

PowerLink AUX Expander

OneRemote Type 30017774

User Manual



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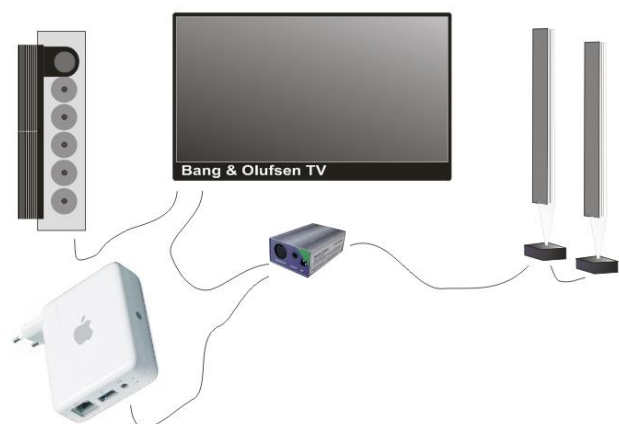
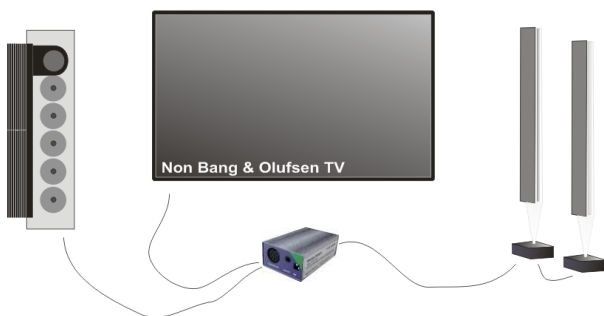
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POWERLINK AUX EXPANDER

The OneRemote Powerlink AUX Expander enables two different sound sources to share ONE set of Bang & Olufsen PowerLink AUX Expanders.

Input Sources:

- Any Bang & Olufsen radio or TV sound source.
- Any **level controlled** analog audio source like a TV, a Sonos system, an Apple Airport, a Bluetooth receiver, a DAB receiver or similar.



PLUG & PLAY OPERATION

No programming is needed to make the AUX Expander work. As soon as fully connected sound from one connected device is lead to the AUX Expanders, in accordance with below truth table.

The PowerLink source always has priority over the AUX source. See the truth table.

When detecting sound from the AUX input, the AUX Expander powers on and loop the AUX source to the speaker.

The AUX Expander remain powered up, until no sound has been detected from the AUX source for about one minute.

PowerLink Source	AUX	PowerLink Out
ON	OFF	PowerLink Source
ON	ON	PowerLink Source
OFF	ON	AUX *1
OFF	OFF	AUX Expanders off *1

**1 The AUX Expander remain powered up for a minute after sound has disappeared from the AUX source.*

LED INDICATION

When the AUX Expander is powered up the LED flashes RED a few times and then stops flashing. When sound is flowing it turns Green, now and then blinking with sound pulsation.

Red Flash	At power on the LED flashes a few times, while initializing.
Red	Standby, no input is sensed at either input.
Green	Sound is detected at one of the inputs and speaker is powered on.
Green flash.	AUX source is playing but the sound level has been too low for more than 10 seconds. After 90 seconds of flashing the speaker will power off, unless the sound level rises during this period and thereby reset the time-out period.

FEATURES

GALVANIC ISOLATION

Designed with galvanic isolation the input signals are kept completely separate from each other. This prevents problems with floating grounds and the two separate ground potentials for data and audio.

- Signal switching is made with a mechanical relay.
- The data ground signal is switched with a mechanical relay.
- The analog ground signal is switched with a mechanical relay.
- Digital data signal flow via a galvanic isolating optocoupler.

LOSSLESS POWERLINK AUDIO PASS

The PowerLink audio signals pass without any modification; the output of the is the same as the input.

DATALINK PASS

When the PowerLink source is active, any DataLink signals herein are passed directly to the output.

INSTALLATION

The OneRemote PowerLink AUX Expander is easily installed:

1. Connect the AUX Expanders with PowerLink cable(s). *Not included.*
2. Connect the two sound sources with appropriate cables. *Not included.*
3. Connect the power supply.

CABLE QUALITY

Be sure to use good quality PowerLink cables, preferably the double-shielded type, especially if long cables are used. DO NOT use un-shielded cables for any connection.

PowerLink Cable MKII with 4-wire connections is not recommended.

Poorly or non-screened cables pick up noise from the surroundings.

AUX SOURCE NOISE REDUCTION

The AUX input can connect to any controlled line like an output from a preamplifier or a headphone output from a TV.

Use the NR switch on the OneRemote AUX Expander to match the source and thereby reduce noise. Use the position giving the best result.



If noise disappears when pulling out the AUX jack, the noise is either being picked up from cables or the quality of the source is poor.

In rare setups a humming low pitched noise can appear due to problems with ground planes. If this occurs, an audio transformer can solve the problem.

AUX SOUND LEVEL

Use the two potentiometer adjustments to align the levels of the PowerLink and AUX sources.

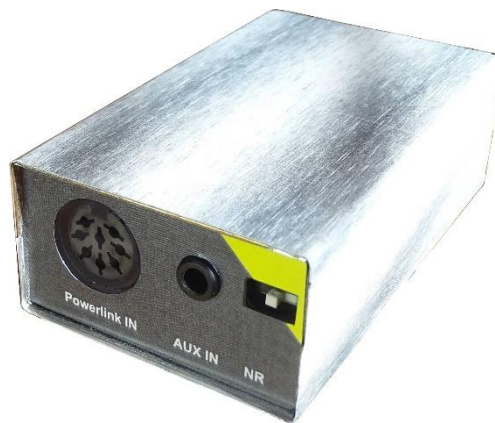
This adjustment also sets the maximum volume for the AUX source.



TECHNICAL SPECIFICATIONS

Dimensions	25 x 45 x 74 mm
Included accessories	Power 12VDC @ 400mA Euro

CONNECTIONS

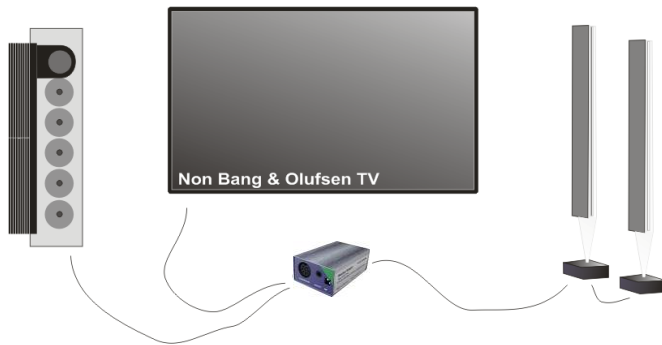


Sockets:

PowerLink in	DIN 8-pin PowerLink
AUX in	3.5 mm stereo jack
OUT	DIN 8-pin PowerLink
Power	12V DC 300mA

POWERLINK AUX EXPANDER – APPLICATION EXAMPLES

Non Bang & Olufsen TV, all **Beo4** controlled



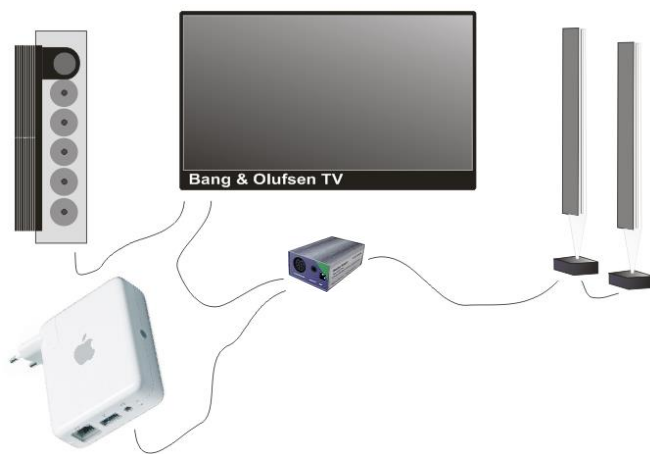
When the Bang & Olufsen radio is powered up, sound from the radio is automatically routed through the AUX Expander.

When only the TV is powered up, the TV sound is routed through the AUX Expander.

If a Beo4 is modified with a OneRemote RMB4 converter, it can operate both the TV and the radio.

A complete Bang & Olufsen system with a PowerLink AUX Expander connecting:

Airport Express, Bluetooth adapter, DAB+ tuner



Add music to any Bang & Olufsen system wirelessly using Apple Airplay or Bluetooth or cable directly via the OneRemote PowerLink AUX Expander:

- Wirelessly from any mobile phone with Bluetooth using a Bluetooth Music Receiver
- Wirelessly from an Apple iPhone, iPad, Mac computer etc using Airplay .
- Wirelessly or cabled from any PC.
- Cabled from an Internet Radio or DAB+ receiver.

If a Beo4 is modified with a OneRemote RMB4 converter, it can operate a OneRemote DAB+ or WiFi receiver too.