

# ebode

## HD Video Link



Full HDMI Wireless Audio/Video Sender System

**VLHD30**

Before using our product, please read this documents carefully.

## CONTENTS

1. CONFORMITY OF USE
2. INTRODUCTION
3. SET CONTENTS
4. GENERAL SPECIFICATIONS
5. HARDWARE OVERVIEW
6. BEFORE YOU BEGIN
7. INSTALLING THE SYSTEM
8. QUICK INSTALLATION GUIDE
9. TECHNICAL DATA
10. Q&A

### 1. Conformity of Use

For carefree and safe use of this product, please read this manual and safety information carefully and follow the instructions. The unit is registered as a device that does not cause or suffer from radio-frequency interference. It is CE approved and it conforms with the Low Voltage Directory. The safety and installation instructions must be observed. Technical manipulation of the product, or any changes to the product, is forbidden, due to security and approval issues. Please take care to set up the device correctly - consult your user guide. Young children should use the device only under adult supervision. No guarantee or liability will be accepted for any damage caused due to incorrect use of the equipment supplied, other than indicated in this owner's manual.

### SAFETY WARNINGS

- To prevent short circuits, this product (except if specified for outdoor usage) should only be used inside and only in dry spaces. Do not expose the components to rain or humidity.
- Only connect the adapter to the mains after checking whether the mains voltage is the same as the values on the rating labels. Never connect an adapter or power cord when it is damaged. In that case, contact your supplier. If there is any danger of a thunderstorm, it is a good precaution to unplug the power supply from the mains network in order to protect it from lightning. The same applies if the system is to be out of action for any length of time.
- Avoid strong mechanical tear and wear, extreme ambient temperatures, strong vibrations and atmospheric humidity.
- Do not disassemble any part of the product: the device contains live parts and no user-serviceable parts are inside. The product should only be repaired or serviced by qualified and authorized service personnel. Defected pieces must be replaced by original (spare) parts.
- *Batteries:* keep batteries out of the reach of children. Dispose of batteries as chemical waste. Never use old and new batteries or different types of batteries together. Remove the batteries when you are not using the system for a longer period of time.

When inserting batteries, please be sure the polarity is right. Make sure that the batteries are not short circuits and are not disposed in fire (danger of explosion).

In case of improper usage or if you have opened, altered and repaired the product yourself, all guarantees expire. The supplier does not accept responsibility in the case of improper usage of the product or when the product is used for purposes other than specified. The supplier does not accept responsibility for additional damage other than covered by the legal product responsibility.

## 2. Introduction

This wireless HD audio/video kit solution allows you to place your HD TV set or projector wherever you want, free of constraint or cables. Just connect your HD TV or projector to the Receiver with an HDMI cable, and connect your A/V equipment (Blu-ray players, HD set-up boxes, game consoles or HD media players and streamers) to the Transmitter. Almost every display with an HDMI input is compatible with this kit, please make sure the display supports HDCP when watching Blu-ray movies.

This setup doesn't clutter your media and allows the A/V equipment to be hidden in a cabinet. This solution delivers uncompressed 1080p full HD video and audio content to your existing HDTV set wirelessly. It operates the transmission in 4.9 GHz~ 5.9 GHz frequencies and it can adjust its communication frequency automatically in case of interference from another RF system. With built-in Omni-directional antennas, it can transmit uncompressed video content up to 30 meters (66 feet) LOS (Line of sight) with no latency.

Both IR Sensor Extender Cable and IR Blaster Extender Cable are included in the package so users can point their own remote control of the A/V source at the Receiver directly for device operation.

***NOTE:*** Except North America, The wireless link might require 80 seconds to connect between Transmitter and Receiver, and show video on the TV screen. Please be patient and wait for a while.

### Product description

Freedom from unsightly audio-visual components and wires is finally at hand! With the Wireless HDMI Kit, you can enjoy your beautiful HDTV, HD projector without having to stare at the mess of wires and boxes that make up your home theatre system. Just connect your AV components, such as your STB, PS3, BD DVD player, HD camera, HD Photographic or stereo receiver, to this Kit, and enjoy your multi-media content delivered wirelessly with perfect resolution and clarity to any HDTV in your house. This means that you can finally place your TVs exactly where you want, without having to worry about available cable jacks, outlets, or space for your components.

### Features

- No Latency for playing high definition video game console;
- Omni directional Antenna System for Maximum 100 feet (30 meters) LOS HD Video Transmission Distance;
- fully Support the HDMI connector, Up to 1080P 60HZ Picture Quality;
- Support up to HDMI 1.3a, HDCP 1.2;
- Support EDID;
- Support CEC (Demand Transmission and Receiver Device support);
- Support IR Blasting;
- Transmission power  $\geq 12\text{dBm}$ ;
- Auto set-up, plug & play. One to One connection;
- Support AES-256 bit Encryption for securing Video Transmission over wireless;
- Support maximum 100kbs Return channel;
- Support OSD;
- Support WHDI 1.0;

### 3. Set contents

- 1x Transmitter
- 1x Receiver
- 2x Bracket
- 1x IR Extension Cable
- 2x HDMI Cable
- 2x Power Adapter

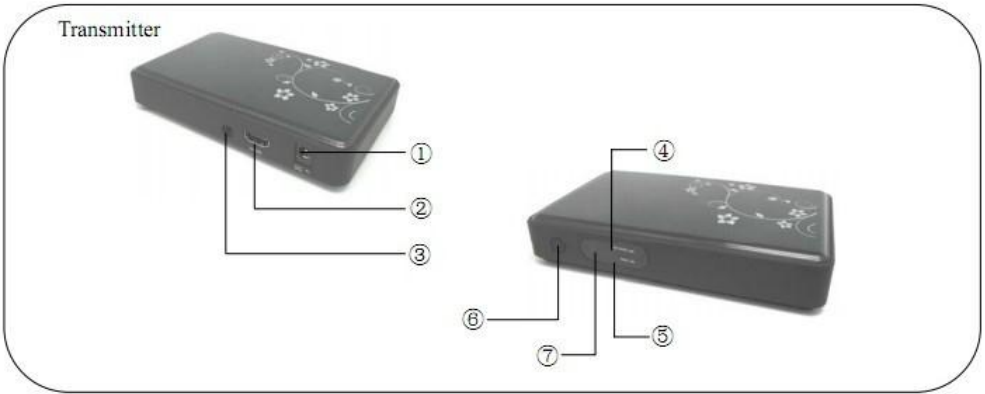
### 4. General Specifications

Supported Video Resolution	1080p, 1080i,720p,576p,480p,
Supported Audio Formats	PCM,DTS, DOLBY DIGITAL
Communication system	MIMO
Modulation	OFDM
Transmission Max. Power	12 dBm
Transmission Range	≤30M
System Latency	Less than 1ms
Antenna	Omni directional High performance small form factor Internal Antennas
Operating Frequencies	5.1~5.9 GHz (non-DFS FREQUENCY Bands for US, EU, JP, TW.
Supported IR Blasting Frequency	38KHz
Power Supply	100~240V AC, 5V 2A DC
Storage Temperature	-20~80°C
Operating Temperature	-10~50°C

\*Operation on the NON-DFS (Dynamic frequency selection) Frequency with automatic Frequency selection, the system will automatically change frequency in case of interference with another RF system.

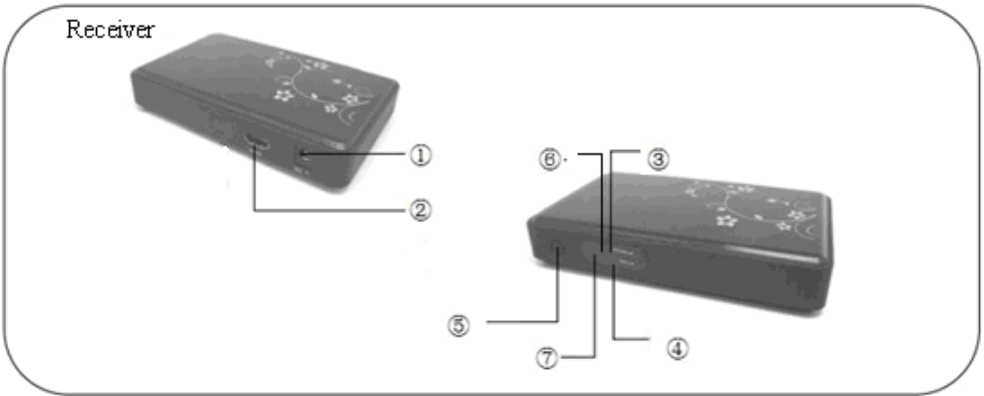
## 5. Hardware Overviews

### Transmitter



- ① Receptor for the power Adapter  
5V/2A, using power supply with different Voltage rating than the one included with the VLHD30 will cause damage and void warranty for these products.
- ② HDMI Input Connector  
Connect all devices with a good quality HDMI High Speed Cable to make sure The connection is in the best possible condition.
- ③ IR signal output interface  
Connect the IR extension cable and aim the IR head to the device which need to be control. It will receive the IR signal from the Transmitter side and send it to the Receiver side.
- ④ Network Link LED status  
After the power is connected, the green LED in the front will show the communication status. When the LED has turned green, your connection has succeeded. When the green LED is off, the connection is not complete or out of range. When the LED is flashing green, your device is defective.
- ⑤ Video Link LED status  
When the HDMI cable is connected, the LED shows the video connected status. When the LED is green, it show the video connect has succeeded. When the green LED is off, it show the video connect has failed or is not complete, make sure your TV is on, connected with the HDMI cable and on the right channel (source HDMI).
- ⑥ Frequency Reset button  
When the received video image quality is poor, you can press this button for a short time (less than 1 second). Then the transmitter is ready to change frequency and you can start to change the transmitting frequency for every time you press this button.
- ⑦ Power LED.

## Receiver



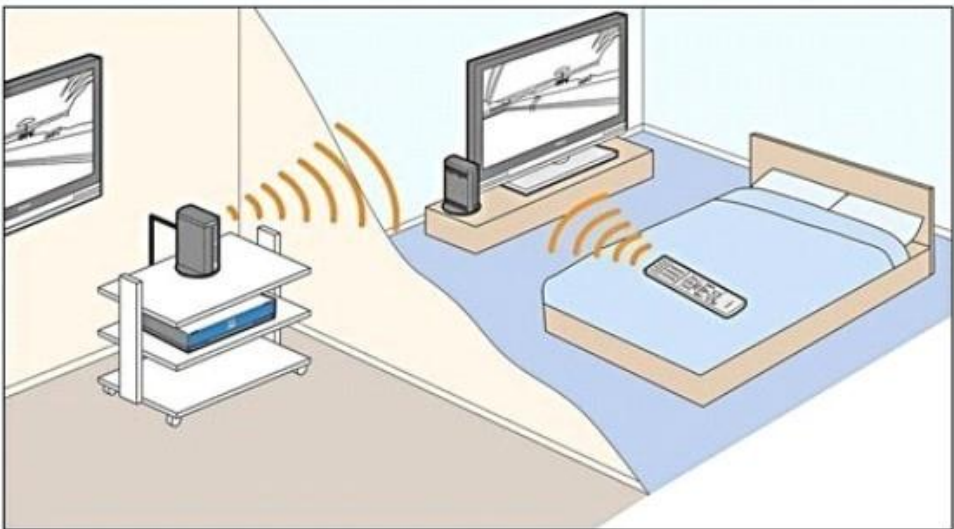
- ① Receptor for the power Adapter  
5V/2A, using power supply with different Voltage rating than the one included with the VLHD30 will cause damage and void warranty for these products.
- ② HDMI Output connector  
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When the HDMI cable is connected, the LED shows the video connected status. When the LED is green, it show the video connect has succeeded. When the green LED is off, it show the video connect has failed or is not complete, make sure your TV is on, connected with the HDMI cable and on the right channel (source HDMI).
- ⑤ This button is reserved for some extended functionality
- ⑥ IR control receiving port  
Aim the original remote of your video source to this window to control the source.
- ⑦ Power LED

## 6. Before you begin:

### Wireless considerations

The HDMI wireless kit let you access your video signal using a wireless connection from virtually anywhere within the operation range. Keep in mind, however, that the number, thickness and location of the wall and ceilings, or other objects that the wireless signal must pass through, may limit the range. Typically range depending on the type of material and background RF noise in your home and business. The key to maximizing the wireless range is to follow the basic guideline.

1. Keep the number of walls and ceilings between the Transmitter and Receiver to the minimum. Each wall and ceiling can reduce your transmission range from 3-90 feet (1-30M). For the best result, position your device so the number of walls and ceilings is minimal.
2. Be aware the direct line of the Transmitter and Receiver. A wall that is 1.5 feet (0.5M) thick, at a 45 degree angle appears to be almost 3 feet (1 M) thick. At a 2 degree angle it looks like over 42 feet (14M) thick! Position device so that the signal will travel straight through a wall or ceiling (instead of with an angle) for a much better reception.
3. Building material make difference. A solid material door or an aluminium studs may have a negative effect on the kit's range. Try to position the transmission line to drywall of open doorways. Material such as glass, steel, metal, wall with insulation, water (fish tank), mirrors, files cabinets and brick concrete wall will reduce your signal.
4. If you are using 5.4 GHz cordless phones or X-10 (wireless products such as ceiling fan, lights, and home security system), your wireless connection may degrade dramatically or drop complete. Make sure your 5.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.



## 7. Installing the system

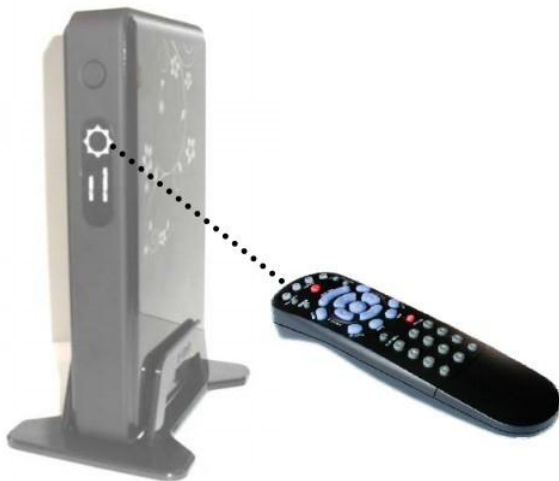
1. Please install the Receiver with the included bracket, and put it properly beside the TV.
  - when installing, put the Antenna Button on the front of the receiver in the upper position.
  - Keep the Receiver area clear, too many objects will reduce the receiver's signal quality.
  - The Maximum distance of the Transmitter and Receiver is 30 meter (100 feet) line of sight. Walls and ceilings will reduce the signal range.
2. When turning on the power, make sure the Power LED on the Receiver is on.
3. Connect the HDMI cable to the HDMI input of the TV Set. Please make sure the TV/display is powered and turned on and the input is properly selected. Then connect the cable to the Receiver's HDMI input.
4. Please install the Transmitter with the included bracket, and put it properly beside the player with the Antenna Button on the front of the Transmitter in the upper position.
  - Keep the Receiver area clear, too many objects will reduce the receiver's signal quality.
5. Connect the IR extension cable into the transmitter. Aim the IR LED to the player's receiver area so the player can receive the IR signal from the original remote.
6. When turning on the power, make sure the Power LED on the Transmitter is on. After 5~30 second the Network Link LED in the front of the transmitter and receiver will turn green when the connection between the two devices is succeeded.
7. Connect the HDMI cable to the HDMI output of the device you want to use for wireless video transition (e.g. DVD Player). Please make sure this device is turned on and the output is properly selected to HDMI. Then connect the HDMI cable to the Transmitter's HDMI input.

After Few second the Video Link LED shall turn green on the front of the Transmitter and Receiver. It is mean the installation has been succeeded.

***NOTE:*** Except North America, the wireless link might require 80 seconds to connect between Transmitter and Receiver, and show video on the TV screen. Please be patient and wait for a while.



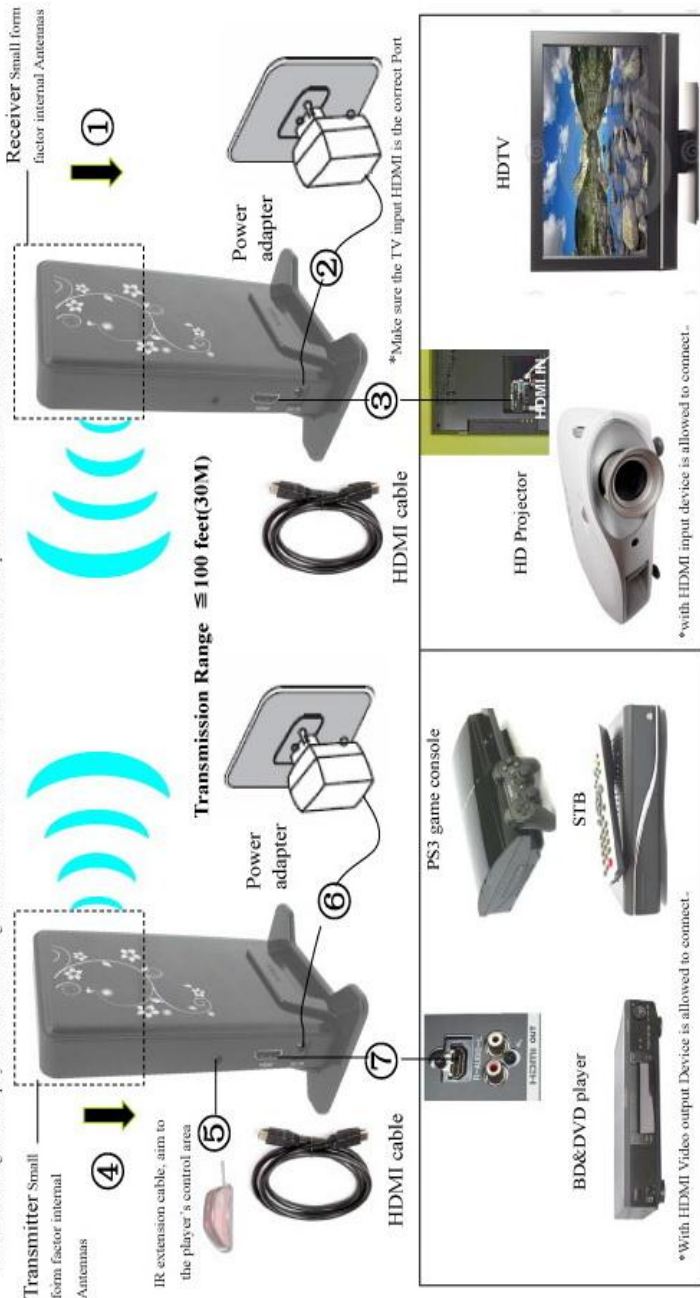
**Note:** Our product will only operate with 38K modulation remote controls.



## 8. Quick Installation Guide

### Quick Installation Guide

\* When installation, It will suggest the transmitter and receiver be setup both in vertical or horizontal. If set in other configuration (one in vertical, and other horizontal), there will reduce the transmission length and display resolution. Mounting on a wall are recommend. Please follow the below sequence to install the HDMI wireless Kit



## 9. Technical Data

	<b>Model name</b>	<b>VLHD30</b>
<b>transmitter</b>	Operating Frequencies	5.1~5.9GHz
	Frequency stability	±4PPM
	Band with (Max.)	40MHz
	Transmission Max. Power	≥12dBm
	Receiver sensitive	≤-75dBm
	System Latency	≤1ms
	transmission/ receiver channel	4channel/ 1channel
	HD Video interface	HDMI 1.3a
	HD Video Encryption	HDCP 1.2
	LOS(line of sight)	≤30M (100Feet)
	Input voltage	5VDC
	Operation current	2A±10%
<b>receiver</b>	Operating Frequencies	5.1~5.9GHz
	Communication system	MIMO
	Modulation mode	OFDM
	Frequency stability	±4PPM
	Band with (Max.)	40MHz
	Transmission Max. Power	≥15dBm
	Receiver sensitive	≤-65dBm
	System Latency	≤1ms
	transmission/receiver channel	1 channel/5 channel
	HD Video interface	HDMI 1.3a
	HD video encryption	HDCP 1.2
	LOS(line of sight)	≤30M
	Input voltage	5VDC
	Operation current	2A±10%
	Operating Temperature	-10°C~50°C
	Storage temperature	-20°C~80°C
	Operation Humility	15~85%RH

- **All the miner change in the technical specification will not be noted.**

## LED Status :

LED	status	Working status
Network Link (Transmitter)	Green on Green off Green blinking	→ Connection successful → Connection failed → Device defect
Video Link (Transmitter)	Green on Green off	→Video connection successful →Video connection failed
Network Link (Receiver)	Green on Green off Green blinking	→ Connection successful → Connection failed → Device defect
Video Link (Receiver)	Green on Green off	→Video connection successful →Video connection failed



## 10. Questions and Answers:

### \* **Failure 1: After power on the transmitter and receiver, the TV has no image?**

Answer : The Transmitter and receiver need few seconds for the initialize for the system connection, It will take about 15-30 sec Please be patience. If more than 1 min., there is no image on the TV, please check the transmitter and player, Receiver and TV is properly connected, and check the LED status table to find out the problem.

### \* **Failure 2: After power on the transmitter and receiver for more than 1 min. Why the Network Link LED is still off?**

Answer : It is possible the distance is too long or there are objects in between the transmitter and receiver. Please change the location.

**\* Failure 3: The distance between the transmitter and receiver are close, why 1 minute later the Network Link LED is still off?**

Answer : Please check the frequency between the transmitter and receiver is set. Please follow the frequency setting process to tune the frequency.

**\* Failure 4: The Network Link LED is on in the transmitter and receiver, but the Video Link LED is off and the TV has no image?**

Answer: Please make sure the transmitter resolution is in the technical specification. If not please revise the resolution to the proper setting.

**\* Failure 5: Why is the TV showing "no signal" ?**

Answer: Please check your HDMI connections. Make sure the TV input is in the correct HDMI port, the TV is turned on and put to the right source (e.g. HDMI1) Is the source playing movie? If not, please start the player.

**\* Failure 6: The TV has an image, but no sound?**

Answer: Please check if the player and TV are not in a "mute" status. If the status is OK, please unplug the HDMI cables, turn everything off, connect everything again and turn on the TV and set it to the right channel and turn up the volume of the TV.

**\* Failure 7: TV with sound, but no image.**

Answer : Please check the transmitter and receiver. if the connection is OK. please unplug the kit and power it on again.

**\* Failure 8: When trying to watch a Blu-ray disk, some TV's can't properly play the image, but on some TV's the image is OK?**

Answer: the Blu-ray player need to meet the HDCP specifications, please make sure your display support HDCP. If your TV does not support HDCP, there is no way to play a Blu-ray disk on this display.

**\* Failure 9: The Transmitter and Receiver Network Link LED is blinking and the TV has no image and sound?**

Answer : Please unplug the power of the Transmitter and receiver and plug again. If the LED keeps blinking, the device is defect, please contact your seller for repair.

**\* Failure 10: The TV has no smooth image?**

Answer: Maybe the signal is not properly received. We suggest you to relocate the receiver. Are the Transmitter and Receiver vertically positioned with the included brackets with the Antenna Button in the upper position ?

**\* Failure 11: The remote control cannot operate properly?**

Answer: Please check if the IR extension cable is properly plugged into the IR connector, make sure the IR LED is aimed to the players control receiver area. Make sure the remote control is a 38KHz IR control remote.

## NOTES

## DECLARATION OF CONFORMITY

Hereby, ebode declares that this **VLHD30** is in compliance with the essential requirements and other relevant provisions of the following Directives:

**1) Directive 1999/5/EC** of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity

**2) Directive 2004/108/EC** of the European Parliament and of the Council of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility

**3) Directive 2006/95/EC** of the European Parliament and of the Council of 12 December 2006 on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits

**4) Directive 2002/95/EC** of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment

**5) Directive 2005/32/EC** of the European Parliament and of the Council of 6 July 2005 establishing a framework for the setting of eco design requirements for energy-using

Technical data and copies of the original Declaration of Conformity are available and can be obtained from ebode electronics: PB 25, NL-4264ZG, the Netherlands.



### User Information for Consumer Products Covered by EU Directive 2002/96/EC on Waste Electric and Electronic Equipment (WEEE)

This document contains important information for users with regards to the proper disposal and recycling of ebode products. Consumers are required to comply with this notice for all electronic products bearing the following symbol:

#### Environmental Information for Customers in the European Union



European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams.

It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health.

For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

**DECLARATION OF CONFORMITY TO R&TTE DIRECTIVE 1999/5/EC  
for the European Community, Switzerland, Norway, Iceland and  
Liechtenstein**

Product category: general consumer (category 3).

English: This equipment is in compliance with the essential requirements and other relevant provisions of the European R&TTE Directive 1999/5/EC

Deutsch [German]: Dieses Gerät entspricht den grundlegenden Anforderungen und den weiteren entsprechenden Vorgaben der Richtlinie 1999/5/EU.

Nederlands [Dutch]: Dit apparaat voldoet aan de essentiële eisen en andere van toepassing zijnde bepalingen van de Richtlijn 1999/5/EC.

Svenska [Swedish]: Denna utrustning står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Français [French]: Cet appareil est conforme aux exigences essentielles et aux autres dispositions pertinentes de la Directive 1999/5/EC

Español [Spanish]: Este equipo cumple con los requisitos esenciales así como con otras disposiciones de la Directiva 1999/5/CE.

Português [Portuguese]: Este equipamento está em conformidade com os requisitos essenciais e outras provisões relevantes da Directiva 1999/5/EC.

Italiano [Italian]: Questo apparato é conforme ai requisiti essenziali ed agli altri principi sanciti dalla Direttiva 1999/5/CE.

Norsk [Norwegian]: Dette utstyret er i samsvar med de grunnleggende krav og andre relevante bestemmelser i EU-direktiv 1999/5/EF.

Suomi [Finnish]: Tämä laite täyttää direktiivin 1999/5/EY olennaiset vaatimukset ja on siinä asetettujen muiden laitetta koskevien määräysten mukainen.

Dansk [Danish]: Dette udstyr er i overensstemmelse med de væsentlige krav og andre relevante bestemmelser i Direktiv 1999/5/EF.

Polski [Polish]: Urządzenie jest zgodne z ogólnymi wymaganiami oraz szczególnymi warunkami określonymi Dyrektywą UE: 1999/5/EC



## Also available from ebody: TAKE10

### Universal Remote Control



The TAKE10 is an elegant universal remote that is able to control up to 10 A/V devices, including TV, DVD, VCR, Cable, X10 Home Automation products and more.

You don't even have to remember which TV station is on which button, as the brightly displayed icons on the full-colour LCD display make it easy to find and surf all the channels, plus your own favourite 'personal' buttons for you and your partner also give you quick access to all your own favourite channels too.

The remote can be set-up within 5 minutes and is very easy to use and navigate.

As the TAKE10 features RF control, you can even control equipment which is out of sight - even through doors, walls and ceilings.

#### **Features of the TAKE10**

- Familiar Channel Logos
- Large, Easy-to-Use Buttons and LCD Screen
- His & Hers Favourite Buttons
- 5-Minute Setup
- The Future-Proof Remote .... world's largest build-in IR library
- incl RF for controlling X10-PLC lighting control
- No PC needed to program
- QuickPower Feature
- Multilingual

## Also available from ebody: LightSpeaker

### The Next Bright Idea

The unique ebody LightSpeaker™ cleverly combines low consumption LED lighting with wireless sound in one easy 'plug and play' system that can be hidden away in a lampshade or light fitting. Install it into any room in just a few minutes without tools or extra wiring!



LightSpeaker™ can be mounted into many different light fixtures including pendant fittings, table and floor lamps.

It can even be recessed into your ceiling using our custom-made fitting. All you need is an iPod™, HiFi, television or PC to provide your music and a standard E27 socket to plug into, and this multiroom, two source system will deliver brilliant lighting and tuneful music around your home - free of wires and headphones.



### How it works

Up to two music sources - an iPod™ and a radio for example, can be connected to the transmitter in the base station, which wirelessly sends the sound to the LightSpeakers™ which are screwed into a standard E27 socket to receive their power.

The wireless transmitter base station or the supplied remote control allow you to control your source, music and lighting levels from anywhere in your home. Up to four pairs of LightSpeakers™ can be 'paired' to one base station.

## Also available from ebode: Hide your A/V gear

Place your A/V equipment inside your TV cabinet and out-of-sight! Use ebode's InfraRed products to control your equipment with your existing remote control.

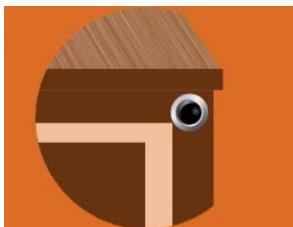
Place the table top mouse Receiver on top of your TV cabinet.



Stick the Mini Receiver right next to or under your TV.



Mount the Flush- Mount Receiver in your TV cabinet.



Our ebode proprietary eIR<sup>2</sup>x™ (pronounce Irex) Technology guarantees a high level of immunity for infrared noise from direct sunlight, CFL lighting and Flat Panel TV's (including Plasma, LCD and LED). This kit contains two 3IREDB for control of 6 devices, and a 1IRQC Quick Connect cable for direct control of popular audio/video Receivers (e.g. Yamaha, Onkyo, Denon, Marantz, NAD, Harman-Kardon, Pioneer, etc).

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[www.ebodeelectronics.eu](http://www.ebodeelectronics.eu)