

PowerLink Switch

OneRemote Type 30017742

User Manual



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MODES OF SWITCHING

The OneRemote PowerLink Switch is developed for use with active (powered) B&O speakers connected with PowerLink DIN cables. Use adaptor cables, if speakers or a source are equipped with RJ45 connectors.

The PowerLink Switch makes it possible for two different sound sources to share one set of PowerLink speakers.

The switch can be operated in **one** of three ways.

1. Priority switching. *Factory default.*
2. Last switched on source.
3. Remote controlled.

PRIORITY SWITCHING MODE

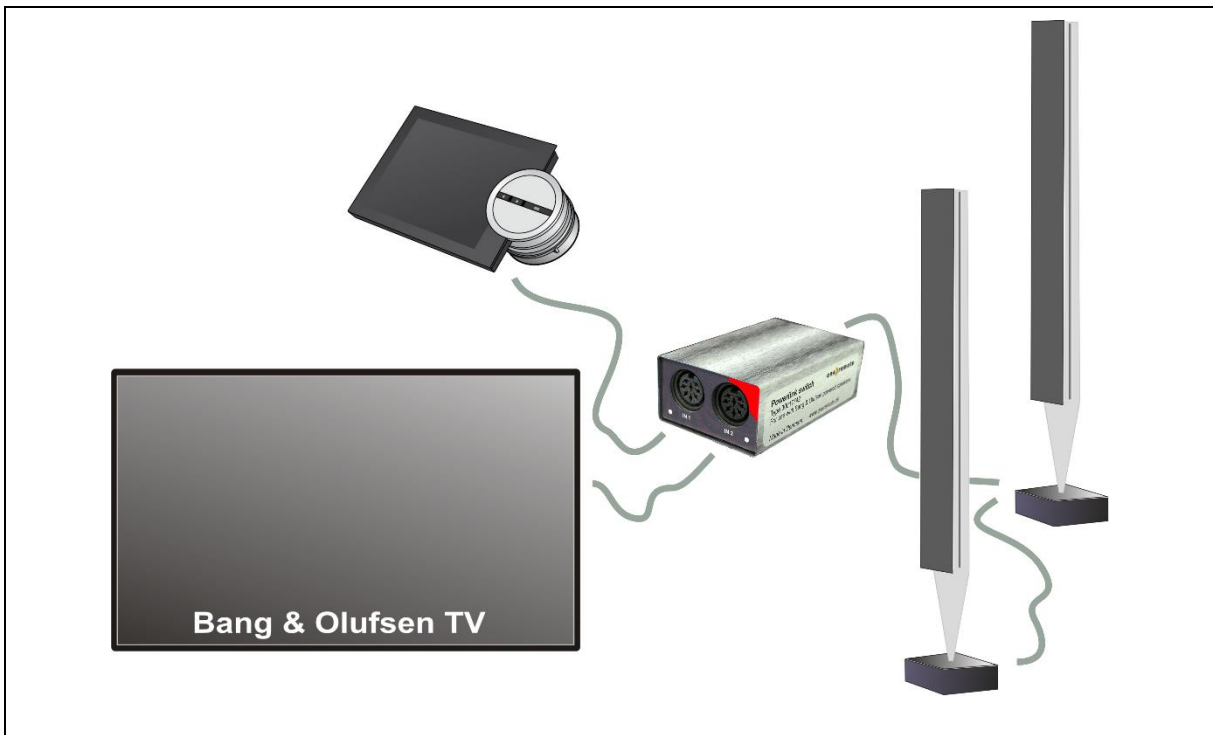
In the *Priority Switching Mode* both Inputs, PL1 and PL2, must connect to PowerLink compatible sources or sources that include a switching **power** trigger signal. *PowerLink from Bang & Olufsen, Loewe Audio Link or similar.*

When one of the sources is powered on, sound from this input will be routed to the output of the switch. At the same time the speaker will power on.

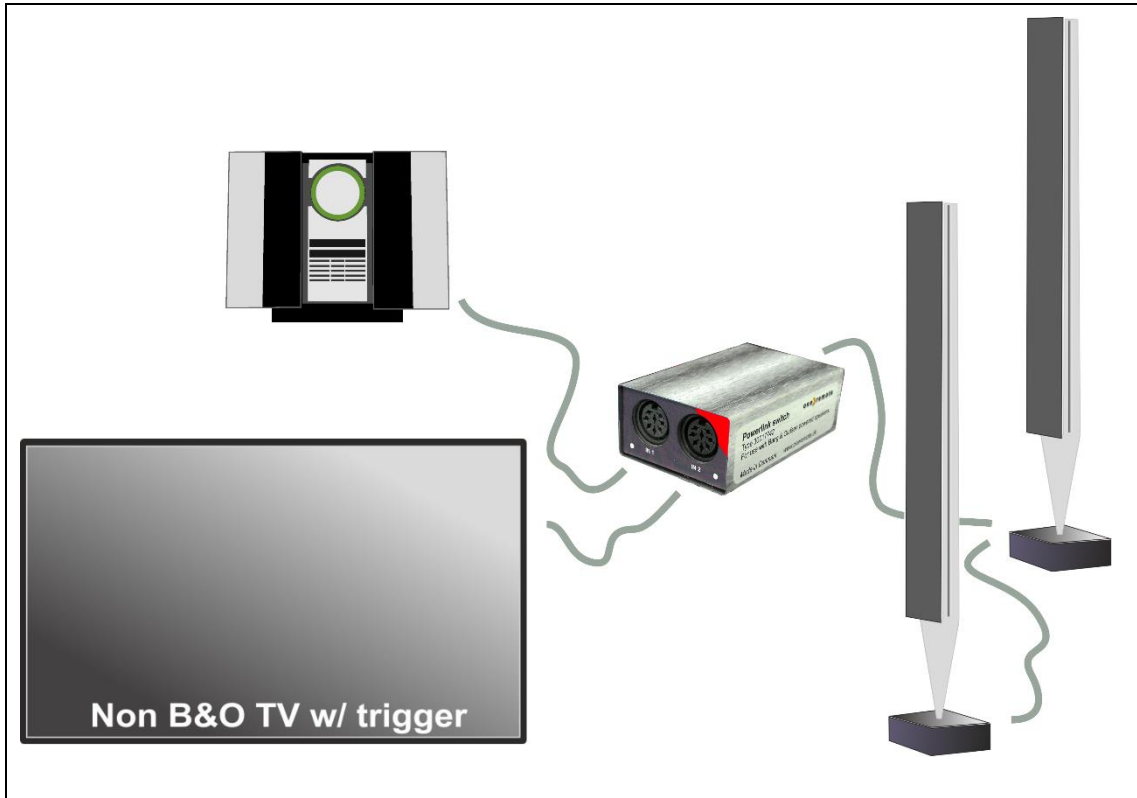
If **both** PL1 and PL2 sources are powered on, PL2 input will always be prioritized.

Refer to the chapter **Option Programming** to program the PowerLink Switch to the *Priority Switching Mode*, if it has been changed from the factory setting.

PL1	PL2	Out
ON	OFF	PL1
ON	ON	PL2
OFF	ON	PL2
OFF	OFF	Speaker off



*Example of use in the Priority Switching Mode.
BeoSound Encore and a Bang & Olufsen TV sharing BeoLab speakers.*



Example of use in the Priority Switching Mode.

*A NON Bang & Olufsen TV *1 and a BeoSound audio product sharing BeoLab speakers.*

**1 The TV must have a regulated sound output and a trigger output signal, like a Loewe TV equipped with Audiolink.*

LAST SOURCE SWITCHED **ON** MODE

In the *Last Source Switched ON Mode* both inputs, PL1 and PL2, must connect to PowerLink compatible sources or sources that include a **power** trigger signal. *PowerLink* from Bang & Olufsen, *Loewe Audio Link* or similar.

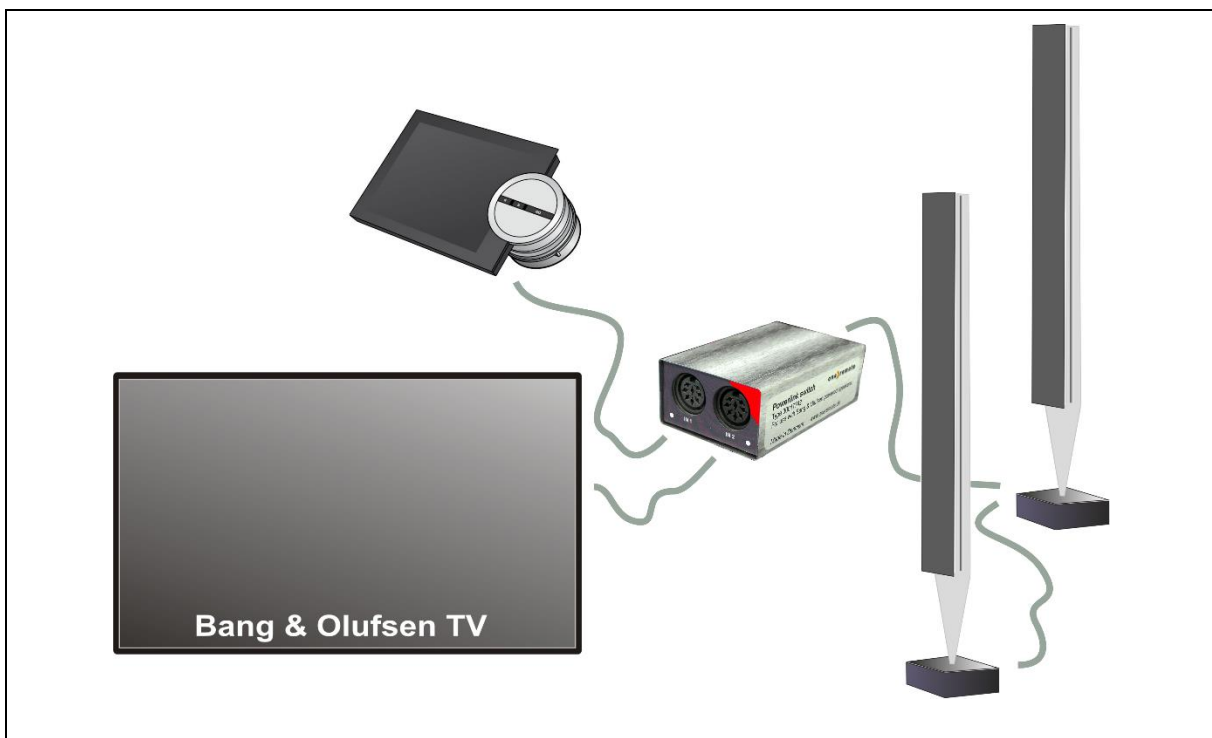
When one of the sources is **powered on**, it creates an event.

When an event occurs, sound from the source that created the event will be routed to the output of the switch. At the same time the speaker will power on.

The *Last Source Switched ON Mode* makes it possible to have both sources powered on at the same time, selecting audio from either one.

Refer to the chapter **Option Programming** on how to select the *Last Source Switching Mode*.

PL1	PL2	Out
POWER ON	OFF	PL1
ON	POWER ON	PL2
POWER ON	ON	PL1
OFF	OFF	Speaker off



Example of use in the Last Source Switching ON Mode.
BeoSound Encore and a Bang & Olufsen TV sharing BeoLab speakers.

REMOTE CONTROLLED SWITCHING MODE

In the *Remote Controlled Switching Mode* the PL1 and PL2 sources do **not** need to be PowerLink compatible or include a switching **power on** trigger signal.

A B&O remote controls the switching using a connected IR-receiver. Any B&O Remote control may be used.

*Note that an infrared receiver is **not** included with the switch.*

Refer to the chapter **Option Programming** on how to change to the *Remote Controlled Switching Mode*.

The *Remote Controlled Switching Mode* is for special use.

Each source key **used** in the set-up must be option programmed. One by one.

B&O Remote Control Key	Switch Output
TV	PL1
DVD	PL1
RADIO	PL2
.....	
LIGHT	No change
STANDBY	Speaker off

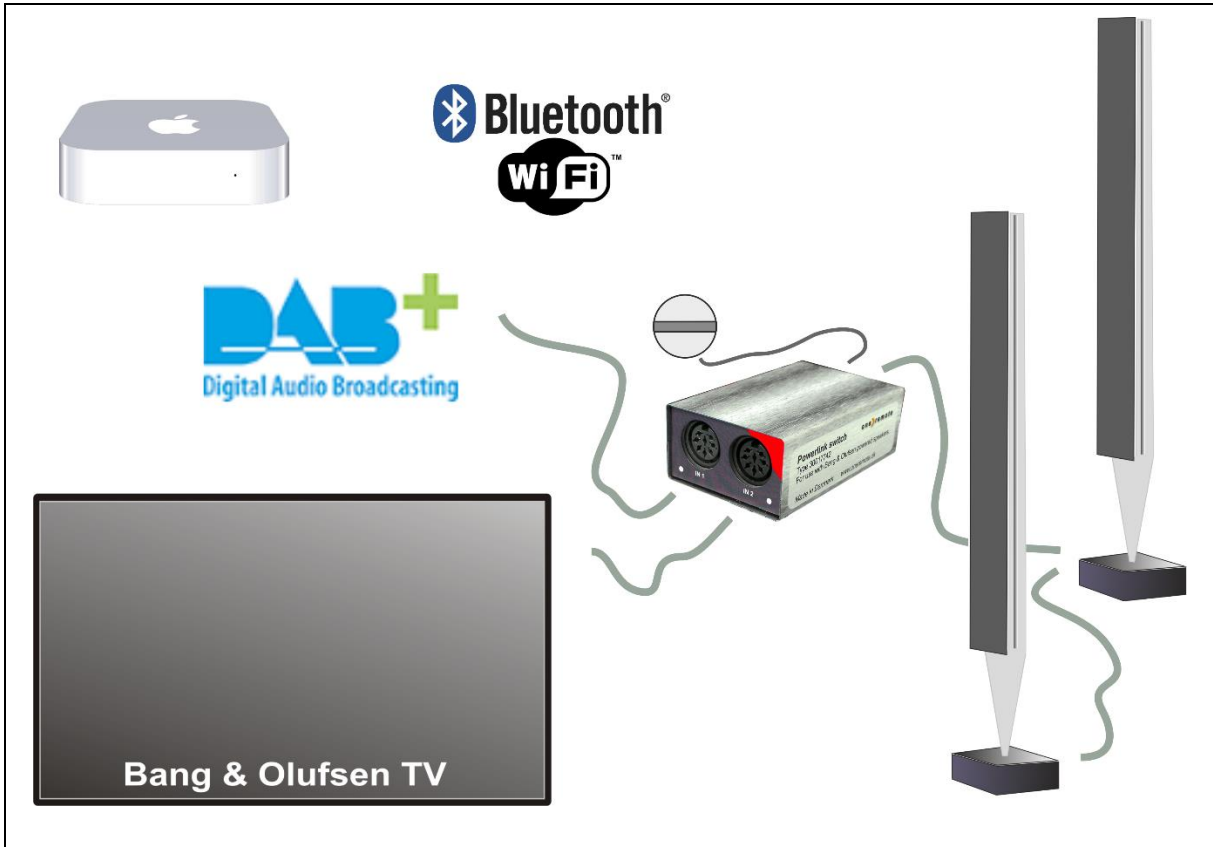
Default control with IR-receiver.

To suit the actual set-up it will most likely need reprogramming of some keys.

Factory defaults					
Remote Controlled Switching Mode					
Source	In	Source	In	Source	In *1
TV	1	RADIO	2	LIGHT	0
DVD	1	CD	2		
DVD2	1	CD2	2	STANDBY	Speaker OFF
VAUX	1	AMEM	2		
VAUX2	1	AMEM2	2		
VMEM	1	NMUSIC	2		
VMEM2	1	AAUX	2		
VTAPE	1	PHONO	2		
VTAPE2	1	NRADIO	2		
DTV	1				
DTV2	1				
TEXT	1				

*1

Sources programmed for INPUT-0 are ignored. As default setting the LIGHT key has been set to input 0, so the switch will ignore the LIGHT key being pressed. TV will select PL1 and RADIO will select PL2 and so on.



*Example of use in the Remote Control Switching Mode.
A B&O TV and an Apple Airport Express, Bluetooth receiver or DAB radio sharing BeoLab speakers.*

FEATURES

GALVANIC ISOLATION

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

- Sound signals are switched with relays.
- Data ground signal is switched with a relay.
- Analog ground signal is switched with a relay.
- Digital data signal flows via galvanic isolating optocouplers.

When power is not connected or in standby mode, sound output is muted with a mechanical relay.

LOSSLESS AUDIO PASS

The audio signals are passed without any modification; the output of the switch is the same that enters the input.

DATALINK PASS

Datalink is passed to the output, from the selected input for display and other control.

DELAY AT POWER OFF

As the switching is controlled directly from the sources or an IR receiver, the speaker will power off immediately, when no source is selected. When the speaker is powered off, sound signals will be muted using a mechanical relay.

INSTALLATION

The OneRemote PowerLink Switch, is easily installed.

1. Connect the speakers with PowerLink cable(s). *Not included.*
2. Connect the two sound sources with appropriate cables. *Not included.*
3. Connect the mains adaptor.

CABLE QUALITY

Make sure to use good quality PowerLink cables, preferably double-shielded types, especially if long cables are used. Do not use un-shielded cables for any connection.

PowerLink MKII with 4-wire mounted is not recommended.

When connection to PowerLink sources, there is no need for further programming. The PowerLink switch is factory programmed in the *Priority Switching Mode*.

OPTION PROGRAMMING

The PowerLink Switch may be programmed with different options, determining the way the switching is done. Programming is made only once, during the initial installation.

Programming an option is easy. Programming is carried out using the Bang & Olufsen remote control. During programming an IR-receiver needs to be connected to the switch.

1. Press and hold the programming switch on the PowerLink Switch, until the Status LED turns red.
2. Press a 2 key option code from the tables below on your Bang & Olufsen remote control within 30 seconds. The Status LED is acknowledging the input by turning green.

Status LED During Option Programming		2-Key Switching Mode Option Table	
Red	<p>The programming switch has been activated for more than two seconds, and the PowerLink Switch is in the option programming mode.</p> <p>When in the programming mode the 2 key option code must be entered within 30 seconds.</p>	STOP 0	<p>Sound source selection is controlled only via an external IR-receiver. Any source key may be used to select one of the two sources. Refer to the IR-source option table below for these options.</p>
Flashing Green	An option has been entered correctly.	STOP 1	<p>When one of the two sources is powered on, the switch directs this sound signal to the speakers.</p>
Flashing Red	An error occurred while entering an option. No changes have been made.	STOP 2	<p>If the source connected to input 2 is powered on, the switch directs the sound signal from it to the speakers, otherwise the sound signal from input 1 is selected.</p>
Green	Idle, more than 30 seconds passed without receiving data.		

2-Key Remote Control Switching Mode Source Selection Table

Examples of options for source selection using an IR-receiver.

VAUX	0	Pressing VAUX will hereafter be ignored.
VAUX	1	Pressing VAUX will hereafter select input 1.
VAUX	2	Pressing VAUX will hereafter select input 2.
AAUX	0	Pressing VTAPE will hereafter be ignored.
AMEM	1	Pressing VTAPE will hereafter select input 1.
AMEM	2	Pressing VTAPE will hereafter select input 2.

See a list of all the programmable source keys in the table on page 6.

An option must be entered for every source key used in the set-up.

TECHNICAL SPECIFICATIONS

Dimensions	25 x 45 x 74 mm
Included accessories	Power Adaptor 12VDC @ 400mA Euro
Not included	IR-receiver 455 KHz type 31107834 Cables

CONNECTIONS



Sockets:

PL1	DIN 8-pin PowerLink
PL2	DIN 8-pin PowerLink
OUT	DIN 8-pin PowerLink
Power	12V DC 300mA
IR:	Jack 3-conductor, 5 volt

