Qubo Ceiling

Instructions for assembly and use

visplay

This manual is provided to ensure the safe and effective use of the Qubo Ceiling product.

This manual is a component of the product and must be kept on hand in the vicinity of the product at all times.

All personnel who deal with the product must have read this manual. Compliance with all the safety instructions and handling instructions specified in this manual is a prerequisite for safe work.

The illustrations in this manual are provided for the purposes of general understanding and may deviate from the actual version.

All dimension information in this manual is specified in mm.

Quality assurance

All processes in our company are subject to a comprehensive management system, which conforms to the quality standard ISO 9001 and the environmental standard ISO 14001.

The Zertifizierungs- und Umweltgutachter GmbH (BSI) company audits this management system regularly and documents compliance with the standard via a certificate.

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Content

1 Safety

1.1 Explanation of symbols

Safety instructions are indicated in this manual as follows.

⚠ WARNING

A warning notice designated in this manner indicates a potentially dangerous situation that can result in death or serious injury if it is not avoided.

NOTE

A warning notice designated in this manner indicates a potentially dangerous situation that could result in material damage or environmental damage if it is not avoided.

1.2 Intended use

The product is designed exclusively to hold merchandise supports for displaying goods.

Only merchandise supports and consumers that comply with the specifications in this manual are approved.

In the event of misuse, there is the danger that the merchandise supports and the electrical devices will be damaged. This can result in injuries and damage to the product.

Area of application

The product may only be used in the commercial area.

Personnel

This manual describes how to install the product and how to operate and clean the product. Consequently after the product is installed this manual must be transferred to the end user.

The contents of the section on "Assembly" is directed at personnel, who undertake the assembly and the electrical connection (e.g. shop fitters, qualified electricians).

The contents of the section on "Handling" is directed at the end users (e.g. sales personnel, visual merchandisers).

1.3 General hazards

- > **Use only approved accessories and electrical devices.**
- > **Comply with the permitted connection, maximum load and equipment values.**
- > **Do not lean any ladders against the merchandise supports.**
- > **Do not load the merchandise supports above the maximum load capacity.**
- > **Do not place any receptacles, from which fluids can escape, on the merchandise supports.**
- > **Keep moisture away from current conducting components.**

2 Product description

2.1 Overview

Qubo Ceiling is a structural system with a high degree of design freedom for use in structures mounted in the space between floor and ceiling.

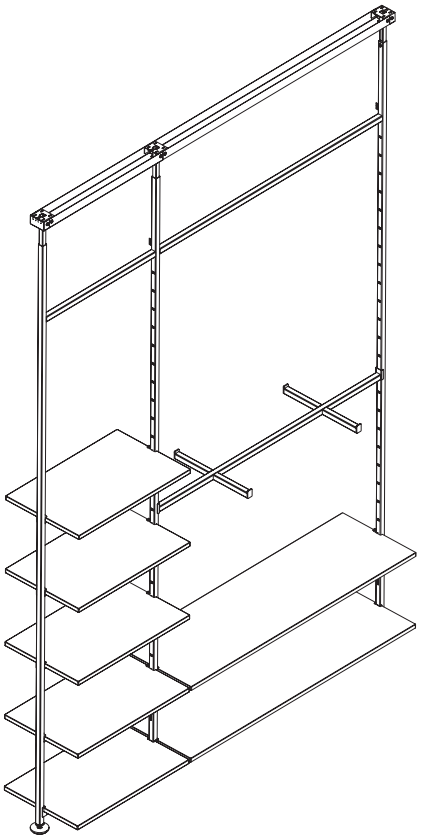


Fig. 1: Qubo Ceiling

2.2 Brief description

The system consists of height-adjustable steel uprights with or without an integrated power track for electrifying shelves with LED lighting and hanging rails.
The steel uprights are attached to the top of an existing ceiling on site.
The spigots on the side of the steel upright are for fitting multiple connecting tubes.
The electrical connection (24 V) between the uprights can be established at both the top and bottom ends.

2.3 Power supply

The 90 W converter allows up to 2 connections to be powered with a maximum of 90 W.

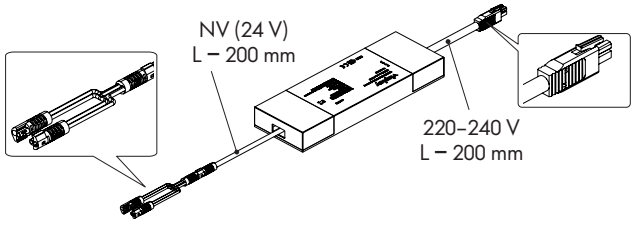
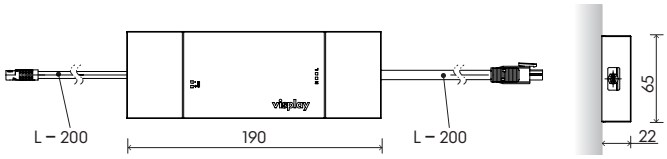


Fig. 2: Converter

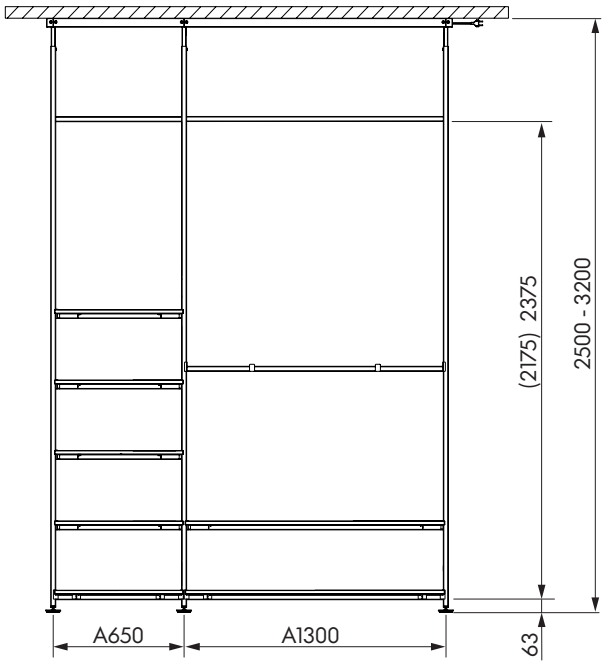
3 Technical data

3.1 Dimensions

Converter dimensions, power-dependent



System dimensions



3.2 Connected loads

General

Specification	Value	Unit
Operating voltage	220–240	V AC
Frequency	50–60	Hz
Nominal voltage (SELV)	24	V DC
Maximum load	90	W
Mains protection class; converter 10–180 W	II	
Maximum housing temperature (converter)	90	°C

3.3 Weight loads

The maximum load applies including the dead weight and the weight of all components

Upright

Specification	Load
Maximum load	120 kg

Support frame for shelf

Specification	Load
Maximum load	40 kg

Hanging rail

Specification	Load
Maximum load	40 kg

Hanging rail with front arms

Specification	Load
Maximum load	40 kg

Front arm

Specification	Load
Maximum load	15 kg

3.4 Scope of delivery and accessories

3.4.1 Uprights

Steel uprights with and without an integrated power track for supplying electricity to shelves with LED lighting. The spigots on the side are for fitting connecting tubes.

The uprights are telescopic and available for the following two height ranges:

- Upright for ceiling height 2500 - 2900 mm (A)
- Upright for ceiling height 2900 - 3200 mm (A)

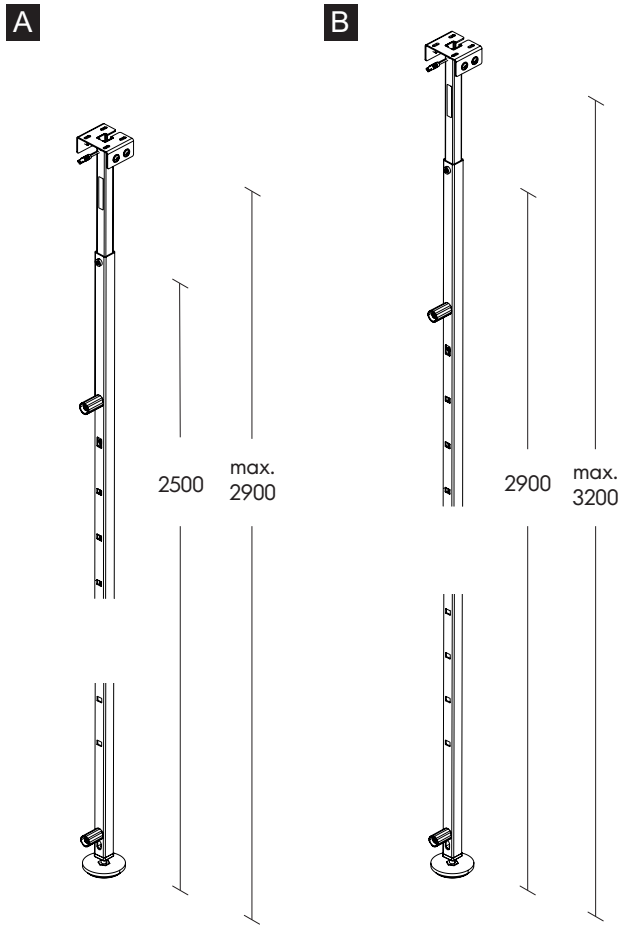


Fig. 3: Uprights

3.4.2 Connecting tube set

The connecting tubes are screwed on to the spigots on the uprights. Please use the assembly key (111-844.12).

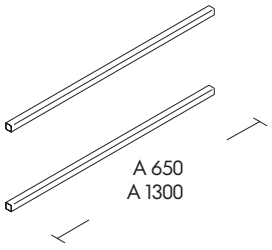


Fig. 4: Connecting tubes

3.4.3 Support frame for shelf

The support frames are used to install glass and wooden shelves. They are suspended between the uprights using shelf supports.

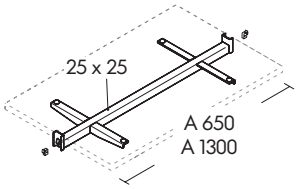


Fig. 5: Support frame for non-electrified shelf

3.4.4 Support frame for electrified shelf

The support frames are used to support glass and wooden shelves. They are suspended between the uprights using shelf supports. The shelf support set consists of two supports, one of which is for the power take-up (Fig. 6/1). A 5 W/10 W LED light (Fig. 6/2) is built into the electrified support frame. The power take-up is on the left side.

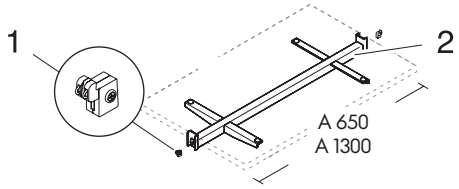


Fig. 6: Support frame for electrified shelf

3.4.5 Hanging rail

The hanging rail is suspended between the uprights using shelf supports.

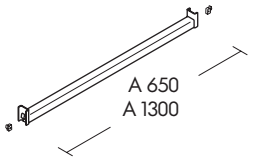


Fig. 7: Hanging rail

3.4.6 Front arm

The front arm is suspended over the hanging rail.

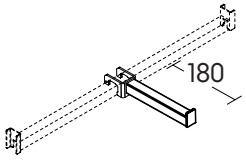


Fig. 8: Front arm

3.4.7 Hanging rail with front arms

The hanging rail is suspended between the uprights using shelf supports.

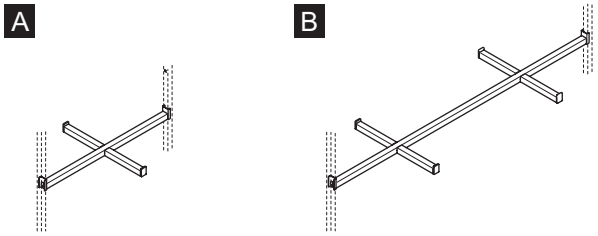


Fig. 9: Hanging rail with front arms

The hanging rails are available in the following configurations:

- Hanging rail with one front arm on both sides for 650 mm axis (A)
- Hanging rail with two front arms on both sides for 1300 mm axis (B)

3.4.8 Plug-in shelf brackets

The plug-in shelf brackets are inserted via the lower connecting tube. The two locking devices prevent the tube from twisting.

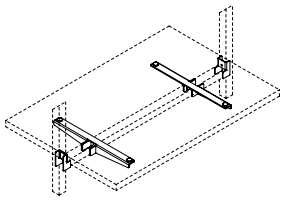


Fig. 10: Plug-in shelf brackets with anti-rotation device

3.4.9 LED spotlight

The LED spotlight is plugged into the grid holes on the electrified upright.

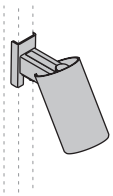


Fig. 11: LED spotlight

3.4.10 Single power adapter for connecting various consumers

The power take-up can only be fitted to an electrified upright. Once inserted, the adapter must be locked into place by pushing it down.

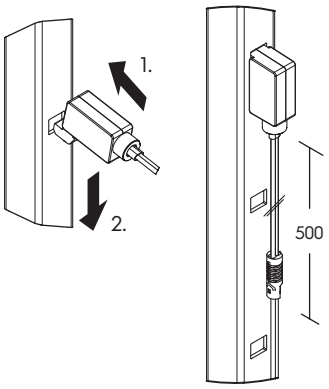


Fig. 12: Single power adapter with cable and socket

Specification	Value	Unit
Nominal voltage	24	V DC
Nominal current	max. 4	A

4 Assembly

⚠ WARNING

Risk of injury from falling goods and merchandise supports. The system can fail if it is not assembled correctly.

> **Please observe and follow all of the assembly instructions and notes provided.**

4.1 Unpacking

Check the delivery for completeness and integrity immediately upon receipt.

Proceed as follows if there is apparent transport damage:

- Do not accept delivery, or only accept delivery subject to reservation.
- Note the scope of damage on the transport documents or on the delivery ticket of the freight forwarder.
- Initiate the claim process.

Packaging

The product is safely packed so that transport damage is unlikely.

- Keep the original packaging for later transport.
- Only ship the product in the original packaging.
- Comply with all instructions that are specified on the packaging.

Disposing of packaging material

If packaging material is no longer required, dispose of it in accordance with the locally-applicable disposal regulations.

4.2 Storage

Store the product and its components under the following conditions:

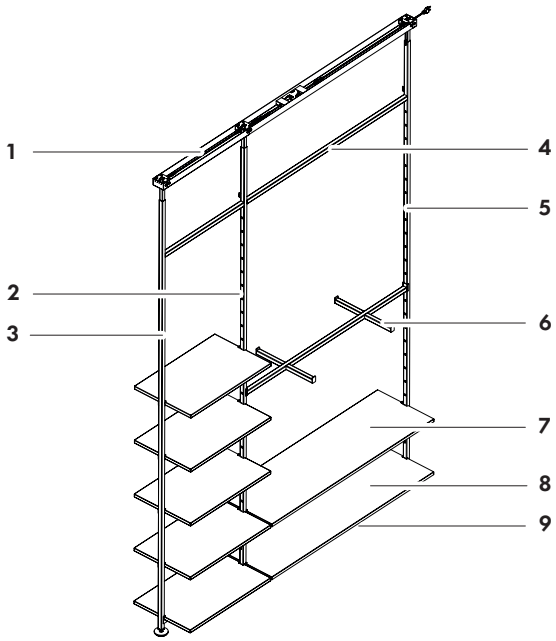
- Do not store outdoors.
- Store in a dry and dust-free location.
- Do not expose to aggressive media.
- Protect from sunlight.
- Avoid mechanical shocks.
- Storage temperature: 23 °C
- Relative humidity: 50%

4.3 Requirements for the installation location

The installation location must meet the following requirements:

- The installation location must be dry. Installation outdoors is prohibited.
- The ceiling must be designed for, and able to support, the load to be borne (check with architect and structural engineer).

4.4 Components

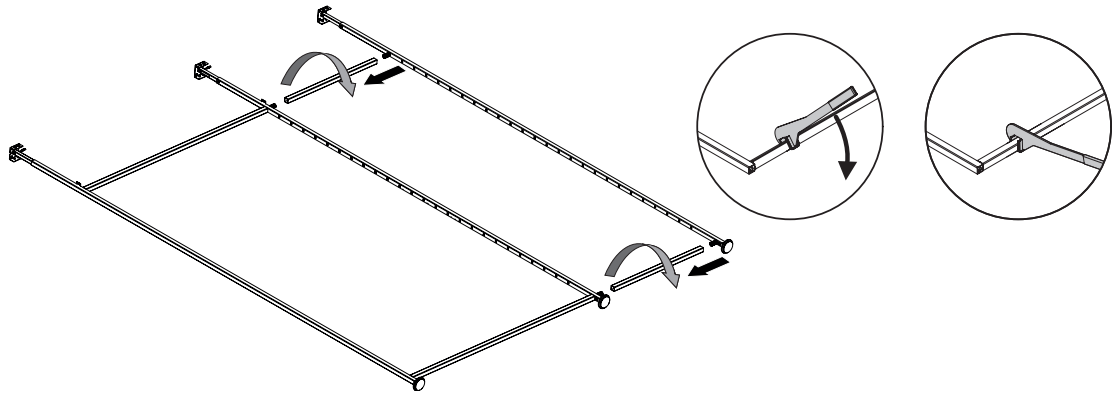


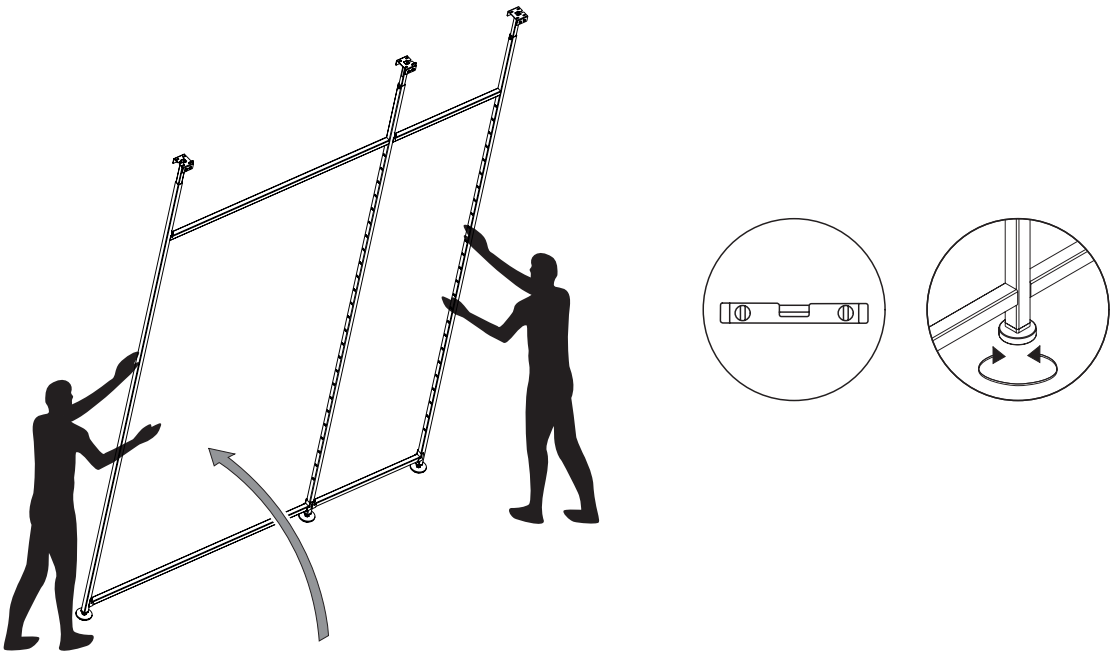
1	Cable channel A650 and A1300 with power supply from above
2	Upright, centre electrified
3	Upright, externally electrified
4	Connecting tube, top and bottom
5	Upright, outer
6	Hanging rail with front arms
7	Wooden and glass shelves
8	Plug-in shelf bracket
9	Cable and converter tray

4.5 Frame assembly

NOTE

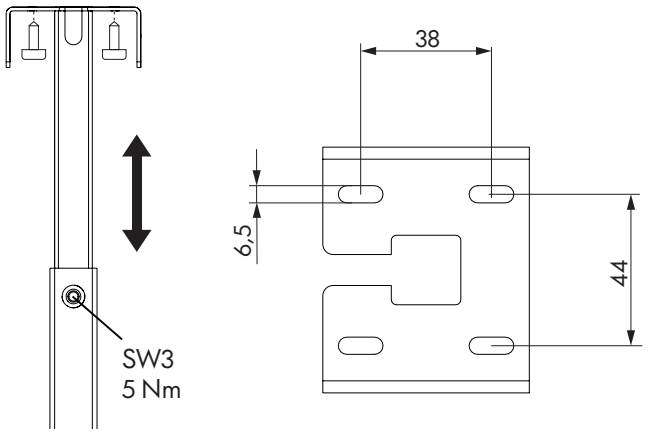
The connecting tubes must be twisted with the assembly tool and positioned properly.





4.6 Ceiling fixation

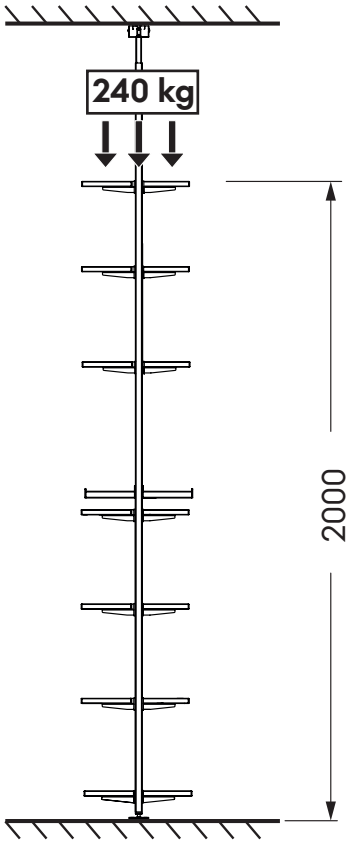
After adjusting the upright height and screwing it to the ceiling, the pull-out must be clamped firmly in place using the threaded pin on the side.



⚠ WARNING

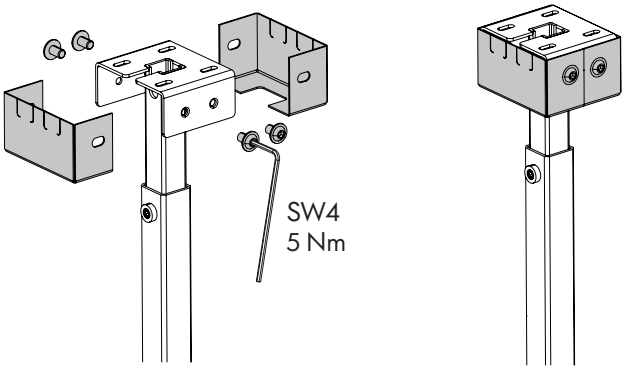
Please observe the instructions on load values and ensure that the ceiling construction and its fixtures can support the expected loads.

- **> The permissible weight load of all merchandise supports per axis is max. 240 kg. The weight load must be reduced as the height of the accessories increases.**
- **> Each ceiling fixation must support a horizontal force of 1.6 kN.**
- **> Each mounting point must be able to support a pulling force of 0.1 kN.**
- **> The correct size and type of anchor fixings must be used to suit the construction conditions.**
- **> Test the anchor fixings according to manufacturer specifications.**
- **> All mounting points must be used.**



4.7 Ceiling fixation cover assembly

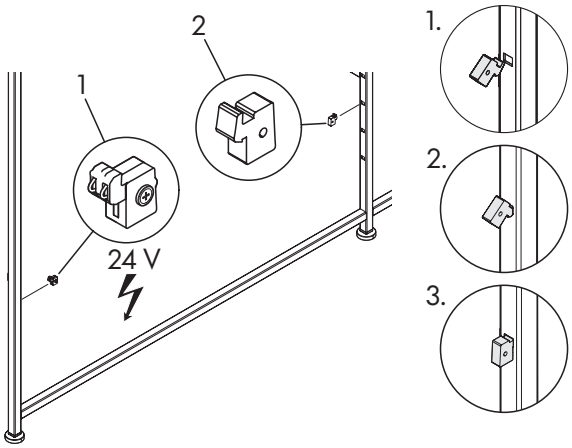
The screw connection of the ceiling pull-out is concealed with 2 covers (set).

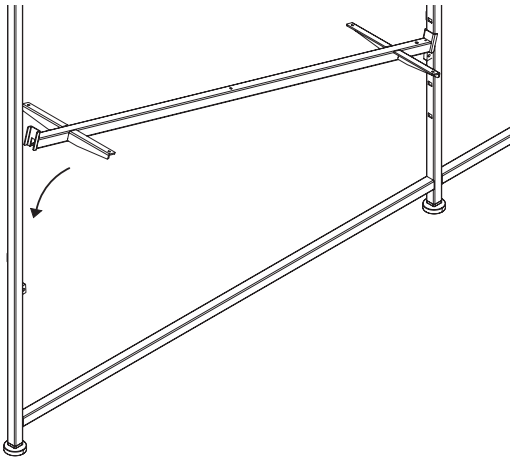


4.8 Support frame for shelf

NOTE

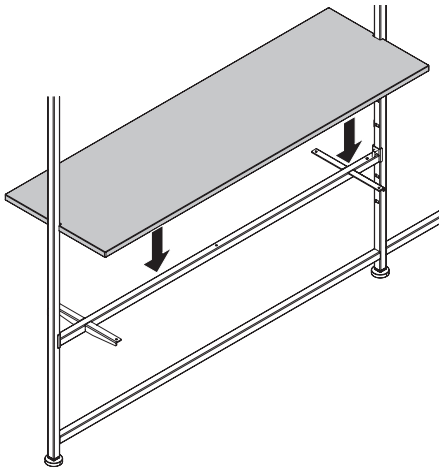
When using the electrified version, attention must be paid to the position of the electrified shelf support (1) on the shelf frame. The default position is on the left-hand side.





Production drawings are available to download at www.visplay.com.

- Drawing number:
  1000264 Glass shelf 1290 mm
  1000265 glass shelf 640 mm
  1000266 Wooden shelf 1290 mm
  1000267 Wooden shelf 640 mm

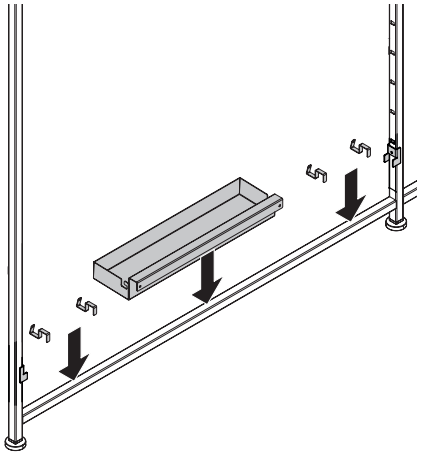


4.9 Electrification assembly

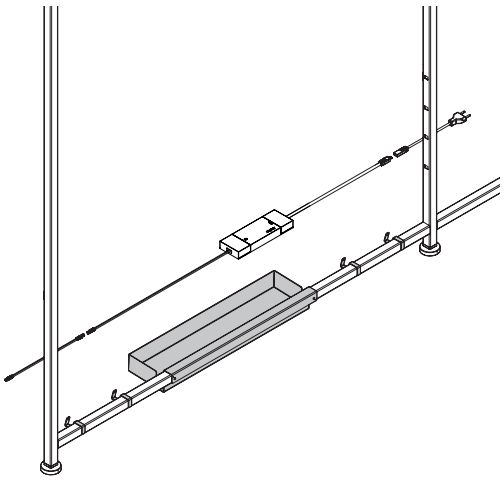
The power supply can be connected to electrified uprights at the top or bottom end.

4.9.1 Bottom connection

Attaching the cable holder and converter tray



Inserting cable and converter

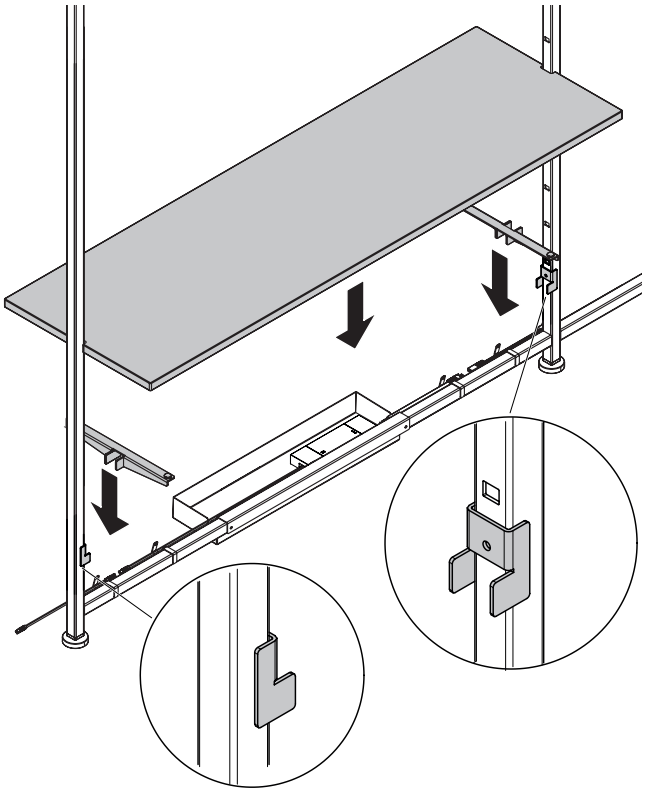


Wooden shelf (only with bottom connection)

The plug-in shelf brackets with an anti-rotation device are inserted via the lower connecting tube. The cable and converter tray are covered by a wooden shelf.

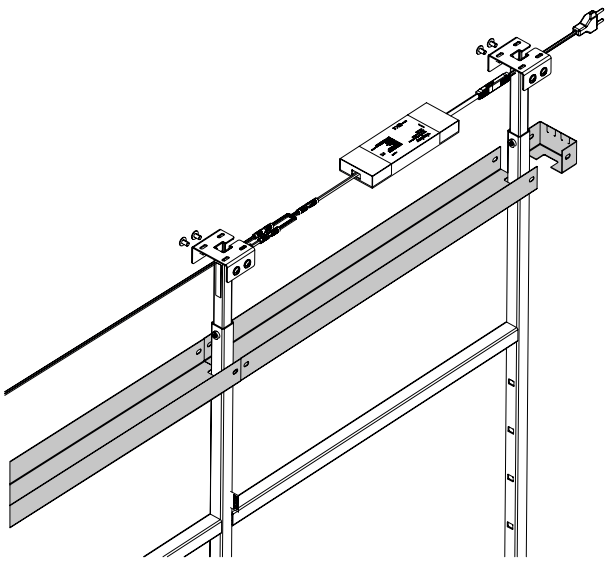
Production drawings for wooden shelves are available to download at www.visplay.com.

- Drawing number:
  100-0266 Wooden shelf 1290 mm
  100-0267 Wooden shelf 640 mm



4.9.2 Top connection

The converter and the cables are laid in the cable channel, which is affixed to the ceiling pull-out.



4.10 Visplay connector system

NOTE

It is imperative to take account of power consumption of the electrical devices! The power consumption of all electrical devices should be below the nominal output rating of the converter. It is generally recommended to factor in a power reserve for additional electrical devices.

Powering with 90 W converter

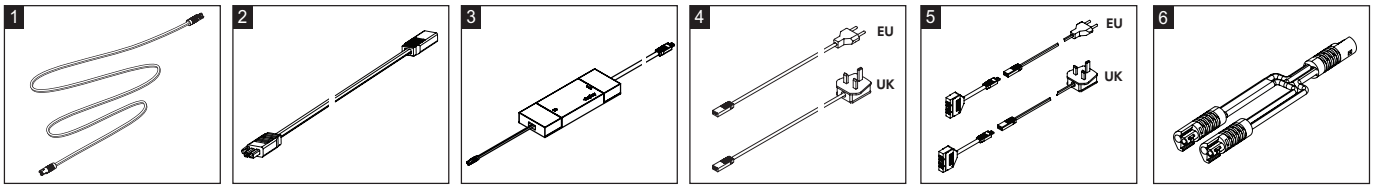
A 24 V / 90 W converter is required for one or two electrified system axes (650 or 1300 mm).

Two electrified axes are coupled with a 2-way 24 V distributor. The input side of the distributor is connected to the converter.

An additional converter is required for other electrified system axes.

It is connected to the mains using an extension cable and a 4-way 230 V distributor.

Components



1 Extension cable 24 V DC

2 HV extension cable

3 90 W LED converter

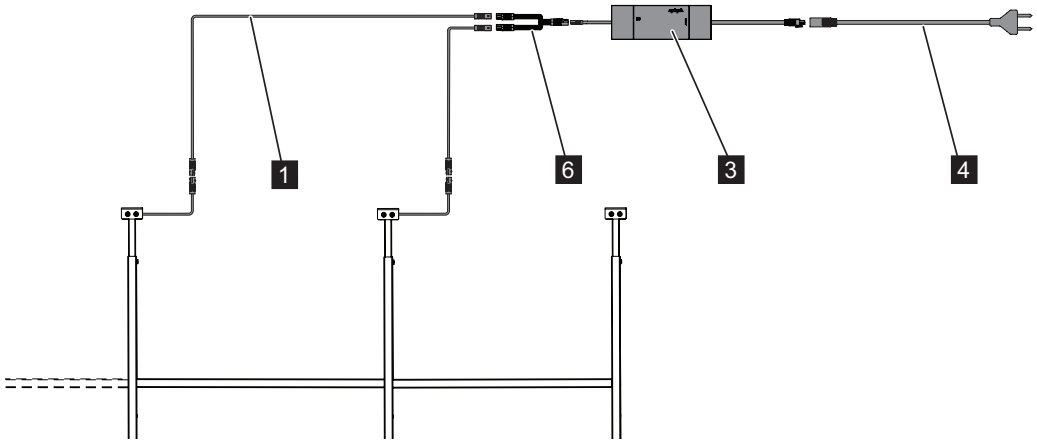
4 Supply lead 220–240 V AC

5 220-240 V AC distributor, 4-way

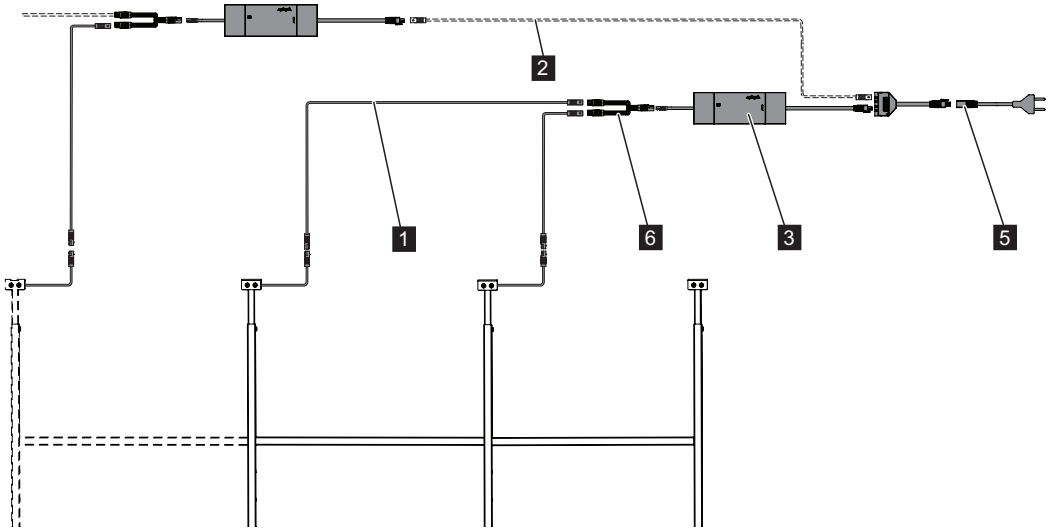
6 24 V DC distributor, 2-way

4.10.1 Electrified from the top

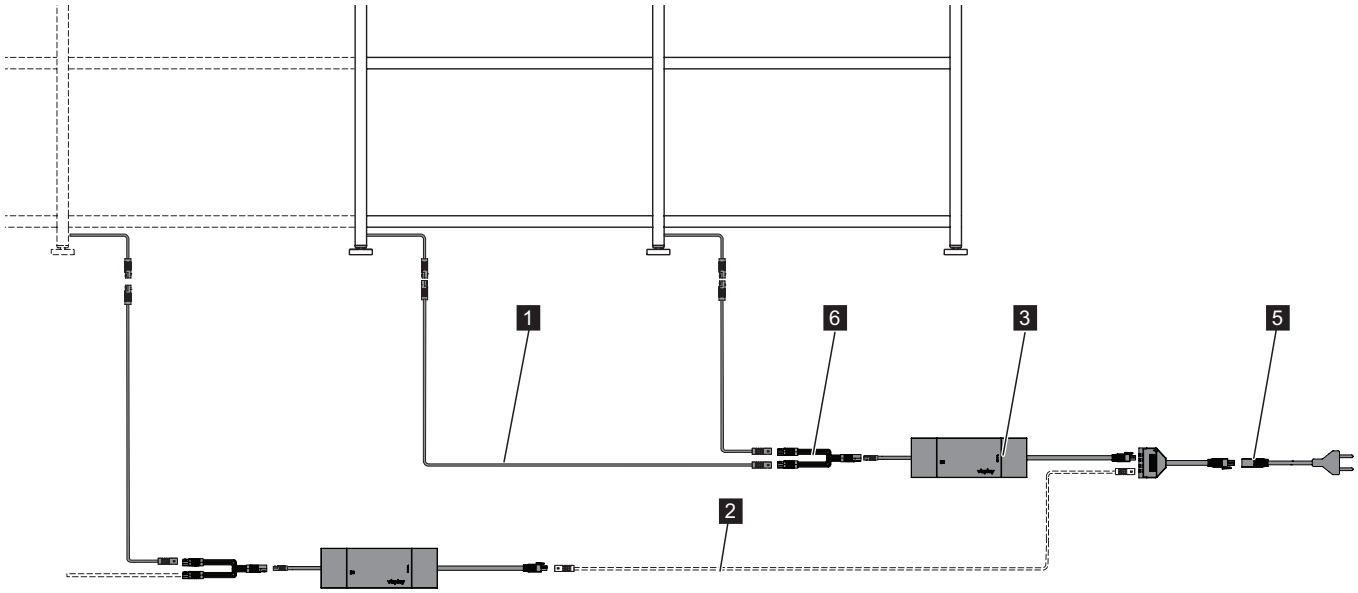
Powering with 90 W converter



Powering with 2 x 90 W converters



4.10.2 Electrified from the bottom



5 Operation

⚠ WARNING

If the maximum permissible load of the merchandise support is exceeded, merchandise supports and/or system can be damaged and cause injuries.

> **Observe the maximum load values of the individual merchandise supports.**
> **Do not exceed the maximum load of 240 kg per axis.**

5.1 Cleaning

During the course of time, dust and deposits from coat-hangers can settle on the merchandise supports. In order that the goods on display do not become soiled, the merchandise supports must be regularly cleaned.

Remove goods from the merchandise support.

1. Remove dirt on the merchandise support carefully with a soft, dry cloth.
2. Remove stubborn dirt with a mild cleaning agent.

6 Dismantling and disposal

6.1 Dismantling

> **Pull the power plug out of the power outlet.**
> **Dismount converter and power distribution module (if present).**

6.2 Disposal

NOTE

Hazards to the environment can occur if product components are disposed of improperly.

> **Ensure product components are disposed of in a proper environmental manner or through waste management specialists.**
> **Send components that can be recycled for recycling.**

- Send metal components for recycling or scrapping.
- Recycle plastic parts.
- Have an approved specialized disposal company dispose of electrical and electronic components.
- Dispose of other components according to their material characteristics.

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