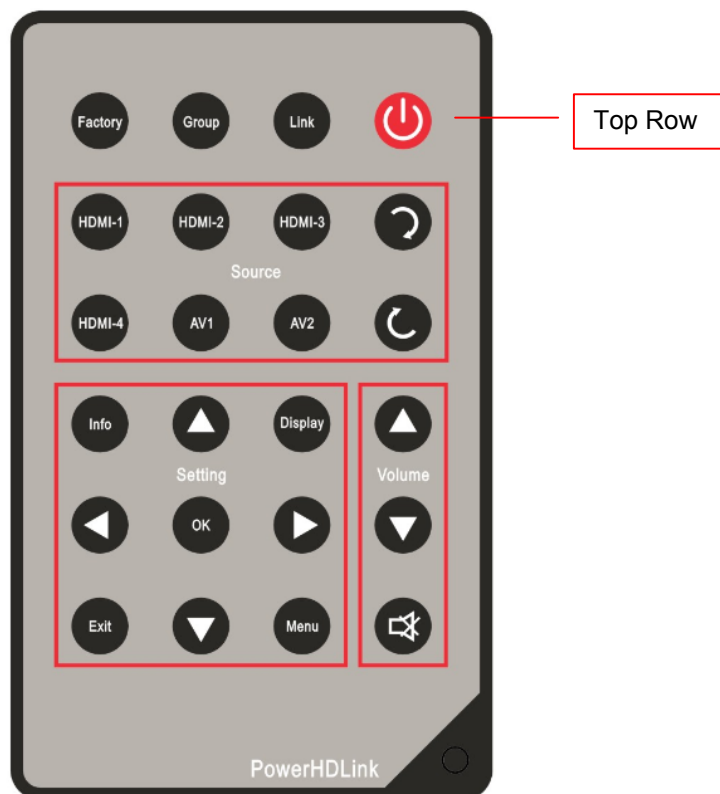


5 Remote Controller

The HDMI Over Power Line system comes with its own Remote Controller Unit that is designed to control the Transmitter and Receiver. The Remote Controller can manipulate the TX locally or from a remote location (i.e. where receiver is located). The receiver accepts IR signals from the Remote Controller and passes them to the transmitter through the power lines.

The Remote Controller can also bring up and manipulate the OSD Menu on the TV attached to the RX. It can also adjust the audio volume on the receiver.

The Remote Controller panel is separated into 4 areas (Top Row, Source Area, Setting Area, Volume Area) as shown below:



Remote Controller Button Descriptions



























Fig A	rea	Name	Description
	Top Row	Active/Power Saving	Toggles the states of the TX and RX between Active mode and Power Saving mode. Power Saving mode is the state you can set the TX and RX to when not in use. In Power Saving mode, the RX & TX stop sending video to the TV monitors and then revert to a low-power state. The Power Saving mode for the RX and TX are independent of each other and must be set at their respective locations.
	Top Row	Link	Establishes a PLC connection between the TX/RX and other HomePlug AV PLC.
	Top Row	Group	Use this button if the RX and TX cannot establish a connection (cannot be paired). You also need to use this button when adding an additional RX to your existing RX/TX environment (or group.). This button is also used to allow the RX/TX to reset the system to factory defaults.
	Top Row	Factory	Reserved
	Source	Not in use	Reserved
	Source	Not in use	Reserved
	Source	Not in use	Reserved
	Source	Not in use	Reserved
	Source	Not in use	Reserved
	Source	Not in use	Reserved
	Source	Not in use	Reserved
	Source	Re-sync audio and video (for RX)	Use this button for audio and video re-synchronization when there is lip-sync issue on the receiver TV.

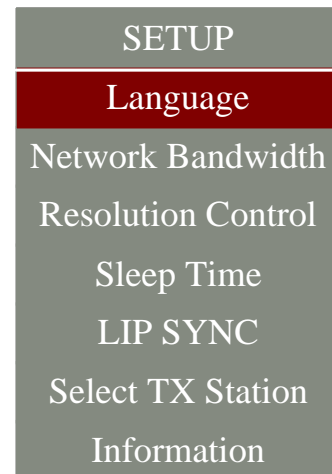
Fig A	rea	Name	Description
	Volume	Increase Volume (for RX)	Increase audio volume on the receiver
	Setting	Display (for RX)	<ol style="list-style-type: none"> When the OSD menu is not displaying, this button is used to toggle the TV system between 59.94 Hz (NTSC) and 50 Hz (PAL). When the OSD menu is displaying, this button is used to enable/disable the display of PLC throughput warning message
	Setting	Scroll up (for RX)	Scroll up button on the OSD Menu
	Setting	Information (for RX)	Displays OSD information
	Volume	Decrease volume (for RX)	Decrease audio volume on the receiver
	Setting	Move right (for RX)	Move-to-right button on the OSD Menu
	Setting	Setting confirmation (for RX)	This button is like the "Enter" key, used to confirm a setting selection.
	Setting	Move left (for RX)	Move-to-left button on the OSD Menu
	Volume	Audio Mute	(for RX)Audio Mute on/off on the receiver (for TX)Change HDMI output color mode
	Setting	Menu (for RX)	Bring up OSD Menu on the display that is attached to the RX.
	Setting	Scroll down (for RX)	Scroll-down button on the OSD Menu
	Setting	OSD Exit (for RX)	Exit OSD Menu
	Setting	Force TX to wakeup	Force TX to wake up if TX and RX are in linked state
	Setting	Force TX to Standby	Force TX to enter into the standby mode if TX and RX are in linked state

6 OSD Menu

When the system is active, you can press the “Menu” button on the remote controller to bring up the OSD menu on the display attached to the RX. The OSD menu is used to configure various options as described below.

OSD Menu SETUP Items:

- Language
- Network Bandwidth
- Resolution Control
- Sleep Time
- LIP SYNC
- Select TX Station
- Information



Navigating the OSD Menu

You can navigate the OSD Menu using the following keys on the Remote Controller.

- Press the “Exit” button to exit the OSD Menu
- Press [→] or “OK” buttons to select an item on the menu and move on to the next menu item.
- Press [↑] or [↓] buttons to select the optional items.

OSD Menu Descriptions

Menu Item	Description	Options
Language	Selects language for OSD Menu	<ul style="list-style-type: none"> ■ English ■ German ■ Spanish ■ Japanese ■ Italian ■ Traditional Chinese ■ Simplified Chinese ■ French
Network Bandwidth	Choose the option that best matches your Network Bandwidth (Low – Excellent). This product uses your selection to adjust the compression bit rate to optimize the video stream and image quality. If you are unaware of your Network Bandwidth, you can simply choose the Auto Detect option.	<ul style="list-style-type: none"> ■ Auto Detect ■ Low ■ Fair ■ Good ■ Excellent
Resolution Control	Selects the output resolution for the display attached to RX.	<ul style="list-style-type: none"> ■ By Source ■ By TV
Sleep Time	Sets the amount of time that the RX remains idle before it goes into Power Saving mode. RX is idle when it is not receiving video from the TX; the TX is idle when there is no video input from the "selected" media source (indicated by Source LED). Only RX uses this configuration option.	<ul style="list-style-type: none"> ■ Off ■ 10 minutes ■ 30 minutes ■ 60 minutes ■ 120 minutes
LIP SYNC	The selections in this option are used as a reference value for the system to adjust audio timing. (only used for 60/59.94 Hz or NTSC video systems and does not apply to 50 Hz or PAL video system)	<ul style="list-style-type: none"> ■ 60 Hz ■ 59.94 Hz
Select TX Station	If there are multiple TX stations, this item allows users to select the TX station to receive video.	<ul style="list-style-type: none"> ■ TX station name is editable. The default names will be numbered 1~4
Information		Firmware version of TX/RX

7 Adding an additional RX

You can attach up to 4 RXs to the single TX **depending on your power-line network quality**. Not all power-line is able to transmit video to multiple RXs. In most of applications, you can only turn on 2 RXs simultaneously.

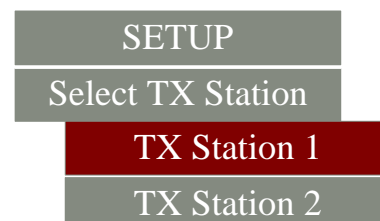
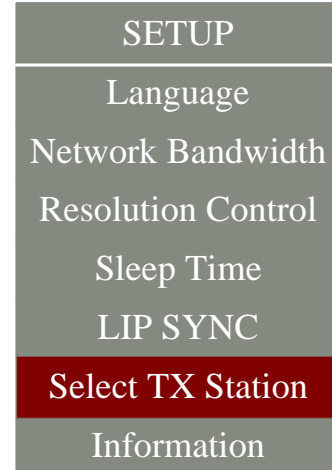
You must perform the RX-TX pairing procedures each time when you want to add an additional RX to your system. Please refer to Appendix 1 for the detail TX/RX pairing.

8 Running Multiple Transmitters with Multiple Receivers






Each receiver (RX) can be paired with a maximum of 4 transmitters (TX) as described in the Chapter “Adding an Additional RX”. Therefore, an HDMI Over PLC receiver can choose from multiple transmitters as the media source. Remote control will also be automatically redirected when changing to a different transmitter.

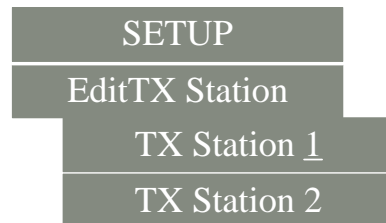
【Selecting a different TX source for a RX】

1. On the remote control (at the RX), press the “Menu” button to open the OSD menu. Use the up/down buttons to move to the “Select TX Station” item.
2. Press the “OK” button to enter the “Select TX Station” menu.
3. On the “Select TX Station” screen there is a TX stations list. Use the up/down buttons to select the TX Station.
4. Press the “OK” button to confirm the selection.
5. If the selected TX is currently transmitting the video, the video should begin to display.



【Modifying the name of TX Station】

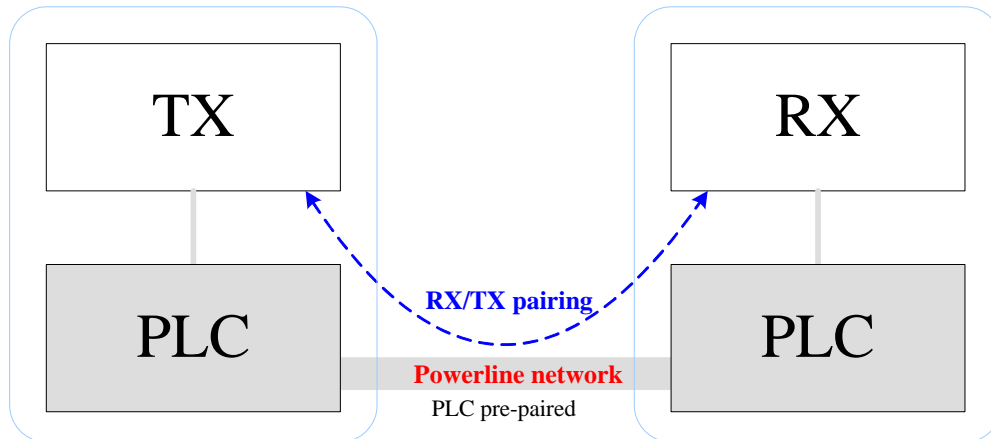
1. On the remote control, press the “Menu” button to open the **OSD** menu and use the up/down buttons to move to the “Select TX Station” item.
2. Press the “OK” button to enter “Select TX Station” menu.
3. Press the up/down buttons and highlight the intended TX.
4. Press the “Menu” button again to edit the name of selected TX. Editing keys are described below:
 - ◆ The underline below the TX name implies the current cursor position.
 - ◆ Use the  and the  buttons to select a certain character (alphabet or numeric).
 - ◆ Use the  button to move back one space, deleting one character.
 - ◆ Use the  button to confirm the character selection and move to next space.
 - ◆ Use the  button to finish the editing.



Appendix 1 RX/TX Pairing

These procedures are used when you want to add an additional RX into the environment or re-pairing RX/TX is necessary.

“Pairing” is performed to establish/re-establish a logical connection between the RX and TX.




There are two methods to pair the RX with TX as described below:

a) Press “Group” buttons on the RX and TX rear Panels:

1. Press the Group button on the rear panel of the RX until the “PAIRING” message displays on the TV attached to the RX.
2. Press the Group button on the rear panel of the TX for 1 second at least until the Link and PWR LEDs begin to alternately “double blink”.

b) Press “Group” key on the remote controller

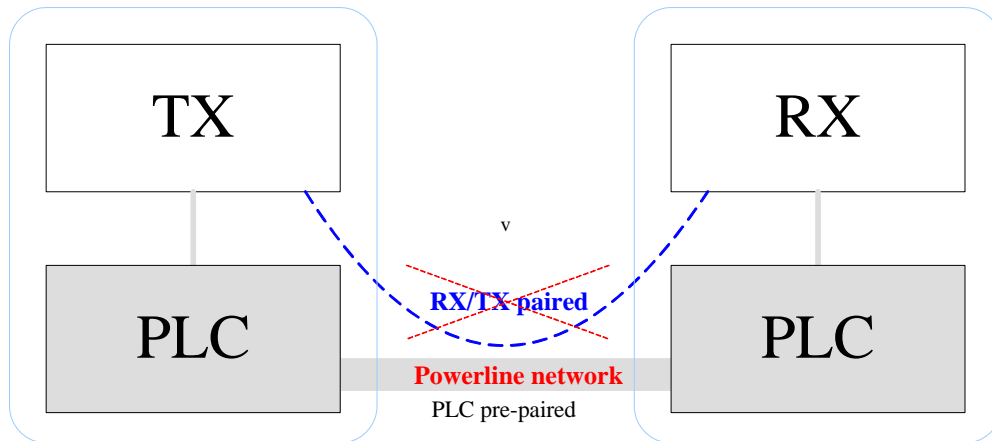
Push the  (Group button) on the remote controller to pair the RX and TX.





If the pairing success, the message on the TV screen will change from “PAIRING” to “PAIRED”, followed by the video (if video is currently streaming from the source).

NOTE: It is strongly recommended to do the procedures (RX/TX Pairing) with the RX and TX in the same vicinity, preferably on the same power outlet (for testing). The max pairing number for TX/RX is 4. Please refer to the Appendix 2 to reset the pairing table if there’s no more space in the pairing table.

Appendix 2 Reset RX/TX to System Defaults

The procedures below set the RX and TX to factory defaults and are used when troubleshooting the system (i.e. Video fails to appear on TV attached to RX).



- a) At the TX, press the Group Button  several times (in rapid succession) on the remote controller and **CONTINUE** to do so until all the LEDs on the front panel illuminate; then press the  button (on the remote controller). The LEDs will flash off-on-off-on and TX will reboot automatically. TX will be reset to the factory default settings.
- b) At the RX, press the Group Button  on the remote controller **AT LEAST 5 TIMES** (in rapid succession) until the screen message displays on the TV. then press the  button (on the remote controller) to reset to the factory default settings.

Note: If you reset the system to the factory default values according to this Appendix 2, you will need to execute the RX/TX Pairing procedures (Appendix 1) again.

Reset to default settings ?
Press "OK" to reset.
Or,
Press any key to exit.

Appendix 3 Trouble Shooting Checklist

Trouble Shooting		
Scenario Possible	Reason	Resolution
TV attached to the RX displays no video images	<ul style="list-style-type: none"> ● Power is switched “off” at the RX or TX. ● Cable connections are not secure. 	<ul style="list-style-type: none"> ■ Make sure the power switches on the back panels of both the TX and RX are turned on. ■ Make sure the power cables and HDMI cables are secured.
	<ul style="list-style-type: none"> ● Media source player is not working properly. 	<ul style="list-style-type: none"> ■ Verify that the media source (e.g. player) is working properly by connecting it directly to a TV.
	<ul style="list-style-type: none"> ● Media source player is sending a video format that is not supported by the TX & RX (e.g. 1080@60P). 	<ul style="list-style-type: none"> ■ If the media source player can work directly with the TV, it might indicate a problem with the video/audio format. Check Appendix 4 (Video Specifications) to make sure the video format delivered by the player is supported by the system (RX/TX).
	<ul style="list-style-type: none"> ● Interference from an EMI or electrical surge protection device. 	<ul style="list-style-type: none"> ■ If there are electrical surges or an EMI protection circuit inside the power socket, change to the different socket. Also, make sure that you are using all three prongs on the power connector.
Power indicator LED is not illuminated.	<ul style="list-style-type: none"> ● Power not turned “On” for RX or TX. 	<ul style="list-style-type: none"> Check the power switch on the rear panels of both RX and TX to make sure both are turned “On” .
	<ul style="list-style-type: none"> ● Device is not starting normally 	<ul style="list-style-type: none"> ■ If there is no response to the buttons or remote controllers, try turning the power switch “Off” and “On” .
	<ul style="list-style-type: none"> ● Power supply short 	<ul style="list-style-type: none"> ■ If the suggestions above do not remedy the problem, the power supply in the devices may have a short. Unplug the power cords immediately and contact your dealer.
The TV attached to the RX displays “Not paired, please do pairing” .	<ul style="list-style-type: none"> ● RX and TX are not successfully paired. 	<ul style="list-style-type: none"> ■ Try the pairing procedures in Appendix 1 to re-establish connections (pairing). ■ If it does not resolve the problem, refer to Appendix 2 (Reset TX/RX) first and then Appendix 1 (system pairing).
The RED LED on TX front panel is always flashing.	<ul style="list-style-type: none"> ● Media source player is not powered on or is in standby mode 	<ul style="list-style-type: none"> ■ Check to see if the media source player is turned on. ■ Check to see if the media source player is sending video (may have to press the play button on the media source player).
	<ul style="list-style-type: none"> ● Unsupported video/audio format from the media source player 	<ul style="list-style-type: none"> ■ Refer to the user manual of media source player and make sure it is sending a video format supported by

Trouble Shooting		
Scenario Possible	Reason	Resolution
		the system such as 1920X1080@60i, PCM audio – see Appendix 4 Video Specifications.
During video playback TV displays “Waiting for TX to be ready.”	● PLC network cannot support enough bandwidth or network quality is not stable, which results in suspension of the video picture.	<ul style="list-style-type: none"> ■ This problem will usually resolve by itself within a minute. ■ If it is a persistent problem, it may be a faulty socket. Try another socket.
	● RX is continuously rebooting.	<ul style="list-style-type: none"> ■ If the Power LED indicator keeps turning on and off, the power supply may not stable. Unplug the power cord and contact your dealer.
Message: “unsupported format”	● The resolution of the media source player output is not supported by the TX. The system can only support up to 1920x1080@60i or 1920x1080@24P	<ul style="list-style-type: none"> ■ Media sources may be configured to “auto detect” the format used by the TX; in this case there are usually no problems. However, if the Media source had been manually configured to send a certain format that is not supported by the TX, you will need to reference the Media source manual to reset the format to one supported by the TX (see Appendix 4 – Video Specifications).

Appendix 4 system Specifications

Video Specifications:

Resolution	Interface	HDMI
1920 x 1080p/24, 23.98		✓
1920 x 1080i/60, 59.94		✓
1920 x 1080i/50		✓
1280 x 720p/60, 59.94		✓
1280 x 720p/50		✓
720 x 576p/50		✓
720 x 480p/60, 59.94		✓
720 x 576i/50		✓
720 x 480i/59.94		✓

Audio Specifications:

Interface	HDMI
Format	PCM
Sampling rate and resolution	44.1/48 kHz, 16 bits
Audio channel	2 channel
Connector	HDMI

System Specifications:

Item	Transmitter	Receiver	Note
HDMI Port	Input: 1, Output: 1	1	
IR sensor port		1	36/38 kHz / 56 kHz
Remote Controller	1		
IR Blaster port	1		
IR Blaster cable	1		
AC Power Input	100-240V/50, 60 Hz		0.15A max.
Power Consumption	12W	9W	average
Operation Temperature and Humidity	10~40°C, 30~80%RH		
Storage Temperature and Humidity	-20~80°C, 20~90%RH		