Network Link

Passive infrastructure
Manual
English - Version 3.0

BANG & OLUFSEN

BANG & OLUFSEN

Technical specifications, features and the use thereof are subject to change without notice!

Change log:

Ver. 1.0 - 09-09 ..... Original release
Ver. 2.0 - 10-02 ..... Section 9 improved as well as pictures in general and new components added
Ver. 3.0 - 11-10 ..... New layout and pictures introduced; cable connection instructions added; new cables

2. Introduction

This handbook contains guidelines and installation practices for the new Bang & Olufsen distribution system. The new installation concept is intended to replace the existing Master Link and Power Link system cabling and ensures future compatibility.

3. What is the Cat7/Class F installation concept

The new installation concept is based on Cat7/Class F double shielded Ethernet cable. This will eventually replace Master Link and Power Link cables. The new installation concept ensures backward compatibility at the same time as preparing for the new digital world. Cat7/Class F double shielded cable has been selected because of its high bandwidth capability for future digital systems and for its resistance to noise when used to carry analogue audio signals instead of Power Link cables when used with, for example, BeoLab 5 loudspeakers.

To ensure high flexibility all connections must be wired to the distribution centre. Please see drawing in chapter 8.

Connectors for wall plates are available in two versions. Choose a straight or angled Network Link connector depending on space behind the wall plate and placement of conduit.

The difference between these two connectors lies in the way the installation cable is mounted in the wall:

- Straight - where the cable goes directly into the back of the connector
- Angled - where the cable goes into the side of the connector

Face plates differ in every country. Please contact your local wall plate supplier for further information.

4. Distribution centre

All cabling leads back to a central place. This could typically be a technical room, equipment closet or another appropriate location.

There are two types of cabinets available for the distribution centre:

- In-wall 'flush mounted'
- Surface mounted

There are two components for 19" rack:

- Bracket for Master Link and Power Link Patch Modules
- Bracket for connector

In case of large installations, it is possible to place more distribution centres in one installation (e.g. one on each floor).

- For Master Link there must be a connection from centre to centre
- Power Link is done locally on each floor
- For Ethernet, a switch must be placed on each floor and the 'input' cable must come from the router that provides the Internet connection.

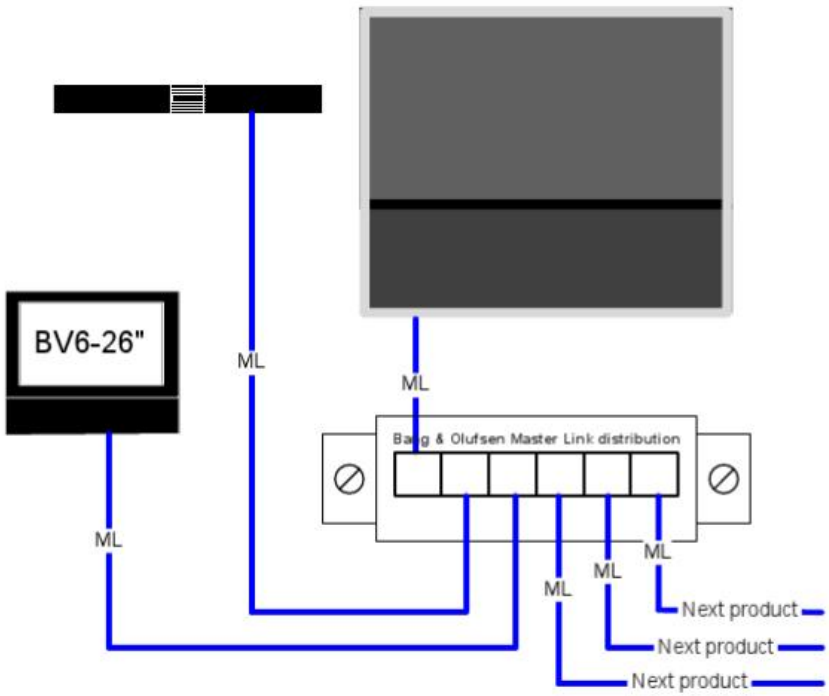
4.1 Patch Modules

Patch Modules are available in two versions for use with cabinets or 19" rack systems:

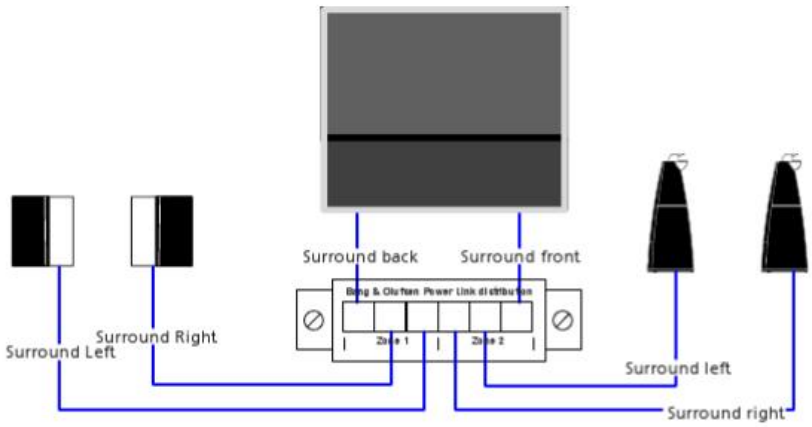
- Master Link Patch Module with 6 x RJ45 connections.
  6 products can be connected to one module.

- Power Link Patch Module with 6 x RJ45 connections.
  2 pair of speakers can be connected to one module.
  Both modules must be mounted with a Network Link bracket made for use in cabinets or a 19" rack.

Example of how to wire a Master Link module



Example of how to wire a Power Link module



A sub woofer would normally be connected directly to the TV, however if the wiring is done via the distribution centre it must be patched to the connector.

5. How to handle cable management

To ensure a reliable system, it is important to follow a few guidelines during installation.

Important !
When securing cables you must take care not to pull cable binders too tight. This can crush and damage the twisted cables causing a lowered bandwidth or cable failure.

Important !
The distance between mains AC power cables and Network Link installation cables must be greater than 50 mm (2") to avoid electro magnetic disturbance. Network Link installation cable must not run in the same conduit/cable duct as the mains AC power cable if using cable management systems such as flex tubing or conduit/cable ducts.

Important !
Rules for grounding (earthing) must be followed closely. See chapter 8. Remember to use proper pull sleeve when pulling cable in tubes. If necessary use proper pulling compound. Do not use any kind of soap that can damage cables over time.

Important !
If mounting a Network Link installation or product cable directly onto the wall please use cable clips to avoid damaging the cable:

- 8 mm cable clip for Network Link installation cable
- 6 mm cable clip for Network Link product cable

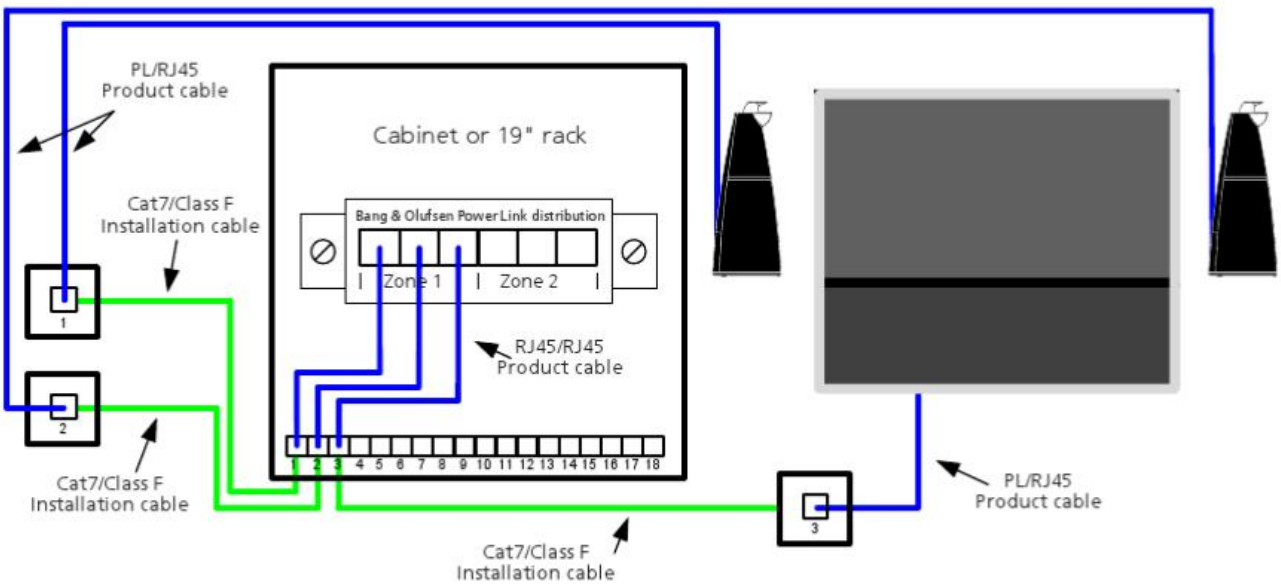
5.1 Cable length

Maximum total length of Network Link installation cable per outlet is 90 m/290 feet (from cabinet or rack to wall plate).
Maximum total length of Network Link product cable is 10 m/32 feet (from product to wall plate).

Maximum total length of Master Link cable that may be run in a Master Link system today is 400 m/1300 feet.
Maximum total length of Network Link Cat7/Class F that may be run as Master Link is increased to 1000 m/3250 feet.

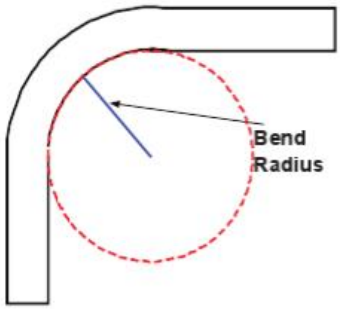
Maximum total length of Power Link cable today is 100 m/325 feet in a system. Maximum total length of Network Link Cat7/Class F that may be used as Power Link can be 300 m/984 feet.

Example of cable lengths are seen in the below figure.



Note:
Maximum total length from endpoint to endpoint of Cat7/Class F Installation cable (green) + Product cable (blue) + Patch cable (blue) is 90 m/295 feet.

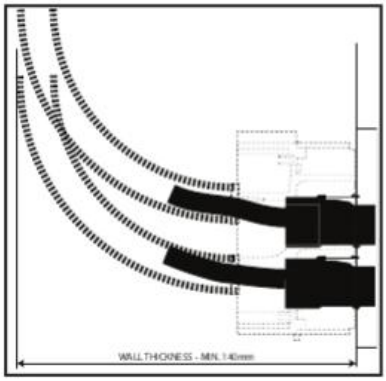
5.2 Bend radius



Minimum bend radius for Cat7 installation cable (horizontal cable) is 75 mm/3".
Part number 6250027.

Minimum bend radius for special plenum Cat7 installation cable (CL2P rated) is 150 mm/5.9".
Part number 6250030.

Minimum bend radius for Cat7 product cable is 20 mm/0.8".
Part number 6250028.



Using the LK FUGA in-wall units must be of the 50 mm/2" in depth type, and with soft bending conduits/channels in in-wall construction of minimum 140 mm/5.5".

Note:
- the top most cable connector must be of the straight type.
- the lower most connector is recommended to be of the straight type.

6. How to reduce noise in Power Link

If the building/house is placed in an area with a lot of magnetic or electrical noise, a nanoperm coil can be used to significantly reduce the affect.

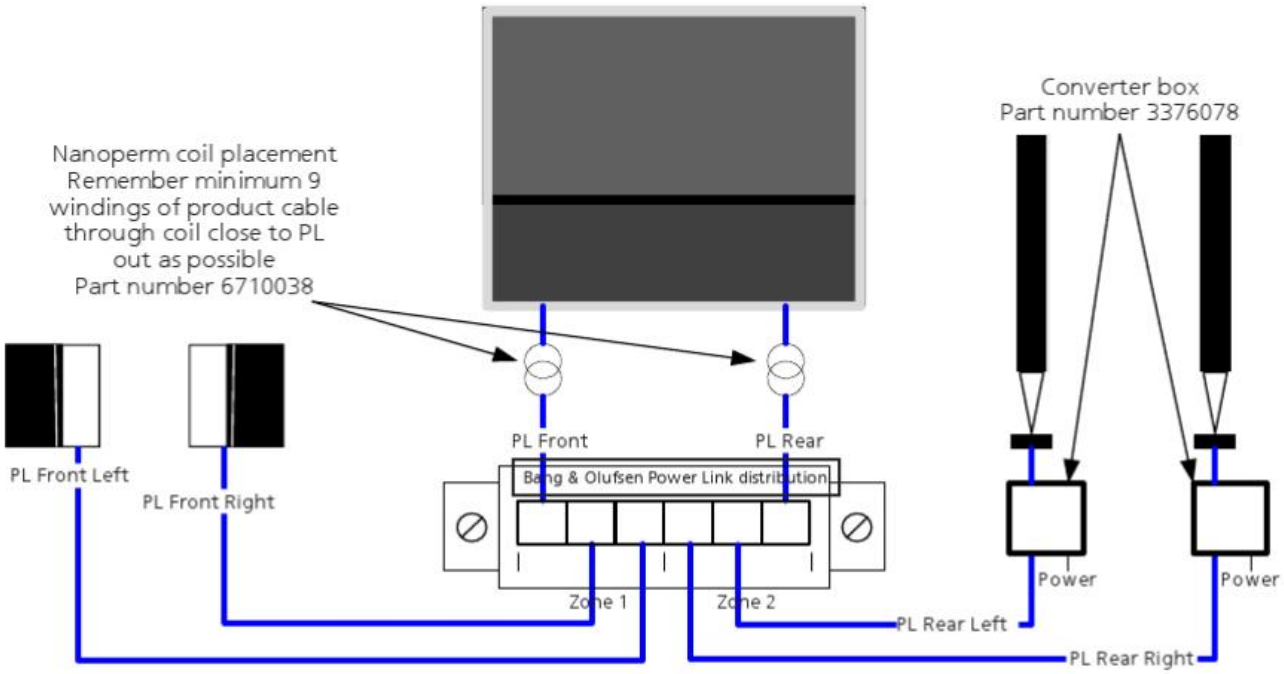
The coil is available as part number 6710038.
Place the coil somewhere between the Power Link output and the wall inlet RJ45.

The Power Link cable is arranged with 9 windings on the coil as seen in the illustration.

7. Non balanced speakers

Pre-ICEpower loudspeakers with non balanced input must be mounted with a special non balance converter box. Part number 3376078.

This is only necessary if BeoLab loudspeakers without ICEpower amplifiers are used.



8. ! Grounding !

It is very important to ground the installation in order to eliminate any possible electrical hazard and to avoid noise in the loudspeakers.

All Network Link Cat7/Class F installation concept components are shielded.
If not grounded properly the customer can experience an electrical shock!

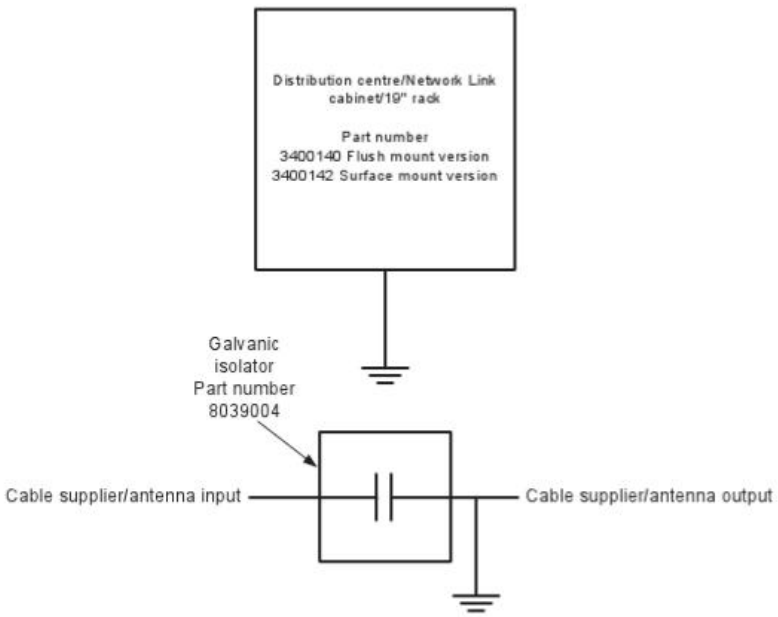
Always use the ground from an electrical mains installation.
Always use the galvanic isolator if an external antenna signal is connected to the system.

Always remember that grounding of a Class 1 product is very important. Grounding through Cat7/Class F cable is not sufficient. Class 1 products must be grounded according to rules of authorities. The Cat7/Class F shield and accompanied connections are not rated to function as safety ground, carrying the current needed to blow the mains fuse.

8.1 Primary goal of earthing/grounding

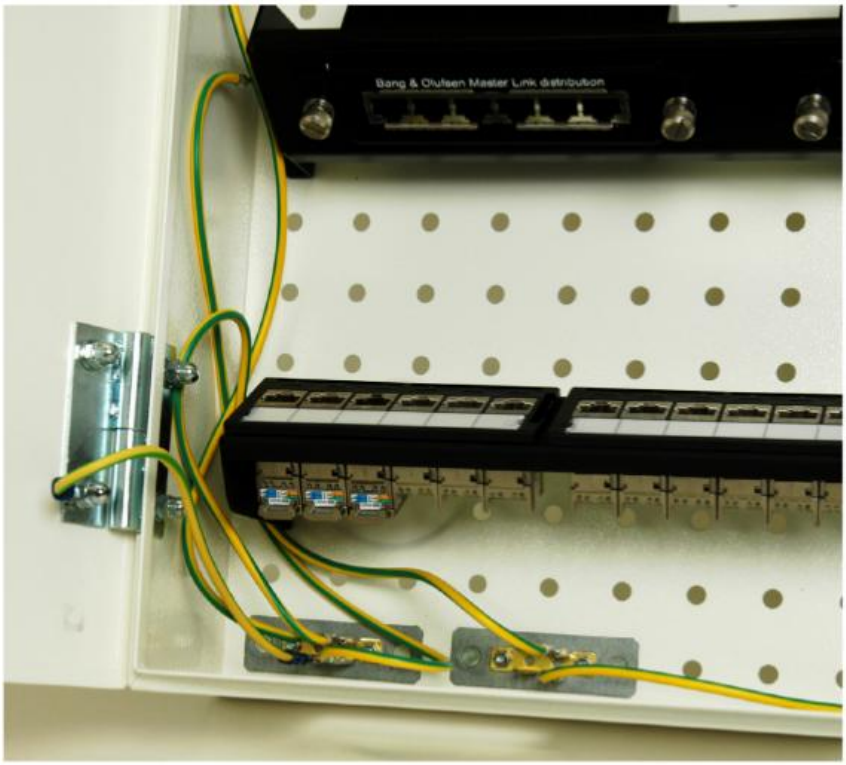
The primary goal of earthing/grounding is to protect the installation from electrostatic discharge and to protect the customer from electrical shock from the sum of leakage current from all the equipment connected to the network. The Network Link distribution centre must be connected to existing earth grounding installation in the building.

Example of structured grounding of Network Link distribution centre cabinet and galvanic isolator is shown in the below illustration.



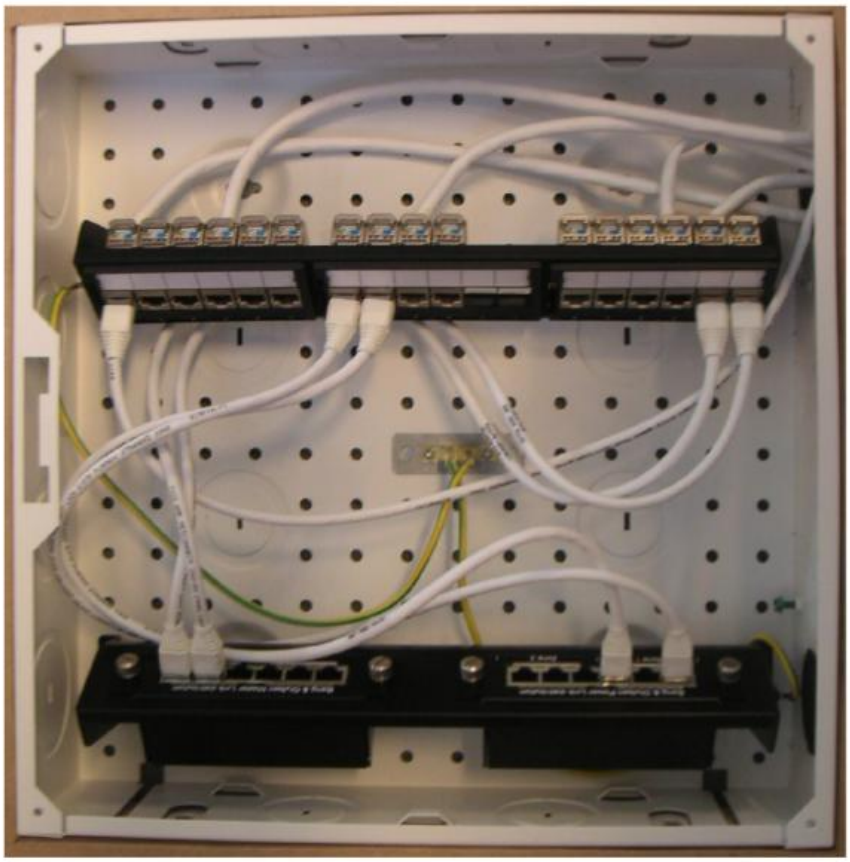
8.2 How to wire earth in a surface mount cabinet

Connect all wires to common ground. Then connect the common ground to the earth grounding of the building .

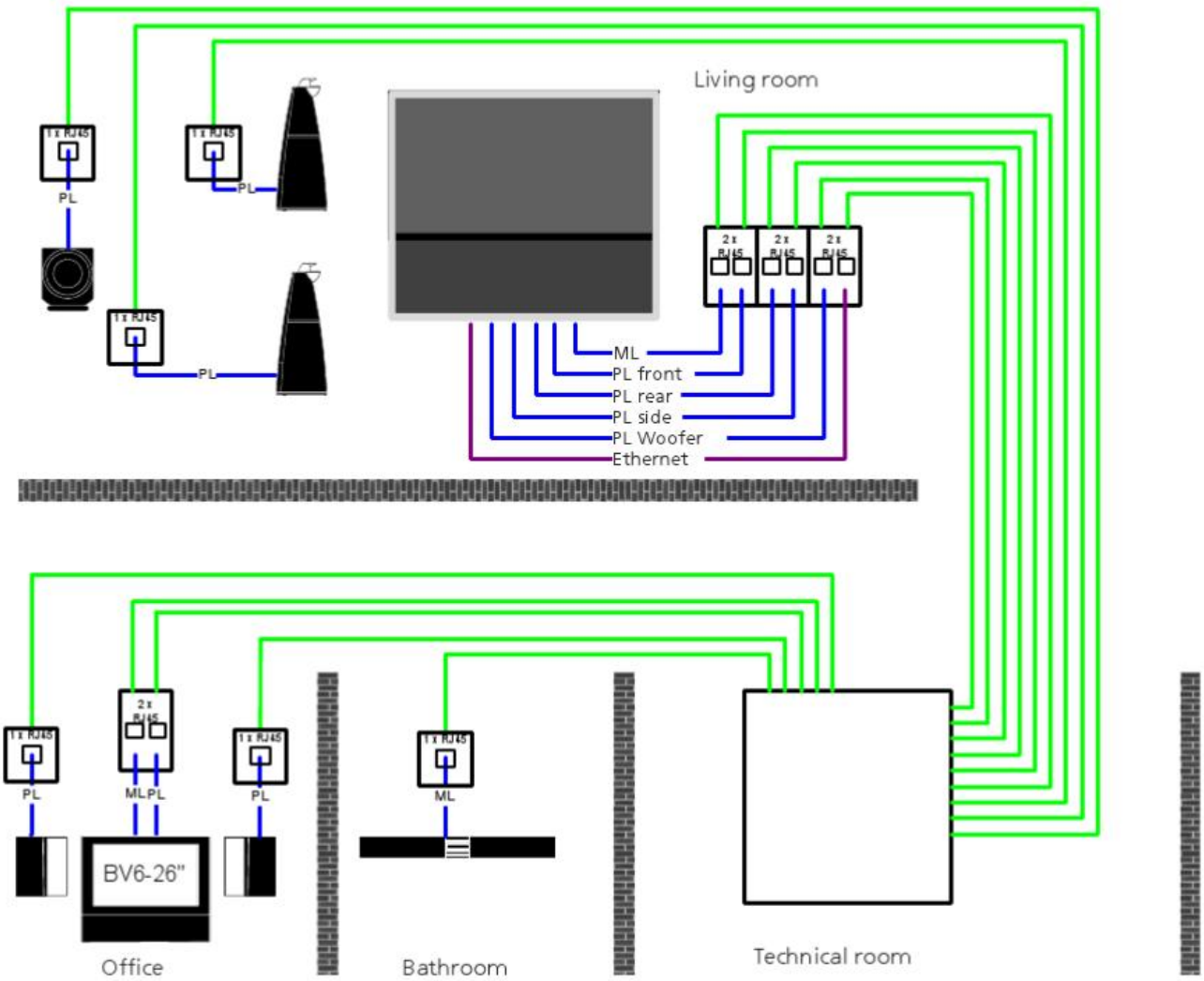


8.3 How to wire earth in a flush mount cabinet

Connect all wires to common ground. Then connect the common ground to the earth grounding of the building.



9. Installation examples with bill of material



Bill of material:

Part number	Pieces	Description
6250027	1 reel	Network Link Cat7/Class F installation cable
7221200	1 package	Network Link connector straight (or optional: angled (7221201))
Various types	6	Face plates single outlet
Various types	4	Face plates double outlet
3400142	1	Distribution centre cabinet for surface mount
3153293	1	Network Link bracket for connector in cabinet
3153287	2	Network Link bracket for Patch Module
8052351	3	Network Link Power Link Patch Module
8052352	1	Network Link Master Link Patch Module
Various lengths	14	Network Link patch cables
Various lengths	10	Network Link product cable Power Link to RJ45
Various lengths	3	Network Link product cable Master Link to RJ45

Description of how many outlets are needed for different products:

Main TV point (video master)
8 x Cat7 (ML, PL Front, PL Surround, PL Rear, PL Sub, Ethernet + 2 spare)
3 x Coax - TV, DTV + RF Distribution
2 x Mains cord - TV and e.g. set top box
SCART back to centrally stored Set Top Box - to RF distribute signal from STB

Link TV
4 x Cat7 (ML, PL Front, Ethernet + 1 spare)
2 x Coax - RF, TV, DTV
2 x Mains cord - TV + STB

Audio System
3 x Cat7 - ML, PL, Ethernet
2 x Coax - Radio, DAB
1 x Mains cord

Speakers
1 x Cat7 (per loudspeaker)
1 x Mains cord (per loudspeaker)

10. Wiring types

10.1 RJ45 to RJ45 (for Power Link only)

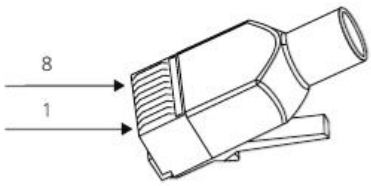
Power Link cable ø5 (6250031).

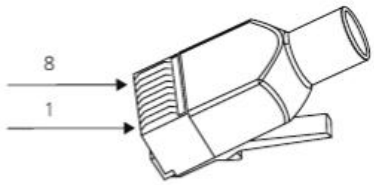
RJ45 connections

Pin	Colour	Description
1	N/C	
2	White	Data
3	White/ Green	Signal ground
4	Yellow	Speaker on/off
5	N/C	
6	Green	Audio R out
7	White/Brown	Signal ground
8	Brown	Audio L out
GND	Braid shield	Data ground

RJ45 connections

Pin	Colour	Description
1	N/C	
2	White	Data
3	White/ Green	Signal ground
4	Yellow	Speaker on/off
5	N/C	
6	Green	Audio R out
7	White/Brown	Signal ground
8	Brown	Audio L out
GND	Braid shield	Data ground





10.2 Power Link to Power Link (for Power Link only)

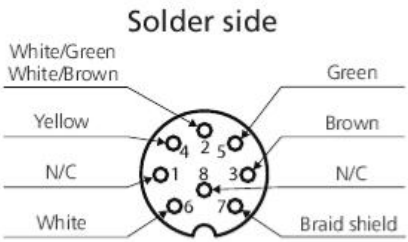
Power Link cable ø5 (6250031) .

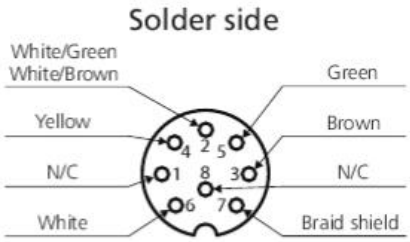
Power Link connections

Pin	Colour	Description
1	N/C	
2	White/Green White/Brown	Signal ground
3	Brown	Audio L out
4	Yellow	Speaker on/off
5	Green	Audio R out
6	White	Data
7	Braid shield	Data ground
8	N/C	

Power Link connections

Pin	Colour	Description
1	N/C	
2	White/Green White/Brown	Signal ground
3	Brown	Audio L out
4	Yellow	Speaker on/off
5	Green	Audio R out
6	White	Data
7	Braid shield	Data ground
8	N/C	





10.3 Power Link to RJ45 (for Power Link only)

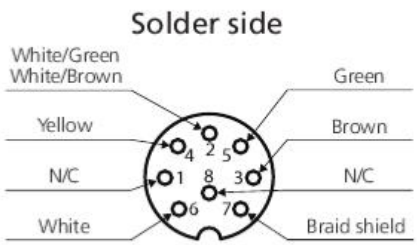
Power Link cable ø5 (6250031).

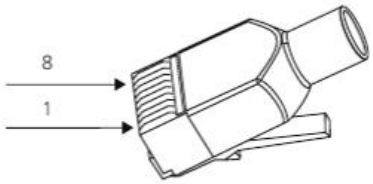
Power Link connections

Pin	Colour	Description
1	N/C	
2	White/Green White/Brown	Signal ground
3	Brown	Audio L out
4	Yellow	Speaker on/off
5	Green	Audio R out
6	White	Data
7	Braid shield	Data ground
8	N/C	

RJ45 connections

Pin	Colour	Description
1	N/C	
2	White	Data
3	White/ Green	Signal ground
4	Yellow	Speaker on/off
5	N/C	
6	Green	Audio R out
7	White/Brown	Signal ground
8	Brown	Audio L out
GND	Braid shield	Data ground





10.4 Power Link to RJ45 (for Power Link only)

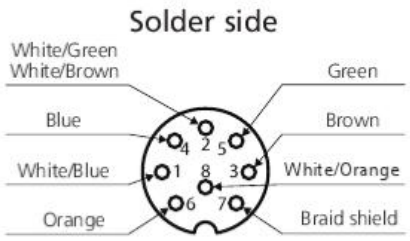
Network Link product cable ø6 (6250028).

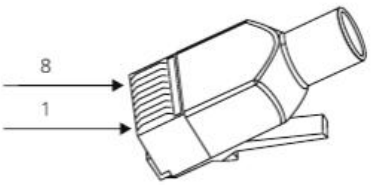
Power Link connections

Pin	Colour	Description
1	White/Blue	
2	White/Green White/Brown	Signal ground
3	Brown	Audio L out
4	Blue	Speaker on/off
5	Green	Audio R out
6	Orange	Data
7	Braid shield	Data ground
8	White/Orange	

RJ45 connections

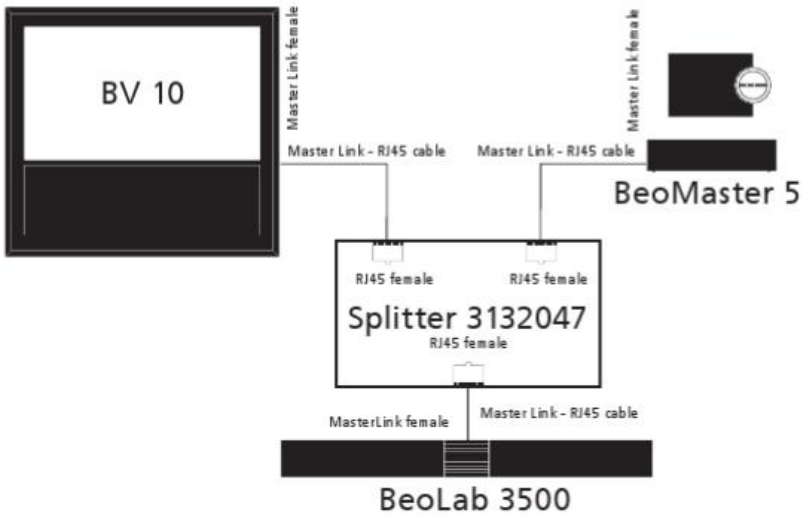
Pin	Colour	Description
1	White/Orange	
2	Orange	Data
3	White/Green	Signal ground
4	Blue	Speaker on/off
5	White/Blue	
6	Green	Audio R out
7	White/Brown	Signal ground
8	Brown	Audio L out
GND	Braid shield	Data ground



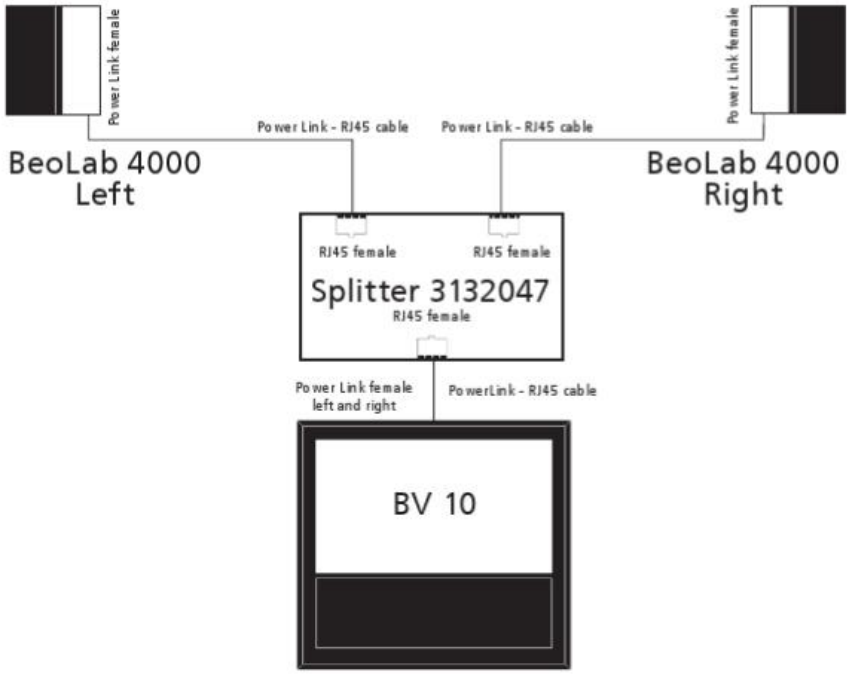


11. Splitter scenarios

11.1 Master Link

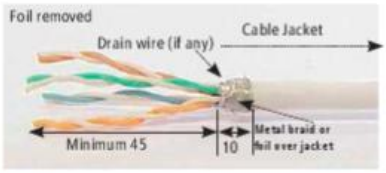


11.2 Power Link



12. Assembly of connectors

Tool for stripping installation cable and crimp the connectors.
Part number 3642008.



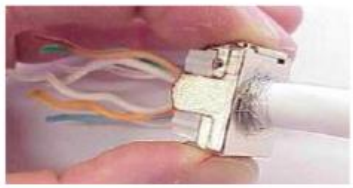
1. S/FTP cable: prepare the cable and cut the pair foils as shown.
F/FTP cable (compact cable): prepare the cable and cut the pair foils as shown.

Note: The metal braid (S/FTP), metal foil (F/FTP) and drain wire (if any) must be in contact with the clamp.

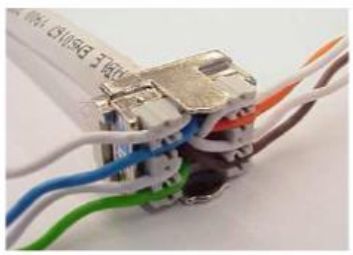
2. Colour coding according to T568 A and T568 B.
An instructive video for the assembly of this connector can be seen via the link found on **Bang & Olufsen Retail System I Training I Start BEOCADeMY I My BeoCasts I Assembly of Network Link connector.**

Important !
Ensure that you use the same wiring system A or B (colour combination) at both ends. See chapter "10. Wiring types" on page 15. If the connector is not assembled correctly, please take a new one.
Bang & Olufsen do not recommend to reuse the connector.

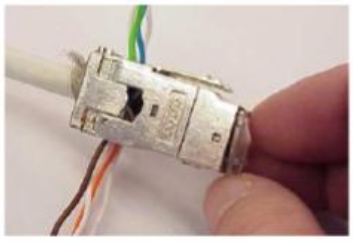
3. Push the cable clamp to open it.



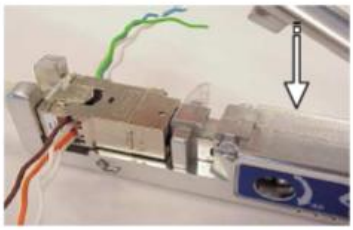
4. Insert the cable through the hole until pair foil is visible on the opposite site.
Release the cable clamp (it has to press on the shield of the cable jacket).



5. Sort the wires and place them in slots according to relevant colour coding (step 2).

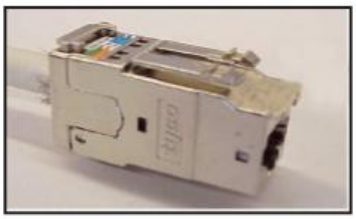


6. Locate the rear housing (step 5) into the front housing until it is engaged.



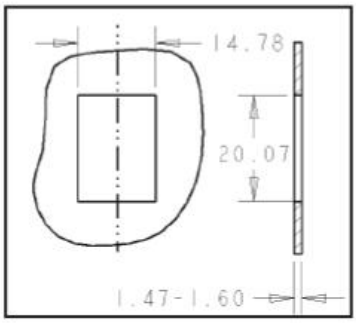
7. Position the pre-assembled jack into the tool.

8. Squeeze the handle down until the back part latches into the front part. The wires are cut automatically. Remove wires in closed position.



9. The connector is now terminated and ready to be applied to the environment application.

10. The jack fits in cut-out as the drawing shows; step 11.



11. Only for reference indicating: Hole dimensions:
Hole dimensions: 14.78 mm (5.82") × 20.07 mm (7.90").
Material thicknes: min 1.47 mm (0.58") and max. 1.60 mm (0.63")

12. For re-opening, use a small screw driver for A) unlocking the two side latches ...

Note: Bang & Olufsen do not recommend to reuse the connector.

13. ...and for B) separating the front and the rear part.

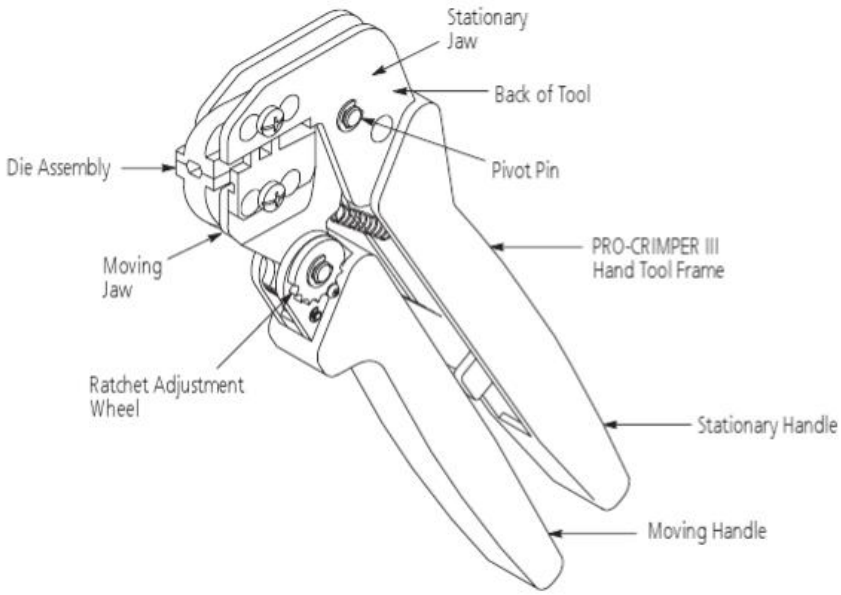
Note: Bang & Olufsen do not recommend to reuse the connector.

12.1 Numbering of cables and connectors

Brackets for distribution centre cabinet are numbered 1 to 18 (1-24 for 19" bracket).
To ensure you have a proper installation overview, and for future trouble shooting, wall plates must be numbered to match the number in the distribution centre.
If more brackets are used a letter can be used as prefix for each number in the bracket and on the corresponding wall plate.

12.2 Tool to crimp a Network Link RJ45 plug

Note: Observe to select the correct instruction related to connectores, cable type and wire pattern; see chapter 10.
Tool to crimp a Network Link RJ45 plug on Network Link product cable.
Part number 3624009.
Remember to keep the tools in a good state of repair.



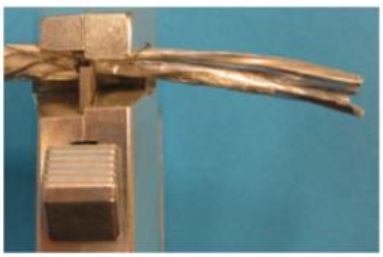
12.3 How to prepare and crimp a Network Link RJ45 plug on Network Link product cable or Power Link cable

1. Slide the plug boot onto the cable.

2. Insert the Network Link product cable into the tool for cutting through the cable jacket approx. 2.5cm/1" from the end of the cable.
   Note: Turn the cutting tool in the direction of the small arrow.

4. Strip off the cable jacket.

5. Fold the outside braid shield back over the jacket.



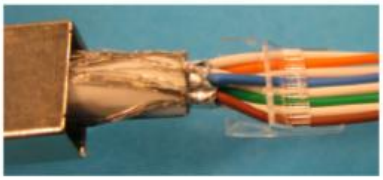
6. Insert the Network Link product cable into the tool as shown for cutting the foil shield of the twisted pairs.
   Note: The foil shield must protrude approx 2 mm/0.1" from the outer braid shield.
   Only turn the tool one round.

7. Twist and pull off the foil shield of each twisted pair.

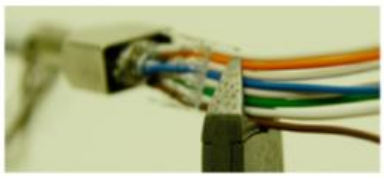
8. Slide the plug shield over the cable jacket and cable braid shield.

9. Arrange the wires according to the wiring type used and hold them firmly (the example shown in the picture is with the Network Link product cable).

	Power Link cable		Network Link product cable
1	N/C	1	White/Orange
	White		Orange
	White/Green		White/Green
	Yellow		Blue
	N/C		White/Blue
	Green		Green
	White/Brown		White/Brown
8	Brown	8	Brown



10. Place the wires in the wire holder.
    If needed the wires may be trimmed to be equally long before applying the wire holder.



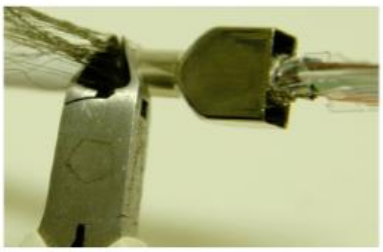
11. Trim all conductors using an appropriate tool along the end of the wire holder.

12. Apply the contact housing over the wire holder. make sure that all wires are fully inserrted to the front of the plug.

13. Gently push the plug shield until it covers the contact housing.

14. All subparts of the RJ45 plug shown proper position.

15. Place the assembled plug in the crimper tool as shown.



16. Trim away all braid shield as close as possible to the edge of the plug shield.

17. The RJ45 plug successfully crimped and trimmed.

18. Slide the sheath over the crimped plug and shield.
The RJ45 plug is ready for use.

13. How to test the installation

To test the installation you use a Simple Ethernet cable tester to check if there are short/open circuit or cross wiring. When the installation is finished an Advanced cable tester can check that all connections are done correctly.

13.1 Simple Ethernet cable tester

Simple tester used to check if there are short/open circuit or cross wiring.
Use 2 patch cables for connecting the small unit and tester in wall outlet and technical room. When connected it will power up and show connections in the display. User guide for this tester is available on BeoWise.

JDSU TP250 Simple Ethernet tester
Used for simple check of installation
Part number: 3624029
Package size: 1 piece

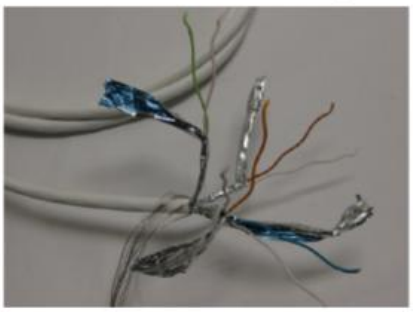
13.2 Advanced cable tester

Each time an installation is finished, it is important to check that all connections are done correctly and that the cable has not been damaged during installation.

With the Fluke cable tester it is possible to make a complete test report of all connections. This report can be signed and handed over to the customer.
The tester package includes a CD with user guide and PC software for Fluke CableIQ plus 6 pieces of CableIQ Remote ID locators.

Fluke CableIQ Advanced Ethernet tester
Used for advanced validation of installation
Part number: 3624030
Package size: 1 piece

14. New infrastructure components



Cable is used for in-wall installation
Part number: 6250027
Description: Network Link Cat7/Class F installation cable white, 8 mm
Reel size: 500 m/1625 feet

Plenum cable Cat6/Class E (CL2P rated) for use in special areas where high demands regarding fire codes make it necessary
Part number: 6250030
Reel size: 305 m/1000 feet

Product cable to make customised cables used between a RJ45 wall outlet and a RJ45 in a Bang & Olufsen product
Part number: 6250028
Description: Network Link product cable, white, 6 mm
Reel size: 300 m/975 feet

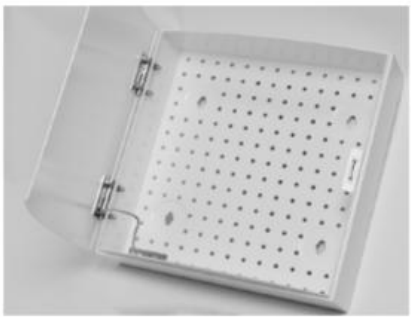
Straight connector used for wall outlet
Installation cable goes straight into the connector
Part number: 7221200
Description: Network Link Connector RJ45 Straight
Package size: 24 pieces

Angled connector used for wall outlet. Installation cable goes into the side of the connector
Part number: 7221201
Description: Network Link Connector RJ45 Angled
Package size: 24 pieces

Crimp tool for wall outlet connectors
Part number: 3624008
Description: Tool for Network Link RJ45 connector
Package size: 1 piece

RJ45 plug with white cover for Network Link product cable only
Part number: 7221248
Package size: 25 pieces

Tool for RJ45 plug crimp
Part number: 3624009
Package size: 1 piece



Network Link cabinet, surface installation
Used as distribution centre
Ground connectors are included
H x W x D: 370 mm x 400 mm x 120 mm
H x W x D: 14.5" x 15.75" x 4.72"
Part number: 3400142
Package size: 1 piece

Network Link Cabinet double surface installation
H x W x D 723 mm x 390 mm x 120 mm
H x W x D 29" x 16" x 5"
Part number : 3400207
Package size : 1 piece

Network Link Cabinet build in
H x W x D: 370 m x 370 mm x 100 mm
H x W x D: 15" x 15" x 4"
Part number: 3400140
Package size: 1 piece

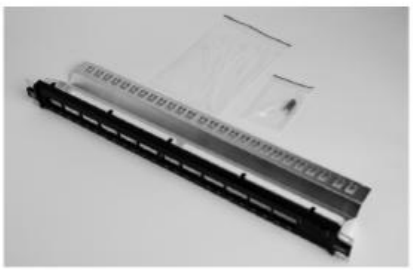
Network Link Cabinet double build in
H x W x D 715 mm x 365 mm x 100 mm
H x W x D 29" x 16" x 5"
Part number : 3400208
Package size : 1 piece

Master Link Patch Module for cabinet mounting
Part number: 8052351
Package size: 1 piece

Power Link Patch Module for cabinet mounting
Part number: 8052352
Package size: 1 piece

Network Link bracket for Patch Module in cabinet
1 piece ground wire included
Part number: 3153287
Package size: 1 piece

Network Link bracket for connector in cabinet
1 piece ground wire included
Maximum 18 connectors can be mounted on one bracket
Part number: 3153293
Package size: 1 piece

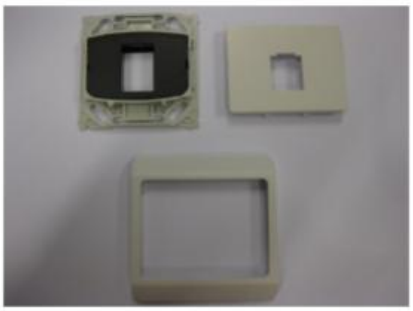


Network Link bracket, connector for 19" rack
Maximum 24 connectors can be mounted on one bracket
Part number: 3153269
Package size: 1 piece

Network Link bracket, Path Module for 19" rack
Part number: 3153286
Package size: 1 piece

Network Link Wall Plate DK Fuga, white
Part number: 7211635
Package size: 1 piece

Network Link Wall Plate DK Fuga double, white
Part number : 3321471
Package size : 1 piece



Network Link Wall Plate DK Opus, white
Part number: 7211634
Package size: 1 piece

Network Link Wall Plate DK Opus double, white
Part number : 3321472
Package size : 1 piece

Network Link Wall Plate US, white
Part number: 3321404
Package size: 1 piece

Network Link Wall Plate US double, white
Part number : 3321474
Package size : 1 piece

Network Link Wall Plate UK, white
Part number: 7211636
Package size: 1 piece

Network Link Wall Plate UK double, white
Part number : 3321476
Package size : 1 piece

Network Link Wall Mount (surface) for 2 connectors
Part number : 3321475
Package size : 1 piece

Network Link Wall Plate DIN, white
Part number : 7211637
Package size: 1 piece

Power Link Splitter Box 3 × RJ45 female
Part number: 3132047
Package size: 1 piece

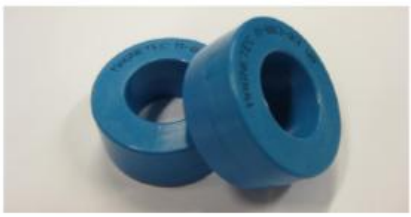
Network Link product cable RJ45 - RJ45 for Power Link
Part numbers:
6271069 1.5 m/4.5 feet, black
6271130 1.5 m/4.5 feet, white
6271070 3.0 m/9.75 feet, black
6271131 3.0 m/9.75 feet, white
6271071 5.0 m/16 feet, black
6271136 5.0 m/16 feet, white
6271072 10.0 m/32 feet, black
6271140 10.0 m/32 feet, white
Package size: 1 piece

Network Link product cable Power Link - RJ45
Part numbers:
6270017 1.5 m/4.5 feet, black
6270023 1.5 m/4.5 feet, white
6270020 3.0 m/9.75 feet, black
6270024 3.0 m/9.75 feet, white
6270004 5.0 m/16 feet, black
6270025 5.0 m/16 feet, white
6270022 10.0 m/32 feet, black
6270026 10.0 m/32 feet, white
Package size: 1 piece

Network Link product cable Master Link - RJ45
Part numbers:
6271218 0.3 m/0.5 feet, black
6270006 1.5 m/4.5 feet, black
6270013 1.5 m/4.5 feet, white
6270011 3.0 m/9.75 feet, black
6270014 3.0 m/9.75 feet, white
6270002 5.0 m/16 feet, black
6270015 5.0 m/16 feet, white
6270012 10.0 m/32 feet, black
6270016 10.0 m/32 feet, white
Package size: 1 piece

Network Link product cable, also used as patch cables in Network Link cabinet
Part numbers:
6271023 0.5 m/1.5 feet, white
6271024 1.5 m/4.5 feet, white
6271025 3.0 m/9.75 feet, white
6271026 5.0 m/16 feet, white
6271027 10.0 m/32 feet, white
6271028 20.0 m/64 feet, white
Package size: 1 piece

Galvanic isolator
Used for isolation between incoming antenna signal and Network Link installation
Part number: 8039004
Package size: 1 piece



Nanoperm coil. Only use if noise is experienced in speakers
Part number: 6710038
Package size: 1 piece

Balanced to non balanced converter box. For speakers with non balanced input only
BL 6000, BL 8000, BL 4000 MK1 and older active speakers
Part number:
EU: 3376078
UK: not available
US: not available
AUS: not available
Package size: 1 piece

15. Questions and answers

Question: Is it possible to crimp an RJ45 plug on existing Master Link or Power Link cables?
Answer: No, it will give reliability problems over time.

Question: Is it possible to crimp a RJ45 plug on Cat7/Class F installation cable?
Answer: No, RJ45 plugs can only be crimped on Network Link product cable.

Question: Do Bang & Olufsen accept use of other types than the preferred Cat 7/Class F cables and connectors in an installation?
Answer: Bang & Olufsen cannot guarantee functionality with other types of cable/ connector. An exception to this is LK LexCom Home/IHC net that also has been tested/approved to carry Master Link and Power Link connections. Cables and connectors from different manufactures must not be mixed in an installation.

Question: Is it possible to see how much cable I have used in an installation?
Answer: Yes, the installation cable is marked with forth going m (metre) indication. This way one can read the number when installation work starts, and then again when finished. The difference is the amount used for the installation.

Question: Can I mount a connector on the product cable in the same way as I mount it on the installation cable?
Answer: Yes. This way it is possible to make an extension cord. The parts needed are connector 7221200, RJ45 plug 7221248 and cable 6250028.

Question: Can I use Network Link product cable as installation cable?
Answer: Yes. In situations where a thinner cable are required (e.g. if two cables are to be pulled in one conduite), however used for ethernet the max lenght to switch/ router is 50 m (160 feet). For Master Link max 100 m (320 feet) can be Network Link product cable, the rest should be Network Link installation cable.

Question: Can Cat7 cables be used for HDMI?
Answer: The New installation concept can also be used to transfer HDMI. One or two Cat7 cables must be reserved for each HDMI connections depending on tehcnology used. Please note that additional active adapters are needed.

Question: Can I connect two installation cables by soldering or using some sort of junction box?
Answer: No, that is not possible.

Question: My customer want another design of wall plates than the one delivered from Bang & Olufsen. Can I use other designs?
Answer: There is a number of 'Tyco Keystone' compatible wall plates available. Ask your local supplier of wall plates. See also TIP in BeoWise: List of global wall outlets.

16. Glossary & abbreviations

Term	Explanation
AC	Short for Alternating Current
AV	Audio/Video
BV	Short for BeoVision
CAT5e	Category 5e (enhanced). Cable type very common cable on non-Ethernet based installations
CAT7/class F	Category 7. Cable recommended for all future installations in a Network Link setup. An Ethernet cable with shielding added for the individual wire pairs and the cable as a whole. Besides the foil shield, the twisting of the pairs and number of turns per inch causes RF shielding and protects from crosstalk. The Cat 7 cable standard allow 10 Gigabit Ethernet over 100 m of copper cabling.
CL2P	Class 2 Plenum cable - for in-wall installation in plenum, riser and general spacer
Gbps	Gigabit per second (Gbit/s or Gb/s or Gbps)
kbps	Kilobit per second (kbit/s or kb/s or kbps)
kBps	Kilobyte per second (kB/s or kBps)
ML	Short for Master Link
Network Link	Bang & Olufsen Network for Ethernet products
PL	Short for Power Link
RJ45	A registered jack connector and wiring pattern used for connection of a high-speed modem to a telephone network using a keyed 8P8C modular connector
S/STP	Screen Shielded Twisted Pair normal for CAT7
STP	Shielded Twisted Pair (CAT5e or CAT6)
T568A	Wiring pattern for 8 wire ethernet cable The specification for Category 5 cable was defined in ANSI/TIA/EIA-568-A, with clarification in TSB-95. These documents specified performance characteristics and test requirements for frequencies of up to 100 MHz. Cable types, connector types and cabling topologies are defined by TIA/EIA-568-B. The cable is terminated in either the T568A scheme or the T568B scheme. Canada and Australia use the T568A standard, and the United States commonly uses T568B scheme.[citation needed] The two schemes work equally well and may be mixed in an installation so long as the same scheme is used on both ends of each cable. Nearly always, 8P8C modular connectors, often referred to as RJ45, are used for connecting category 5 cable. The USOC/RJ-61 standard is used in multi-line telephone connections.
T568B	See T568A above.
Tx/Rx	Transmit/Receive