

Infrared to Bluetooth Converter

# User's manual

wb\_electronics

# Introduction

The RE·BL is an IR to Bluetooth converter, designed to allow any universal IR remote to control a PS3 system. Using a RE·BL will allow you to fully control DVD/Blu-ray playback and power-on/off a PS3, without the need for any other remote. The RE·BL is easy to setup and only needs to be paired with a PS3 before it is ready for use.

It does however allow for advanced customization of options by connecting the RE·BL to a PC USB port (no drivers required) and using the accompanying PC-software.

# Features

- Full DVD/Blu-ray playback control of PS3.
- Power on / off control of the PS3.
- Support for external IR receiver and IR distribution networks for permanent installations.
- Supports multiple power sources: DC adaptor, USB, battery.
- Automatic low-power mode for extended battery life.
- Low-battery indicator.
- Easy battery-change by removing two o-rings, no screwdriver needed.
- Power-state sensing of the PS3 via USB connector.
- Activity LED for user feedback.
- Configurable IR device code to avoid conflicts between RE·BL and existing SONY DVD players.
- Customizable macros to execute command sequence on specific IR command incl. predefined power-off macro.
- Fully firmware upgradeable for future features incl. firmware upgrade or Bluetooth firmware.
- Driverless USB connection for advanced configuration through PC-software.
- Multilingual software incl. English, Danish, German, French, Spanish, Italian.
- Innovative casing design, allowing for easy change of batteries and flexible placement options leaving a small footprint.

# **Getting started**

(See quick start guide)

# Software

In order to use the RE·BL software, the RE·BL must be connected to the PC using a USB 1.1/2.0 cable with a mini-USB connector. The RE·BL uses existing Windows drivers and does not require any additional drivers to be installed before using the software.

If any changes are made to the configuration, they need to be written to the device by pressing the **Save** button. If factory settings need to be restored, it can be done by selecting the menu option **Options** > **Restore default settings**. This will erase all custom settings and restore them to their default values, including any custom macros which may have been defined.

# Settings tab

# Enable status LED on IR activity

Selects if the LED should light up when receiving valid IR commands from an IR remote

# Flash status LED on low battery level

Selects if the LED should flash shortly to indicate low battery level

# IR receiver (Internal / External)

Selects if IR should be received through the internal IR receiver, or through an externally connected IR receiver. If an external IR receiver is used RE·BL must be powered by USB or DC adaptor, not batteries.

- Choose between:
- Internal
- External modulated (RE·BL X only)
- External demodulated
- Repeater mode (RE·BL X only)
- Autosense (RE·BL X only)

# Power tracking

Selects USB, Internal or no powertracking. Powertracking is a way to make sure that power-on and power-off commands are handled correct.

To learn more about powertracking, see FAQ entry 6: "What is power-tracking and how does it work?"

# Bluetooth pairing mode (RE·BL X only)

Selects if RE·BL X should initiate Bluetooth pairing during the first 20 seconds of power up, or if it should only pair if it receives an IR button press (key '2').

(If the PS3 is turned off while powering on RE·BL X in Auto pairing mode, the PS3 will turn on because it receives a pairing command. If this behavior is not desired, choose "Manual" mode.)

# Macros tab

The macros tab allows the user to define 10 custom macros, which will execute a sequence of commands by activating only one IR command. The power-off macro is a predefined macro, which will execute a power-off sequence which will power off the PS3 by pressing only one button on the IR remote.

# Select macro

Selects which of the 10 macros to edit

# Command

Selects which IR command to execute

## Duration

Specifies the time in milliseconds to activate the current command

#### Pause

Specifies the time in milliseconds to pause until the next command should be sent

# Default

The default button resets the currently selected macro to its default values

# IR device code tab

By default the RE·BL responds to IR codes from the device code SONY DVD1a, but this can be changed to any SONY device code. For ease, it is possible to select the most common used device codes directly from the selection box. Make sure that you have a remote that transmits the selected codes, or the RE·BL will not respond.

If you have an existing SONY DVD player that conflicts with the default RE·BL device code, change the device code from **DVD1a** to **DVD2a** in the selection box and press **Save**. In the Harmony Remote software, add a new device with the model name **RE·BL DVD2a** to allow control of a RE·BL with the IR device code DVD2a.

A custom IR device code can be entered by selecting the **Custom** entry from the selection box, and entering the code manually.

# Install module tab

Allows for future features to be downloaded as a firmware upgrade.

# **Product information**

# Changing or removing batteries

Batteries are removed by removing the two o-rings, lift the covers apart (no screwdriver is needed) and lift the batteries from the battery-holder. Replace batteries with type 2 x "AA alkaline" (LR6).

# **Product warranty**

The limited 2 year warranty covers production defects from the date of purchase.

# Disclaimer

Do not use this product for any other purpose than the intended. Under no circumstances including negligence, shall WB Electronics be liable to you for an incidental, indirect, special or consequential damages (including property damage) arising from the use or misuse of this product.

# Intellectual rights

The software is exclusively for use with WB Electronics ApS products. The software must not be altered or modified in any way. Copyright © 2008 – WB Electronics ApS

# **Technical specifications**

Dimensions	Unit: 85x45x34mm (3.3x1.8x1.3 inch), Packaging: 112x69x37mm (4.4x2.7x1.5 inch)
Weight	Unit: 53g (1.87oz), Gross: 121g (4.28oz)
Temperature range	0° - 45° Celcius, 32° - 113° Fahrenheit
Relative humidity	15% - 95% Non condensing
Placement	Do not place in direct sunlight
DC Power supply	9-12Vdc, min. 100mA
Batteries	2 x AA alkaline (LR6) standard batteries
Expected battery lifetime	6-12 months of normal use. (Expected battery lifetime is only indicative. Actual battery
	lifetime depends on battery type, model, usage scenarios etc.)

# System requirements

Windows 2000, Windows XP, Windows Vista (32 and 64bit) or later Min. 2MB free hard disk space Min. 32MB free memory Min. 1 free USB 1.1 or 2.0 port

#### Trademarks

- \* "RE·BL" is a trademark of WB Electronics
- \* "Bluetooth" is a trademark of Bluetooth SIG, Inc.
- \* "PLAYSTATION" is a registered trademark of Sony Computer Entertainment Inc.
- \* "SONY" is a registered trademark of Sony Corporation.
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# Troubleshooting / FAQ

# 1. My RE·BL and PS3 will not pair

Make sure all power supplies are completely removed (DC adaptor, USB and batteries inside the casing) before trying to pair the RE·BL and PS3. Also make sure that the PS3 screen says "Press ENTER+START to begin pairing". When all power sources are removed the RE·BL should start flashing for 20 seconds when connecting either: DC adaptor, USB or batteries. Within these 20 seconds (while the LED flashes) press and hold the '2' button on the IR remote, the LED on the RE·BL should be constant on until the PS3 says "Registering". If you let go of the '2' button before the PS3 has registered the RE·BL, you will have to start from the beginning and power off the RE·BL again.

If the above does not work try the following:

- Change the remote control batteries.
- Power the RE·BL directly from a DC adaptor or USB.
- Make sure the RE·BL device is selected as the active device in the Universal Remote Control.
- Hold the remote control in front of the IR window of the RE·BL with approximate 10cm distance while holding the '2' button.

# 2. My RE-BL conflicts with my existing SONY DVD player

If you have an existing SONY DVD player that conflicts with the default RE·BL IR device code, the RE·BL can be configured to respond to another IR device code. In order to do this, connect the RE·BL to a PC using a USB cable with a mini-USB connector. Open the RE·BL software and select the **IR device code** tab, change the device code from **DVD1a** to **DVD2a** (or other) in the selection box and press **Save**. In the Harmony Remote software, add a new device with the model name **REBL DVD2a** to allow control of a RE·BL with the IR device code DVD2a.

Logitech Harmony selection: Device: Game Console > Game Console (With DVD) Manufacturer: WB Electronics Model: REBL DVD2a

# 3. My RE·BL does not respond to any IR remote commands

Make sure that power is supplied to the RE·BL either by DC adaptor or USB, and make sure to use fresh batteries (See manual on how to replace batteries).

Make sure that the IR device code specified in the RE·BL software matches the IR remote control used. Try loading the factory settings in the RE·BL software, to reset all settings to default.

If using a Logitech Harmony or other universal remote control, make sure the REBL device is selected as the currently activated device.

# 4. Can I power my RE·BL from my PS3's USB port

Yes, the RE·BL can be powered from the PS3 USB port, but the PS3 does not supply power to its USB port when it is powered off. Therefore you will not be able to turn on the PS3 from your IR remote control if it does not have an additional power source. If you do not wish to use an external DC adaptor, you could use batteries to power the RE·BL when the PS3 is off. The RE·BL will automatically draw power from the USB port when the PS3 is on. This way you can control the PS3 as normal and you do not need any external DC adaptor. Also battery life will be increased since power is supplied by the USB port whenever the PS3 is turned on.

# 5. My remote cannot transmit the key "2" continously, so I cannot pair with the PS3.

To pair with a PS3, you must go through the sequence described in: "1. [Q] My RE·BL and PS3 will not pair.".

Please note: From configurations software v1.19 (firmware 1.23) and up, an autopairing feature was added which no longer requires the "2" key to be pressed. Simply enter the "Register BD Remote" menu on the PS3, and power on the RE·BL. The pairing will then initiate automatically.

# 6. What is power-tracking and how does it work?

The PS3 has no specific power-off command, so power-off is implemented as a sequence of commands (a macro) in the RE·BL firmware. Pressing power off on the remote will initiate the macro.

If the PS3 is already off when pressing power off on the remote (for instance if the controller has been used to turn of the PS3), the PS3 will boot up instead of turning off. The powerstate will be out of sync.

RE·BL has 2 ways of overcoming this problem, internal and external (USB) powertracking. They can be enabled in the configuration software (from v1.15 and up). Internal and external is default off.

The USB (external/hardware) powertracking works like this:

If the RE·BL does not detect a USB-link (PS3 = Off) it ignores the poweroff macro. The USB link is only present from the PS3 when the PS3 is on.

The internal powertracking works like this:

When powered up, the RE·BL sets it's internal state to Off. When the internal state is Off, it ignores the poweroff macro. Any other key is allowed, and any other key will change the internal state to On (any other key will also power up the PS3). Once the internal state is On, the poweroff macro is allowed which in turn will set the state to Off.

If the PS3 and RE·BL comes out of sync, (PS3 = On, Internal state = Off) the RE·BL will not issue a poweroff macro until at least one other key has been pressed changing the state to On. Then they will be synced again.

If PS3 = Off and Internal state = On, an accidental firing of the poweroff macro will cause the PS3 to turn on accidentally.

7. My Logitech Harmony remote seems to be slow in response, especially when I'm scrolling through menus? By default the Logitech Harmony remotes are setup with a long delay from a key is pressed, to the transmission of actual IR commands.

This setting can be changed in the Logitech Harmony software:

- Start the Logitech Harmony software
- Select devices tab
- Select settings for device RE·BL
- Check / Tick "Adjust the delays (speed settings)" and press Next
- Set "Power On Delay" to 1500
- Set "Inter-key Delay" to 0
- Set "Inter-Device Delay" to 0
- Press Next, and finish the guide by updating the remote control

# 8. When pressing the power-off button on my Logitech Harmony during Bluray/DVD playback, the PS3 does not turn off?

The reason is that the Logitech Harmony by default sends a stop command, then immediatly sends the power-off macro. A stop command takes a long time to execute on the PS3 (up to 10 seconds), and the power-off macro is therefore "lost". The solution is to insert a long delay between the stop-command, or (better), remove the stop command completely. This is done in the Logitech Harmony configuration software, under the settings for the activity (for instance "Watch a BD"). Choose "Change options" and press [Next]. Then choose "Dont send stop command" under the "Stop on exit" property. Press save and update your remote control.

The above is only a problem with activities. Using the Power off button under the RE·BL device, powers off the PS3 as expected.

#### 9. When pressing the power-off button on my remote, my PS3 Slim sometimes doesn't turn off?

When pressing the power-off button, RE-BL executes a macro that goes through numerous different commands, to turn off the PS3.

The first command sent is a PS keypress, with a length of 2500ms (2,5 seconds). The PS3 Slim sometimes requires a slightly longer keypress to enter the power-off menu, and we have found 3750ms (3.75 seconds) to work well with both the original PS3 and the PS3 Slim.

The change can be made in the configuration software, under the Macro tab. Choose the power-off macro (first on the list), and change the value 2500 to 3750 on the PS/Powertoggle command and press "Save".

Configuration software v1.22 and higher already has the value 3750 as default.

# 10. What is the difference between RE·BL and RE·BL X?

RE·BL X (extended version) is a new version of the RE·BL (classic version), released in February 2010. RE·BL X is the result of the feedback and suggestions we have received from users of the original RE·BL.

The major improvement over the original RE·BL, is the IR port which supports almost any kind of IR signalling, demodulated signals from an external IR eye, or modulated signals from an IR distribution network. An auto-sense function chooses between the different input modes automatically.

One of the most interesting new features of the IR port, is the ability of RE·BL X working as an IR repeater. This is very useful for A/V devices placed in a closed rack. RE·BL X will take any signal received from the internal IR receiver, and transmit it to a single, dual or quad IR emitter cable connected to the IR port, while still providing the usual functionality of IR to Bluetooth conversion.

(Since  $RE \cdot BL X$  keeps all current features from the  $RE \cdot BL$  (classic version) and is available at the same retail price,  $RE \cdot BL$  (classic version) will no longer be produced or sold).

All RE·BL X units are marked with an [x] on the outside of the packaging, serial-number and product-label on the inside of the plastic casing.

For further information and support, visit:

# www.**re-bl**.com

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