können Sie das Produkt ein-/ausschalten, eine Eingangsquelle wählen oder das OSD-Menü anpassen.



Kommunikationsparameter

- Baudrate: 9600 bps (UART)
- Datenlänge: 8 bit
- Prüfbit: Ohne
- Stoppbit: 1 bit
- Flusskontrolle: Ohne
- Übertragungscode: ASCII-Code

Befehlsreferenzliste

	BEFEHL1	BEFEHL2	DATEN (Hex)
01. Power(Einschalten)	k	a	00H - 01H
02. Input Select(Eingangsauswahl)	k	b	02H - 08H
03. Aspect Ratio(Seitenverhältnis)	k	c	01H - 06H
04. Screen Mute(Bildschirm-Ruhezustand)	k	d	00H - 01H
05. Volume Mute(Stummschaltung)	k	e	00H - 01H
06. Volume Control(Lautstärkeregelung)	k	f	00H - 64H
07. Contrast(Kontrast)	k	g	00H - 64H
08. Brightness(Helligkeit)	k	h	00H - 64H
09. Color(Farbstärke)	k	i	00H - 64H
10. Tint(Farbton)	k	j	00H - 64H
11. Sharpness(Schärfe)	k	k	00H - 64H
12. OSD Select(OSD-Auswahl)	k	l	00H - 01H
13. Remote Lock On/Off(Fernbedienungssperre Ein/Aus)	k	m	00H - 01H
14. PIP/PBP/POP On/Off(PIP/PBP/POP Ein/Aus)	k	n	00H - 03H
15. PIP Position(PIP-Bildlage)	k	q	00H - 03H
16. Balance	k	t	00H - 64H
17. ACC	k	u	00H - 04H
18. PIP/PBP/POP SOURCE(PIP/PBP/POP-QUELLE)	k	y	00H - 08H
19. Auto Configure(Auto-configuration)	j	u	01H
20. Key(Taste)	m	c	Tastencode
21. Tiling Mode(Kachelmodus)	d	d	00H - 0FH
22. Tile H Position(Kachel H-Position)	d	e	00H - 64H
23. Tile V Position(Kachel V-Position)	d	f	00H - 64H
24. Tile H Size(Kachel H-Größe)	d	g	00H - 64H
25. Tile V Size(Kachel V-Größe)	d	h	00H - 64H
26. Tile ID Set(Festlegen der Kachelkennung)	d	i	00H - 63H
27. Elapsed time return(Ablesen der Betriebszeit)	d	l	FFH
* 28. Light Sensor value return (Wertangabe des Lichtsensors)	d	m	FFH
* 29. Temperatur value return(Temperaturangabe)	d	n	FFH
* 30. Fan On/Off(Gebläse Ein/Aus)	d	o	00H - 01H
* 31. Lamp fault check(Funktionsprüfung der Lampe)	d	p	FFH
* 32. Video input fault return (Videoeingangsfehler-Rückgabe)	d	q	FFH

*** : Optional**

DEUTSCH

Verwenden mehrerer Produkte

Übertragungs-/Empfangsprotokoll

Übertragung

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Command 1]: Erster Befehl (j, k, m, d)
* [Command 2]: Zweiter Befehl
* [Set ID]: Sie können die Set-ID einstellen, um die gewünschte Produkt-ID im Menü „Speziell“ zu wählen. Der Einstellungsbereich beträgt 0-99.
  Wenn Sie als Set-ID „0“ auswählen, wird jedes angeschlossene TV-Set gesteuert. Die Set-ID wird im Menü als Dezimalzahl (0-99) und im Übertragungs-/Empfangsprotokoll als Hexadezimalzahl (0x0-0x64) angegeben.

* [DATEN]: Für die Übertragung von Befehlsdaten
  „FF“ übertragen, um Befehlsstatus zu lesen.
* [Cr]: Carriage Return (Zeilenschaltung)
  ASCII-Code „0x0D“
* [ ]: ASCII-Code „Leerschritt (0x20)“

OK-Bestätigung

[Command2][ ][Set ID][ ][OK][Data][x]

* Das Produkt überträgt ACK (Bestätigung) beim Empfang normaler Daten basierend auf diesem Format. Wenn sich zu diesem Zeitpunkt Daten im Datenlesemodus befinden, werden die aktuellen Statusdaten angezeigt. Wenn sich die Daten im Datenschreibmodus befinden, werden die Daten an den PC zurückgegeben.

Fehlerbestätigung

[Command2][ ][Set ID][ ][NG][Data][x]

* Das Produkt überträgt ACK (Bestätigung) beim Empfang nicht normaler Daten von nicht brauchbaren Funktionen oder bei Kommunikationsfehlern basierend auf diesem Format.

Daten 1: Ungültiger Code
2: Nicht unterstützte Funktion
3: Weiter warten

Übertragungs-/Empfangsprotokoll

01. Power (Command : a) (Einschalten (Befehl: a))

► Für die Steuerung des Ein-/Ausschaltens des Geräts

Übertragung

[k][a][ ][Set ID][ ][Data][Cr]

Daten 0: Aus 1: Einschalten

Bestätigung

[a][ ][Set ID][ ][OK][Data][x]

► Für die Anzeige des Ein-/Ausschaltens

Übertragung

[k][a][ ][Set ID][ ][FF][Cr]

Daten 0: Aus 1: Einschalten

Bestätigung

[a][ ][Set ID][ ][OK][Data][x]

* Das Produkt überträgt ACK (Bestätigung) beim Empfang normaler Daten basierend auf diesem Format. Wenn sich zu diesem Zeitpunkt Daten im Datenlesemodus befinden, werden die aktuellen Statusdaten angezeigt. Wenn sich die Daten im Datenschreibmodus befinden, werden die Daten an den PC zurückgegeben.

02. Input Select(Command : b) (Main Picture Input) (Eingangsauswahl (Befehl: b) (Hauptbildeingang))

► Für die Auswahl der Eingangsquelle für das Gerät
Sie können eine Eingangsquelle auch über die Taste INPUT an der Fernbedienung auswählen.

Übertragung

[k][b][ ][Set ID][ ][Data][Cr]

Daten 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Bestätigung

[b][ ][Set ID][ ][OK][Data][x]

03. Aspect Ratio(Command : c) (Manin picure format) (Seitenverhältnis (Befehl: c) (Hauptbildformat))

► Für die Einstellung des Bildformats
Sie können das Bildformat auch über die Taste ARC (Aspect Ratio Control) der TV-Fernbedienung oder im Menü „Screen“ anpassen.

Übertragung

[k][c][ ][Set ID][ ][Data][Cr]

Daten 1 : 4:3 (Video)
2 : Voll (PC, Video)
3 : Breitbild (Video)
4 : Zoom1 (PC, Video)
5 : Zoom2 (Video)
6 : 1:1(PC)

Bestätigung

[c][ ][Set ID][ ][OK][Data][x]

04. Screen Mute(Command : d) (Bildschirm-Ruhezustand (Befehl: d))

► Für die Aktivierung/Deaktivierung des Bildschirm-Ruhezustands

Übertragung

[k][d][ ][Set ID][ ][Data][Cr]

Daten 0 : Bildschirm-Ruhezustand aus (Bild an)
1 : Bildschirm-Ruhezustand ein (Bild aus)

Bestätigung

[d][ ][Set ID][ ][OK][Data][x]

DEUTSCH

Übertragungs-/Empfangsprotokoll

05. Volume Mute(Command : e) (Stummschaltung (Befehl: e))

► Für die Steuerung des Ein-/Ausschaltens der Stummschaltung

Übertragung

[k][e][ ][Set ID][ ][Data][Cr]

Daten 0 : Stummschaltung ein (Lautstärke aus)
1 : Stummschaltung aus (Lautstärke ein)

Bestätigung

[e][ ][Set ID][ ][OK][Data][x]

Daten 0 : Stummschaltung ein (Lautstärke aus)
1 : Stummschaltung aus (Lautstärke ein)

06. Volume Control(Command : f) (Lautstärkeregelung (Befehl: f))

► Regeln Sie die Lautstärke.

Übertragung

[k][f][ ][Set ID][ ][Data][Cr]

Data Min.: 00 H ~ Max: 64 H
(Hexadezimalcode)

Bestätigung

[f][ ][Set ID][ ][OK][Data][x]

Data Min.: 00 H ~ Max: 64 H

* Echtdatenzuordnung
0 : Schritt 0
:
A : Schritt 10
:
F : Schritt 15
10 : Schritt 16
:
64 : Schritt 100

07. Contrast(Command : g) (Kontrast (Befehl: g))

► Für die Einstellung des Bildschirmkontrasts Sie können den Kontrast auch über das Menü „Imagine“ einstellen.

Übertragung

[k][g][ ][Set ID][ ][Data][Cr]

Data Min.: 00 H ~ Max: 64 H
• Siehe „Echtdatenzuordnung“ nachfolgend.

Bestätigung

[g][ ][Set ID][ ][OK][Data][x]

* Echtdatenzuordnung
0 : Schritt 0
:
A : Schritt 10
:
F : Schritt 15
10 : Schritt 16
:
64 : Schritt 100

08. Brightness(Command : h) (Helligkeit (Befehl: h))

► Für die Einstellung der Bildschirmhelligkeit Sie können die Helligkeit auch über das Menü „Imagine“ einstellen.

Übertragung

[k][h][ ][Set ID][ ][Data][Cr]

Data Min.: 00 H ~ Max: 64 H
• Siehe „Echtdatenzuordnung“ nachfolgend.

Bestätigung

[h][ ][Set ID][ ][OK][Data][x]

* Echtdatenzuordnung
0 : Schritt
:
A : Schritt 10
:
F : Schritt 15
10 : Schritt 16
:
64 : Schritt 100

Übertragungs-/Empfangsprotokoll

09. Color(Command : i) (Video only)
(Farbe (Befehl: i) (nur Video))

▶ Für die Einstellung der Bildschirmfarbstärke
Sie können die Farbe auch über das Menü „Imagine“ einstellen.

Übertragung

[k][i][ ][Set ID][ ][Data][Cr]

Data Min.: 00 H ~ Max: 64 H
(Hexadezimalcode)

Bestätigung

[i][ ][Set ID][ ][OK][Data][x]

Data Min.: 00 H ~ Max: 64 H

10. Tint(Command : j) (Farbton (Befehl: j)
(AV/S-Video: nur NTSC)

▶ Für die Einstellung des Bildschirmfarbtons
Sie können den Farbton auch über das Menü „Imagine“ einstellen.

Übertragung

[k][j][ ][Set ID][ ][Data][Cr]

Daten Rot: 00 H ~ Grün: 64 H
(Hexadezimalcode)

Bestätigung

[j][ ][Set ID][ ][OK][Data][x]

Daten Rot: 00 H ~ Grün: 64 H

* Farbton : -50 ~ +50

11. Sharpness(Command : k) (Video only)
(Bildschärfe (Befehl: k) (nur Video))

▶ Für die Einstellung der Bildschärfe
Sie können die Bildschärfe auch über das Menü „Imagine“ einstellen.

Übertragung

[k][k][ ][Set ID][ ][Data][Cr]

Data Min.: 00 H ~ Max: 64 H
(Hexadezimalcode)

Bestätigung

[k][ ][Set ID][ ][OK][Data][x]

Data Min.: 00 H ~ Max: 64 H

12. OSD Select(Command : l) (OSD-Auswahl
(Befehl: l))

▶ Für die Steuerung des Ein-/Ausschaltens des OSD des Geräts

Übertragung

[k][l][ ][Set ID][ ][Data][Cr]

Daten 0: OSD Aus 1: OSD Ein

Bestätigung

[l][ ][Set ID][ ][OK][Data][x]

Daten 0: OSD Aus 1: OSD Ein

13. Remote Lock On/Off(Command : m)
(Fernbedienungssperre/Tastensperre
(Befehl: m))

▶ Für die Sperre der Tasten der Fernbedienung und der Frontkonsole am Gerät

Übertragung

[k][m][ ][Set ID][ ][Data][Cr]

Daten 0: Fernbedienungssperre Aus
1: Fernbedienungssperre Ein

Bestätigung

[m][ ][Set ID][ ][OK][Data][x]

Daten 0: Fernbedienungssperre Aus
1: Fernbedienungssperre Ein

▶ Wenn Sie die Fernbedienung und die Frontkonsole des Geräts nicht nutzen, verwenden Sie diesen Modus.
Wenn der Hauptstrom aus-/eingeschaltet wird, wird die Fernbedienungssperre aufgehoben.

Übertragungs-/Empfangsprotokoll

14. PIP/PBP/POP On/Off(Command : n) (PIP/PBP/POP Ein/Aus (Befehl: n))

► Für die Steuerung des Ein-/Ausschaltens von PIP/PBP/POP für das Gerät

Übertragung

[k][n][ ][Set ID][ ][Data][Cr]

Daten 0 : AUS
1 : PIP
2 : PBP
3 : POP

Bestätigung

[n][ ][Set ID][ ][OK][Data][x]

Daten 0 : AUS
1 : PIP
2 : PBP
3 : POP

15. PIP Position(Command : q) (PIP-Position (Befehl: q))

► Für die Einstellung der PIP-Bildlage

Übertragung

[k][q][ ][Set ID][ ][Data][Cr]

Daten 0: Untere rechte Seite des Bildschirms
1: Untere linke Seite des Bildschirms
2: Obere linke Seite des Bildschirms
3: Obere rechte Seite des Bildschirms

Bestätigung

[q][ ][Set ID][ ][OK][Data][x]

Daten 0: Untere rechte Seite des Bildschirms
1: Untere linke Seite des Bildschirms
2: Obere linke Seite des Bildschirms
3: Obere rechte Seite des Bildschirms

16. Balance(Command : t) (Balance (Befehl: t))

► Für die Einstellung der Balance

Übertragung

[k][t][ ][Set ID][ ][Data][Cr]

Data Min.: 00 H ~ Max: 64 H
(Hexadezimalcode)

Bestätigung

[t][ ][Set ID][ ][OK][Data][x]

Data Min.: 00 H ~ Max: 64 H

* Balance : -50 ~ +50

17. ACC(Command : u) (ACC (Befehl: u))

► Für die Einstellung der Farbtemperatur des Bildschirms

Übertragung

[k][u][ ][Set ID][ ][Data][Cr]

Daten 0 : Normal (9300K) 4 : 3600K
1 : Kalt PC : 0, 2, 3, 4
2 : Warm (6500K) Video : 0, 1, 2
3 : Benutzer

Bestätigung

[u][ ][Set ID][ ][OK][Data][x]

Daten 0 : Normal (9300K) 4 : 3600K
1 : Kalt PC : 0, 2, 3, 4
2 : Warm (6500K) Video : 0, 1, 2
3 : Benutzer

Übertragungs-/Empfangsprotokoll

18. PIP/PBP/POP SOURCE(Command : y) (PIP/PBP/POP-Quelle (Befehl: y)

► Für die Auswahl der Unterbild-Quelle

Übertragung

[k][y][ ][Set ID][ ][Data][Cr]

Daten 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Bestätigung

[y][ ][Set ID][ ][OK][Data][x]

Daten 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

19. Auto Configure(Command: j u) (Auto-configuration (Befehl: j u))

► Für die automatische Einstellung der Bildposition und die automatische Minimierung des Bildwackelns. Nur in RGB (PC)-Modus.

Übertragung

[j][u][ ][Set ID][ ][Data][Cr]

Daten 1: Einstellen

Acknowledgement

[u][ ][Set ID][ ][OK][Data][x]

20. Key(Command : m c) (Taste (Befehl: m c))

► Für das Senden des IR-Fernbedienungs-Tastencodes

Übertragung

[m][c][ ][Set ID][ ][Data][Cr]

Daten-Tastencode

Bestätigung

[c][ ][Set ID][ ][OK][Data][x]

21. Tiling Mode(Command : d d) (Kachelmodus (Befehl: d d))

► Ändern eines Kachelmodus

Übertragung

[d][d][ ][Set ID][ ][Data][x]

Daten	Beschreibung
00	Der Kachelmodus ist aus.
12	1 x 2-Modus (Spalte x Reihe)
13	1 x 3-Modus
14	1 x 4-Modus
...	...
44	4 x 4-Modus

* Die Daten können außer auf 00 nicht auf 0X oder X0 gesetzt werden.

Bestätigung

[d][ ][00][ ][OK/NG][Data][x]

22. Tile H Position(Command : d e) (Kachel H-Position (Befehl: d e))

► Zur Einstellung der horizontalen Position

Übertragung

[d][e][ ][Set ID][ ][Data][x]

* Die Daten müssen zwischen 00 und 64 (Hex) liegen.

Bestätigung

[e][ ][Set ID][ ][OK/NG][Data][x]

Übertragungs-/Empfangsprotokoll

23. Tile V Position(Command : d f) (Kachel V-Position (Befehl: d f))

► Zur Einstellung der vertikalen Position

Übertragung

[d][f][ ][Set ID][ ][Data][x]

* Die Daten müssen zwischen 00 und 64 (Hex) liegen.

Bestätigung

[f][ ][Set ID][ ][OK/NG][Data][x]

24. Tile H Size(Command : d g) (Kachel H-Größe (Befehl: d g))

► Zur Einstellung der horizontalen Größe

Übertragung

[d][g][ ][Set ID][ ][Data][x]

* Die Daten müssen zwischen 00 und 64 (Hex) liegen.

Bestätigung

[g][ ][Set ID][ ][OK/NG][Data][x]

25. Tile V Size(Command : d h) (Kachel V-Größe (Befehl: d h))

► Zur Einstellung der vertikalen Größe

Übertragung

[d][h][ ][Set ID][ ][Data][x]

* Die Daten müssen zwischen 00 und 64 (Hex) liegen.

Bestätigung

[h][ ][Set ID][ ][OK/NG][Data][x]

26. Tile ID Set(Command : d i) (Festlegen der Kachelkennung (Befehl: d i))

► Zur Einstellung der Kachelkennung für den Kachelmodus

Übertragung

[d][i][ ][Set ID][ ][Data][x]

* Die Daten können im Kachelmodus zwischen 00 und 00 x10 liegen.

Bestätigung

[i][ ][Set ID][ ][OK/NG][Data][x]

27. Elapsed time return(Command : d l) (Ablesen der Betriebszeit (Befehl: d l))

► Zum Ablesen der Betriebszeit

Übertragung

[d][l][ ][Set ID][ ][Data][x]

* Die Daten sind immer auf FF (Hex) gesetzt.

Bestätigung

[l][ ][Set ID][ ][OK/NG][Data][x]

***28. Light Sensor value Return(Command : d m) (Wertangabe des Lichtsensors (Befehl: d m)) - Optional**

► Über diesen Befehl können Sie den Lichtsensorwert zur Anpassung der Bildschirmhelligkeit an die Helligkeit der Umgebung ablesen.

Übertragung

[d][m][ ][Set ID][ ][Data][x]

* Die Daten sind immer auf FF (Hex) gesetzt.

Bestätigung

[m][ ][Set ID][ ][OK/NG][Data][x]

Übertragungs-/Empfangsprotokoll

***29. Temperature value Return(Command : d n) (Temperaturangabe (Befehl: d n)) - Optional**

► Zum Ablesen der Innentemperatur

Übertragung

[d][n][ ][Set ID][ ][Data][x]

* Die Daten sind immer auf FF (Hex) gesetzt.

Bestätigung

[n][ ][Set ID][ ][OK/NG][Data][x]

Die Datenlänge beträgt 1 Byte im Hex-/ASCII-Code.

***30. Fan On/Off(Command : d o) (Gebläse Ein/Aus (Befehl: d o)) - Optional**

► Für die Steuerung des Ein-/Ausschaltens des Gerätegebläses.

Übertragung

[d][o][ ][Set ID][ ][Data][x]

Daten 0: Gebläse Aus 1 : Gebläse Ein

Bestätigung

[o][ ][Set ID][ ][OK/NG][Data][x]

***31. Lamp fault Check(Command : d p) (Funktionsprüfung der Lampe (Befehl: d p)) - Optional**

► Zur Funktionsprüfung der Lampe

Übertragung

[d][p][ ][Set ID][ ][Data][x]

* Die Daten sind immer auf FF (Hex) gesetzt.

Bestätigung

[p][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

***32. Video input fault return(Command : d q) (Videoeingangsfehler-Rückgabe (Befehl: d q)) - Optional**

► Zur Prüfung des Videoeingangsfehlers Übertragung

Übertragung

[d][q][ ][Set ID][ ][Data][x]

* Die Daten sind immer auf FF (Hex) gesetzt.

Bestätigung

[q][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

DEUTSCH

IR-Codes

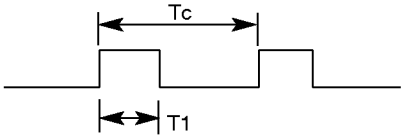
Anschließen

▶ Verbinden Sie das Kabel der Fernbedienung mit der Fernbedienungsbuchse am Produkt.

Fernbedienung IR-Code

▶ Signalform-Ausgabe

Einzelimpuls, Modulationssignal mit 37,917 kHz Signal bei 455 kHz

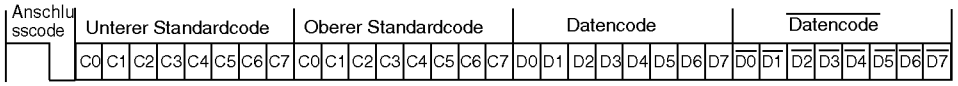


Trägerfrequenz

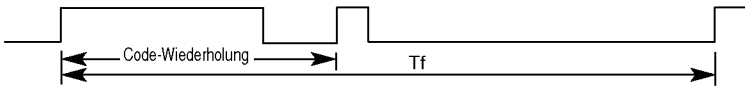
FCAR = 1/Tc = fosc/12
Relative Einschaltdauer = T1/Tc = 1/3

▶ Frame-Konfiguration

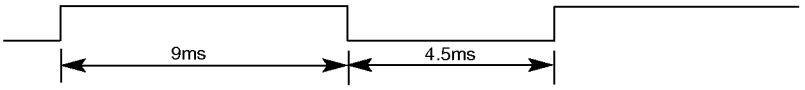
• Erster Frame



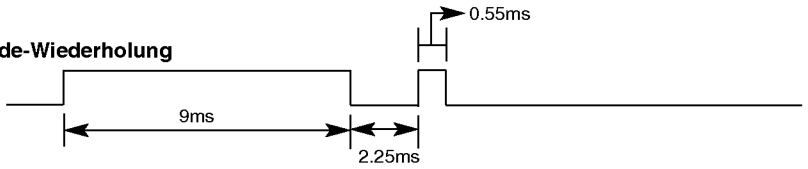
• Frame-Wiederholung



▶ Anschlusscode

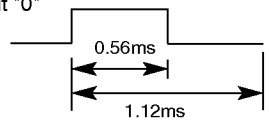


▶ Code-Wiederholung

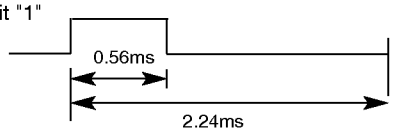


▶ Bit-Beschreibung

• Bit "0"

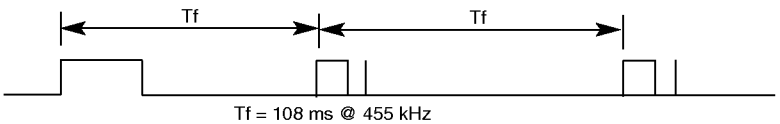


• Bit "1"



▶ Frame-Intervall: Tf

• Die Wellenform wird so lange übertragen, wie die Taste gedrückt wird.



Code (Hex)	Funktion	Hinweis
02	VOL (▲)	Fernbedienungstaste
03	VOL (▼)	Fernbedienungstaste
40	▲	Fernbedienungstaste
41	▼	Fernbedienungstaste
06	►	Fernbedienungstaste
07	◄	Fernbedienungstaste
08	POWER ON/OFF (Ein/Aus)	Fernbedienungstaste (POWER On/Off)
5B	EXIT	Fernbedienungstaste
09	MUTE (Lautlos)	Fernbedienungstaste
4D	EZ VIDEO(PSM)	Fernbedienungstaste
52	EZ AUDIO(SSM)	Fernbedienungstaste
98	INPUT(Quelle)	Fernbedienungstaste
5A	AV	Fernbedienungstaste
D8	S-VIDEO	Fernbedienungstaste
BF	COMPONENT	Fernbedienungstaste
C6	DVI	Fernbedienungstaste
0E	SLEEP	Fernbedienungstaste
43	MENU(Menü)	Fernbedienungstaste
44	ENTER	Fernbedienungstaste
60	PIP	Fernbedienungstaste
61	POP	Fernbedienungstaste
63	SWAP (Tausch)	Fernbedienungstaste
79	ARC(Bildformat)	Fernbedienungstaste
76	ARC(Bildformat 4:3)	Fernbedienungstaste
77	ARC(Bildformat Voll)	Fernbedienungstaste
AF	ARC(ZOOM1)	Fernbedienungstaste
54	AUTO	Fernbedienungstaste

RS-232C

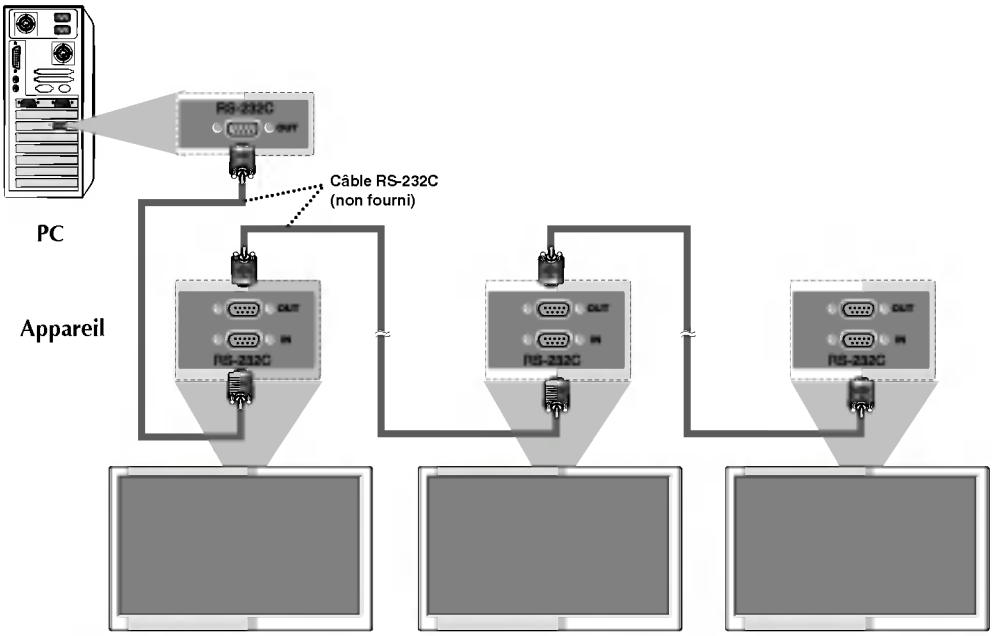
Contrôle de plusieurs appareils

Utilisez la méthode suivante pour connecter plusieurs appareils à un seul PC.
Vous pouvez contrôler plusieurs appareils en même temps en les connectant à un seul PC.

Raccordement des câbles.

Raccordez le câble RS-232C comme indiqué sur le schéma.

* Le protocole RS-232C s'utilise lors de la communication entre le PC et l'appareil. Vous pouvez mettre l'appareil sous ou hors tension, sélectionner une source d'entrée ou régler le menu OSD depuis votre PC.



Paramètres de communication

- Débit en bauds : 9600 o/s (UART - émetteur-récepteur universel asynchrone)
- Longueur des données : 8 bits
- Bit de parité : Aucun
- Bit d'arrêt : 1 bit
- Contrôle de flux : Aucun
- Code de communication : code ASCII

Liste des références de commandes

	COMMANDE 1	COMMANDE 2	DONNÉES (Hexadécimales)
01. Power(Marche/Arrêt)	k	a	00H - 01H
02. Input Select(Sélection de l'entrée)	k	b	02H - 08H
03. Aspect Ratio(Format d'image)	k	c	01H - 06H
04. Screen Mute(Activation/Désactivation des images)	k	d	00H - 01H
05. Volume Mute(Volume muet)	k	e	00H - 01H
06. Volume Control(Contrôle du volume)	k	f	00H - 64H
07. Contrast(Contraste)	k	g	00H - 64H
08. Brightness(Luminosité)	k	h	00H - 64H
09. Color(Couleur)	k	i	00H - 64H
10. Tint(Teinte)	k	j	00H - 64H
11. Sharpness(Brillance)	k	k	00H - 64H
12. OSD Select(Activation/Désactivation de l'affichage à l'écran)	k	l	00H - 01H
13. Remote Lock On/Off(Blocage M-A de la télécommande)	k	m	00H - 01H
14. PIP/PBP/POP On/Off(PIP/PBP/POP Marche/Arrêt)	k	n	00H - 03H
15. PIP Position(Position PIP)	k	q	00H - 03H
16. Balance	k	t	00H - 64H
17. ACC	k	u	00H - 04H
18. PIP/PBP/POP SOURCE(SOURCE PIP/PBP/POP)	k	y	00H - 08H
19. Auto Configure(Configuration Auto.)	j	u	01H
20. Key(Clé)	m	c	Code clé
21. Tiling Mode(Mode Mosaïque)	d	d	00H - 0FH
22. Tile H Position(Position H en Mosaïque)	d	e	00H - 64H
23. Tile V Position(Position V en Mosaïque)	d	f	00H - 64H
24. Tile H Size(Taille H en Mosaïque)	d	g	00H - 64H
25. Tile V Size(Taille V en Mosaïque)	d	h	00H - 64H
26. Tile ID Set(Configuration ID en Mosaïque)	d	i	00H - 63H
27. Elapsed time return(Valeur de temps écoulé)	d	l	FFH
* 28. Light Sensor value return (Valeur de senseur lumineux)	d	m	FFH
* 29. Temperatur value return(Valeur de température)	d	n	FFH
* 30. Fan On/Off(Ventilateur Marche/Arrêt)	d	o	00H - 01H
* 31. Lamp fault check(Vérification de défaut de la lampe)	d	p	FFH
* 32. Video input fault return(Retour d'erreur d'entrée vidéo)	d	q	FFH

*** : En option**

FRANÇAIS

Contrôle de plusieurs appareils

Protocole de transmission / réception

Transmission

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Command 1] : première commande (j, k, m, d)
* [Command 2] : deuxième commande
* [Set ID]: vous pouvez régler cette fonction afin de choisir le numéro d'identification de l'appareil désiré, dans le menu Spécial. La plage de réglage est comprise entre 0 et 99. Lorsque vous sélectionnez la valeur « 0 », vous commandez chacun des téléviseurs connectés. Set ID est indiqué en décimales (de 0 à 99) dans le menu et en hexadécimales (0x0 à 0x64) dans le protocole de transmission/réception.

* [DATA]: pour transmettre des données de commande.
  Transmettre des données 'FF' pour voir l'état de commande.
* [Cr]: retour de chariot
  Code ASCII « 0x0D »
* [ ]: code ASCII espace (0x20)

Accusé de réception OK

[Command2][ ][Set ID][ ][OK][Data][x]

* L'appareil transmet un accusé de réception (ACK) de ce format quand il reçoit des données normales. Si les données reçues sont en mode lecture, il indique l'état actuel des données. Si ces données sont en mode écriture, ce sont celles de l'ordinateur.

Accusé de réception incorrect

[Command2][ ][Set ID][ ][NG][Data][x]

* L'appareil transmet un accusé de réception (ACK) de ce format quand il reçoit des erreurs de communication ou des données anormales de fonctions non viables.

Données 1 : code non autorisé
2 : fonction non disponible.
3 : attendre un peu plus

Protocole de transmission / réception

01. Power (Command : a) (Marche (Commande : a))

► Pour vérifier si le poste est allumé ou éteint.

Transmission

[k][a][ ][Set ID][ ][Data][Cr]

Données 0 : Mise hors tension
1 : Mise sous tension

Accusé de réception

[a][ ][Set ID][ ][OK][Data][x]

► Pour montrer l'état de Marche ou d'Arrêt.

Transmission

[k][a][ ][Set ID][ ][FF][Cr]

Données 0 : Mise hors tension
1 : Mise sous tension

Accusé de réception

[a][ ][Set ID][ ][OK][Data][x]

* L'appareil transmet un accusé de réception (ACK) de ce format quand il reçoit des données normales. Si les données reçues sont en mode lecture, il indique l'état actuel des données. Si ces données sont en mode écriture, ce sont celles de l'ordinateur.

02. Input Select(Command : b) (Main Picture Input) (Sélection de l'entrée (Commande : b) (Entrée image principale)

► Pour sélectionner l'entrée du poste. Vous pouvez également sélectionner une entrée en utilisant la touche INPUT de la télécommande.

Transmission

[k][b][ ][Set ID][ ][Data][Cr]

Données 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Accusé de réception

[b][ ][Set ID][ ][OK][Data][x]

03. Aspect Ratio(Command : c) (Manin picure format) (Format d'image (Commande : c) (Format de l'image principale))

► Permet de régler le format d'image. Vous pouvez également régler le format d'image à l'aide de la touche ARC (Aspect Ratio Control) de la télécommande ou à partir du menu Screen.

Transmission

[k][c][ ][Set ID][ ][Data][Cr]

Données 1 : 4:3 (Video)
2 : Plein écran (PC, Video)
3 : Spectacle (Video)
4 : Zoom1 (PC, Video)
5 : Zoom2 (Video)
6 : 1:1 (PC)

Accusé de réception

[c][ ][Set ID][ ][OK][Data][x]

04. Screen Mute(Command : d) (Activation/Désactivation des images (Commande : d))

► Permet de commander l'affichage des images.

Transmission

[k][d][ ][Set ID][ ][Data][Cr]

Données 0 : Activation de l'image (affichage des images)
1 : Désactivation de l'image (aucune image affichée)

Accusé de réception

[d][ ][Set ID][ ][OK][Data][x]

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Contrôle de plusieurs appareils

Protocole de transmission / réception

05. Volume Mute(Command : e) (Volume muet (Commande : e))

► Pour contrôler si le volume muet est activé ou désactivé.

Transmission

[k][e][ ][Set ID][ ][Data][Cr]

Données 0 : Volume muet activé (Volume éteint)
1 : Volume muet désactivé (Volume activé)

Accusé de réception

[e][ ][Set ID][ ][OK][Data][x]

Données 0 : Volume muet activé (Volume éteint)
1 : Volume muet désactivé (Volume activé)

06. Volume Control(Command : f) (Contrôle du volume (Commande : f))

► Permet de régler le volume.

Transmission

[k][f][ ][Set ID][ ][Data][Cr]

Données Min : 00H ~ Max : 64H
(code hexadécimal)

Accusé de réception

[f][ ][Set ID][ ][OK][Data][x]

Données Min : 00H ~ Max : 64H

* Mise en correspondance réelle
0 : étape 0
:
A : étape 10
:
F : étape 15
10 : étape 16
:
64 : étape 100

07. Contrast(Command : g) (Contraste (Commande : g))

► Pour régler le contraste de l'écran. Vous pouvez aussi régler le contraste dans le menu Image.

Transmission

[k][g][ ][Set ID][ ][Data][Cr]

Données Min : 00H ~ Max : 64H
• Consultez le chapitre « Mise en correspondance réelle » comme indiqué ci-dessous.

Accusé de réception

[g][ ][Set ID][ ][OK][Data][x]

* Mise en correspondance réelle
0 : étape 0
:
A : étape 10
:
F : étape 15
10 : étape 16
:
64 : étape 100

08. Brightness(Command : h) (Luminosité (Commande : h))

► Pour régler la luminosité de l'écran. Vous pouvez aussi régler la luminosité dans le menu Image.

Transmission

[k][h][ ][Set ID][ ][Data][Cr]

Données Min : 00H ~ Max : 64H
• Consultez le chapitre « Mise en correspondance réelle » comme indiqué ci-dessous.

Accusé de réception

[h][ ][Set ID][ ][OK][Data][x]

* Mise en correspondance réelle
0 : étape
:
A : étape 10
:
F : étape 15
10 : étape 16
:
64 : étape 100

Protocole de transmission / réception

09. Color(Command : i) (Video only) (Couleur (Commande : i) (Video uniquement))

▶ Pour régler la couleur de l'écran.
Vous pouvez aussi régler la couleur dans le menu Image.

Transmission

[k][i][ ][Set ID][ ][Data][Cr]

Données Min : 00H ~ Max : 64H
(code hexadécimal)

Accusé de réception

[i][ ][Set ID][ ][OK][Data][x]

Données Min : 00H ~ Max : 64H

10. Tint(Command : j) (Teinte (Commande : j) (AV/S-Video: NTSC uniquement)

▶ Pour régler la teinte de l'écran.
Vous pouvez aussi régler la teinte dans le menu Image.

Transmission

[k][j][ ][Set ID][ ][Data][Cr]

Données Rouge : 00H ~ Vert : 64H
(code hexadécimal)

Accusé de réception

[j][ ][Set ID][ ][OK][Data][x]

Données Rouge : 00H ~ Vert : 64H

* Teinte : -50 ~ +50

11. Sharpness(Command : k) (Video only) (Netteté (Commande : k) (Video uniquement))

▶ Pour régler la netteté de l'écran.
Vous pouvez aussi régler la netteté dans le menu Image.

Transmission

[k][k][ ][Set ID][ ][Data][Cr]

Données Min : 00H ~ Max : 64H
(code hexadécimal)

Accusé de réception

[k][ ][Set ID][ ][OK][Data][x]

Données Min : 00H ~ Max : 64H

12. OSD Select(Command : l) (Sélection de l'affichage à l'écran (Commande : l))

▶ Pour activer ou désactiver l'affichage à l'écran.

Transmission

[k][l][ ][Set ID][ ][Data][Cr]

Données 0 : OSD désactivé
1 : OSD activé

Accusé de réception

[l][ ][Set ID][ ][OK][Data][x]

Données 0 : OSD désactivé
1 : OSD activé

13. Remote Lock On/Off(Command : m) (Verrouillage de la télécommande/Verrouillage des touches (Commande : m))

▶ Permet de verrouiller la télécommande ainsi que les touches du panneau avant du téléviseur.

Transmission

[k][m][ ][Set ID][ ][Data][Cr]

Données 0 : Blocage à distance désactivé
1 : Blocage à distance activé

Accusé de réception

[m][ ][Set ID][ ][OK][Data][x]

Données 0 : Blocage à distance désactivé
1 : Blocage à distance activé

▶ Utilisez ce mode si vous n'utilisez pas la télécommande et les touches du panneau avant du téléviseur.
Lorsque l'alimentation principale est sous/hors tension, le verrouillage de la télécommande se désactive.

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Contrôle de plusieurs appareils

Protocole de transmission / réception

14. PIP/PBP/POP On/Off(Command : n) (Marche/Arrêt PIP/PBP/POP (Commande : n))

► Pour activer ou désactiver PIP/PBP/POP du poste.

Transmission

[k][n][ ][Set ID][ ][Data][Cr]

Données 0 : OFF
1 : PIP
2 : PBP
3 : POP

Accusé de réception

[n][ ][Set ID][ ][OK][Data][x]

Données 0 : OFF
1 : PIP
2 : PBP
3 : POP

15. PIP Position(Command : q) (Position PIP (Commande : q))

► Pour régler la position PIP.

Transmission

[k][q][ ][Set ID][ ][Data][Cr]

Données 0 : en bas à droite de l'écran
1 : en bas à gauche de l'écran
2 : en haut à gauche de l'écran
3 : en haut à droite de l'écran

Accusé de réception

[q][ ][Set ID][ ][OK][Data][x]

Données 0 : en bas à droite de l'écran
1 : en bas à gauche de l'écran
2 : en haut à gauche de l'écran
3 : en haut à droite de l'écran

16. Balance (Command : t) (Balance (Commande : t))

► Pour régler la balance de bruit .

Transmission

[k][t][ ][Set ID][ ][Data][Cr]

Données Min : 00H ~ Max : 64H
(code hexadécimal)

Accusé de réception

[t][ ][Set ID][ ][OK][Data][x]

Données Min : 00H ~ Max : 64H

* Balance : -50 ~ +50

17. ACC(Command : u) (ACC (Commande : u))

► Pour régler la température de couleur de l'écran.

Transmission

[k][u][ ][Set ID][ ][Data][Cr]

Données 0 : Normal(9300K) 4 : 3600K
1 : Froid PC : 0, 2, 3, 4
2 : Chaud(6500K) Video : 0, 1, 2
3 : Utilisateur

Accusé de réception

[u][ ][Set ID][ ][OK][Data][x]

Données 0 : Normal(9300K) 4 : 3600K
1 : Froid PC : 0, 2, 3, 4
2 : Chaud(6500K) Video : 0, 1, 2
3 : Utilisateur

Protocole de transmission / réception

18. PIP/PBP/POP SOURCE(Command : y) (SOURCE PIP/PBP/POP (Commande : y))

► Pour sélectionner la source du sous-écran.

Transmission

[k][y][ ][Set ID][ ][Data][Cr]

Données 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Accusé de réception

[y][ ][Set ID][ ][OK][Data][x]

Données 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

19. Auto Configure(Command: j u) (Configuration Auto. (Commande : j u))

► Pour régler la position de l'image et minimiser automatiquement les vibrations de l'image. Disponible uniquement en mode RGB (PC).

Transmission

[j][u][ ][Set ID][ ][Data][Cr]

Données 1 : validation

Accusé de réception

[u][ ][Set ID][ ][OK][Data][x]

20. Key(Command : m c) (Clé (Commande : m c))

► Permet d'envoyer le code de clef de la télécommande par infrarouge.

Transmission

[m][c][ ][Set ID][ ][Data][Cr]

Données code de clef

Accusé de réception

[c][ ][Set ID][ ][OK][Data][x]

21. Tiling Mode(Command : d d) (Mode Mosaïque (Commande : d d))

► Permet de changer un mode Mosaïque.

Transmission

[d][d][ ][Set ID][ ][Data][x]

Données	Description
00	Le mode Mosaïque est désactivé.
12	1 x 2 mode (colonne x ligne)
13	1 x 3 mode
14	1 x 4 mode
...	...
44	4 x 4 mode

* Les données ne peuvent pas être réglées sur 0X or X0, sauf 00.

Accusé de réception

[d][ ][00][ ][OK/NG][Data][x]

22. Tile H Position(Command : d e) (Position H en Mosaïque (Commande : d e))

► Permet de régler la position Horizontale

Transmission

[d][e][ ][Set ID][ ][Data][x]

* La plage de données est comprise entre 00 et 64 (Hex).

Accusé de réception

[e][ ][Set ID][ ][OK/NG][Data][x]

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Protocole de transmission/réception

23. Tile V Position(Command : d f) (Position V en Mosaïque (Commande : d f))

► Permet de régler la position Verticale.

Transmission

[d][f][ ][Set ID][ ][Data][x]

* La plage de données est comprise entre 00 et 64 (Hex).

Accusé de réception

[f][ ][Set ID][ ][OK/NG][Data][x]

24. Tile H Size(Command : d g) (Taille H en Mosaïque (Commande : d g))

► Permet de régler la taille Horizontale.

Transmission

[d][g][ ][Set ID][ ][Data][x]

* La plage de données est comprise entre 00 et 64 (Hex).

Accusé de réception

[g][ ][Set ID][ ][OK/NG][Data][x]

25. Tile V Size(Command : d h) (Taille V en Mosaïque (Commande : d h))

► Permet de régler la taille Verticale.

Transmission

[d][h][ ][Set ID][ ][Data][x]

* La plage de données est comprise entre 00 et 64 (Hex).

Accusé de réception

[h][ ][Set ID][ ][OK/NG][Data][x]

26. Tile ID Set(Command : d i) (Configuration ID en Mosaïque (Commande : d i))

► Permet d'assigner l'identificateur Mosaïque à la fonction Mosaïque.

Transmission

[d][i][ ][Set ID][ ][Data][x]

* La plage de données est comprise entre 00 et 00 x 10 en mode mosaïque.

Accusé de réception

[i][ ][Set ID][ ][OK/NG][Data][x]

27. Elapsed time return(Command : d l) (Valeur de temps écoulé (Commande : d l))

► Permet de lire le temps écoulé.

Transmission

[d][l][ ][Set ID][ ][Data][x]

* Les données sont toujours FF (Hex).

Accusé de réception

[l][ ][Set ID][ ][OK/NG][Data][x]

***28. Light Sensor value Return(Command : d m) (Valeur de senseur lumineux (Commande : d m)) – En option**

► Permet de lire la valeur du senseur lumineux afin de régler la luminosité de l'appareil selon la luminosité ambiante.

Transmission

[d][m][ ][Set ID][ ][Data][x]

* Les données sont toujours FF (Hex).

Accusé de réception

[m][ ][Set ID][ ][OK/NG][Data][x]

Protocole de transmission/réception

***29. Temperature value Return(Command : d n) (Valeur de température (Commande : d n)) – En option**

► Permet de lire la valeur de la température intérieure.

Transmission

[d][n][ ][Set ID][ ][Data][x]

* Les données sont toujours FF (Hex).

Accusé de réception

[n][ ][Set ID][ ][OK/NG][Data][x]

Les données ont une longueur de un octet en format hexadécimal ASCII.

***30. Fan On/Off(Command : d o) (Ventilateur Marche/Arrêt (Commande : d o)) – En option**

► Pour activer ou désactiver le contrôle du ventilateur de l'unité.

Transmission

[d][o][ ][Set ID][ ][Data][x]

Données 0 : Ventilateur Arrêt
1: Ventilateur Marche

Accusé de réception

[o][ ][Set ID][ ][OK/NG][Data][x]

***31. Lamp fault Check(Command : d p) (Vérification de défaut de la lampe (Commande : d p)) – En option**

► Permet de vérifier si la lampe a un défaut.

Transmission

[d][p][ ][Set ID][ ][Data][x]

* Les données sont toujours FF (Hex).

Accusé de réception

[p][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

***32. Video input fault return(Command : d q) (Retour d'erreur d'entrée vidéo (Commande : d q)) – En option**

► Pour vérifier l'erreur d'entrée vidéo.

Transmission

[d][q][ ][Set ID][ ][Data][x]

* Les données sont toujours FF (Hex).

Accusé de réception

[q][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

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Codes IR

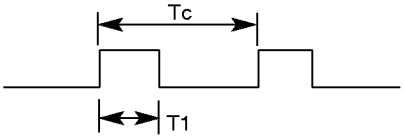
Branchement

▶ Branchez la télécommande à fil sur la prise de l'appareil prévue à cet effet.

Code IR de la télécommande

▶ Forme d'onde émise

Impulsion unique, fréquence de 37.917 KHz modulée à 455 KHz

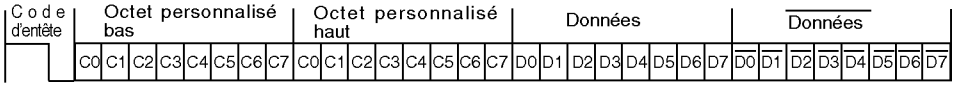


Fréquence de l'onde porteuse

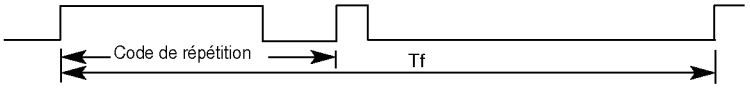
FPorteuse = 1/TC = FOscillateur/12
Ratio = T1/Tc = 1/3

▶ Configuration de la trame

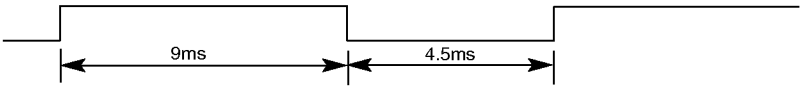
• 1ère trame



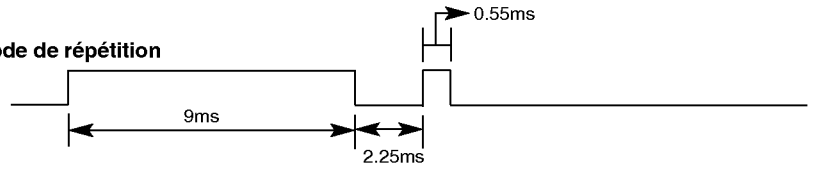
• Trame de répétition



▶ Code d'entête

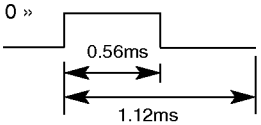


▶ Code de répétition

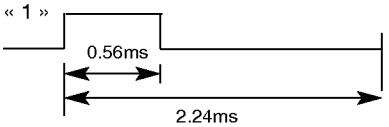


▶ Bit description

• Bit à « 0 »

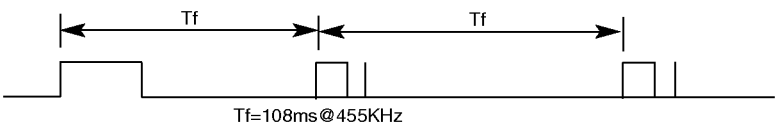


• Bit à « 1 »



▶ Intervalle de trame : Tf

• Le signal est transmis tant qu'une touche est maintenue enfoncée.



Code (Hexa)	Fonction	Remarque
02	VOL (▲)	Touche de la télécommande
03	VOL (▼)	Touche de la télécommande
40	▲	Touche de la télécommande
41	▼	Touche de la télécommande
06	►	Touche de la télécommande
07	◄	Touche de la télécommande
08	ALIMENTATION	Touche de la télécommande (Marche/Arrêt)
5B	EXIT	Touche de la télécommande
09	MUTE	Touche de la télécommande
4D	EZ VIDEO(PSM)	Touche de la télécommande
52	EZ AUDIO(SSM)	Touche de la télécommande
98	INPUT(Source)	Touche de la télécommande
5A	AV	Touche de la télécommande
D8	S-VIDEO	Touche de la télécommande
BF	COMPONENT	Touche de la télécommande
C6	DVI	Touche de la télécommande
0E	SLEEP	Touche de la télécommande
43	MENU	Touche de la télécommande
44	ENTER	Touche de la télécommande
60	PIP	Touche de la télécommande
61	POP	Touche de la télécommande
63	SWAP	Touche de la télécommande
79	ARC	Touche de la télécommande
76	ARC(4:3)	Touche de la télécommande
77	ARC(Plein)	Touche de la télécommande
AF	ARC(ZOOM1)	Touche de la télécommande
54	AUTO	Touche de la télécommande

RS-232C

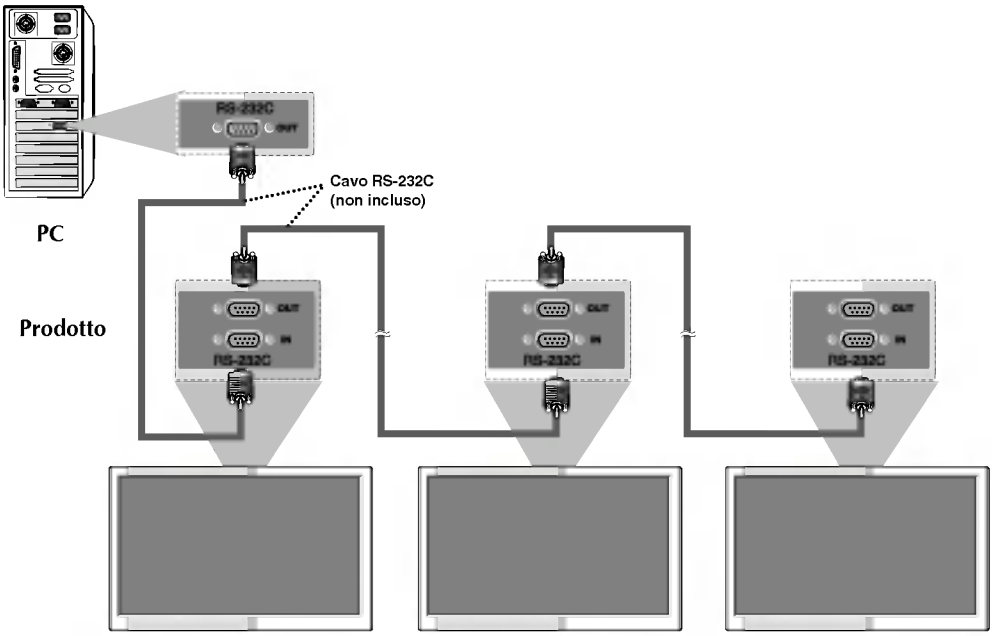
Controllo di prodotti multipli

Utilizzare questo metodo per collegare diversi prodotti ad un unico PC.
È possibile controllare diversi prodotti allo stesso tempo collegandoli ad un unico PC.

Collegamento del cavo

Collegare il cavo RS-232 come mostrato nell'illustrazione.

* Il protocollo RS-232C viene impiegato per le comunicazioni tra il PC e il prodotto. È possibile accendere/spegnere il prodotto, selezionare una sorgente d'ingresso o regolare il menu OSD dal PC.



Parametri di comunicazione

- Velocità di trasmissione in baud: 9600 bps (UART)
- Lunghezza dati: 8 bit
- Bit di parità: nessuno
- Bit di stop: 1 bit
- Controllo di flusso: nessuno
- Codice di comunicazione: codice ASCII

Elenco di riferimento dei comandi

	COMANDO1	COMANDO 2	DATI (Esadecimale)
01. Power(Alimentazione)	k	a	00H - 01H
02. Input Select(Selezione ingresso)	k	b	02H - 08H
03. Aspect Ratio(Rapporto larghezza-altezza)	k	c	01H - 06H
04. Screen Mute(Schermo silenzioso)	k	d	00H - 01H
05. Volume Mute(Volume silenzioso)	k	e	00H - 01H
06. Volume Control(Controllo volume)	k	f	00H - 64H
07. Contrast(Contrasto)	k	g	00H - 64H
08. Brightness(Luminosità)	k	h	00H - 64H
09. Color(Colore)	k	i	00H - 64H
10. Tint(Tinta)	k	j	00H - 64H
11. Sharpness(Nitidezza)	k	k	00H - 64H
12. OSD Select(Selezione OSD)	k	l	00H - 01H
13. Remote Lock On/Off(Blocco telecomando On/Off)	k	m	00H - 01H
14. PIP/PBP/POP On/Off(PIP/PBP/POP On/Off)	k	n	00H - 03H
15. PIP Position(Posizione PIP)	k	q	00H - 03H
16. Balance(Bilanciamento)	k	t	00H - 64H
17. ACC	k	u	00H - 04H
18. PIP/PBP/POP SOURCE(SORGENTE PIP/PBP/POP)	k	y	00H - 08H
19. Auto Configure(Configurazione Automatica)	j	u	01H
20. Key(Pulsante)	m	c	Codice pulsante
21. Tiling Mode(Modalità ad elementi affiancati)	d	d	00H - 0FH
22. Tile H Position(Posizione H affiancato)	d	e	00H - 64H
23. Tile V Position(Posizione V affiancato)	d	f	00H - 64H
24. Tile H Size(Dimensioni H affiancato)	d	g	00H - 64H
25. Tile V Size(Dimensioni V affiancato)	d	h	00H - 64H
26. Tile ID Set(Impostazione ID affiancato)	d	i	00H - 63H
27. Elapsed time return(Risposta tempo trascorso)	d	l	FFH
* 28. Light Sensor value return (Risposta del valore sensore luce)	d	m	FFH
* 29. Temperatur value return(Risposta del valore temperatura)	d	n	FFH
* 30. Fan On/Off(Ventola On/Off)	d	o	00H - 01H
* 31. Lamp fault check(Controllo guasto lampada)	d	p	FFH
* 32. Video in put fault return(Risposta errore ingresso video)	d	q	FFH

*** : opzionale**

ITALIANO

Controllo di prodotti multipli

Protocollo trasmissione / ricezione

Trasmissione

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Comando 1]: primo comando. (j, k, m, d)
* [Comando 2]: secondo comando.
* [Set ID] : [Imposta ID]: È possibile regolare l'impostazione ID per selezionare il numero ID del prodotto desiderato nel menu speciale. La gamma di regolazioni è 0 ~ 99.
  Quando si seleziona Set ID '0', si controlla ogni impianto TV collegato. Set ID viene indicato come numero decimale (0~99) sul menu e come numero esadecimale (0x0~0x64) nel protocollo di trasmissione/ricezione.
* [DATA]: [DATI]: Per la trasmissione dei dati di comando.
  Trasmettere i dati 'FF' per leggere lo stato del comando.
* [Cr]: Ritorno a margine
  codice ASCII '0x0D'
* [ ]: Spazio codice ASCII (0x20)'

Riconoscimento OK

[Command2][ ][Set ID][ ][OK][Data][x]

* Il prodotto trasmette ACK (riconoscimento) in base al formato quando si ricevono dati normali. A questo punto se i dati sono in modalità lettura, indica i dati nello stato corrente. Se i dati sono in modalità scrittura, restituisce i dati del PC.

Error Acknowledgement

[Command2][ ][Set ID][ ][NG][Data][x]

* Il prodotto trasmette ACK (riconoscimento) in base a questo formato quando si ricevono dati normali anomali da funzioni non utilizzabili o errori di comunicazione.

Dati 1 : codice illegale
2 : Funzione non supportata
3 : Attendere ancora

Protocollo trasmissione / ricezione

01. Power (Command : a) (Alimentazione (comando: a))

▶ Per controllare l'alimentazione On/Off dell'impianto.

Trasmissione

[k][a][ ][Set ID][ ][Data][Cr]

Dati 0: alimentazione non attiva
1: alimentazione attiva

Riconoscimento

[a][ ][Set ID][ ][OK][Data][x]

▶ Per visualizzare lo stato dell'alimentazione On/Off.

Trasmissione

[k][a][ ][Set ID][ ][FF][Cr]

Dati 0: alimentazione non attiva
1: alimentazione attiva

Riconoscimento

[a][ ][Set ID][ ][OK][Data][x]

* Il prodotto trasmette ACK (riconoscimento) in base al formato quando si ricevono dati normali. A questo punto se i dati sono in modalità lettura, indica i dati nello stato corrente. Se i dati sono in modalità scrittura, restituisce i dati del PC.

02. Input Select(Command : b) (Main Picture Input) Selez. Ingresso (comando: b) (Ingresso immagine principale))

▶ Per selezionare la sorgente dell'ingresso per l'impianto.
È possibile selezionare anche una sorgente d'ingresso con il pulsante INPUT sul telecomando.

Trasmissione

[k][b][ ][Set ID][ ][Data][Cr]

Dati 2 : AV
3 : S-Video
4 : Component
6 : RGB1
7 : RGB2
8 : DVI

Riconoscimento

[b][ ][Set ID][ ][OK][Data][x]

03. Aspect Ratio(Command : c) (Manin picure format) (Rapporto larghezza-altezza (comando: c) (Formato immagine principale))

▶ Per regolare il formato dello schermo.
È inoltre possibile regolare il formato dello schermo con il pulsante ARC (Aspect Ratio Control [Controllo rapporto larghezza-altezza]) presente sul telecomando o nel menu dello schermo.

Trasmissione

[k][c][ ][Set ID][ ][Data][Cr]

Dati 1 : 4:3 (Video)
2 : Pieno (PC, Video)
3 : Spettacolo (Video)
4 : Zoom1 (PC, Video)
5 : Zoom2 (Video)
6 : 1:1(PC)

Riconoscimento

[c][ ][Set ID][ ][OK][Data][x]

04. Screen Mute(Command : d) (Schermo silenzioso (comando: d))

▶ Per selezionare la funzione schermo silenzioso on/off.

Trasmissione

[k][d][ ][Set ID][ ][Data][Cr]

Dati 0 : Schermo silenzioso off (Immagine on)
1 : Schermo silenzioso attivato (immagine disattivata)

Riconoscimento

[d][ ][Set ID][ ][OK][Data][x]

ITALIANO

Controllo di prodotti multipli

Protocollo trasmissione / ricezione

05. Volume Mute(Command : e)
(Azzeramento volume (comando: e))

► Per controllare l'opzione On/Off dell'azzeramento del volume.

Trasmissione

[k][e][ ][Set ID][ ][Data][Cr]

Dati 0 : azzeramento volume On (volume Off)
1 : Azzeramento volume Off (volume On)

Riconoscimento

[e][ ][Set ID][ ][OK][Data][x]

Dati 0 : azzeramento volume On (volume Off)
1 : Azzeramento volume Off (volume On)

06. Volume Control(Command : f)
(Controllo volume (comando: f))

► Regolare il volume.

Trasmissione

[k][f][ ][Set ID][ ][Data][Cr]

Dati min.: 00H ~ Max: 64H
(codice esadecimale)

Riconoscimento

[f][ ][Set ID][ ][OK][Data][x]

Dati min.: 00H ~ Max: 64H

* Rilevamento dati reali
0 : punto 0
:
A : punto 10
:
F : punto 15
10 : punto 16
:
64 : punto 100

07. Contrast(Command : g) (Contrasto (comando: g))

► Per regolare il contrasto dello schermo. È possibile regolare anche il contrasto nel menu Immagine.

Trasmissione

[k][g][ ][Set ID][ ][Data][Cr]

Dati min.: 00H ~ Max: 64H
• Consultare il 'rilevamento dati reali' come indicato di seguito.

Riconoscimento

[g][ ][Set ID][ ][OK][Data][x]

* Rilevamento dati reali
0 : punto 0
:
A : punto 10
:
F : punto 15
10 : punto 16
:
64 : punto 100

08. Brightness(Command : h)
(Luminosità (comando: h))

► Per regolare la luminosità dello schermo. È possibile regolare anche la luminosità del menu Immagine.

Trasmissione

[k][h][ ][Set ID][ ][Data][Cr]

Dati min.: 00H ~ Max: 64H
• Consultare il 'rilevamento dati reali' come indicato di seguito.

Riconoscimento

[h][ ][Set ID][ ][OK][Data][x]

* Rilevamento dati reali
0 : punto
:
A : punto 10
:
F : punto 15
10 : punto 16
:
64 : punto 100

Protocollo trasmissione / ricezione

09. Color(Command : i) (Video only) (Colore (comando: i) (Video solo))

► Per regolare il colore dello schermo. È possibile regolare anche il colore nel menu Immagine.

Trasmissione

[k][i][ ][Set ID][ ][Data][Cr]

Dati min.: 00H ~ Max: 64H
(codice esadecimale)

Riconoscimento

[i][ ][Set ID][ ][OK][Data][x]

Dati min.: 00H ~ Max: 64H

10. Tint(Command : j) (Tinta (comando: j)(AV/S-Video: solo NTSC)

► Per selezionare la tinta dello schermo. È possibile regolare anche la tinta del menu Immagine.

Trasmissione

[k][j][ ][Set ID][ ][Data][Cr]

Dati rosso: 00H ~ Verde: 64H
(codice esadecimale)

Riconoscimento

[j][ ][Set ID][ ][OK][Data][x]

Dati rosso: 00H ~ Verde: 64H

* Tinta : -50 ~ +50

11. Nitidezza (comando: k) (solo Video)

► Per regolare la nitidezza dello schermo. È possibile regolare anche la nitidezza nel menu Immagine.

Trasmissione

[k][k][ ][Set ID][ ][Data][Cr]

Dati min.: 00H ~ Max: 64H
(codice esadecimale)

Riconoscimento

[k][ ][Set ID][ ][OK][Data][x]

Dati min.: 00H ~ Max: 64H

12. OSD Select(Command : l) (Selez. OSD (comando: l))

► Per controllare l'opzione On/Off dell'OSD per l'impianto.

Trasmissione

[k][l][ ][Set ID][ ][Data][Cr]

Dati 0: OSD Off 1: OSD On

Riconoscimento

[l][ ][Set ID][ ][OK][Data][x]

Dati 0: OSD Off 1: OSD On

13. Remote Lock On/Off(Command : m) (Blocco / Pulsante di blocco del telecomando (Comando: m))

► Per bloccare il telecomando e i controlli del pannello frontale sull'apparecchiatura.

Trasmissione

[k][m][ ][Set ID][ ][Data][Cr]

Dati 0: Blocco telecomando Off
1: Blocco telecomando On

Riconoscimento

[m][ ][Set ID][ ][OK][Data][x]

Dati 0: Blocco telecomando Off
1: Blocco telecomando On

► Se non si utilizza il telecomando e i controlli del pannello frontale sull'apparecchiatura, utilizzare questa modalità.
Quando l'alimentazione principale è attivata/disattivata, il blocco del telecomando viene disabilitato.

ITALIANO

Controllo di prodotti multipli

Protocollo trasmissione / ricezione

14. PIP/PBP/POP On/Off(Command : n) (PIP/PBP/POP On/Off(Comando: n))

► Per controllare l'opzione On/Off di PIP/PBP/POP dell'impianto.

Trasmissione

[k][n][ ][Set ID][ ][Data][Cr]

Dati 0 : OFF
1 : PIP
2 : PBP
3 : POP

Riconoscimento

[n][ ][Set ID][ ][OK][Data][x]

Dati 0 : OFF
1 : PIP
2 : PBP
3 : POP

15. PIP Position(Command : q) (Posizione PIP (comando: q))

► Per regolare la posizione PIP.

Trasmissione

[k][q][ ][Set ID][ ][Data][Cr]

Dati 0 : in basso a destra sullo schermo
1 : in basso a sinistra sullo schermo
2 : in alto a sinistra sullo schermo
3 : in alto a destra sullo schermo

Riconoscimento

[q][ ][Set ID][ ][OK][Data][x]

Dati 0 : in basso a destra sullo schermo
1 : in basso a sinistra sullo schermo
2 : in alto a sinistra sullo schermo
3 : in alto a destra sullo schermo

16. Balance(Command : t) (Bilanc. (comando: t))

► Per selezionare il bilanciamento dello suono.

Trasmissione

[k][t][ ][Set ID][ ][Data][Cr]

Dati min.: 00H ~ Max: 64H
(codice esadecimale)

Riconoscimento

[t][ ][Set ID][ ][OK][Data][x]

Dati min.: 00H ~ Max: 64H

* Bilanciamento: -50 ~ +50

17. ACC(Command : u) (ACC (comando: u))

► Per regolare la temperatura del colore dello schermo.

Trasmissione

[k][u][ ][Set ID][ ][Data][Cr]

Dati 0 : Normale (9300K) 4 : 3600K
1 : Freddo PC : 0, 2, 3, 4
2 : Caldo (6500K) Video : 0, 1, 2
3 : Utente

Riconoscimento

[u][ ][Set ID][ ][OK][Data][x]

Dati 0 : Normale (9300K) 4 : 3600K
1 : Freddo PC : 0, 2, 3, 4
2 : Caldo (6500K) Video : 0, 1, 2
3 : Utente

Protocollo trasmissione / ricezione

18. PIP/PBP/POP SOURCE(Command : y)
(SORGENTE PIP/PBP/POP (Comando: y))

▶ Per selezionare la sorgente del sottoschermo.

Trasmissione

[k][y][ ][Set ID][ ][Data][Cr]

Dati 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Riconoscimento

[y][ ][Set ID][ ][OK][Data][x]

Dati 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

19. Auto Configure(Command: j u)
(Configurazione Automatica (Comando: j u))

▶ Per regolare la posizione dell'immagine riducendo al minimo lo sfarfallio in modo automatico. Funziona esclusivamente in modalità RGB (PC).

Trasmissione

[j][u][ ][Set ID][ ][Data][Cr]

Dati 1: da impostare

Riconoscimento

[u][ ][Set ID][ ][OK][Data][x]]

20. Key(Command : m c) (Pulsante
(comando: m c))

▶ Per inviare il codice pulsante del telecomando all'infrarosso.

Trasmissione

[m][c][ ][Set ID][ ][Data][Cr]

Codice pulsanti dati

Riconoscimento

[c][ ][Set ID][ ][OK][Data][x]

21. Tiling Mode(Command : d d)
(Modalità ad elementi affiancati
(comando: d d))

▶ Modifica di una modalità ad elementi affiancati.

Trasmissione

[d][d][ ][Set ID][ ][Data][x]

Dati	Descrizione
00	La modalità ad elementi affiancati è disattivata.
12	Modalità 1 x 2 (colunne x righe)
13	Modalità 1 x 3
14	Modalità 1 x 4
...	...
44	Modalità 4 x 4

* Non è possibile impostare i dati su 0x o 0X tranne 00.

Riconoscimento

[d][ ][00][ ][OK/NG][Data][x]

22. Tile H Position(Command : d e)
(Posizione H affiancato (comando: d e))

▶ Impostazione della posizione orizzontale.

Trasmissione

[d][e][ ][Set ID][ ][Data][x]

* L'intervallo dei dati va da 00 a 64 (in un sistema esadecimale).

Riconoscimento

[e][ ][Set ID][ ][OK/NG][Data][x]

ITALIANO

Protocollo trasmissione / ricezione

23. Tile V Position(Command : d f) (Posizione V affiancato (comando: d f))

► Impostazione della posizione verticale.

Trasmissione

[d][f][ ][Set ID][ ][Data][x]

* L'intervallo dei dati va da 00 a 64 (in un sistema esadecimale).

Riconoscimento

[f][ ][Set ID][ ][OK/NG][Data][x]

24. Tile H Size(Command : d g) (Dimensioni H affiancato (comando: d g))

► Impostazione delle dimensioni orizzontali.

Trasmissione

[d][g][ ][Set ID][ ][Data][x]

* L'intervallo dei dati va da 00 a 64 (in un sistema esadecimale).

Riconoscimento

[g][ ][Set ID][ ][OK/NG][Data][x]

25. Tile V Size(Command : d h) (Dimensioni V affiancato (comando: d h))

► Impostazione delle dimensioni verticali.

Trasmissione

[d][h][ ][Set ID][ ][Data][x]

* L'intervallo dei dati va da 00 a 64 (in un sistema esadecimale).

Riconoscimento

[h][ ][Set ID][ ][OK/NG][Data][x]

26. Tile ID Set(Command : d i) (Impostazione ID affiancato (comando: d i))

► Assegnazione dell'ID affiancato per la funzione ad elementi affiancati.

Trasmissione

[d][i][ ][Set ID][ ][Data][x]

* L'intervallo dei dati va dalla modalità affiancati 00 a 00 x 10.

Riconoscimento

[i][ ][Set ID][ ][OK/NG][Data][x]

27. Elapsed time return(Command : d l) (Risposta tempo trascorso (comando: d l))

► Lettura del tempo trascorso.

Trasmissione

[d][l][ ][Set ID][ ][Data][x]

* I dati sono sempre FF (in un sistema esadecimale).

Riconoscimento

[l][][Set ID][][OK/NG][Data][x]

*** 28. Light Sensor value Return(Command : d m) (Risposta del valore sensore luce (comando: d m)) - opzionale**

► La lettura del valore del sensore luce per la regolazione della luminosità del prodotto dipende dalla luminosità circostante.

Trasmissione

[d][m][ ][Set ID][ ][Data][x]

* I dati sono sempre FF (in un sistema esadecimale).

Riconoscimento

[m][ ][Set ID][ ][OK/NG][Data][x]

Protocollo trasmissione / ricezione

*** 29. Temperature value Return(Command : d n) (Risposta del valore temperatura (comando: d n)) - opzionale**

► Lettura del valore della temperatura interna.

Trasmissione

[d][n][ ][Set ID][ ][Data][x]

* I dati sono sempre FF (in un sistema esadecimale).

Riconoscimento

[n][ ][Set ID][ ][OK/NG][Data][x]

I dati hanno la lunghezza di un byte in formato ASCII esadecimale.

*** 30. Fan On/Off(Command : d o) (Ventola On/Off (comando: d o)) - opzionale**

► Controllo della ventola da impostare su On/Off.

Trasmissione

[d][o][ ][Set ID][ ][Data][x]

Dati 0: Ventola Off 1: Ventola On

Riconoscimento

[o][ ][Set ID][ ][OK/NG][Data][x]

*** 31. Lamp fault Check(Command : d p) (Controllo guasto lampada (comando: d p)) - opzionale**

► Controllo del guasto lampada.

Trasmissione

[d][p][ ][Set ID][ ][Data][x]

* I dati sono sempre FF (in un sistema esadecimale).

Riconoscimento

[p][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

***32. Video input fault return(Command : d q) (Risposta errore ingresso video (comando: d q)) - opzionale**

► Per verificare l'errore dell'ingresso video.

Trasmissione

[d][q][ ][Set ID][ ][Data][x]

* I dati sono sempre FF (in un sistema esadecimale).

Riconoscimento

[q][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

ITALIANO

Codici IR

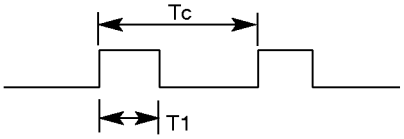
Metodi di collegamento

▶ Collegare il telecomando a cavo all'apposita porta presente sul prodotto.

Codice IR del telecomando

▶ Forma d'onda in uscita

impulso singolo modulato con segnale da 37.917 KHz a 455 KHz



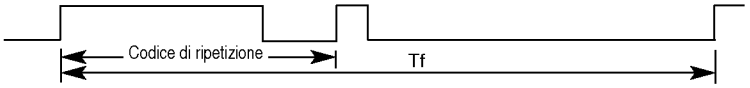
Frequenza portante

FCAR = 1/Tc = fosc/12
Fattore di utilizzazione = T1/Tc = 1/3

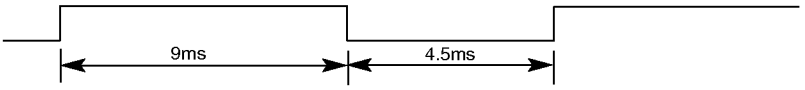
▶ Configurazione di sequenza

• 1° sequenza

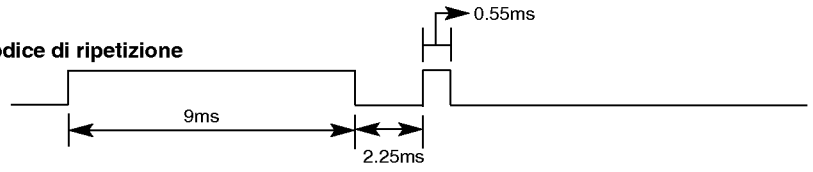
• Sequenza di ripetizione



▶ Codice guida

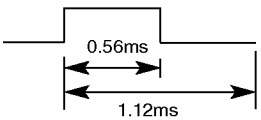


▶ Codice di ripetizione

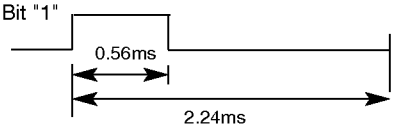


▶ Descrizione bit

• Bit "0"

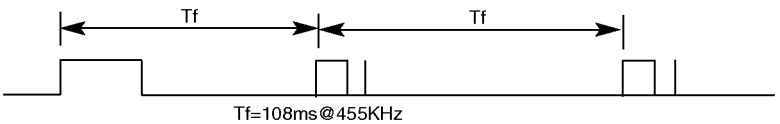


• Bit "1"



▶ Intervallo di sequenza: Tf

• La forma d'onda viene trasmessa fino a quando sono premuti i pulsanti.



Codice (Esadec.)	Funzione	Nota
02	VOL (▲)	Pulsante R/C
03	VOL (▼)	Pulsante R/C
40	▲	Pulsante R/C
41	▼	Pulsante R/C
06	▶	Pulsante R/C
07	◀	Pulsante R/C
08	POWER ON/OFF	Pulsante R/C (POWER On/Off)
5B	EXIT	Pulsante R/C
09	MUTE	Pulsante R/C
4D	EZ VIDEO(PSM)	Pulsante R/C
52	EZ AUDIO(SSM)	Pulsante R/C
98	INPUT(Source)	Pulsante R/C
5A	AV	Pulsante R/C
D8	S-VIDEO	Pulsante R/C
BF	COMPONENT	Pulsante R/C
C6	DVI	Pulsante R/C
0E	SLEEP [spegnimento]	Pulsante R/C
43	MENU	Pulsante R/C
44	ENTER	Pulsante R/C
60	PIP	Pulsante R/C
61	POP	Pulsante R/C
63	SWAP	Pulsante R/C
79	ARC	Pulsante R/C
76	ARC(4:3)	Pulsante R/C
77	ARC(Pieno)	Pulsante R/C
AF	ARC(ZOOM1)	Pulsante R/C
54	AUTO	Pulsante R/C

RS-232C

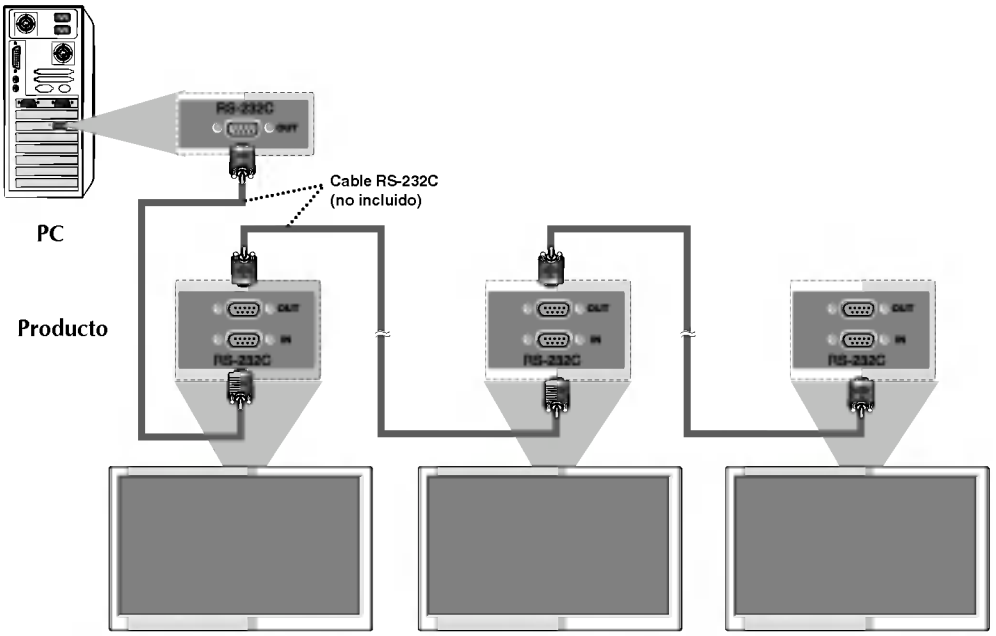
Control de varios productos

Utilice este método para conectar varios productos a un solo PC.
Puede controlar varios productos simultáneamente mediante su conexión a un solo PC.

Conexión del cable

Conecte el cable RS-232C tal como se muestra en la imagen.

* El protocolo RS-232C se utiliza para comunicaciones entre el PC y el producto. Puede apagar y encender el producto, seleccionar una fuente de entrada o ajustar el menú OSD desde el PC.



Parámetro de comunicación

- Velocidad de línea en baudios: 9600 bps (UART)
- Longitud de los datos: 8 bits
- Bit de paridad: ninguno
- Bit de parada: 1 bit
- Control de flujo: ninguno
- Código de comunicación: código ASCII

Lista de referencia de comandos

	COMMAND1	COMMAND2	DATA(Hexa)
01. Power(Encendido)	k	a	00H - 01H
02. Input Select(Selección de entrada)	k	b	02H - 08H
03. Aspect Ratio(Relación de aspecto)	k	c	01H - 06H
04. Screen Mute(Silencio de pantalla)	k	d	00H - 01H
05. Volume Mute(Silencio de volumen)	k	e	00H - 01H
06. Volume Control(Control de volumen)	k	f	00H - 64H
07. Contrast(Contraste)	k	g	00H - 64H
08. Brightness(Luminosidad)	k	h	00H - 64H
09. Color	k	i	00H - 64H
10. Tint(Tinte)	k	j	00H - 64H
11. Sharpness(Definición)	k	k	00H - 64H
12. OSD Select(Selección)	k	l	00H - 01H
13. Remote Lock On/Off(Bloqueo/Desbloqueo del mando a distancia)	k	m	00H - 01H
14. PIP/PBP/POP On/Off(Activación/Desactivación de PIP/PBP/POP)	k	n	00H - 03H
15. PIP Position(Posición PIP)	k	q	00H - 03H
16. Balance	k	t	00H - 64H
17. ACC	k	u	00H - 04H
18. PIP/PBP/POP SOURCE(FUENTE PIP/PBP/POP)	k	y	00H - 08H
19. Auto Configure(Config. automático)	j	u	01H
20. Key(Clave)	m	c	Código de clave
21. Tiling Mode(Modo mosaico)	d	d	00H - 0FH
22. Tile H Position(Posición H en mosaico)	d	e	00H - 64H
23. Tile V Position(Posición V en mosaico)	d	f	00H - 64H
24. Tile H Size(Tamaño H en mosaico)	d	g	00H - 64H
25. Tile V Size(Tamaño V en mosaico)	d	h	00H - 64H
26. Tile ID Set(Definir ID en mosaico)	d	i	00H - 63H
27. Elapsed time return(Valor de tiempo transcurrido)	d	l	FFH
* 28. Light Sensor value return (Valor de sensor luminoso)	d	m	FFH
* 29. Temperatur value return(Valor de temperatura)	d	n	FFH
* 30. Fan On/Off(Ventilador conectado/desconectado)	d	o	00H - 01H
* 31. Lamp fault check(Comprobación de fallos de la lámpara)	d	p	FFH
* 32. Video input fault return (Respuesta de fallo de entrada de vídeo)	d	q	FFH

*** : opcional**

Control de varios productos

Protocolo de transmisión y recepción

Transmisión

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Command 1]: primer comando (j, k, m, d)
* [Command 2]: segundo comando.
* [Set ID]: puede ajustar Set ID para seleccionar el número de ID del producto que desee en el menú Especial. El rango de ajuste es 0 ~ 99.
  Al seleccionar Set ID '0', controlará todos los monitores conectados. Set ID se expresa como un número decimal (0~99) en el menú y como un número hexadecimal (0x0~0x64) en el protocolo de transmisión y recepción.

* [DATA]: para transmitir los datos del comando.
  Transmita datos 'FF' para leer el estado del comando.
* [Cr]: retorno de carro
  Código ASCII '0x0D'
* [ ]: espacio en código ASCII (0x20)'

Confirmación correcta

[Command2][ ][Set ID][ ][OK][Data][x]

* El producto transmite un ACK (confirmación) basado en este formato al recibir datos normales. En ese momento, si los datos son datos en modo de lectura, indicará los datos del estado actual. Si los datos son datos en modo de escritura, devolverá los datos al PC.

Confirmación de error

[Command2][ ][Set ID][ ][NG][Data][x]

* El producto transmite un ACK (confirmación) basado en este formato al recibir datos incorrectos de funciones no viables o comunicaciones de error.

Data 1 : código no admitido
2 : función no admitida
3 : solicitud de ampliación de espera

Protocolo de transmisión y recepción

01. Power (Command : a) (Encendido (Comando: a))

► Para controlar el encendido y apagado de la unidad.

Transmisión

[k][a][ ][Set ID][ ][Data][Cr]

Data 0: Apagado 1: encendido

Confirmación

[a][ ][Set ID][ ][OK][Data][x]

► Para mostrar el estado de encendido o apagado.

Transmisión

[k][a][ ][Set ID][ ][FF][Cr]

Data 0: Apagado 1: encendido

Confirmación

[a][ ][Set ID][ ][OK][Data][x]

* El producto transmite un ACK (confirmación) basado en este formato al recibir datos normales. En ese momento, si los datos son datos en modo de lectura, indicará los datos del estado actual. Si los datos son datos en modo de escritura, devolverá los datos al PC.

02. Input Select(Command : b) (Main Picture Input) (Selección de entrada (Comando: b) (Entrada de imagen principal))

► Para seleccionar la fuente de entrada de la unidad.
También puede seleccionar una fuente de entrada utilizando el botón INPUT del mando a distancia.

Transmisión

[k][b][ ][Set ID][ ][Data][Cr]

Data 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Confirmación

[b][ ][Set ID][ ][OK][Data][x]

03. Aspect Ratio(Command : c) (Manin picure format) (Relación de aspecto (Comando: c) (Formato de imagen principal))

► Para ajustar el formato de la pantalla.
También puede ajustar el formato de la pantalla con el botón ARC (Control de relación de aspecto) desde el mando a distancia o en el menú Screen.

Transmisión

[k][c][ ][Set ID][ ][Data][Cr]

Data 1 : 4:3 (Video)
2 : Completo (PC, Video)
3 : Spectacle (Video)
4 : Zoom1 (PC, Video)
5 : Zoom2 (Video)
6 : 1:1(PC)

Confirmación

[c][ ][Set ID][ ][OK][Data][x]

04. Screen Mute(Command : d) (Silencio de pantalla (Comando: d))

► Para seleccionar la activación o desactivación del silencio de pantalla.

Transmisión

[k][d][ ][Set ID][ ][Data][Cr]

Data 0 : Silencio de pantalla desactivado (Imagen sí)
1 : Silencio de pantalla activado (Imagen no)

Confirmación

[d][ ][Set ID][ ][OK][Data][x]

ESPAÑOL

Protocolo de transmisión y recepción

05. Volume Mute(Command : e)
(Silencio de volumen (Comando: e))

► Para controlar la activación y desactivación del silencio de volumen.

Transmisión

[k][e][ ][Set ID][ ][Data][Cr]

Data 0 : silencio de volumen activado (volumen apagado)
1 : silencio de volumen desactivado (volumen encendido)

Confirmación

[e][ ][Set ID][ ][OK][Data][x]

Data 0 : silencio de volumen activado (volumen apagado)
1 : silencio de volumen desactivado (volumen encendido)

06. Volume Control(Command : f)
(Control de volumen (Comando: f))

► Ajuste el volumen.

Transmisión

[k][f][ ][Set ID][ ][Data][Cr]

Data Min: 00H ~ Max: 64H
(código hexadecimal)

Confirmación

[f][ ][Set ID][ ][OK][Data][x]

Data Min: 00H ~ Max: 64H

* Asignación de datos reales
0 : Paso 0
:
A : Paso 10
:
F : Paso 15
10 : Paso 16
:
64 : Paso 100

07. Contrast(Command : g) (Contraste (Comando: g))

► Para ajustar el contraste de la pantalla. También puede ajustar el contraste en el menú Imagen.

Transmisión

[k][g][ ][Set ID][ ][Data][Cr]

Data Min: 00H ~ Max: 64H
• Consulte la 'Asignación de datos reales' tal como se muestra más abajo.

Confirmación

[g][ ][Set ID][ ][OK][Data][x]

* Asignación de datos reales
0 : Paso 0
:
A : Paso 10
:
F : Paso 15
10 : Paso 16
:
64 : Paso 100

08. Brightness(Command : h)
(Luminosidad (Comando: h))

► Para ajustar el brillo de la pantalla. También puede ajustar la luminosidad en el menú Imagen.

Transmisión

[k][h][ ][Set ID][ ][Data][Cr]

Data Min: 00H ~ Max: 64H
• Consulte la 'Asignación de datos reales' tal como se muestra más abajo.

Confirmación

[h][ ][Set ID][ ][OK][Data][x]

* Asignación de datos reales
0 : Paso
:
A : Paso 10
:
F : Paso 15
10 : Paso 16
:
64 : Paso 100

Protocolo de transmisión y recepción

09. Color(Command : i) (Video only) (Color (Comando: i) (sólo Video))

▶ Para ajustar el color de la pantalla.
También puede ajustar el color en el menú Imagen.

Transmisión

[k][i][ ][Set ID][ ][Data][Cr]

Data Min: 00H ~ Max: 64H
(código hexadecimal)

Confirmación

[i][ ][Set ID][ ][OK][Data][x]

10. Tint(Command : j) (Tinte (Comando: j)(AV/S-Video: sólo NTSC)

▶ Para ajustar el tinte de la pantalla.
También puede ajustar el tinte en el menú Imagen.

Transmisión

[k][j][ ][Set ID][ ][Data][Cr]

Data Rojo: 00H ~ Verde: 64H
(código hexadecimal)

Confirmación

[j][ ][Set ID][ ][OK][Data][x]

Data Rojo: 00H ~ Verde: 64H

* Tinte : -50 ~ +50

11. Sharpness(Command : k) (Video only) (Definición (Comando: k) (sólo Video))

▶ Para ajustar la definición de la pantalla.
También puede ajustar la definición en el menú Imagen.

Transmisión

[k][k][ ][Set ID][ ][Data][Cr]

Data Min: 00H ~ Max: 64H
(código hexadecimal)

Confirmación

[k][ ][Set ID][ ][OK][Data][x]

Data Min: 00H ~ Max: 64H

12. OSD Select(Command : l) (Selección de OSD (Comando: l))

▶ Para habilitar o deshabilitar el control de OSD de la unidad.

Transmisión

[k][l][ ][Set ID][ ][Data][Cr]

Data 0: OSD desactivado 1: OSD activado

Confirmación

[l][ ][Set ID][ ][OK][Data][x]

Data 0: OSD desactivado 1: OSD activado

13. Remote Lock On/Off(Command : m) (Bloqueo del mando a distancia/Bloqueo de las teclas (Comando: m))

▶ Para bloquear el mando a distancia y los controles del panel frontal de la unidad.

Transmisión

[k][m][ ][Set ID][ ][Data][Cr]

Data 0: bloqueo mando a distancia desactivado
1: bloqueo mando a distancia activado

Confirmación

[m][ ][Set ID][ ][OK][Data][x]

Data 0: bloqueo mando a distancia desactivado
1: bloqueo mando a distancia activado

▶ Si no utiliza el mando a distancia ni los controles del panel frontal de la unidad, utilice este modo.
Si la alimentación está activada o desactivada, se libera el bloqueo del mando a distancia.

ESPAÑOL

Control de varios productos

Protocolo de transmisión y recepción

14. PIP/PBP/POP On/Off(Command : n) (Activación/Desactivación de PIP/PBP/POP (Comando: n))

► Para controlar la activación y la desactivación de PIP/PBP/POP de la unidad.

Transmisión

[k][n][ ][Set ID][ ][Data][Cr]

Data 0 : DESACTIVADO
1 : PIP
2 : PBP
3 : POP

Confirmación

[n][ ][Set ID][ ][OK][Data][x]

Data 0 : DESACTIVADO
1 : PIP
2 : PBP
3 : POP

15. PIP Position(Command : q) (Posición PIP (Comando: q))

► Para ajustar la posición PIP.

Transmisión

[k][q][ ][Set ID][ ][Data][Cr]

Data 0:esquina inferior derecha de la pantalla
1:esquina inferior izquierda de la pantalla
2:esquina superior izquierda de la pantalla
3:esquina superior derecha de la pantalla

Confirmación

[q][ ][Set ID][ ][OK][Data][x]

Data 0:esquina inferior derecha de la pantalla
1:esquina inferior izquierda de la pantalla
2:esquina superior izquierda de la pantalla
3:esquina superior derecha de la pantalla

16. Balance(Command : t) (Balance (Comando: t))

► Para ajustar el balance de la sonido.

Transmisión

[k][t][ ][Set ID][ ][Data][Cr]

Data Min: 00H ~ Max: 64H
(código hexadecimal)

Confirmación

[t][ ][Set ID][ ][OK][Data][x]

Data Min: 00H ~ Max: 64H

* Balance : -50 ~ +50

17. ACC(Command : u) (ACC (Comando: u))

► Para ajustar la temperatura de color de la pantalla.

Transmisión

[k][u][ ][Set ID][ ][Data][Cr]

Data 0 : Flat (9300K) 4 : 3600K
1 : Frío PC : 0, 2, 3, 4
2 : Caliente (6500K) Video : 0, 1, 2
3 : Usuario

Confirmación

[u][ ][Set ID][ ][OK][Data][x]

Data 0 : Flat (9300K) 4 : 3600K
1 : Frío PC : 0, 2, 3, 4
2 : Caliente (6500K) Video : 0, 1, 2
3 : Usuario

Protocolo de transmisión y recepción

18. PIP/PBP/POP SOURCE(Command : y) (FUENTE PIP/PBP/POP (Comando: y))

► Para seleccionar la fuente de la subpantalla.

Transmisión

[k][y][ ][Set ID][ ][Data][Cr]

Data 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Confirmación

[y][ ][Set ID][ ][OK][Data][x]

Data 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

19. Auto Configure(Command: j u) (Config. automático (Comando: j u))

► Para ajustar la posición de la imagen y minimizar las vibraciones automáticamente. Funciona solamente en modo RGB(PC).

Transmisión

[j][u][ ][Set ID][ ][Data][Cr]

Data 1: Validación

Confirmación

[u][ ][Set ID][ ][OK][Data][x]

20. Key(Command : m c) (Clave (Comando: m c))

► Para enviar el código de clave del mando a distancia por infrarrojos.

Transmisión

[m][c][ ][Set ID][ ][Data][Cr]

Data Código de clave

Confirmación

[c][ ][Set ID][ ][OK][Data][x]

21. Tiling Mode(Command : d d) (Modo mosaico(Comando: d d))

► Cambia un modo mosaico.

Transmisión

[d][d][ ][Set ID][ ][Data][x]

Data	Descripción
00	Modo mosaico desactivado.
12	Modo 1 x 2 (columna x fila)
13	Modo 1 x 3
14	Modo 1 x 4
...	...
44	Modo 4 x 4

* Los datos no pueden ajustarse en 0X o X0, excepto 00.

Confirmación

[d][ ][00][ ][OK/NG][Data][x]

22. Tile H Position(Command : d e) (Posición H en mosaico(Comando: d e))

► Ajusta la posición horizontal.

Transmisión

[d][e][ ][Set ID][ ][Data][x]

* El rango de datos varía entre 00 y 64 (Hex).

Confirmación

[e][ ][Set ID][ ][OK/NG][Data][x]

ESPAÑOL

Protocolo de transmisión y recepción

23. Tile V Position(Command : d f) (Posición V en mosaico(Comando: d f))

► Ajusta la posición vertical.

Transmisión

[d][f][ ][Set ID][ ][Data][x]

* El rango de datos varía entre 00 y 64 (Hex).

Confirmación

[f][ ][Set ID][ ][OK/NG][Data][x]

24. Tile H Size(Command : d g) (Tamaño H en mosaico(Comando: d g))

► Ajusta el tamaño horizontal.

Transmisión

[d][g][ ][Set ID][ ][Data][x]

* El rango de datos varía entre 00 y 64 (Hex).

Confirmación

[g][ ][Set ID][ ][OK/NG][Data][x]

25. Tile V Size(Command : d h) (Tamaño V en mosaico(Comando: d h))

► Ajusta el tamaño vertical.

Transmisión

[d][h][ ][Set ID][ ][Data][x]

* El rango de datos varía entre 00 y 64 (Hex).

Confirmación

[h][ ][Set ID][ ][OK/NG][Data][x]

26. Tile ID Set(Command : d i) (Definir ID en mosaico(Comando: d i))

► Asigna un ID de mosaico a la función mosaico.

Transmisión

[d][i][ ][Set ID][ ][Data][x]

* El rango de datos varía entre 00 y 00 x 10 en modo mosaico.

Confirmación

[i][ ][Set ID][ ][OK/NG][Data][x]

27. Elapsed time return(Command : d l) (Valor de tiempo transcurrido(Comando: d l))

► Lee el tiempo transcurrido.

Transmisión

[d][l][ ][Set ID][ ][Data][x]

* Los datos son siempre FF (Hex).

Confirmación

[l][ ][Set ID][ ][OK/NG][Data][x]

***28. Light Sensor value Return(Command : d m) (Valor de sensor luminoso(Comando: d m)) - opcional**

► Lee el valor del sensor luminoso para ajustar la luminosidad del producto en función de la luminosidad ambiente.

Transmisión

[d][m][ ][Set ID][ ][Data][x]

* Los datos son siempre FF (Hex).

Confirmación

[m][ ][Set ID][ ][OK/NG][Data][x]

Protocolo de transmisión y recepción

***29. Temperature value Return(Command : d n) - opcional (Valor de temperatura(Comando: d n))**

► Lee el valor de temperatura interna.

Transmisión

[d][n][ ][Set ID][ ][Data][x]

* Los datos son siempre FF (Hex).

Confirmación

[n][ ][Set ID][ ][OK/NG][Data][x]

Los datos tienen una longitud de 1 en formato hexadecimal ASCII.

***30. Fan On/Off(Command : d o) (Ventilador conectado/desconectado (Comando: d o)) - opcional**

► Para habilitar o deshabilitar el control del ventilador de la unidad.

Transmisión

[d][o][ ][Set ID][ ][Data][x]

Data 0: Ventilador desconectado
1: Ventilador conectado

Confirmación

[o][ ][Set ID][ ][OK/NG][Data][x]

***31. Lamp fault Check(Command : d p) (Comprobación de fallos de la lámpara(Comando: d p)) - opcional**

► Realiza la comprobación de fallos de la lámpara.

Transmisión

[d][p][ ][Set ID][ ][Data][x]

* Los datos son siempre FF (Hex).

Confirmación

[p][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

***32. Video input fault return(Command : d q) (Comprobación de fallos de la lámpara(Comando: d q)) - opcional**

► Para comprobar los fallos de la entrada de vídeo.

Transmisión

[d][q][ ][Set ID][ ][Data][x]

* Los datos son siempre FF (Hex).

Confirmación

[q][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

ESPAÑOL

Códigos IR

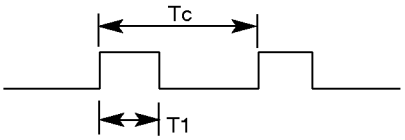
Cómo conectar

▶ Conecte el mando a distancia cableado al puerto del mando a distancia del producto.

Código IR del mando a distancia

▶ Forma de onda en la salida

impulso único, modulado con señal de 37,917 Khz. a 455 Khz.

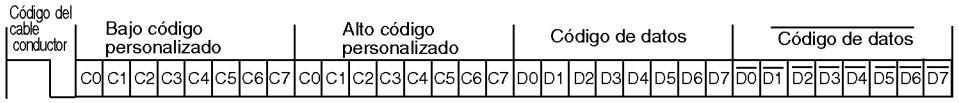


Frecuencia portadora

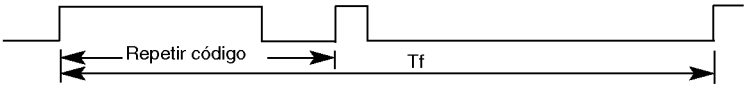
FCAR = 1/Tc = fosc/12
Relación de trabajo = T1/Tc = 1/3

▶ Configuración del cuadro

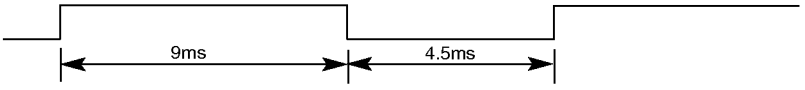
• 1er cuadro



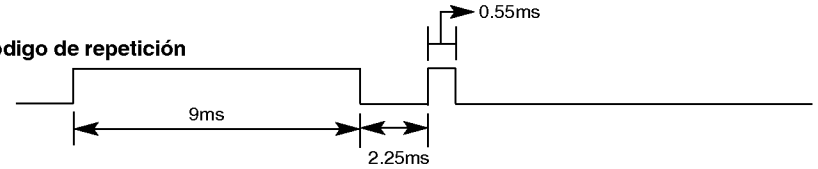
• Repetir cuadro



▶ Código del cable conductor

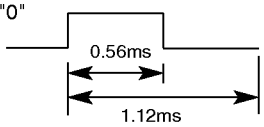


▶ Código de repetición

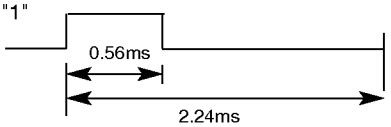


▶ Descripción de bits

• Bit "0"

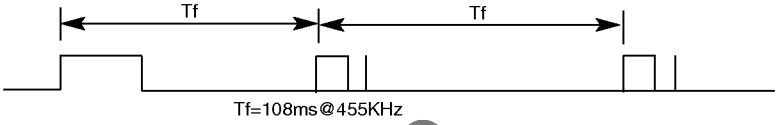


• Bit "1"



▶ Intervalo de cuadros: Tf

• La forma de onda se transmite siempre que esté pulsada una tecla.



Código (Hexa)	Función	Nota
02	VOL (▲)	Botón R/C
03	VOL (▼)	Botón R/C
40	▲	Botón R/C
41	▼	Botón R/C
06	►	Botón R/C
07	◄	Botón R/C
08	ENCENDIDO/APAGADO	Botón R/C (Encendido/apagado)
5B	EXIT	Botón R/C
09	MUTE	Botón R/C
4D	EZ VIDEO(PSM)	Botón R/C
52	EZ AUDIO(SSM)	Botón R/C
98	INPUT(Source)	Botón R/C
5A	AV	Botón R/C
D8	S-VIDEO	Botón R/C
BF	COMPONENT	Botón R/C
C6	DVI	Botón R/C
0E	SLEEP	Botón R/C
43	MENU(MENÚ)	Botón R/C
44	ENTER	Botón R/C
60	PIP	Botón R/C
61	POP	Botón R/C
63	SWAP	Botón R/C
79	ARC	Botón R/C
76	ARC(4:3)	Botón R/C
77	ARC(Completo)	Botón R/C
AF	ARC(ZOOM1)	Botón R/C
54	AUTO	Botón R/C

RS-232C

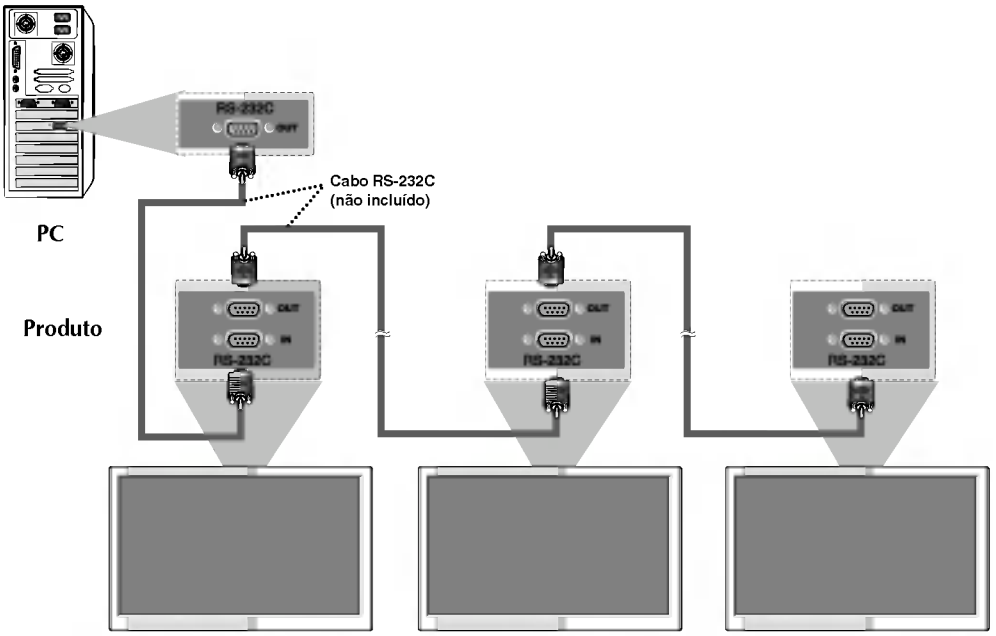
Controlando vários produtos

Use este método para conectar vários aparelhos a um único PC.
Você pode controlar vários aparelhos de uma vez conectando-os a um único PC.

Conectando o cabo

Conectando o cabo RS-232C como mostrado na figura.

* O protocolo RS-232C é usado para a comunicação entre o PC e o aparelho. Você pode ligar/desligar o aparelho, selecionar uma fonte de entrada ou ajustar o menu OSD do PC.



Parâmetro de Comunicação

- ▶ Taxa de Transmissão: 9600bps (UART)
- ▶ Comprimento de Dados: 8 bits
- ▶ Bits de Paridade: Nenhum
- ▶ Bit de parada: 1 bit
- ▶ Controle de Fluxo: Nenhum
- ▶ Código de Comunicação: Código ASCII

Lista de referência de comandos

	COMANDO1	COMANDO2	DADOS (Hexa)
01. Power(Ligar/desligar)	k	a	00H - 01H
02. Input Select(Seleção de Entrada)	k	b	02H - 08H
03. Aspect Ratio(Taxa de Proporção)	k	c	01H - 06H
04. Screen Mute(Tela Sem Áudio)	k	d	00H - 01H
05. Volume Mute(Volume Sem Áudio)	k	e	00H - 01H
06. Volume Control(Controle de Volume)	k	f	00H - 64H
07. Contrast(Contraste)	k	g	00H - 64H
08. Brightness(Brilho)	k	h	00H - 64H
09. Color(Cor)	k	i	00H - 64H
10. Tint(Colorir)	k	j	00H - 64H
11. Sharpness(Nitidez)	k	k	00H - 64H
12. OSD Select(Seleção de OSD)	k	l	00H - 01H
13. Remote Lock On/Off(Bloqueio ativado/desativado)	k	m	00H - 01H
14. PIP/PBP/POP On/Off(PIP/PBP/POP ativado/desativado)	k	n	00H - 03H
15. PIP Position(Posição PIP)	k	q	00H - 03H
16. Balance(Balanço)	k	t	00H - 64H
17. ACC	k	u	00H - 04H
18. PIP/PBP/POP SOURCE(EMISSÃO PIP/PBP/POP)	k	y	00H - 08H
19. Auto Configure(Configuração Automática)	j	u	01H
20. Key(Tecla)	m	c	Código da Tecla
21. Tiling Mode(Modo lado a lado)	d	d	00H - 0FH
22. Tile H Position(Lado a lado na posição horizontal)	d	e	00H - 64H
23. Tile V Position(Lado a lado na posição vertical)	d	f	00H - 64H
24. Tile H Size(Tamanho horizontal de lado a lado)	d	g	00H - 64H
25. Tile V Size(Tamanho vertical de lado a lado)	d	h	00H - 64H
26. Tile ID Set(ID Set de lado a lado)	d	i	00H - 63H
27. Elapsed time return(Retorno de tempo decorrido)	d	l	FFH
* 28. Light Sensor value return (Retorno do valor do sensor de iluminação)	d	m	FFH
* 29. Temperatur value return(Retorno do valor de temperatura)	d	n	FFH
* 30. Fan On/Off(Ventilador Ativado/Desativado)	d	o	00H - 01H
* 31. Lamp fault check(Verificação de defeitos da lâmpada)	d	p	FFH
* 32. Video input fault return (Retorno de falha na entrada de vídeo)	d	q	FFH

*** : opcional**

PORTUGUÊS

Controlando vários produtos

Protocolo de transmissão/recepção

Transmissão

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Command 1]: Primeiro comando. (j,k,m,d)
* [Command 2]: Segundo comando.
* [Set ID]: Você pode ajustar a opção Set ID para escolher o número de identificação do aparelho desejado no menu Especial. O ajuste varia de 0 a 99, aproximadamente.
  Ao selecionar '0' em Set ID (identificação), cada aparelho de TV conectado é controlado. A opção Set ID é indicada como decimal (0~99) no menu e como Hexa decimal (0x0~0x64) no protocolo de transmissão/recepção.
* [DATA]: Para transmitir dados de comando.
  Transmitir dados 'FF' para ler o status de comando.
* [Cr]: Retorno de carro
  Código ASCII '0x0D'
* [ ]: Código ASCII espaço (0x20)

Confirmação OK

[Command2][ ][Set ID][ ][OK][Data][x]

* O aparelho transmite uma ACK (confirmação) com base nesse formato ao receber dados normais. Nesse momento, se os dados estiverem no modo de leitura de dados, indicará o status atual dos dados. Se os dados estiverem no modo de gravação, os dados do computador serão retornados.

Confirmação de erro

[Command2][ ][Set ID][ ][NG][Data][x]

* O aparelho transmite uma ACK (confirmação) com base nesse formato ao receber dados anormais de funções não viáveis ou erros de comunicação.

Data 1 : Código ilegal
2 : Função sem suporte
3 : Aguarde alguns minutos

Protocolo de transmissão/recepção

01. Power (Command : a) (Ligar/desligar (Comando: a))

▶ Para controlar a função ligar/desligar do monitor.

Transmissão

[k][a][ ][Set ID][ ][Data][Cr]

Data 0: Desligar 1: Ligar

Confirmação

[a][ ][Set ID][ ][OK][Data][x]

▶ Para mostrar o status de Ligar/desligar.

Transmissão

[k][a][ ][Set ID][ ][FF][Cr]

Data 0: Desligar 1: Ligar

Confirmação

[a][ ][Set ID][ ][OK][Data][x]

* O aparelho transmite uma ACK (confirmação) com base nesse formato ao receber dados normais. Nesse momento, se os dados estiverem no modo de leitura de dados, indicará o status atual dos dados. Se os dados estiverem no modo de gravação, os dados do computador serão retornados.

02. Input Select(Command : b) (Main Picture Input) (Seleção de entrada (Comando: b) (Entrada de imagem principal))

▶ Para selecionar a fonte de entrada do monitor.
Você também pode selecionar uma fonte de entrada usando o botão INPUT do controle remoto da TV.

Transmissão

[k][b][ ][Set ID][ ][Data][Cr]

Data 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Confirmação

[b][ ][Set ID][ ][OK][Data][x]

03. Aspect Ratio(Command : c) (Manin picure format) (Taxa de Proporção (Comando: c) (Formato de imagem principal))

▶ Para ajustar o formato da tela.
Você também pode ajustar o formato da tela usando o botão ARC (Aspect Ratio Control, controle de proporção de vídeo) no controle remoto ou no Menu Screen (Menu de tela).

Transmissão

[k][c][ ][Set ID][ ][Data][Cr]

Data 1 : 4:3 (Video)
2 : Completo (PC, Video)
3 : Espéctac. (Video)
4 : Zoom1 (PC, Video)
5 : Zoom2 (Video)
6 : 1:1(PC)

Confirmação

[c][ ][Set ID][ ][OK][Data][x]

04. Screen Mute(Command : d) (Tela Sem Áudio (Comando: d))

▶ Para ativar/desativar o recurso tela sem áudio.

Transmissão

[k][d][ ][Set ID][ ][Data][Cr]

Data 0 : Recurso tela sem áudio desativado (recurso de imagem ativado)
1 : Recurso tela sem áudio ativado (recurso de imagem desativado)

Confirmação

[d][ ][Set ID][ ][OK][Data][x]

PORTUGUÊS

Protocolo de transmissão/recepção

05. Volume Mute(Command : e) (Volume sem áudio (Comando: e))

► Para ativar/desativar o recurso volume sem áudio.

Transmissão

[k][e][ ][Set ID][ ][Data][Cr]

Data 0 : Recurso volume sem áudio ativado (Volume desativado)
1 : Recurso volume sem áudio desativado (Volume ativado)

Confirmação

[e][ ][Set ID][ ][OK][Data][x]

Data 0 : Recurso volume sem áudio ativado (Volume desativado)
1 : Recurso volume sem áudio desativado (Volume ativado)

06. Volume Control(Command : f) (Controle de Volume (Comando: f))

► Ajuste o volume.

Transmissão

[k][f][ ][Set ID][ ][Data][Cr]

Data Mín: 00H ~ Máx: 64H
(Código hexadecimal)

Confirmação

[f][ ][Set ID][ ][OK][Data][x]

Data Mín: 00H ~ Máx: 64H

* Mapeamento de dados reais
0 : Etapa 0
:
A : Etapa 10
:
F : Etapa 15
10 : Etapa 16
:
64 : Etapa 100

07. Contrast(Command : g) (Contraste (Comando: g))

► Para ajustar o contraste da tela.
Você também pode ajustar o contraste no menu Imagem.

Transmissão

[k][g][ ][Set ID][ ][Data][Cr]

Data Mín: 00H ~ Máx: 64H

• Consulte 'Mapeamento de dados reais' como mostrado a seguir.

Confirmação

[g][ ][Set ID][ ][OK][Data][x]

* Mapeamento de dados reais
0 : Etapa 0
:
A : Etapa 10
:
F : Etapa 15
10 : Etapa 16
:
64 : Etapa 100

08. Brightness(Command : h) (Brilho (Comando: h))

► Para ajustar o brilho da tela.
Você também pode ajustar o brilho no menu Imagem.

Transmissão

[k][h][ ][Set ID][ ][Data][Cr]

Data Mín: 00H ~ Máx: 64H

• Consulte 'Mapeamento de dados reais' como mostrado a seguir.

Confirmação

[h][ ][Set ID][ ][OK][Data][x]

* Mapeamento de dados reais
0 : Etapa
:
A : Etapa 10
:
F : Etapa 15
10 : Etapa 16
:
64 : Etapa 100

Protocolo de transmissão/recepção

09. Color(Command : i) (Video only) (Cor (Comando: i) (somente Video))

▶ Para ajustar a cor da tela.
Você também pode ajustar a cor no menu Imagem.

Transmissão

[k][i][ ][Set ID][ ][Data][Cr]

Data Mín: 00H ~ Máx: 64H
(Código hexadecimal)

Confirmação

[i][ ][Set ID][ ][OK][Data][x]

Data Mín: 00H ~ Máx: 64H

10. Tint(Command : j) (Colorir (Comando: j)(AV/S-Video: somete NTSC)

▶ Para ajustar a tonalidade da tela.
Você também pode ajustar a tonalidade no menu Imagem.

Transmissão

[k][j][ ][Set ID][ ][Data][Cr]

Data Vermelho : 00H ~ Verde: 64H
(Código hexadecimal)

Confirmação

[j][ ][Set ID][ ][OK][Data][x]

Data Vermelho : 00H ~ Verde: 64H

* Colorir : -50 ~ +50

11. Sharpness(Command : k) (Video only) (Nitidez (Comando: k) (somente AV))

▶ Para ajustar a nitidez da tela.
Você também pode ajustar a nitidez no menu Imagem.

Transmissão

[k][k][ ][Set ID][ ][Data][Cr]

Data Mín: 00H ~ Máx: 64H
(Código hexadecimal)

Confirmação

[k][ ][Set ID][ ][OK][Data][x]

Data Mín: 00H ~ Máx: 64H

12. OSD Select(Command : l) (Seleção OSD (Comando: l))

▶ Para controlar o OSD ativado/desativado no aparelho.

Transmissão

[k][l][ ][Set ID][ ][Data][Cr]

Data 0: OSD desativado
1: OSD ativado

Confirmação

[l][ ][Set ID][ ][OK][Data][x]

Data 0: OSD desativado
1: OSD ativado

13. Remote Lock On/Off(Command : m) (Bloqueio/fechadura do Controlo Remoto (Comando: m))

▶ Para bloquear o controlo remoto e os controlos do painel frontal do televisor.

Transmissão

[k][m][ ][Set ID][ ][Data][Cr]

Data 0: Bloqueio desativado
1: Bloqueio ativado

Confirmação

[m][ ][Set ID][ ][OK][Data][x]

Data 0: Bloqueio desativado
1: Bloqueio ativado

▶ Se não está a utilizar o controlo remoto e os controlos do painel frontal do televisor, utilize este modo.
Quando a fonte de alimentação principal está ligada/desligada, o bloqueio do controlo remoto é retirado.

PORTUGUÊS

Protocolo de transmissão/recepção

14. PIP/PBP/POP On/Off(Command : n) (PIP/PBP/POP ativado/desativado (Comando: n))

▶ Para controlar a função PIP/PBP/POP On/Off do monitor.

Transmissão

[k][n][ ][Set ID][ ][Data][Cr]

Data 0 : DESATIVADO
1 : PIP
2 : PBP
3 : POP

Confirmação

[n][ ][Set ID][ ][OK][Data][x]

Data 0 : DESATIVADO
1 : PIP
2 : PBP
3 : POP

15. PIP Position(Command : q) (Posição PIP (Comando: q))

▶ Para ajustar a posição PIP.

Transmissão

[k][q][ ][Set ID][ ][Data][Cr]

Data 0 : Parte inferior do lado direito da tela
1 : Parte inferior do lado esquerdo da tela
2 : Parte superior do lado esquerdo da tela
3 : Parte superior do lado direito da tela

Confirmação

[q][ ][Set ID][ ][OK][Data][x]

Data 0 : Parte inferior do lado direito da tela
1 : Parte inferior do lado esquerdo da tela
2 : Parte superior do lado esquerdo da tela
3 : Parte superior do lado direito da tela

16. Balance(Command : t) (Balanço (Comando: t))

▶ Para ajustar o Balanço da som.

Transmissão

[k][t][ ][Set ID][ ][Data][Cr]

Data Mín: 00H ~ Máx: 64H
(Código hexadecimal)

Confirmação

[t][ ][Set ID][ ][OK][Data][x]

Data Mín: 00H ~ Máx: 64H

* Balanço : -50 ~ +50

17. ACC(Command : u) (ACC (Comando: u))

▶ Para ajustar a temperatura de cor da tela.

Transmissão

[k][u][ ][Set ID][ ][Data][Cr]

Data 0 : Normal (9300K) 4 : 3600K
1 : Frio PC : 0, 2, 3, 4
2 : Morno (6500K) Video : 0, 1, 2
3 : Utiliz.

Confirmação

[u][ ][Set ID][ ][OK][Data][x]

Data 0 : Normal (9300K) 4 : 3600K
1 : Frio PC : 0, 2, 3, 4
2 : Morno (6500K) Video : 0, 1, 2
3 : Utiliz.

Protocolo de transmissão/recepção

18. PIP/PBP/POP SOURCE(Command : y) (EMISSÃO PIP/PBP/POP (Comando: y))

► Para selecionar a fonte da subtela.

Transmissão

[k][y][ ][Set ID][ ][Data][Cr]

Data 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Confirmação

[y][ ][Set ID][ ][OK][Data][x]

Data 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

19. Auto Configure(Command: j u) (Configuração Automática (Comando: j u))

► Para ajustar a posição da imagem e diminuir o tremor da imagem automaticamente. Funciona somente no modo RGB(PC).

Transmissão

[j][u][ ][Set ID][ ][Data][Cr]

Data 1: Para definir

Confirmação

[u][ ][Set ID][ ][OK][Data][x]

20. Key(Command : m c) (Tecla (Comando: m c))

► Para enviar códigos de tecla IR remota.

Transmissão

[m][c][ ][Set ID][ ][Data][Cr]

Código de tecla de dados

Confirmação

[c][ ][Set ID][ ][OK][Data][x]

21. Tiling Mode(Command : d d) (Modo lado a lado(Comando : d d))

► Altera um Modo lado a lado.

Transmissão

[d][d][ ][Set ID][ ][Data][x]

Dados:	Descrição
00	O modo lado a lado está desativado.
12	Modo 1 x 2 (coluna x linha)
13	Modo 1 x 3
14	Modo 1 x 4
...	...
44	Modo 4 x 4

* Os dados não podem ser definidos como 0X ou X0, exceto 00.

Confirmação

[d][ ][00][ ][OK/NG][Data][x]

22. Tile H Position(Command : d e) (Posição horizontal de lado a lado(Comando : d e))

► Para definir a posição horizontal.

Transmissão

[d][e][ ][Set ID][ ][Data][x]

* O intervalo de dados é de 00 a 64(em Hex).

Confirmação

[e][ ][Set ID][ ][OK/NG][Data][x]

PORTUGUÊS

Protocolo de transmissão/recepção

23. Tile V Position(Command : d f) (Posição vertical de lado a lado(Comando : d f))

▶ Para definir a posição vertical.

Transmissão

[d][f][ ][Set ID][ ][Data][x]

* O intervalo de dados é de 00 a 64(em Hex).

Confirmação

[f][ ][Set ID][ ][OK/NG][Data][x]

24. Tile H Size(Command : d g) (Tamanho horizontal de lado a lado(Comando : d g))

▶ Para definir o tamanho horizontal.

Transmissão

[d][g][ ][Set ID][ ][Data][x]

* O intervalo de dados é de 00 a 64(em Hex).

Confirmação

[g][ ][Set ID][ ][OK/NG][Data][x]

25. Tamanho vertical de lado a lado(Comando : d h)

▶ Para definir o tamanho vertical.

Transmissão

[d][h][ ][Set ID][ ][Data][x]

* O intervalo de dados é de 00 a 64(em Hex).

Confirmação

[h][ ][Set ID][ ][OK/NG][Data][x]

26. Tile ID Set(Command : d i) (ID Set de lado a lado(Comando : d i))

▶ Para atribuir a ID lado a lado para a função Lado a lado.

Transmissão

[d][i][ ][Set ID][ ][Data][x]

* O intervalo de dados é de 00 a 00 x 10 modo lado a lado.

Confirmação

[i][ ][Set ID][ ][OK/NG][Data][x]

27. Elapsed time return(Command : d l) (Retorno de tempo decorrido d l))

▶ Para ler o tempo decorrido.

Transmissão

[d][l][ ][Set ID][ ][Data][x]

* Os dados estão sempre em FF (em Hex).

Confirmação

[l][][Set ID][][OK/NG][Data][x]

***28. Light Sensor value Return(Command : d m) (Retorno do valor do sensor de iluminação(Comando : d m)) - opcional**

▶ Para ler o valor do sensor de iluminação para ajustar o brilho do produto, dependendo do brilho do ambiente.

Transmissão

[d][m][ ][Set ID][ ][Data][x]

* Os dados estão sempre em FF (em Hex).

Confirmação

[m][ ][Set ID][ ][OK/NG][Data][x]

Protocolo de transmissão/recepção

***29. Temperature value Return(Command : d n) (Retorno do valor de temperatura (Comando : d n)) - opcional**

► Para ler o valor de temperatura interna.

Transmissão

[d][n][ ][Set ID][ ][Data][x]

* Os dados estão sempre em FF (em Hex).

Confirmação

[n][ ][Set ID][ ][OK/NG][Data][x]

Os dados têm o tamanho de 1 byte no formato Hex ASCII.

***30. Fan On/Off(Command : d o) (Ativado/Desativado(Comando : d o)) - opcional**

► Para controlar definição de Ventilador Ativado/Desativado.

Transmissão

[d][o][ ][Set ID][ ][Data][x]

Dado 0: Ventilador desativado
1: Ventilador ativado

Confirmação

[o][][Set ID][][OK/NG][Data][x]

***31. Lamp fault Check(Command : d p) - opcional (Verificação de defeitos da lâmpada (Comando : d p))**

► Para verificar os defeitos da lâmpada.

Transmissão

[d][p][ ][Set ID][ ][Data][x]

* Os dados estão sempre em FF (em Hex).

Confirmação

[p][ ][Set ID][ ][OK/NG][Data][x]

***31. Lamp fault Check(Command : d p) - opcional (Verificação de defeitos da lâmpada (Comando : d p))**

► Para verificar os defeitos da lâmpada.

Transmissão

[d][p][ ][Set ID][ ][Data][x]

* Os dados estão sempre em FF (em Hex).

Confirmação

[p][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

***32. Video input fault return(Command : d q) - opcional (Retorno de falha na entrada de vídeo(Comando : d q))**

► Para verificar falha na entrada de vídeo

Transmissão

[d][q][ ][Set ID][ ][Data][x]

* Os dados estão sempre em FF (em Hex).

Confirmação

[q][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

PORTUGUÊS

Códigos IR

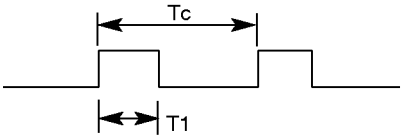
Como conectar

▶ Conecte o controle remoto com fio à porta do controle remoto no aparelho.

Código IR do controle remoto

▶ Forma da onda de saída

pulso único, modulado com o sinal 37.917 KHz a 455KHz

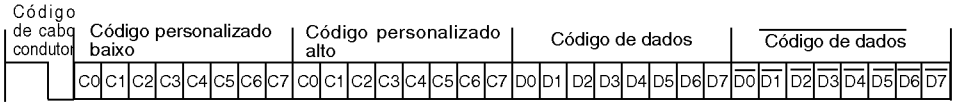


Freqüência da portadora

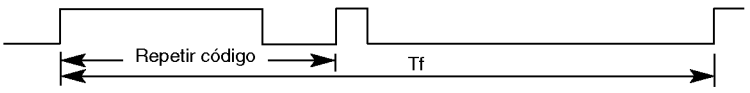
FCAR = 1/Tc = fosc/12
Ciclo ativo = T1/Tc = 1/3

▶ Configuração do quadro

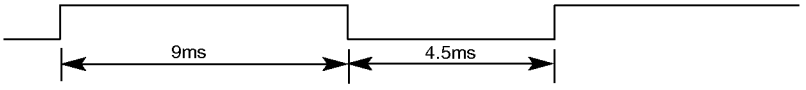
• Primeiro quadro



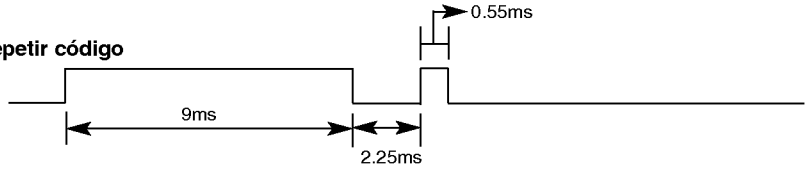
• Repetir quadro



▶ Código de cabo condutor

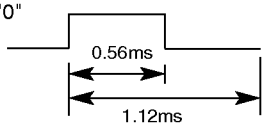


▶ Repetir código

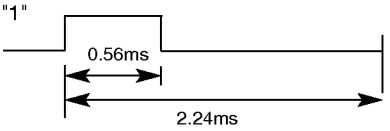


▶ Descrição de bits

• Bit "0"

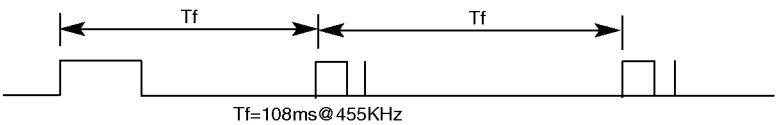


• Bit "1"



▶ Intervalo entre quadros: Tf

• A forma de onda é transmitida assim que a tecla é pressionada.



Código (Hexa)	Função	Nota
02	VOL (▲)	Botão do controle remoto
03	VOL (▼)	Botão do controle remoto
40	▲	Botão do controle remoto
41	▼	Botão do controle remoto
06	►	Botão do controle remoto
07	◄	Botão do controle remoto
08	POWER ON/OFF	Botão do controle remoto (Liga/Desliga)
5B	EXIT	Botão do controle remoto
09	MUTE	Botão do controle remoto
4D	EZ VIDEO(PSM)	Botão do controle remoto
52	EZ AUDIO(SSM)	Botão do controle remoto
98	INPUT(Source)	Botão do controle remoto
5A	AV	Botão do controle remoto
D8	S-VIDEO	Botão do controle remoto
BF	COMPONENT	Botão do controle remoto
C6	DVI	Botão do controle remoto
0E	SLEEP	Botão do controle remoto
43	MENU	Botão do controle remoto
44	ENTER	Botão do controle remoto
60	PIP	Botão do controle remoto
61	POP	Botão do controle remoto
63	SWAP	Botão do controle remoto
79	ARC	Botão do controle remoto
76	ARC(4:3)	Botão do controle remoto
77	ARC(Full)	Botão do controle remoto
AF	ARC(ZOOM1)	Botão do controle remoto
54	AUTO	Botão do controle remoto

RS-232C

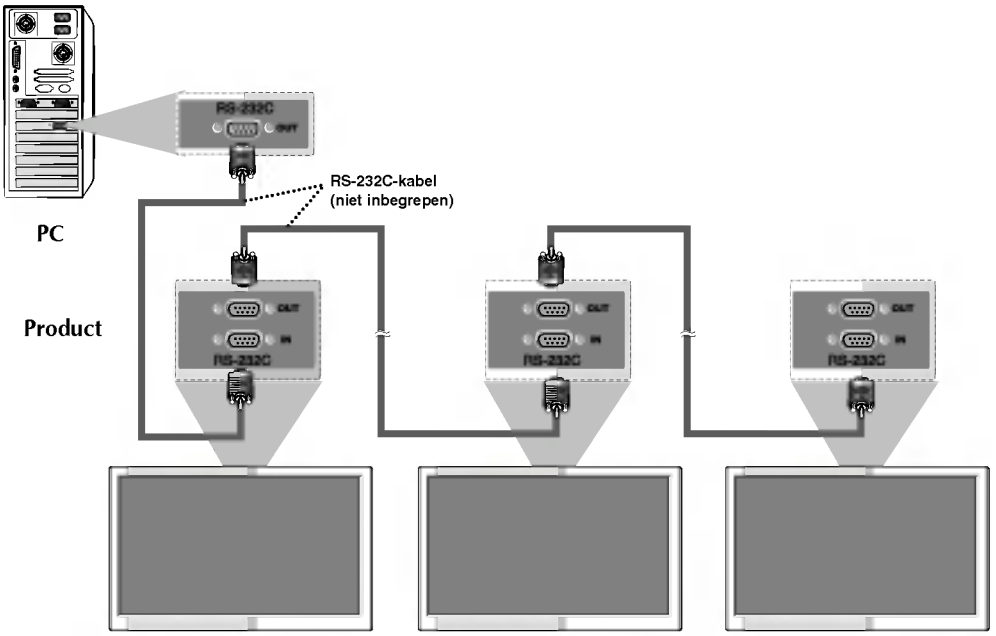
Verschillende producten bedienen

Met behulp van deze methode kunt u verschillende producten op één pc aansluiten.
U kunt verschillende producten tegelijkertijd bedienen door ze op één pc aan te sluiten.

Kabel aansluiten

Sluit de RS-232C-kabel aan zoals in de afbeelding wordt weergegeven.

* Het RS-232C-protocol wordt gebruikt voor de communicatie tussen pc en product. U kunt vanaf uw pc het product in-/uitschakelen, een ingang selecteren of het schermmenu aanpassen.



Communicatieparameters

- ▶ Baudsnelheid: 9600bps (UART)
- ▶ Gegevenslengte: 8 bits
- ▶ Pariteitsbit: geen
- ▶ Stopbit: 1 bit
- ▶ Voortgangsbesturing: geen
- ▶ Communicatiecode: ASCII-code

Lijst met bedieningsfuncties

	OPDRACHT1	OPDRACHT2	DATA (hexa)
01. Power(Aan/uit)	k	a	00H - 01H
02. Input Select(Ingang selecteren)	k	b	02H - 08H
03. Aspect Ratio(Beeldverhouding)	k	c	01H - 06H
04. Screen Mute(Beeld dempen)	k	d	00H - 01H
05. Volume Mute(Volume dempen)	k	e	00H - 01H
06. Volume Control(Volume regelen)	k	f	00H - 64H
07. Contrast(Contrast)	k	g	00H - 64H
08. Brightness(Helderheid)	k	h	00H - 64H
09. Color(Kleur)	k	i	00H - 64H
10. Tint	k	j	00H - 64H
11. Sharpness(Scherpte)	k	k	00H - 64H
12. OSD Select(Schermmenu selecteren)	k	l	00H - 01H
13. Remote Lock On/Off(Vergr. afst.bed. aan/uit)	k	m	00H - 01H
14. PIP/PBP/POP On/Off(PIP/PBP/POP aan/uit)	k	n	00H - 03H
15. PIP Position(PIP-positie)	k	q	00H - 03H
16. Balance(Balans)	k	t	00H - 64H
17. ACC	k	u	00H - 04H
18. PIP/PBP/POP SOURCE(PIP/PBP/POP-bron)	k	y	00H - 08H
19. Auto Configure(Autoconfiguratie)	j	u	01H
20. Key(Sleutel)	m	c	Key Code
21. Tiling Mode(Mozaïekmodus)	d	d	00H - 0FH
22. Tile H Position(H positie mozaïek)	d	e	00H - 64H
23. Tile V Position(V positie mozaïek)	d	f	00H - 64H
24. Tile H Size(H grootte mozaïek)	d	g	00H - 64H
25. Tile V Size(V grootte mozaïek)	d	h	00H - 64H
26. Tile ID Set(Mozaïek-id instellen)	d	i	00H - 63H
27. Elapsed time return(Verstreken tijd retourneren)	d	l	FFH
*28. Light Sensor value return (Waarde lichtsensor retourneren)	d	m	FFH
*29. Temperatur value return (Temperatuurwaarde retourneren)	d	n	FFH
*30. Fan On/Off(Ventilator aan/uit)	d	o	00H - 01H
*31. Lamp fault check(Controleren op lampfout)	d	p	FFH
*32. Video input fault return (Pengembalian kerusakan masukan video)	d	q	FFH

* : optioneel

NEDERLANDS

Protocol voor uitzending/ontvangst

Uitzending

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Command 1 (Opdracht 2)]: Eerste opdracht. (j,k,m,d)
* [Command 2 (Opdracht 2)]: Tweede opdracht.
* [Set ID]: U kunt de set-ID aanpassen om het identificatienummer van het gewenste product te kiezen in het menu Special (Speciaal). U kunt een waarde tussen 0 en 99 kiezen.
  Als u als set-ID '0' kiest, worden alle aangesloten tv's aangestuurd. De Set ID wordt in het menu als een decimale waarde (0 – 99) aangegeven en in het protocol voor uitzending/ontvangst als een hexadecimale waarde.

* [DATA]: Hiermee worden opdrachtgegevens verzonden.
  Verzend FF-gegevens om de status van een opdracht te lezen.
* [Cr]: Carriage Return (regelterugloop)
  ASCII-code '0x0D'
* [ ]: ASCII-code Ruimte (0x20)'

Positieve bevestiging

[Command2][ ][Set ID][ ][OK][Data][x]

* Het product verzendt een ACK (bevestiging) in deze indeling bij de ontvangst van normale gegevens. Op dit moment, met de gegevens in de leesmodus, worden de huidige statusgegevens weergegeven. Als de gegevens zich in de schrijfmodus bevinden, worden de gegevens van de pc geretourneerd.

Foutbevestiging

[Command2][ ][Set ID][ ][NG][Data][x]

* Het product verzendt een ACK (bevestiging) in deze indeling bij de ontvangst van abnormale gegevens ten gevolge van niet-uitvoerbare functies of communicatiefouten.

Data 1: Ongeldige code
2: Niet-ondersteunde functie
3: Even geduld graag

Protocol voor uitzending/ontvangst

01. Power (Command : a) (Inschakelen (opdracht: a))

► Hiermee zet u de set aan en uit.

Uitzending

[k][a][ ][Set ID][ ][Data][Cr]

Data 0: Uitschakelen
1: Voeding aan

Bevestiging

[a][ ][Set ID][ ][OK][Data][x]

► Hier ziet u of de voeding is in- of uitgeschakeld.

Uitzending

[k][a][ ][Set ID][ ][FF][Cr]

Data 0: Uitschakelen 1: Voeding aan

Bevestiging

[a][ ][Set ID][ ][OK][Data][x]

* Het product verzendt een ACK (bevestiging) in deze indeling bij de ontvangst van normale gegevens. Op dit moment, met de gegevens in de leesmodus, worden de huidige statusgegevens weergegeven. Als de gegevens zich in de schrijfmodus bevinden, worden de gegevens van de pc geretourneerd.

02. Input Select(Command : b) (Main Picture Input) (Ingang selecteren (opdracht: b) (Belangrijkste beeldingang))

► Hiermee selecteert u de ingangsbron voor de set.
U kunt ook een ingangsbron selecteren met behulp van de knop INPUT op de afstandsbediening.

Uitzending

[k][b][ ][Set ID][ ][Data][Cr]

Data 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Bevestiging

[b][ ][Set ID][ ][OK][Data][x]

03. Aspect Ratio(Command : c) (Manin picure format) (Beeldverhouding (opdracht: c) (hoofdvenster))

► Hiermee past u de beeldgrootte aan.
U kunt het schermformaat ook aanpassen met de knop ARC (Aspect Ratio Control, beeldverhouding) op de afstandsbediening of in het schermmenu.

Uitzending

[k][c][ ][Set ID][ ][Data][Cr]

Data 1 : 4:3 (Video)
2 : Full (volledig) (PC, Video)
3 : Spectacle
(weergave optimaliseren) (Video)
4 : Zoom1 (zoomen1) (PC, Video)
5 : Zoom2 (zoomen2) (Video)
6 : 1:1(PC)

Bevestiging

[c][ ][Set ID][ ][OK][Data][x]

04. Screen Mute(Command : d) (Beeld dempen (opdracht: d))

► Hiermee schakelt u de beelddemping in/uit.

Uitzending

[k][d][ ][Set ID][ ][Data][Cr]

Data 0 : Beeld dempen uit (Beeld aan)
1 : Beeld dempen aan (Beeld uit)

Bevestiging

[d][ ][Set ID][ ][OK][Data][x]

NEDERLANDS

Protocol voor uitzending/ontvangst

05. Volume Mute(Command : e) (Volume dempen (opdracht: e))

► Hiermee schakelt u Volume dempen in en uit.

Uitzending

[k][e][ ][Set ID][ ][Data][Cr]

Data 0 : Volume dempen aan (Volume uit)
1 : Volume dempen uit (Volume aan)

Bevestiging

[e][ ][Set ID][ ][OK][Data][x]

Data 0 : Volume dempen aan (Volume uit)
1 : Volume dempen uit (Volume aan)

06. Volume Control(Command : f) (Volume regelen (opdracht: f))

► Met deze knop regelt u het volume.

Uitzending

[k][f][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
(Hexadecimale code)

Bevestiging

[f][ ][Set ID][ ][OK][Data][x]

Data Min : 00H ~ Max : 64H

* Bestaande gegevenstoewijzing
0 : Step 0
:
A : Step 10
:
F : Step 15
10 : Step 16
:
64 : Step 100

07. Contrast(Command : g) (Contrast (opdracht: g))

► Hiermee past u het contrast op het scherm aan.
U kunt het contrast ook aanpassen vanuit het menu Picture (Beeld).

Uitzending

[k][g][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
• Zie 'Bestaande gegevenstoewijzing' hieronder.

Bevestiging

[g][ ][Set ID][ ][OK][Data][x]

* Bestaande gegevenstoewijzing
0 : Step 0
:
A : Step 10
:
F : Step 15
10 : Step 16
:
64 : Step 100

08. Brightness(Command : h) (Helderheid (opdracht: h))

► Hiermee kunt u de helderheid van het scherm aanpassen.
U kunt de helderheid ook aanpassen vanuit het menu Picture (Beeld).

Uitzending

[k][h][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
• Zie 'Bestaande gegevenstoewijzing' hieronder.

Bevestiging

[h][ ][Set ID][ ][OK][Data][x]

* Bestaande gegevenstoewijzing
0 : Step
:
A : Step 10
:
F : Step 15
10 : Step 16
:
64 : Step 100

Protocol voor uitzending/ontvangst

09. Color(Command : i) (Video only) (Kleuren (opdracht: i) (uitsluitend Video))

▶ Hiermee past u de kleuren van het beeld aan.
U kunt de kleuren ook aanpassen vanuit het menu Picture (Beeld).

Uitzending

[k][i][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
(Hexadecimale code)

Bevestiging

[i][ ][Set ID][ ][OK][Data][x]

Data Min : 00H ~ Max : 64H

10. Tint(Command : j) (Tint (opdracht: j) (AV/S-Video: uitsluitend NTSC)

▶ Hiermee past u de tint van het beeld aan.
U kunt de tint ook aanpassen vanuit het menu Picture (Beeld).

Uitzending

[k][j][ ][Set ID][ ][Data][Cr]

Data rood: 00H ~ Groen: 64H
(Hexadecimale code)

Bevestiging

[j][ ][Set ID][ ][OK][Data][x]

Data rood: 00H ~ Groen: 64H

* Tint : -50 ~ +50

11. Sharpness(Command : k) (Video only) (Scherpte (opdracht: k) (uitsluitend Video))

▶ Hiermee past u de scherpte van het beeld aan.
U kunt de scherpte ook aanpassen vanuit het menu Picture (Beeld).

Uitzending

[k][k][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
(Hexadecimale code)

Bevestiging

[k][ ][Set ID][ ][OK][Data][x]

Data Min : 00H ~ Max : 64H

12. OSD Select(Command : l) (OSD selecteren (opdracht: l))

▶ Hiermee schakelt u het schermmenu in of uit.

Uitzending

[k][l][ ][Set ID][ ][Data][Cr]

Data 0 : OSD Uit 1 : OSD Aan

Bevestiging

[l][ ][Set ID][ ][OK][Data][x]

Data 0 : OSD Uit 1 : OSD Aan

13. Remote Lock On/Off(Command : m) (Vergrendeling van de afstandsbediening/toetsen (opdracht: m))

▶ De afstandsbediening en de besturingselementen op het voorpaneel van de tv vergrendelen.

Uitzending

[k][m][ ][Set ID][ ][Data][Cr]

Data 0 : Vergrendeling afstandsbediening uit
1 : Vergrendeling afstandsbediening aan

Bevestiging

[m][ ][Set ID][ ][OK][Data][x]

Data 0: Vergrendeling afstandsbediening uit
1: Vergrendeling afstandsbediening aan

▶ Gebruik deze modus als u de afstandsbediening en de besturingselementen op het voorpaneel van de tv niet gebruikt.
De vergrendeling van de afstandsbediening wordt opgeheven als de voeding wordt in- of uitgeschakeld.

NEDERLANDS

Protocol voor uitzending/ontvangst

14. PIP/PBP/POP On/Off (Command : n) (PIP/PBP/POP aan/uit (opdracht: n))

► Hiermee zet u PIP/PBP/POP van de set aan en uit.

Uitzending

[k][n][ ][Set ID][ ][Data][Cr]

Data 0 : UIT
1 : PIP
2 : PBP
3 : POP

Bevestiging

[n][ ][Set ID][ ][OK][Data][x]

Data 0 : UIT
1 : PIP
2 : PBP
3 : POP

15. PIP Position(Command : q) (PIP-positie(opdracht: q))

► Hiermee past u de PIP-positie aan.

Uitzending

[k][q][ ][Set ID][ ][Data][Cr]

Data 0 : Rechtsonder in het scherm
1 : Linksonder in het scherm
2 : Linksboven in het scherm
3 : Rechtsboven in het scherm

Bevestiging

[q][ ][Set ID][ ][OK][Data][x]

Data 0 : Rechtsonder in het scherm
1 : Linksonder in het scherm
2 : Linksboven in het scherm
3 : Rechtsboven in het scherm

16. Balance(Command : t) (Balans (opdracht: t))

► Hiermee past u de beeldbalans geluid.

Uitzending

[k][t][ ][Set ID][ ][Data][Cr]

Data Min : 00H ~ Max : 64H
(Hexadecimale code)

Bevestiging

[t][ ][Set ID][ ][OK][Data][x]

Data Min : 00H ~ Max : 64H

* Balans : -50 ~ +50

17. ACC(Command : u) (ACC (opdracht: u))

► Hiermee past u de kleurtemperatuur van het beeld aan.

Uitzending

[k][u][ ][Set ID][ ][Data][Cr]

Data 0 : Normaal (9300K) 4 : 3600K
1 : Koel PC : 0, 2, 3, 4
2 : Warm (6500K) Video : 0, 1, 2
3 : Aangepast

Bevestiging

[u][ ][Set ID][ ][OK][Data][x]

Data 0 : Normaal (9300K) 4 : 3600K
1 : Koel PC : 0, 2, 3, 4
2 : Warm (6500K) Video : 0, 1, 2
3 : Aangepast

Protocol voor uitzending/ontvangst

18. PIP/PBP/POP SOURCE(Command : y) (PIP/PBP/POP SOURCE (BRON) (opdracht: y))

► Hiermee kiest u de bron voor het subvenster.

Uitzending

[k][y][ ][Set ID][ ][Data][Cr]

Data 2 : AV
3 : S-Video
4 : Component
6 : RGB1
7 : RGB2
8 : DVI

Bevestiging

[y][ ][Set ID][ ][OK][Data][x]

Data 2 : AV
3 : S-Video
4 : Component
6 : RGB1
7 : RGB2
8 : DVI

19. Auto Configure(Command: j u) (Autoconfiguratie (opdracht: j u))

► Hiermee past u de beeldpositie aan en minimaliseert u de beeldtrillingen automatisch. Alleen in de modus RGB(PC).

Uitzending

[j][u][ ][Set ID][ ][Data][Cr]

Data 1 : Instellen

Bevestiging

[u][ ][Set ID][ ][OK][Data][x]

20. Key(Command : m c) (Sleutel (opdracht: m c))

► Hiermee verzendt u de sleutelcode voor de IR-afstandsbediening.

Uitzending

[m][c][ ][Set ID][ ][Data][Cr]

Datacode

Bevestiging

[c][ ][Set ID][ ][OK][Data][x]

21. Tiling Mode(Command : d d) (Mozaïekmodus (opdracht: d d))

► Hiermee wijzigt u een mozaïekmodus.

Uitzending

[d][d][ ][Set ID][ ][Data][x]

Data	Beschrijving
00	Mozaïekmodus is uitgeschakeld.
12	Modus 1 x 2 (kolom x rij)
13	Modus 1 x 3
14	Modus 1 x 4
...	...
44	Modus 4 x 4

* De gegevens kunnen niet worden ingesteld op 0X of X0, behalve 00.

Bevestiging

[d][ ][00][ ][OK/NG][Data][x]

22. Tile H Position(Command : d e) (H positie mozaïek (opdracht: d e))

► Hiermee stelt u de horizontale positie in.

Uitzending

[d][e][ ][Set ID][ ][Data][x]

* Het gegevensbereik ligt tussen 00 en 64 (hexadecimaal).

Bevestiging

[e][ ][Set ID][ ][OK/NG][Data][x]

NEDERLANDS

Protocol voor uitzending/ontvangst

23. Tile V Position(Command : d f) (V positie mozaïek (opdracht: d f))

► Hiermee stelt u de verticale positie in.

Uitzending

[d][f][ ][Set ID][ ][Data][x]

* Het gegevensbereik ligt tussen 00 en 64 (hexadecimaal).

Bevestiging

[f][ ][Set ID][ ][OK/NG][Data][x]

24. Tile H Size(Command : d g) (H grootte mozaïek (opdracht: d g))

► Hiermee stelt u de horizontale grootte in.

Uitzending

[d][g][ ][Set ID][ ][Data][x]

* Het gegevensbereik ligt tussen 00 en 64 (hexadecimaal).

Bevestiging

[g][ ][Set ID][ ][OK/NG][Data][x]

25. Tile V Size(Command : d h) (V grootte mozaïek (opdracht: d h))

► Hiermee stelt u de verticale grootte in.

Uitzending

[d][h][ ][Set ID][ ][Data][x]

* Het gegevensbereik ligt tussen 00 en 64 (hexadecimaal).

Bevestiging

[h][ ][Set ID][ ][OK/NG][Data][x]

26. Tile ID Set(Command : d i) (Mozaïek-id instellen (opdracht: d i))

► Hiermee wijst u de mozaïek-id toe voor de functie Mozaïek.

Uitzending

[d][i][ ][Set ID][ ][Data][x]

* Het gegevensbereik ligt tussen 00 en mozaïekmodus 00 x 10.

Bevestiging

[i][ ][Set ID][ ][OK/NG][Data][x]

27. Elapsed time return(Command : d l) (Verstreken tijd retourneren (opdracht: d l))

► Hiermee leest u de verstreken tijd.

Uitzending

[d][l][ ][Set ID][ ][Data][x]

* De gegevenswaarde is altijd FF (hexadecimaal).

Bevestiging

[l][ ][Set ID][ ][OK/NG][Data][x]

***28. Light Sensor value Return(Command : d m) (Waarde lichtsensor retourneren (opdracht: d m)) - optioneel**

► Hiermee leest u de waarde van de lichtsensor om de helderheid van het product aan te passen afhankelijk van de helderheid in de omgeving.

Uitzending

[d][m][ ][Set ID][ ][Data][x]

* De gegevenswaarde is altijd FF (hexadecimaal).

Bevestiging

[m][ ][Set ID][ ][OK/NG][Data][x]

Protocol voor uitzending/ontvangst

***29. Temperature value Return (Command : d n) (Temperatuurwaarde retourneren (opdracht: d n)) - optioneel**

► Hiermee leest u de temperatuur aan de binnenkant.

Uitzending

[d][n][ ][Set ID][ ][Data][x]

* De gegevenswaarde is altijd FF (hexadecimaal).

Bevestiging

[n][ ][Set ID][ ][OK/NG][Data][x]

Gegevens zijn 1 byte lang in hexadecimale ASCII-indeling.

***30. Fan On/Off(Command : d o) (Ventilator aan/uit (opdracht: d o)) - optioneel**

► Hiermee schakelt u de ventilator voor de set in of uit.

Uitzending

[d][o][ ][Set ID][ ][Data][x]

Data 0: Ventilator uit 1: Ventilator aan

Bevestiging

[o][ ][Set ID][ ][OK/NG][Data][x]

***31. Lamp fault Check(Command : d p) (Controleren op lampfout (opdracht: d p)) - optioneel**

► Hiermee controleert u op een lampfout.

Uitzending

[d][p][ ][Set ID][ ][Data][x]

* De gegevenswaarde is altijd FF (hexadecimaal).

Bevestiging

[p][ ][Set ID][ ][OK/NG][Data][x]

***31. Lamp fault Check(Command : d p) (Controleren op lampfout (opdracht: d p)) - optioneel**

► Hiermee controleert u op een lampfout.

Uitzending

[d][p][ ][Set ID][ ][Data][x]

* De gegevenswaarde is altijd FF (hexadecimaal).

Bevestiging

[p][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

***32. Video input fault return(Command : d q) (Pengembalian kerusakan masukan video (opdracht: d q)) - optioneel**

► Untuk memeriksa kesalahan masukan video.

Uitzending

[d][q][ ][Set ID][ ][Data][x]

* De gegevenswaarde is altijd FF (hexadecimaal).

Bevestiging

[q][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

NEDERLANDS

IR-codes

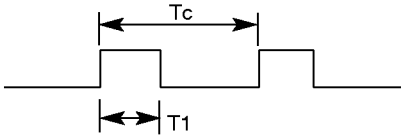
Aansluiten

▶ Sluit de afstandsbediening met draad aan op de daarvoor bestemde poort van het product.

IR-code afstandsbediening

▶ Golfvorm van uitgang

Enkelvoudige impuls, gemoduleerd met 37,917 KHz-signaal bij 455 KHz

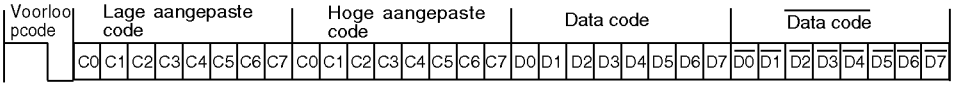


Draagfrequentie

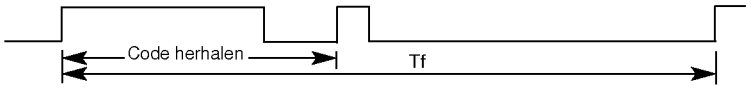
FCAR = 1/Tc = fosc/12
Pulsverhouding = T1/Tc = 1/3

▶ Configuratie van frame

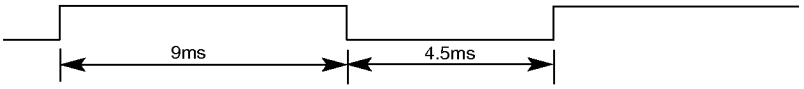
• 1e frame



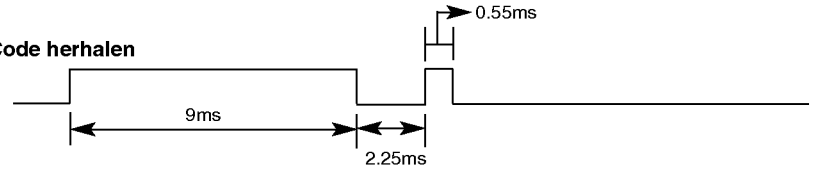
• Frame herhalen



▶ Voorloopcode

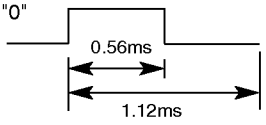


▶ Code herhalen

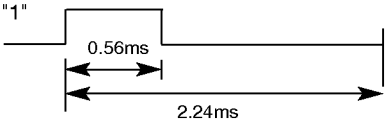


▶ Omschrijving bit

• Bit "0"

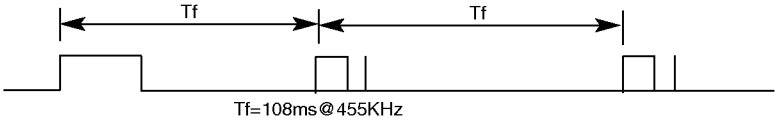


• Bit "1"



▶ Interval van frame: Tf

• Zolang een toets wordt ingedrukt, wordt de golfvorm verzonden.



Code(Hexa)	Functie	Opmerking
02	VOL (▲)	Knop afstandsbediening
03	VOL (▼)	Knop afstandsbediening
40	▲	Knop afstandsbediening
41	▼	Knop afstandsbediening
06	▶	Knop afstandsbediening
07	◀	Knop afstandsbediening
08	AAN/UIT	Knop afstandsbediening (aan/uit)
5B	EXIT	Knop afstandsbediening
09	MUTE	Knop afstandsbediening
4D	EZ VIDEO(PSM)	Knop afstandsbediening
52	EZ AUDIO(SSM)	Knop afstandsbediening
98	INPUT(Source)	Knop afstandsbediening
5A	AV	Knop afstandsbediening
D8	S-VIDEO	Knop afstandsbediening
BF	COMPONENT	Knop afstandsbediening
C6	DVI	Knop afstandsbediening
0E	SLEEP	Knop afstandsbediening
43	MENU	Knop afstandsbediening
44	ENTER	Knop afstandsbediening
60	PIP	Knop afstandsbediening
61	POP	Knop afstandsbediening
63	SWAP	Knop afstandsbediening
79	ARC	Knop afstandsbediening
76	ARC(4:3)	Knop afstandsbediening
77	ARC(Full)	Knop afstandsbediening
AF	ARC(ZOOM1)	Knop afstandsbediening
54	AUTO	Knop afstandsbediening

RS-232C

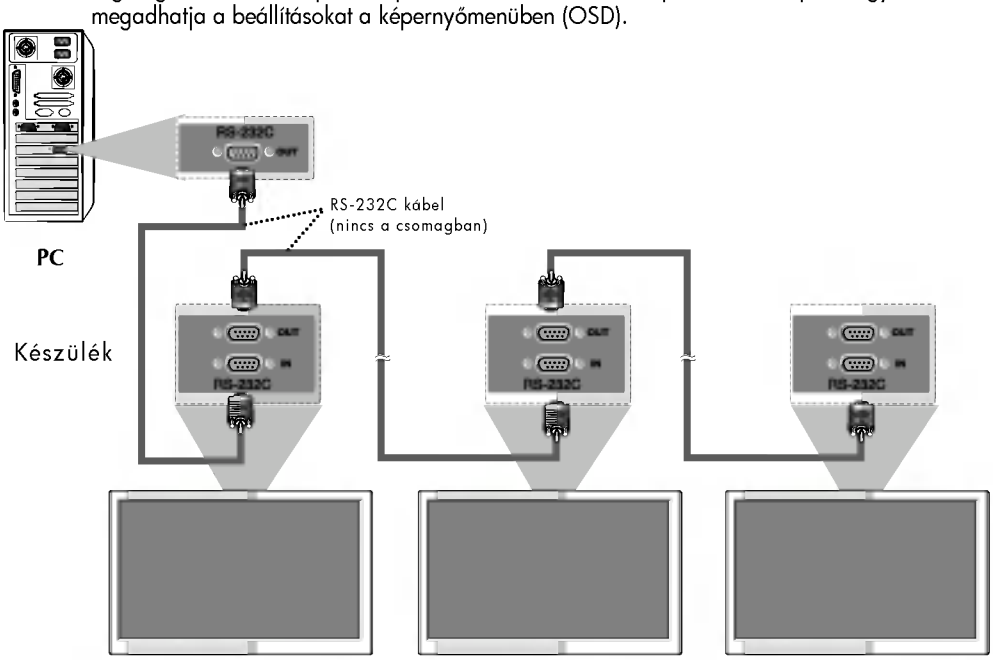
Több készülék vezérlése

Ezzel a módszerrel egyszerre több készüléket csatlakoztathat egyetlen számítógéphez. Egyetlen számítógépről egyszerre kezelheti az összes csatlakoztatott készüléket.

A kábel csatlakoztatása

Csatlakoztassa az RS-232C kábelt az ábrán látható módon.

* A számítógép az RS-232C protokoll segítségével vezérli a készülékeket. Így a számítógép segítségével ki- és bekapcsolhatja a készüléket, kiválaszthatja a bemeneti jelet vagy megadhatja a beállításokat a képernyőmenüben (OSD).



Kommunikációs paraméterek

- Adatsebesség: 9600 bps (UART)
- Adathossz: 8 bit
- Paritásbit: nincs
- Stopbit: 1 bit
- Adatáram-vezérlés: nincs
- Kommunikációs kód: ASCII-kód

Részletes parancslista

	1.PARANCS	2.PARANCS	ADAT (hexadecimális)
01. Power(Tápellátás)	k	a	00H - 01H
02. Input Select(Bemenetválasztás)	k	b	02H - 08H
03. Aspect Ratio(Méretarány)	k	c	01H - 06H
04. Screen Mute(Kép kikapcsolása)	k	d	00H - 01H
05. Volume Mute(Hang némítása)	k	e	00H - 01H
06. Volume Control(Hangerőszabályzás)	k	f	00H - 64H
07. Contrast(Kontraszt)	k	g	00H - 64H
08. Brightness(Fényerő)	k	h	00H - 64H
09. Color(Szín)	k	i	00H - 64H
10. Tint(Színárnyalat)	k	j	00H - 64H
11. Sharpness(Élesség)	k	k	00H - 64H
12. OSD Select(OSD választása)	k	l	00H - 01H
13. Remote Lock On/Off(Távirányító-zárolás be/ki)	k	m	00H - 01H
14. PIP/PBP/POP On/Off(PIP/PBP/POP be/ki)	k	n	00H - 03H
15. PIP Position(PIP helyzet)	k	q	00H - 03H
16. Balance(Balansz)	k	t	00H - 64H
17. ACC	k	u	00H - 04H
18. PIP/PBP/POP SOURCE(PIP/PBP/POP forrása)	k	y	00H - 08H
19. Auto Configure(Automatikus konfigurálás)	j	u	01H
20. Key(Gomb)	m	c	Gomb kódja
21. Tiling Mode(Mozaikrendezési mód)	d	d	00H - 0FH
22. Tile H Position(Mozaik vízszintes helyzete)	d	e	00H - 64H
23. Tile V Position(Mozaik függőleges helyzete)	d	f	00H - 64H
24. Tile H Size(Mozaik vízszintes mérete)	d	g	00H - 64H
25. Tile V Size(Mozaik függőleges mérete)	d	h	00H - 64H
26. Tile ID Set(Mozaikazonosító beállítása)	d	i	00H - 63H
27. Elapsed time return(Eltelt idő lekérdezése)	d	l	FFH
* 28. Light Sensor value return (Fényérzékelő értékének lekérdezése)	d	m	FFH
* 29. Temperatur value return (Hőmérséklet értékének lekérdezése)	d	n	FFH
* 30. Fan On/Off(Ventilátor be/ki)	d	o	00H - 01H
* 31. Lamp fault check(Jelzőfényhiba ellenőrzése)	d	p	FFH
* 32. Video input fault return (Videobemenet-hiba lekérése)	d	q	FFH

* : külön rendelhető

MAGYAR

Több készülék vezérlése

Adatátviteli protokoll

Küldés

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [1. parancs]: Első parancs. (j , k, m, d)
* [2. parancs]: Második parancs.
* [Készülékazonosító]:A készülékazonosítót a Special (Speciális) menüben állíthatja be a kívánt azonosító kiválasztásához. A beállítási tartomány 0–99.
  Ha a készülékazonosító értéke „0", minden csatlakoztatott TV-készüléket vezérel.
  A készülékazonosító decimális (0–99) alakban jelenik meg a menüben, és hexadecimális (0x0–0x64) alakban az adatátviteli protokollban.
* [ADAT]: A parancsadat továbbítása.
  A parancsállapot olvasásához az „FF" adatot kell küldeni.
* [KV]: Kocsi vissza
  „0x0D" ASCII-kód
* [ ]: Szóköz, „0x20" ASCII-kód

OK visszaigazolása

[Command2][ ][Set ID][ ][OK][Data][x]

* A készülék ebben a formátumban küldi a visszaigazolást (ACK), ha helyes adatokat kapott. Adatolvasási mód esetén a jelenlegi állapotadatokat tartalmazza. Adatírási mód esetén a számítógépből származó adatokat küldi vissza.

Hiba visszaigazolása

[Command2][ ][Set ID][ ][NG][Data][x]

* A készülék ebben a formátumban küld visszaigazolást (ACK), ha hibás adatokat kap nem használható funkciókhoz, vagy kommunikációs hiba történt.

Adat 1: Illegális kód
2: Nem használható funkció
3: További várakozás szükséges

Adatátviteli protokoll

01. Power (Command : a)
(Bekapcsolás (Parancs: a))

► A készülék be- és kikapcsolását vezérli.

Küldés

[k][a][ ][Set ID][ ][Data][Cr]

Adat 0: Kikapcsolás 1: Bekapcsolás

Visszaigazolás

[a][ ][Set ID][ ][OK][Data][x]

► A be- vagy kikapcsolt állapot megjelenítése.

Küldés

[k][a][ ][Set ID][ ][FF][Cr]

Adat 0: Kikapcsolás 1: Bekapcsolás

Visszaigazolás

[a][ ][Set ID][ ][OK][Data][x]

* A készülék ebben a formátumban küldi a visszaigazolást (ACK), ha helyes adatokat kapott.
Adatolvasási mód esetén a jelenlegi állapotadatokat tartalmazza. Adatírási mód esetén a számítógépből származó adatokat küldi vissza.

02. Input Select(Command : b) (Main Picture Input) (Bemenetválasztás (Parancs: b) (Főkép bemenete))

► A készülék bemeneti jelforrásának kiválasztása.
A távirányító INPUT gombjával is kiválaszthatja a bemeneti jelforrást.

Küldés

[k][b][ ][Set ID][ ][Data][Cr]

Adat 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Visszaigazolás

[b][ ][Set ID][ ][OK][Data][x]

03. Aspect Ratio(Command : c) (Manin picure format) (Méretarány (Parancs: c) (Főkép formátuma))

► A képformátum beállítása.
A Screen (Képernyő) menüben vagy a távirányító ARC (Méretarány-vezérlés) gombjával is beállíthatja a képformátumot.

Küldés

[k][c][ ][Set ID][ ][Data][Cr]

Adat 1 : 4:3 (Video)
2 : Full (Teljes) (PC, Video)
3 : Spectacle (Látvány) (Video)
4 : Zoom1 (Nagyítás1) (PC, Video)
5 : Zoom2 (Nagyítás2) (Video)
6 : 1:1(PC)

Visszaigazolás

[c][ ][Set ID][ ][OK][Data][x]

04. Screen Mute(Command : d) (Kép kikapcsolása (Parancs: d))

► A kép be-/kikapcsolásának választása.

Küldés

[k][d][ ][Set ID][ ][Data][Cr]

Adat 0 : Képkikapcsolás inaktív (kép bekapcsolva)
1: Képkikapcsolás aktív (kép kikapcsolva)

Visszaigazolás

[d][ ][Set ID][ ][OK][Data][x]

MAGYAR

Több készülék vezérlése

Adatátviteli protokoll

05. Volume Mute(Command : e)
(Hang némítása (Parancs: e))

► A hangnémítás be- és kikapcsolását vezérli.

Küldés

[k][e][ ][Set ID][ ][Data][Cr]

Adat 0: Hang némítása aktív (hang kikapcsolva)
1: Hang némítása inaktív (hang bekapcsolva)

Visszaigazolás

[e][ ][Set ID][ ][OK][Data][x]

Adat 0: Hang némítása aktív (hang kikapcsolva)
1: Hang némítása inaktív (hang bekapcsolva)

06. Hangerő-szabályozás (Parancs: f)

► A hangerő beállítása.

Küldés

[k][f][ ][Set ID][ ][Data][Cr]

Adat Min.: 00H – Max: 64H
(Hexadecimális kód)

Visszaigazolás

[f][ ][Set ID][ ][OK][Data][x]

Adat Min.: 00H – Max: 64H

* Valós adatok leképezése
0 : 0. lépés
:
A : 10. lépés
:
F : 15. lépés
10 : 16. lépés
:
64 : 100. lépés

07. Contrast(Command : g) (Kontraszt (Parancs: g))

► A képernyőkontraszt beállítása.
A kontrasztot a Picture (Kép) menüben is beállíthatja.

Küldés

[k][g][ ][Set ID][ ][Data][Cr]

Adat Min.: 00H – Max: 64H
• ŠLásd az alábbi „Valós adatok leképezése" pontot.

Visszaigazolás

[g][ ][Set ID][ ][OK][Data][x]

* Valós adatok leképezése
0 : 0. lépés
:
A : 10. lépés
:
F : 15. lépés
10 : 16. lépés
:
64 : 100. lépés

08. Brightness(Command : h) (Fényerő (Parancs: h))

► A képernyő fényerejének beállítása.
A fényerőt a Picture (Kép) menüben is beállíthatja.

Küldés

[k][h][ ][Set ID][ ][Data][Cr]

Adat Min.: 00H – Max: 64H
• ŠLásd az alábbi „Valós adatok leképezése" pontot.

Visszaigazolás

[h][ ][Set ID][ ][OK][Data][x]

* Valós adatok leképezése
0 : 0. lépés
:
A : 10. lépés
:
F : 15. lépés
10 : 16. lépés
:
64 : 100. lépés

Adatátviteli protokoll

09. Color(Command : i) (Video only) (Szín (Parancs: i) (csak Video))

► A képernyő színbeállítása.
A színt a Picture (Kép) menüben is beállíthatja.

Küldés

[k][i][ ][Set ID][ ][Data][Cr]

Adat Min.: 00H – Max: 64H
(Hexadecimális kód)

Visszaigazolás

[i][ ][Set ID][ ][OK][Data][x]

Adat Min.: 00H – Max: 64H

10. Tint(Command : j) (Színárnyalat (Parancs: j)(AV/S-Video: ccsak NTSC)

► A képernyő színárnyalatának beállítása.
A színárnyalatot a Picture (Kép) menüben is beállíthatja.

Küldés

[k][j][ ][Set ID][ ][Data][Cr]

Adat: Vörös: 00H – Zöld: 64H
(Hexadecimális kód)

Visszaigazolás

[j][ ][Set ID][ ][OK][Data][x]

Adat: Vörös: 00H – Zöld: 64H

* Színárnyalat: -50 – +50

11. Sharpness(Command : k) (Video only) (Élesség (Parancs: k) (csak Video))

► A képernyő élességének beállítása.
Az élességet a Picture (Kép) menüben is beállíthatja.

Küldés

[k][k][ ][Set ID][ ][Data][Cr]

Adat Min.: 00H – Max: 64H
(Hexadecimális kód)

Visszaigazolás

[k][ ][Set ID][ ][OK][Data][x]

Adat Min.: 00H – Max: 64H

12. OSD Select(Command : l) (OSD választása (Parancs: l))

► A készülék képernyőmenüjének (OSD) be- és kikapcsolását vezérli.

Küldés

[k][l][ ][Set ID][ ][Data][Cr]

Adat 0: OSD kikapcsolva
1: OSD bekapcsolva

Visszaigazolás

[l][ ][Set ID][ ][OK][Data][x]

Adat 0: OSD kikapcsolva
1: OSD bekapcsolva

13. Remote Lock On/Off(Command : m) (A távirányító és a gombok lezárása (Parancs: m))

► A készülék távirányítóján és előlapján található kezelőszervek zárolása.

Transmission

[k][m][ ][Set ID][ ][Data][Cr]

Data 0 : Remote Lock Off
1 : Remote Lock On

Acknowledgement

[m][ ][Set ID][ ][OK][Data][x]

Data 0 : Remote Lock Off
1 : Remote Lock On

► Ha nem használja a készülék távirányítóját és az előlapján található kezelőszerveket, állítsa be ezt a módot
A tápellátás be- és kikapcsolása esetén a távvezérlés zárolása kikapcsol.

MAGYAR

Több készülék vezérlése

Adatátviteli protokoll

14. PIP/PBP/POP On/Off(Command : n) (PIP/PBP/POP be- vagy kikapcsolása (Parancs: n))

► A PIP/PBP/POP be- és kikapcsolását vezérli.

Küldés

[k][n][ ][Set ID][ ][Data][Cr]

Adat 0 : Kikapcsolva
1 : PIP
2 : PBP
3 : POP

Visszaigazolás

[n][ ][Set ID][ ][OK][Data][x]

Adat 0 : Kikapcsolva
1 : PIP
2 : PBP
3 : POP

15. PIP Position(Command : q) (PIP helyzet (Parancs: q))

► A PIP helyzetének beállítása.

Küldés

[k][q][ ][Set ID][ ][Data][Cr]

Adat 0 : A képernyő jobb alsó sarkában
1 : A képernyő bal alsó sarkában
2 : A képernyő bal felső sarkában
3 : A képernyő jobb felső sarkában

Visszaigazolás

[q][ ][Set ID][ ][OK][Data][x]

Adat 0 : A képernyő jobb alsó sarkában
1 : A képernyő bal alsó sarkában
2 : A képernyő bal felső sarkában
3 : A képernyő jobb felső sarkában

16. Balance(Command : t) (Balansz (Parancs: t))

► A képernyő balanszbeállításának meghatározása.

Küldés

[k][t][ ][Set ID][ ][Data][Cr]

Adat Min.: 00H – Max: 64H
(Hexadecimális kód)

Visszaigazolás

[t][ ][Set ID][ ][OK][Data][x]

Adat Min.: 00H – Max: 64H

* Balansz : -50 ~ +50

17. ACC(Command : u) (ACC (Parancs: u))

► A képernyő színhőmérsékletének beállítása.

Küldés

[k][u][ ][Set ID][ ][Data][Cr]

Adat 0 : Normál (9300K) 4 : 3600K
1 : Hideg PC : 0, 2, 3, 4
2 : Meleg (6500K) Video : 0, 1, 2
3 : Egyéni

Visszaigazolás

[u][ ][Set ID][ ][OK][Data][x]

Adat 0 : Normál (9300K) 4 : 3600K
1 : Hideg PC : 0, 2, 3, 4
2 : Meleg (6500K) Video : 0, 1, 2
3 : Egyéni

Adatátviteli protokoll

18. PIP/PBP/POP SOURCE(Command : y)
(PIP/PBP/POP forrása (Parancs: y))

► A kis képernyő jelforrásának kiválasztása.

Küldés

[k][y][ ][Set ID][ ][Data][Cr]

Adat 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

Visszaigazolás

[y][ ][Set ID][ ][OK][Data][x]

Adat 2 : AV 6 : RGB1
3 : S-Video 7 : RGB2
4 : Component 8 : DVI

19. Auto Configure(Command: j u)
(Automatikus konfigurálás
(Parancs: j u))

► A kép helyzetének beállítása és a kép remegésének csökkentése automatikusan. Kizárólag RGB (PC) üzemmódban használható.

Küldés

[j][u][ ][Set ID][ ][Data][Cr]

Adat 1: Beállítás

Visszaigazolás

[u][ ][Set ID][ ][OK][Data][x]

20. Key(Command : m c) (Gomb
(Parancs: m c))

► Infravörös távirányító gombkódjának küldése.

Küldés

[m][c][ ][Set ID][ ][Data][Cr]

Gombkódok

Visszaigazolás

[c][ ][Set ID][ ][OK][Data][x]

21. Tiling Mode(Command : d d)
(Mozaikrendezési mód (Parancs: d d))

► Mozaikrendezési mód módosítása.

Küldés

[d][d][ ][Set ID][ ][Data][x]

Adat	Leírás
00	Mozaikrendezési mód kikapcsolva.
12	1 x 2 mód (oszlop x sor)
13	1 x 3 mód
14	1 x 4 mód
...	...
44	4 x 4 mód

* Az adat nem állítható be 0X vagy X0 értékre a 00 kivételével.

Visszaigazolás

[d][ ][00][ ][OK/NG][Data][x]

22. Tile H Position(Command : d e)
(Mozaik vízszintes helyzete
(Parancs: d e))

► A vízszintes helyzet beállítása.

Küldés

[d][e][ ][Set ID][ ][Data][x]

* Az adatérték 00 és 64 (hexadecimális) közötti lehet.

Visszaigazolás

[e][ ][Set ID][ ][OK/NG][Data][x]

MAGYAR

Több készülék vezérlése

Adatátviteli protokoll

23. Tile V Position(Command : d f)
(Mozaik függőleges helyzete (Parancs: d f))

► A függőleges helyzet beállítása.

Küldés

[d][f][ ][Set ID][ ][Data][x]

* Az adatérték 00 és 64 (hexadecimális) közötti lehet.

Visszaigazolás

[f][ ][Set ID][ ][OK/NG][Data][x]

24. Tile H Size(Command : d g)
(Mozaik vízszintes mérete (Parancs: d g))

► A vízszintes méret beállítása.

Küldés

[d][g][ ][Set ID][ ][Data][x]

* Az adatérték 00 és 64 (hexadecimális) közötti lehet.

Visszaigazolás

[g][ ][Set ID][ ][OK/NG][Data][x]

25. Tile V Size(Command : d h)
(Mozaik függőleges mérete (Parancs: d h))

► A függőleges méret beállítása.

Küldés

[d][h][ ][Set ID][ ][Data][x]

* Az adatérték 00 és 64 (hexadecimális) közötti lehet.

Visszaigazolás

[h][ ][Set ID][ ][OK/NG][Data][x]

26. Tile ID Set(Command : d i)
(Mozaikazonosító beállítása (Parancs: d i))

► Mozaikazonosító hozzárendelése a mozaikrendezési funkcióhoz.

Küldés

[d][i][ ][Set ID][ ][Data][x]

* Az adatérték 00 és a 00 x 10 mozaikrendezési mód közötti lehet.

Visszaigazolás

[i][ ][Set ID][ ][OK/NG][Data][x]

27. Elapsed time return(Command : d l) (Eltelt idő lekérdezése (Parancs: d l))

► Az eltelt idő kiolvasása.

Küldés

[d][l][ ][Set ID][ ][Data][x]

* Az adat értéke mindig FF (hexadecimális).

Visszaigazolás

[l][ ][Set ID][ ][OK/NG][Data][x]

*28. Light Sensor value Return(Command : d m)
(Fényérzékelő értékének lekérdezése (Parancs: d m)) - külön rendelhető

► A fényérzékelő értékének kiolvasása a készüléken a környezeti fényviszonyoktól függő fényerősség beállításához.

Küldés

[d][m][ ][Set ID][ ][Data][x]

* Az adat értéke mindig FF (hexadecimális).

Visszaigazolás

[m][ ][Set ID][ ][OK/NG][Data][x]

Adatátviteli protokoll

*29. Temperature value Return(Command : d n) (Hőmérséklet értékének lekérdezése (Parancs: d n)) - külön rendelhető

► A belső hőmérséklet értékének kiolvasása.

Küldés

[d][n][ ][Set ID][ ][Data][x]

* Az adat értéke mindig FF (hexadecimális).

Visszaigazolás

[n][ ][Set ID][ ][OK/NG][Data][x]

Az adat hossza 1 bájt, hexadecimális ASCII-formátumban.

*30. Fan On/Off(Command : d o) (Ventilátor be/ki (Parancs: d o)) - külön rendelhető

► A készülék ventilátorának be- és kikapcsolását vezérli.

Küldés

[d][o][ ][Set ID][ ][Data][x]

Adat 0: Ventilátor ki 1: Ventilátor be

Visszaigazolás

[o][ ][Set ID][ ][OK/NG][Data][x]

*31. Lamp fault Check(Command : d p) (Jelzőfényhiba ellenőrzése (Parancs: d p)) - külön rendelhető

► A jelzőfényhibák ellenőrzése.

Küldés

[d][p][ ][Set ID][ ][Data][x]

* Az adat értéke mindig FF (hexadecimális).

Visszaigazolás

[p][ ][Set ID][ ][OK/NG][Data][x]

*31. Lamp fault Check(Command : d p) (Jelzőfényhiba ellenőrzése (Parancs: d p)) - külön rendelhető

► A jelzőfényhibák ellenőrzése.

Küldés

[d][p][ ][Set ID][ ][Data][x]

* Az adat értéke mindig FF (hexadecimális).

Visszaigazolás

[p][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

*32. Video input fault return(Command : d q) (Jelzőfényhiba ellenőrzése (Parancs: d q)) - külön rendelhető

► A videobemenet-hibák ellenőrzése.

Küldés

[d][q][ ][Set ID][ ][Data][x]

* Az adat értéke mindig FF (hexadecimális).

Visszaigazolás

[q][ ][Set ID][ ][OK/NG][Data][x]

0 : NG 1 : OK

MAGYAR

RS-232C

Infravörös kódok

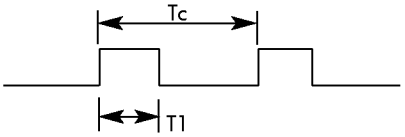
Csatlakoztatás

▶ A vezetékes távirányítót a készülék Remote Control (Távirányító) aljzatához kell csatlakoztatni.

Távirányító infravörös kódja

▶ Kimeneti hullámforma

egyimpulzusú, 37.917 kHz-es jellel modulált 455 kHz-es jel

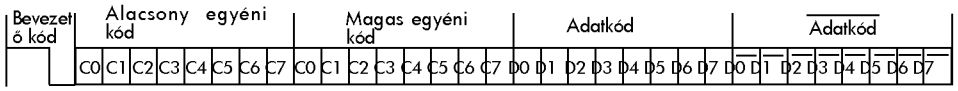


Vivőfrekvencia

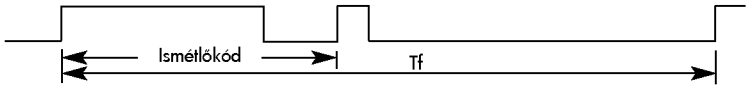
FCAR = 1/Tc = fosc/12
Időarány = T1/Tc = 1/3

▶ A keret felépítése

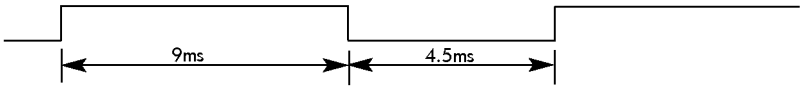
•1. keret



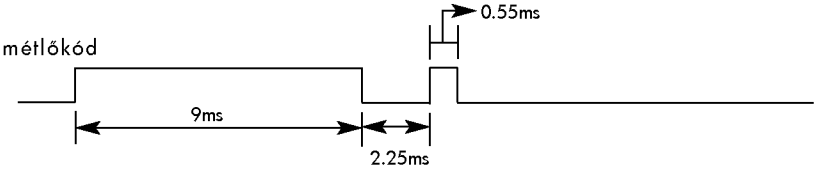
• Ismétlőkeret



▶ Bevezető kód

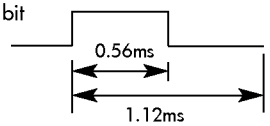


▶ Ismétlőkód

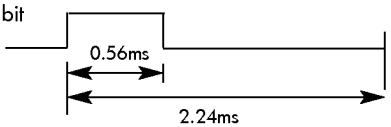


▶ Bitek felépítése

•„0" bit

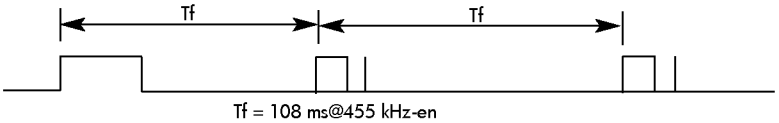


•„1" bit



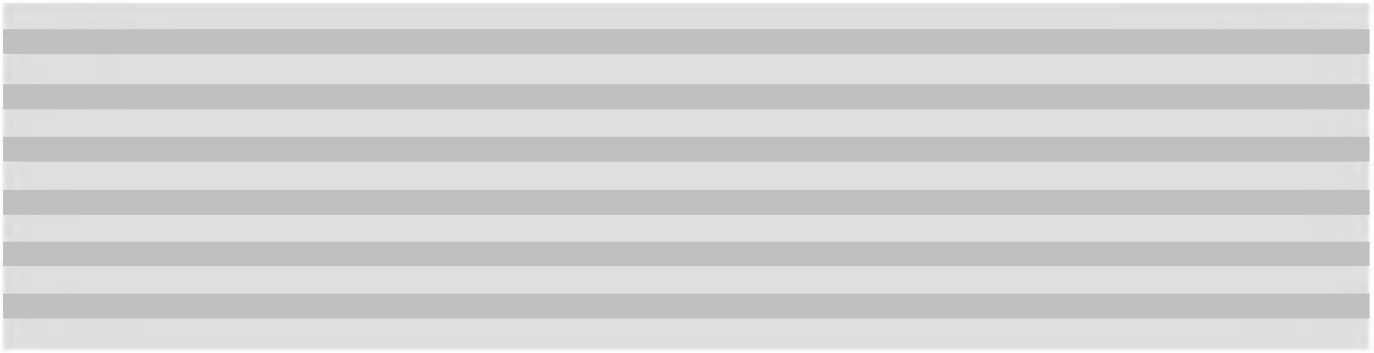
▶ Keret időtartama: Tf

•A távirányító a gomb nyomva tartása alatt folyamatosan sugározza a hullámot.



Tf = 108 ms@455 kHz-en

Kód (hex.)	Funkció	Megjegyzés
02	VOL (▲)	Távirányító gombja
03	VOL (▼)	Távirányító gombja
40	▲	Távirányító gombja
41	▼	Távirányító gombja
06	▶	Távirányító gombja
07	◀	Távirányító gombja
08	TÁPELLÁTÁS BE- ÉS KIKAPCSOLÁSA	Távirányító gombja (be/ki)
5B	EXIT	Távirányító gombja
09	MUTE	Távirányító gombja
4D	EZ VIDEO(PSM)	Távirányító gombja
52	EZ AUDIO(SSM)	Távirányító gombja
98	INPUT(Source)	Távirányító gombja
5A	AV	Távirányító gombja
D8	S-VIDEO	Távirányító gombja
BF	COMPONENT	Távirányító gombja
C6	DVI	Távirányító gombja
0E	SLEEP (ALVÓ ÜZEMMÓD)	Távirányító gombja
43	MENU (MENÜ)	Távirányító gombja
44	ENTER	Távirányító gombja
60	PIP	Távirányító gombja
61	POP	Távirányító gombja
63	SWAP (CSERE)	Távirányító gombja
79	ARC (MÉRETARÁNY)	Távirányító gombja
76	ARC(4:3)	Távirányító gombja
77	ARC(Full)	Távirányító gombja
AF	ARC(ZOOM1)	Távirányító gombja
54	AUTO	Távirányító gombja



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