

General Operating Instructions

WOWMAKER M130



Table of Contents

I. Quick Start Guide	3
II. Introduction and Important Terms	4
III. Flightcase	5
IV. Studiolifter	6
V. Studioframe	7
VI. Transport	8
VII. Set-Up	9
VIII. Starting the LED Display	13
IX. Dismantling the WOWMAKER	15
X. Care and Maintenance	17
XI. Important Information	18
XII. Troubleshooting	19
XIII. Features and Specifications	21
XIV. Cabling and Wiring	25



Please read these instructions carefully before first use.

In order to connect and operate the WOWMAKER M130 safely, you must read and understand the operating instructions!

WOWMAKER is a brand of
caleg Schrank und Gehäusebau GmbH
Zum Gerlen 1
D - 66131 Saarbrücken
Phone +49 6893 89 470
Mail your@wowmaker.de
Internet www.wowmaker.de

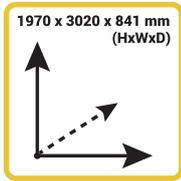
Validity of this document:

The release status of this user manual is shown on the title page and is only valid in connection with a WOWMaker of the same release status.
You can also find an overview at www.wowmaker.de/release.
Subject to technical changes.

Static calculation from June 15, 2018, SuS-Ingenieure GmbH, Ettlingen
© 06.2018 caleg Schrank und Gehäusebau GmbH

I. Quick Start Guide

The Quick Start Guide is a condensed version of the user guide for experienced users. It does not replace the user guide.



- 1 Check the transport dimensions, floor load and fuses at the installation location..
▶ See page 21 ▶ See drawing page 24

- 2 The Flightcase has four inner and four outer wheels.
The inner wheels must always have contact with the ground.
When transported on a tail lift, the four outer wheels can overhang.
▶ See page 8

- 3 When the WOWMAKER has reached its designated location, first lift off the rear case and then the front case. At least two people are required to remove the cases.
▶ See page 9

- 4 Place both cases upright against each other on the floor and lock them against each other with the butterfly locks.
▶ See page 12

Check that all connections are plugged in and locked.

Connections to the socket strip:

- 5
 - 1x Neutrik power cable ▶ See page 25
 - 2x Neutrik plugs from the display ▶ See page 25
 - S-Box power supply unit on socket strip ▶ See page 25
 - 1x power cable for Lifter control ▶ See page 25

Connections S-Box:

- 5
 - S-Box connection with power supply unit ▶ See page 25
 - Network cable between S-Box and display ▶ See page 25

- 6 Lower the device's foot and bring the Lifter to the presentation height.
▶ See page 11

- 7 Remove the slide-in panel and roll the floor of the case away to the front.
▶ See page 12

The WOWMAKER is now ready for presentation and media from the S-Box's hard disk can be shown on the display.

- 8 If desired, other media can be connected to the S-Box via cable.
▶ See page 13

II. Introduction and Important Terms

The **WOWMAKER M130** (hereinafter referred to as WOWMAKER) is an easy-to-use plug and play solution for the SAMSUNG IF 1.5 system. It combines a mobile LED Full HD display with a lift and transport system.

It consists of 3 main components, which together make up the **WOWMAKER**:

1. Flightcase

The flightcase is used to transport the display system safely and easily.

2. Studiolift

The Studiolifter is an adjustable electrical lifting system.

3. Studioframe

The Studioframe is a 130 Zoll (approx. 330cm) Full HD (IF-1.5mm) Samsung display.

The following is also included in delivery:

Neutrik power cable - used to connect the WOWMAKER to the 220 V power supply system (page 10)

Cable remote control - for controlling the Studiolifter (page 11)

S-Box - UHD video processor for signal processing (page 13)

Remote control - for operating the S-Box (page 13)

S-Box power supply - for powering the S-Box (page 14)

IR Extender, consisting of the IR transmitter box, the IR eye and a power supply unit (page 14)



ATTENTION: The device is only for indoor use!

If you pass the device on to a third party, please make sure they receive these operating instructions, as well as all accessories supplied with the WOWMAKER. This includes all of the written documents supplied, as they are also part of the operating instructions.

This device may not be used by people with impaired physical, sensory or mental abilities or by children, unless supervised by a person responsible for their safety.

Original WOWMAKER accessories can be found at: www.wowmaker.de/equipment



ATTENTION: During transport, make sure that the flightcase is not tilted sideways by more than 9 degrees.

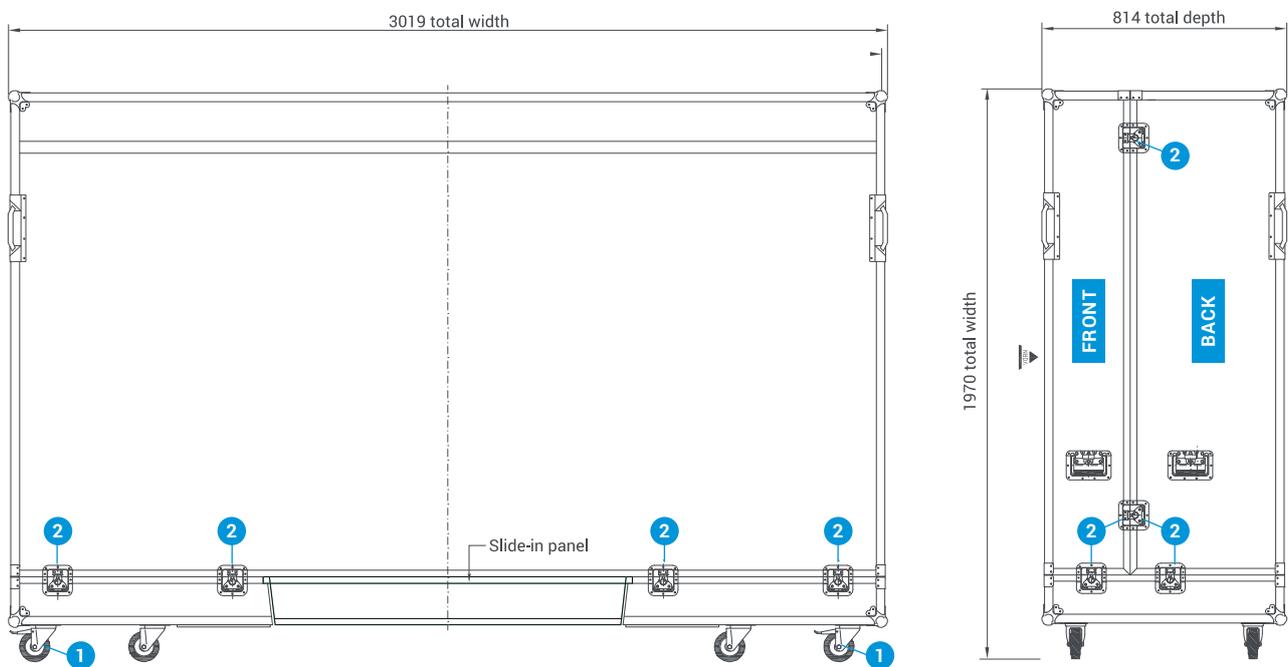
III. Flightcase

The Flightcase is designed to fit through a door with a width of 85cm and a standard height of 200cm. Due to its dimensions and weight (~750kg including Studioliifter and Studioframe) at least 2 people are required to move the WOWMAKER.

If a loading ramp or a forklift is available on site, a small van with a loading area of at least 302cm is sufficient. Otherwise, a 7.5t truck with a lifting platform should be used.



ATTENTION: Observe the load limits of the tail lift.



1 Corner castor wheels with brakes

2 Butterfly locks

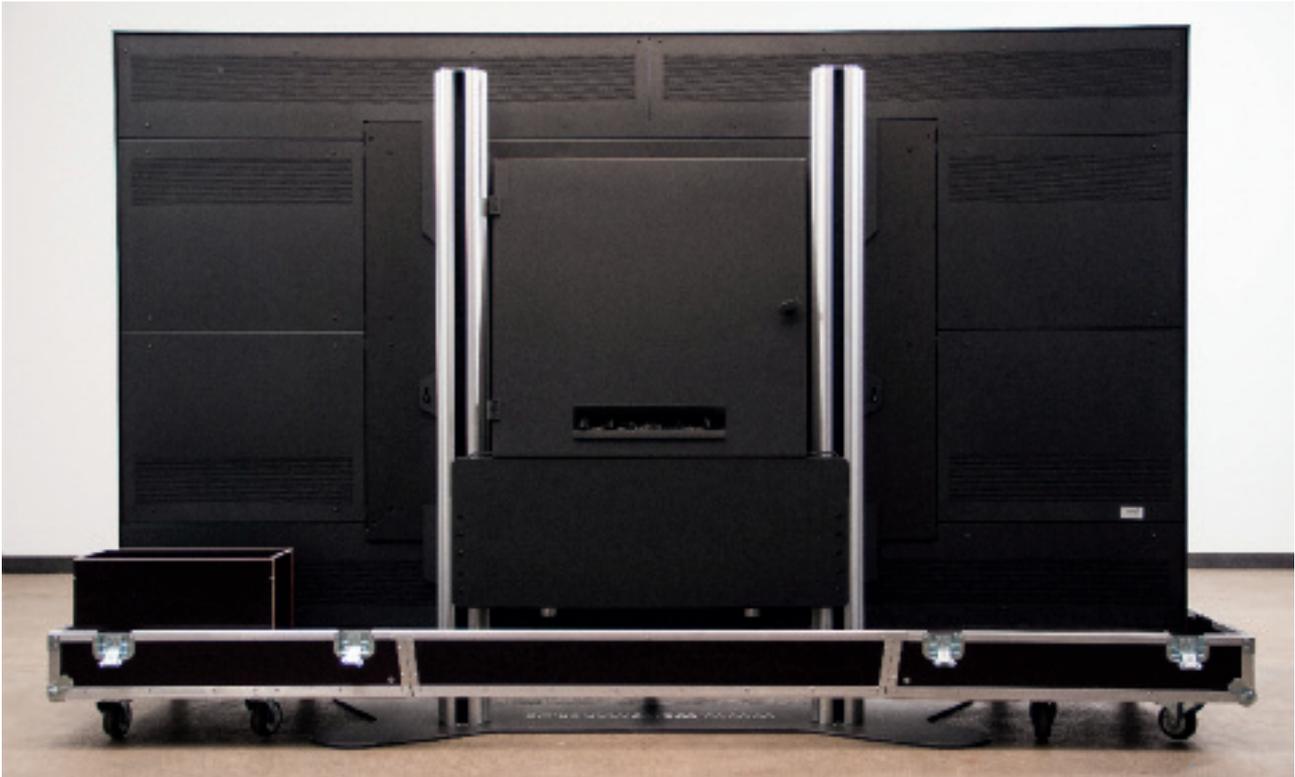
Weight empty approx. 250kg; weight with WOWMAKER approx. 750kg



IV. Studiolifter

The Studiolifter is controlled by a wired remote control. Optionally, a permanently connected control unit with digital height display can also be purchased for the device.

The motors in the lifting columns are not intended for constant changes in the height position of the display. The motion sequence should not exceed 4 minutes. Afterwards, a pause of at least 18 minutes must be observed. A slight oil smell may develop during lifting or lowering.

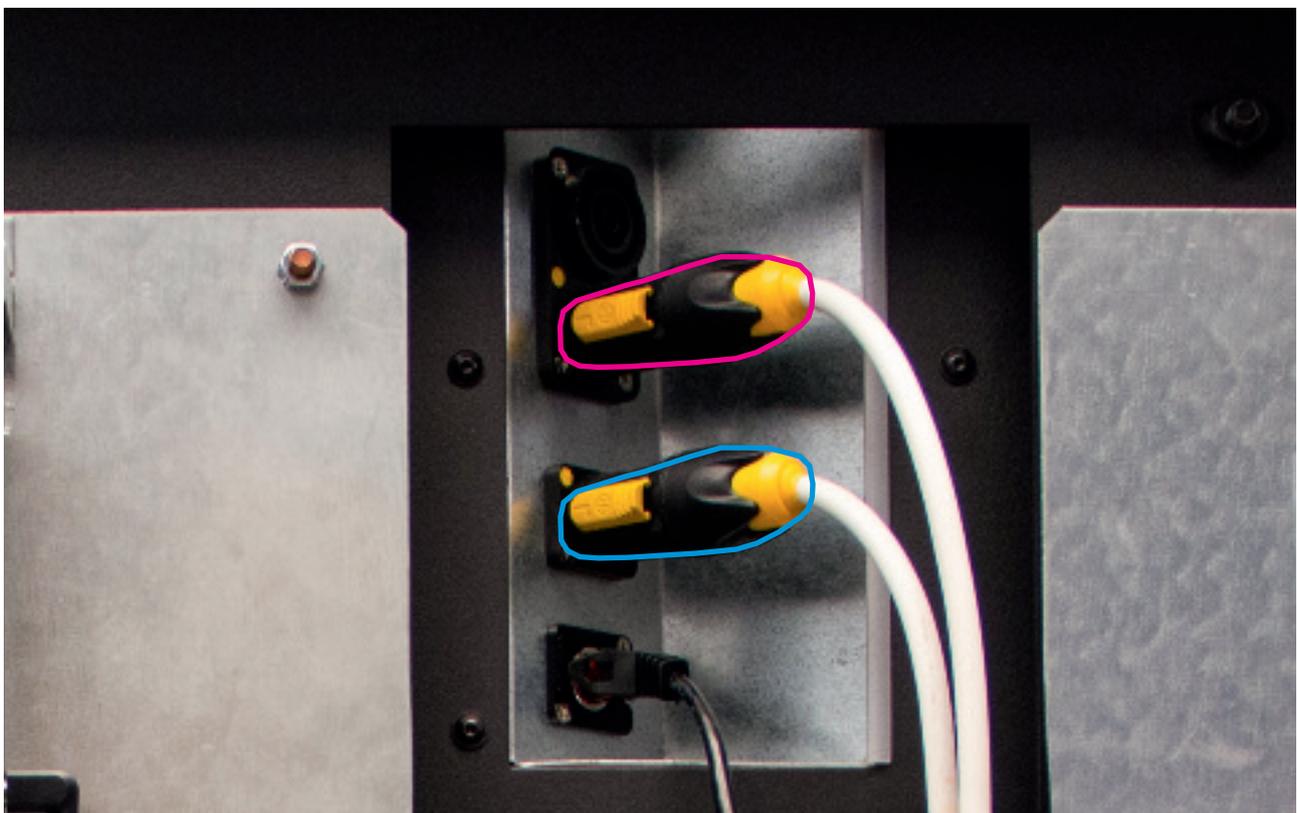
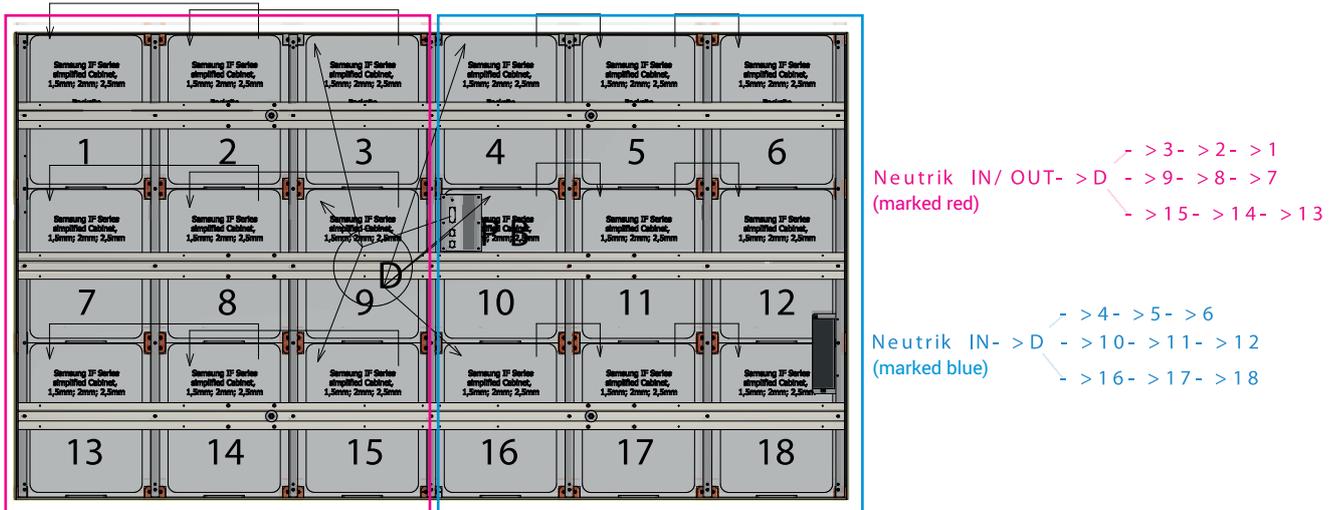


V. Studioframe

The Studioframe consists of 18 single modules (three lines of six modules each) and one S-Box (UHD video processor). The modules have FULL FRONT service access.

Do not touch the LED front with objects or dirty hands. This can irreparably damage the front boards.

Display wiring



VI. Transport



ATTENTION: The Flightcase has four inner and four outer wheels. The inner wheels must always have contact with the ground. When transported on a tail lift, the four outer wheels can overhang.



VII. Set-Up

Move the WOWMAKER to its intended position. This must be flat and able to support ~ 750kg, which corresponds to a floor load of ~ 600kg/m².



ATTENTION: During **transport**, make sure that the Flightcase is not tilted sideways by more than 9 degrees. **Installation** at maximum angle of 3 degrees.

STEP 1: Once the WOWMAKER has reached its intended position, remove the rear part of the Flightcase (wider one). To do so, open the ten butterfly locks. If necessary, the WOWMAKER can now be repositioned.



ATTENTION: At least two people are required to remove the case. Otherwise there is a risk of accidents. Set the rear part of the case down carefully.

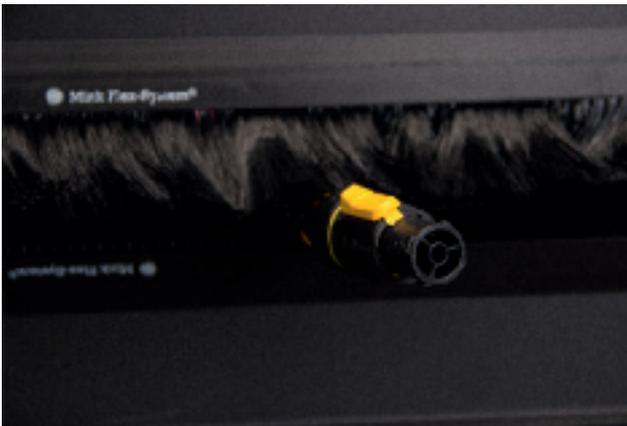
STEP 2: Open the butterfly locks on the front part of the case. Remove the front part of the case and set it down carefully.

STEP 3: Open the back door of the Studiolifter. Insert the cable end with the Neutrik plug from the outside in through the brush strip and connect it to the socket strip. Lock in place with a 1/8 turn and insert the wired remote control from the inside out. Close the door again (does not have to be locked).



ATTENTION: If the power supply is protected with 16A, the supplied Neutrik power cable can be used to power the multi outlet for both circuits of the display. Alternatively, both display circuits can be protected separately with 10A each.

ATTENTION: Make sure that the cables are not pinched!



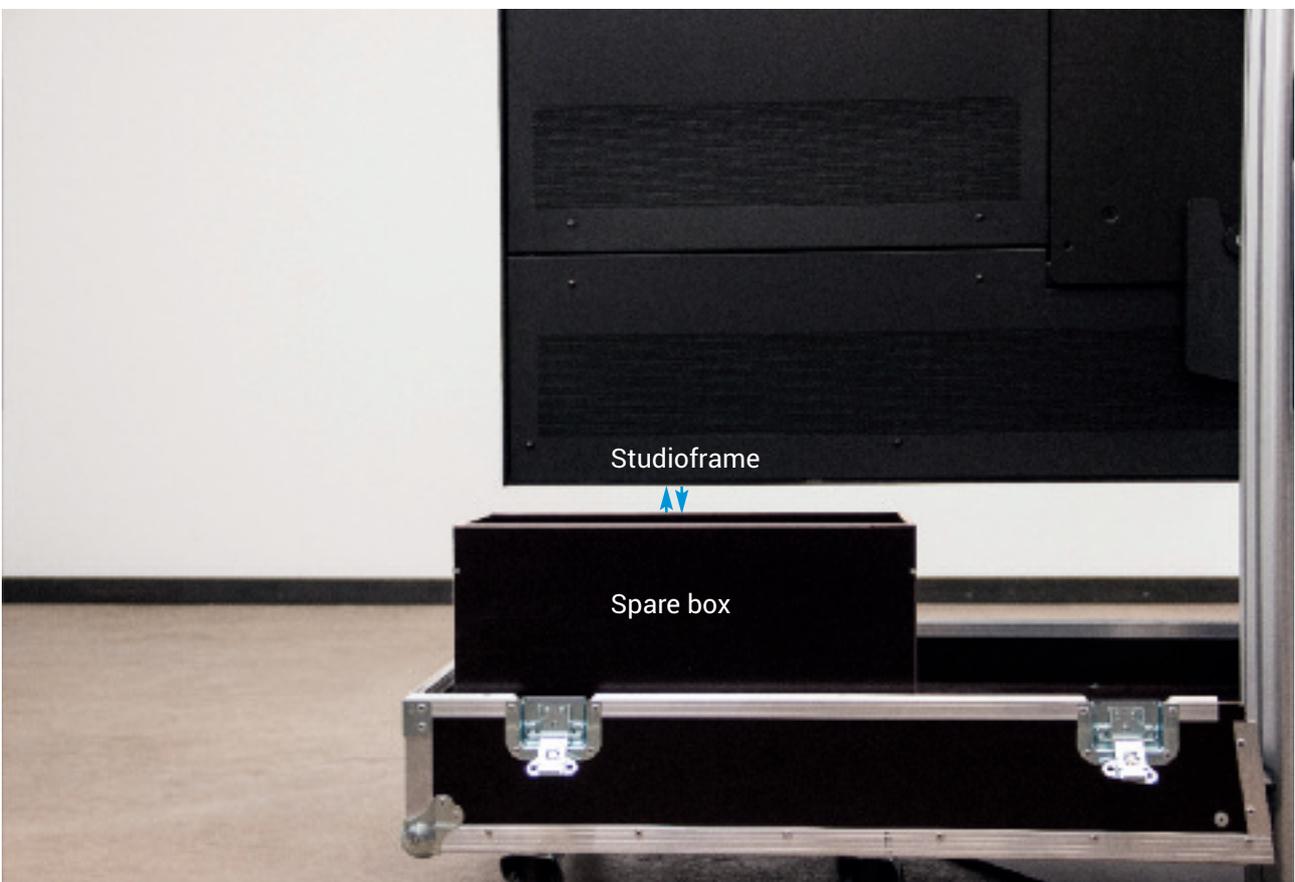
STEP 4: Connect the Neutrik power cable to the power supply (observe safety instructions on page 10).

STEP 5: Lower the foot with the button  and lift the Studioframe up a bit. Because the foot is retracted in transport mode, the lift function must be operated upwards to lower it.



ATTENTION: Risk of crushing by the foot plate when lowering the foot!

ATTENTION: The lower edge of the Studioframe must be higher than the upper edge of the “spare box”!



STEP 6: Pull the rear slide-in panel at the bottom of the Flightcase upwards. Now the floor of the case can be rolled away to the front.

Place the front and rear case back on the case floor.

Make sure you close them with the butterfly locks.



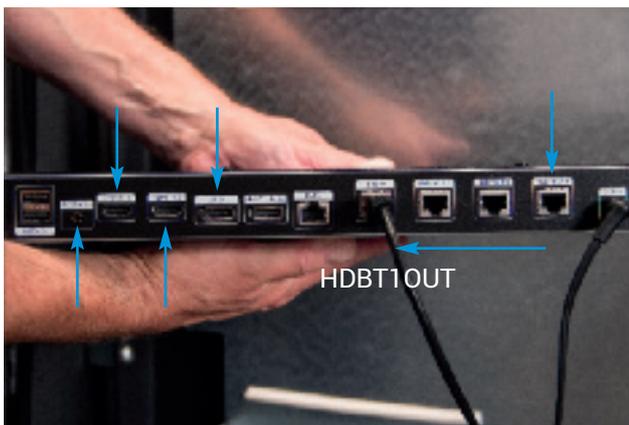
VIII. Starting the LED Display (Studioframe)

STEP 1: Set up the WOWMAKER in accordance with Chapter VII “Set-Up” and ensure that it is connected to a power supply. “NO VIDEO” will appear on the display.

STEP 2: Turn on the S-Box with the remote control.

STEP 3: Connect the video signal to the S-Box.

STEP 4: Select the signal source with the remote control.



ATTENTION: The display must be connected to the S-Box via the HDBT1OUT connection of the S-Box.

The S-Box has several connection options: 2x USB, 1x RS232C, 2x HDMI, 1x DP, 1x RJ45. You can operate the WOWMAKER with a remote control like a standard TV set. The “SOURCE” button is used to control the input signal.

In addition, there is an optical acoustic output.

The S-Box is detachable and can be operated separately from the WOWMAKER. To do so, slide the mounting upwards and remove the S-Box.



If the S-Box is operated separately, all cables must be routed through the brush strip to the inside. The S-Box power supply unit can be detached from the mounting plate (attached with Velcro).



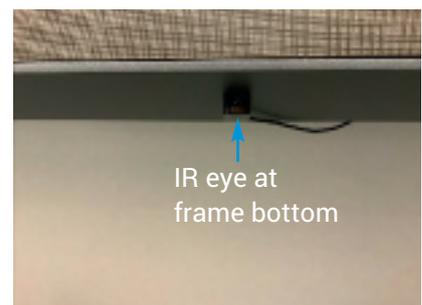
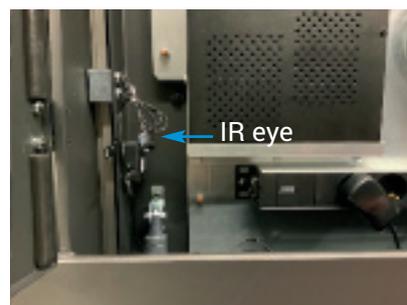
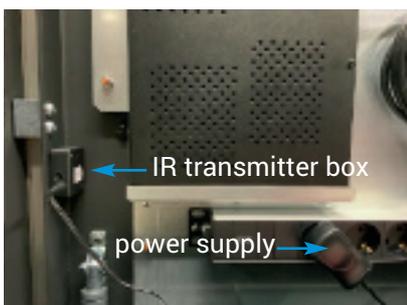
Infrared Extender

The Infrared (IR) Extender allows you to use the WOWMAKER's IR remote control from any angle, e.g. from the front. The IR signal from the remote control is redirected via an IR eye to the IR receiver of the S-Box.

The Extender consists of three parts:

- a power supply
- the IR eye with cable
- the IR transmitter box

The magnetic IR eye can be attached, for example, to a screw on the frame or to the frame of the Lifter. The cable to the S-Box is connected from below. The S-Box's IR receiver is located at the bottom left. The IR transmitter box is positioned opposite the frame.



Operating Instructions for SAMSUNG LED Panels and the S-Box

Detailed descriptions, safety instructions and instructions can be found in the manufacturer's manuals. They also describe the cleaning and maintenance of the LED panels there:

S-Box: <https://www.samsung.com/de/support/model/SBB-SNOWH3U/EN>

Panel: <https://www.samsung.com/de/support/model/LH015IFHTAS/EN/>

IX. Dismantling the WOWMAKER

Disconnect the signal cable. Roll the floor frame of the Flightcase to the front of the Studioframe and its lifting columns. The recesses in the floor frame should surround the lifting columns. Replace the rear slide-in panel.

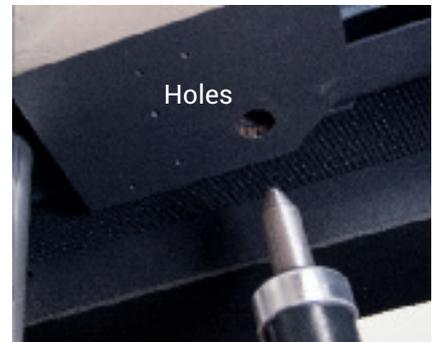


ATTENTION: Rear slide-in panel must be inserted before lowering!

ATTENTION: When lowering the display, make sure that the two locking pins snap into the holes in the Studiolifter. Then lower until the foot plate is flush with the floor of the Flightcase.

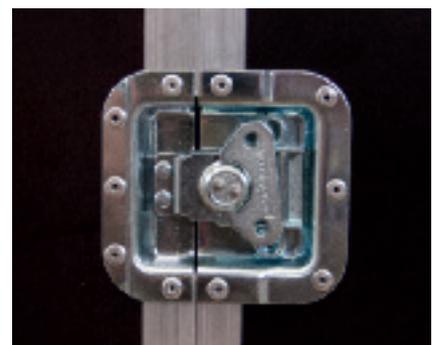
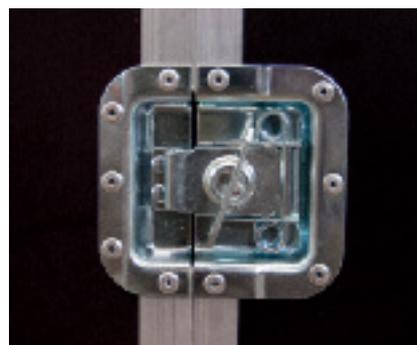
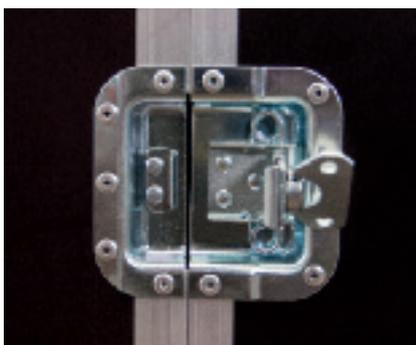


ATTENTION: Risk of crushing by the foot plate!



Disconnect the Neutrik power cable and unlock the Neutrik plug with a 1/8 turn. Store the power cable and the remote control in the internal cable box.

Replace and lock the case. The WOWMAKER is now ready for transport.

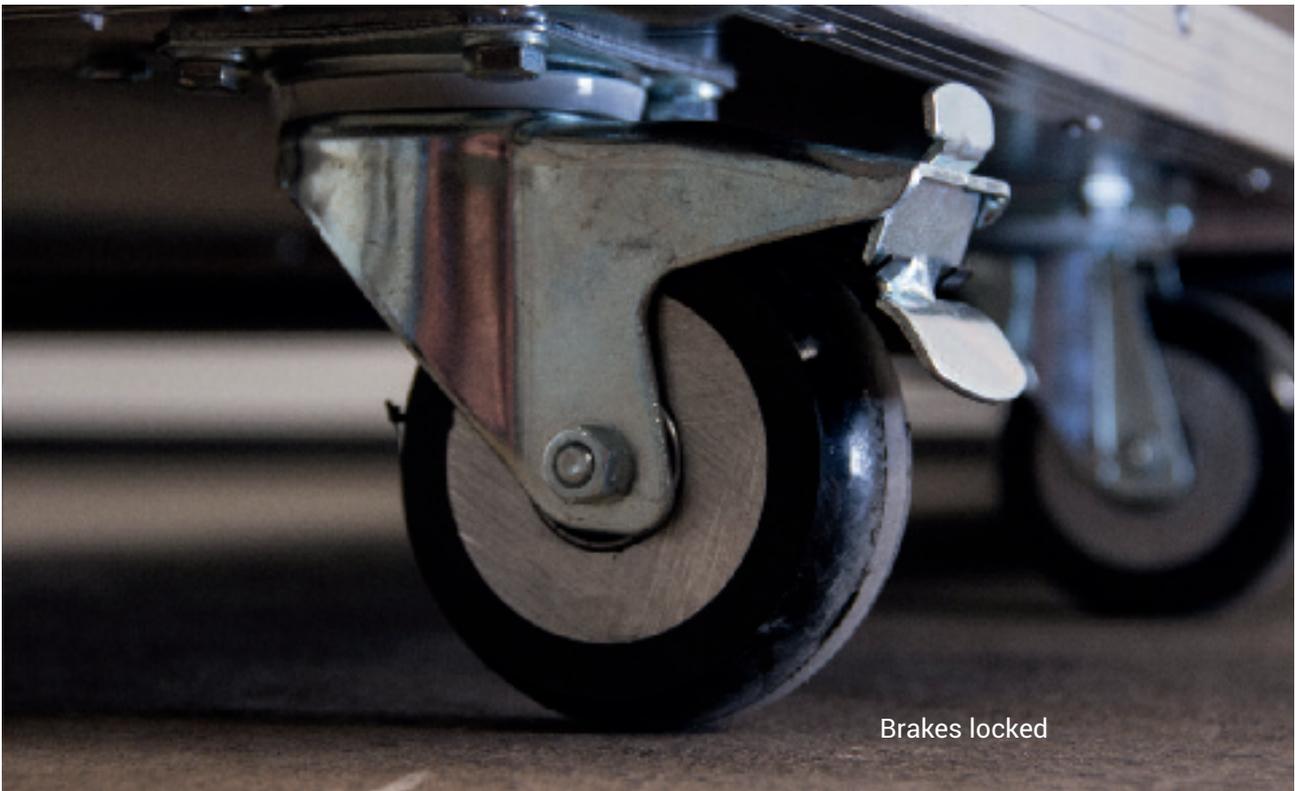




Brakes released



ATTENTION: You must lock the brakes on the castor wheels if you do not want the WOWMAKER to be moved.



Brakes locked

X. Care

Remove dust and dirt from the Flightcase and Studiolifter regularly.

FLIGHTCASE: Clean using pure water with the aid of a soft, non-abrasive cloth or rag. If necessary, add a small amount of neutral cleaning agent (pH 7) to the water.

STUDIOLIFTER: Clean using pure water with the aid of a soft, non-abrasive cloth or rag. If necessary, add a small amount of neutral cleaning agent (pH 7) to the water. Excessive scrubbing should be avoided.

STUDIOFRAME: Clean the back and front as indicated for the Studiolifter. Clean LEDs and front according to manufacturer's instructions from SAMSUNG.

LED MODULE: Clean only according to manufacturer's instructions from SAMSUNG.



ATTENTION: Do not use cleaning agents with scouring milk or solvents!

Maintenance

The WOWMAKER is maintenance-free.

XI. Important Information

	Operate device indoors only!
	Observe the load limits of the tail lift!
	The Flightcase has four inner and four outer wheels (in some models with an additional middle wheel). The inner wheels must always be in contact with the ground. When transported on a tail lift, the outer four wheels can therefore overhang.
	During transport, make sure that the Flightcase is not tilted laterally by more than 9°. Installation may only be carried out at an angle of 3°!
	At least two people are required to remove the cases. Otherwise there is a risk of accident. Set the cases down carefully!
	If the power supply is protected with 16A, the connector strip for both power circuits of the display can be operated with the supplied Neutrik power cable. Alternatively, both display circuits can be powered separately with 10A fuses!
	Only lay cables (power, media, remote control cables) through the brush strip!
	Make sure that the cables are not pinched!
	Attention when lowering the foot plate! There is risk of being crushed!
	The lower edge of the Studioframe must be higher than the upper edge of the "spare box"!
	The connection of the display with the S-Box must be guaranteed via the HDBT1OUT connection of the S-Box!
	The rear slide-in panel must be inserted before lowering!
	When lowering the display, make sure that the two locking bolts snap into the groove of the Studio-lifter. Continue to lower until the foot plate is flush with the floor of the Flightcase!
	Risk of crushing due to foot plate!
	Lock the wheels of the Flightcase if the WOWMAKER is not to be moved!
	Do not use cleaning agents with scouring milk or solvents!

XII. Troubleshooting

Problem	Possible solution
Flightcase won't close	Place groove and rails flush on each other. The rear slide-in panel must be inserted before lowering! ▶ See page 12
Flightcase cannot be locked	Check that the two cases are positioned correctly. The rear case (the wider one) covers the rear part and the front case covers the display side of the WOWMAKER. ▶ See page 9
Flightcase cannot be moved	Check the locking brakes. ▶ See page 16
WOWMAKER has no power	Check whether the Neutrik power cable is correctly inserted and locked (1/8 turn) at the connector strip. ▶ See page 10 Check whether the power cable is connected to a 220V socket. ▶ See page 10 Check how the power supply line is fused. If the power supply is fused with 16A, the connector strip for both power circuits of the display can be operated via the supplied Neutrik power cable. Alternatively, both display circuits can be powered separately fused with 10A each. ▶ See page 10 Check whether the Neutrik plug on the display power cable is correctly plugged in and locked (1/8 turn). ▶ See page 7
WOWMAKER has power but no picture	Check whether the S-Box is switched on. To switch it on, the S-Box must be supplied with 220V and can be operated via the remote control. ▶ See page 13 Check whether the network cable between the S-Box and the display frame is correctly connected and locked. ▶ See page 13

Problem	Possible solution
NO VIDEO appears on the display	The display has power, but no video signal. ▶ See page 13
The position of the Lifter cannot be changed	Check power supply.. ▶ See above: "WOWMAKER has no power" ▶ Call caleg service: +49 6893 89 470
Columns do not run parallel or out of sync	To do this, you must press the DOWN button  on the remote control (approx. 5 seconds) until all motors have reached the lower end position. Continue to press the button for approx. 5 seconds.
Incorrect display of the LED modules or cabinet	▶ Call SAMSUNG service: +49 3591 27 220

XIII. Features and Specifications

Model name	WOWMAKER M 130
Description	Complete mobile 130 Zoll LED full-HD system with Lifter and Flightcase
Display technology	Samsung, Series IF1.5
Cover, Lifter, Flightcase	caleg Schrank und Gehäusebau GmbH
Display size	2895mm x 1635mm
Display diagonal	3300mm (130 Zoll)
Active display area	2880mm x 1620mm
Adjustable lower display edge (Lifter)	From 100mm to 1350mm
Base area (foot plate)	1750mm x 820mm
Required floor space	3020mm x 1000mm
Clearance height (Lifter)	From 1735mm to 2985mm
Resolution	1920px x 1080px
Pixel pitch	1.5mm
Max. brightness	800cd/m ² (nit); Dynamic peaking 1.600cd/m ² (nit)
Viewing angle	160° horizontal and 160° vertical
Image quality options	HDR, dynamic peaking
Video rate	50/60Hz
S-Box (UHD processor)	Can be operated with HDBaseT
Input options	2x USB, 1x RS232C, 2x HDMI, 1x DP, 1x RJ45
Output options	DP, HDBT, Digital Audio Out (Optical)
Voltage input	220V – 240V / 50Hz
Power consumption	Max.: 3.6KW; Average value: 1.2KW
Line fuse	One 16A line or two 10A lines (see Page 25)
Total weight (with Flightcase)	750kg (floor load: 600kg/m ²)
Transport dimensions (with Flightcase)	1970mm x 3020mm x 841mm (HxWxD)
Number of people required for assembly/transport	2 people
Required loading equipment	Loadable with 7.5t truck with tail lift
Clear dimensions for transport	Door opening size 2000mm x 850mm (HxW), maneuvering clearance after door: 3300mm

Service contacts on page 26

IF SERIES – IF015H

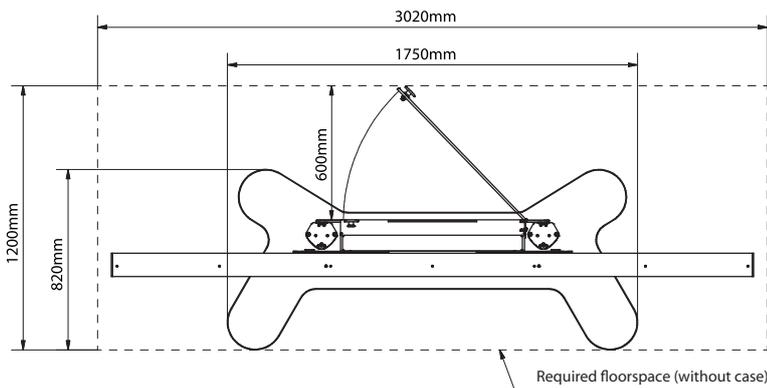
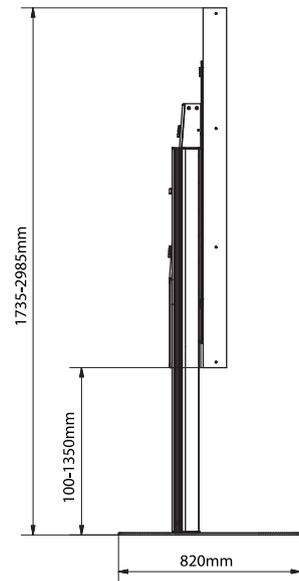
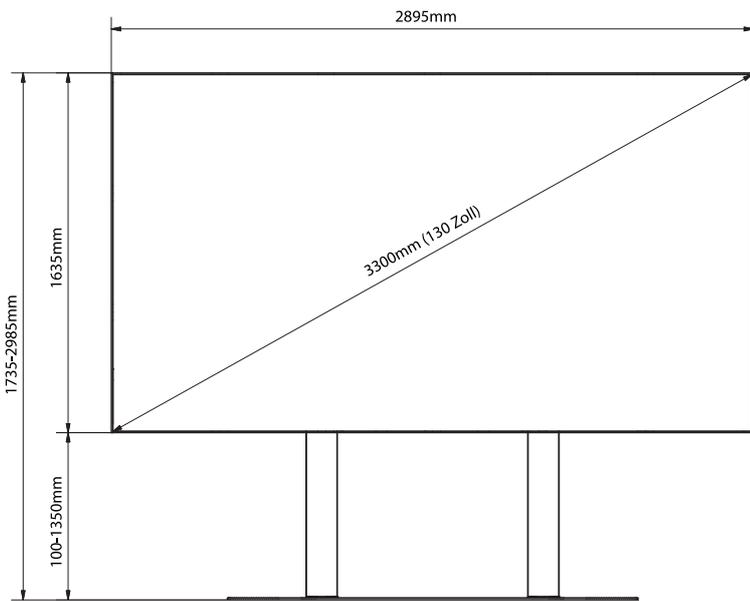
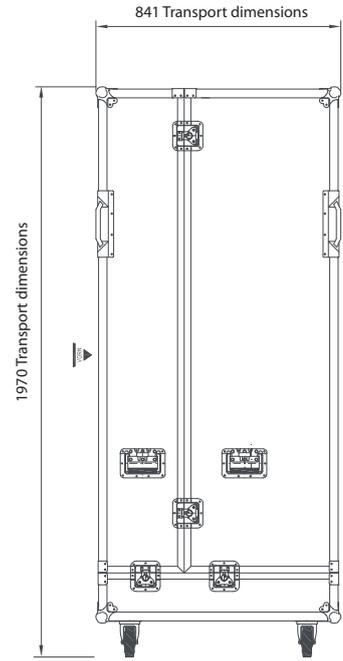
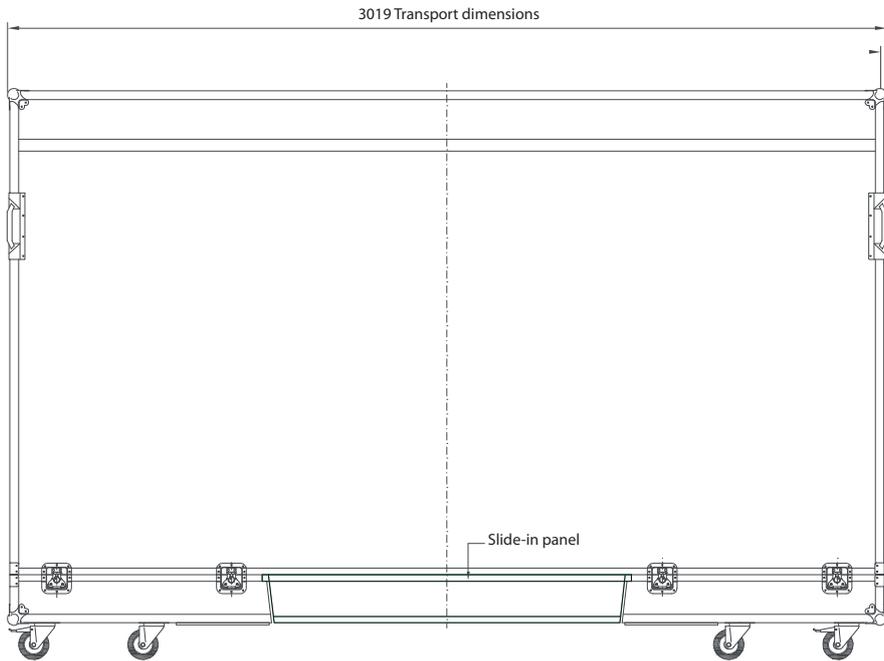
Physical Parameter	
Pixel pitch	1.5mm
Pixel density	444,444m ² / 41,290ft ²
Diode type	Surface Mount Device (SMD)
Optical Parameter	
Max brightness (after calibration)	800nit; Dynamic Peak 1.600nit
Contrast ratio	5,000:1
Viewing angle – horizontal	160°
Viewing angle – vertical	160°
Bit depth	16bit per Color
Color temperature – default	6,500K
Color temperature – adjustable	2,800 – 10,000K (use S/BOX)
Video rate	50/60Hz
Electrical Parameter	
Input power	100~240VAC, 50/60Hz
Power consumption – max	770 (W/m ²) / 200 (W/Cabinet)
Heat generation – max (BTU/SF)	24.5 BTU/SF per hour
Refresh rate	1,920Hz ~ 3,840Hz
Operations Conditions	
LED lifetime	100,000 hours
Certification Service	
Service	Front Service and/or Rear Service

S-BOX – SNOWJ3U / Basic Model Code SBB-SNOWJ3U/**

Feature	
Resolution	UHD (3840 X 2160)
S/W platform	Tizen 2.4
Log function	Supported
Image quality enhancing	HDR, Dynamic Peaking
Diagnostics	Supported
Ethernet	Supported
Input signal	DP 1.4, HDMI 2.0 port x 2, USB
Output signal	DP, HDBT
MagicInfo solution	Supported (CMS/Diagnostics)
Bit-depth (bit)	16bit (RGB 4:4:4)
Refresh rate	50/60Hz
Power	
Power consumption (max, W/m ²)	66W
Power consumption (typical, W/m ²)	60W
Operation	
Working temperature	0°C~40°C (32°F to 104°F)
Operation humidity	10% ~ 80%
Mechanical Spec	
Set without stand	422.4x38.3x221.1mm
Set weight without stand	2.65kg
I/G Card	
Resolution	FHD
Input signal	HDBT
Output signal	Vby1
Log function	Supported
Bit-depth	10bit (RGB 4:4:4)
Refresh rate	50/60Hz
Working temperature	0°C~40°C (32°F to 104°F)
Operation humidity	10% ~ 80%

(Except Accessories)

Drawings



Installation site & route to installation site

Total weight (with Flightcase): 750kg

Floor load: 600kg/m²

Transport dimensions (with Flightcase):
1970 mm x 3020 mm x 841mm (HxWxD)

Required loading equipment:

Loadable with 7.5t truck with tail lift

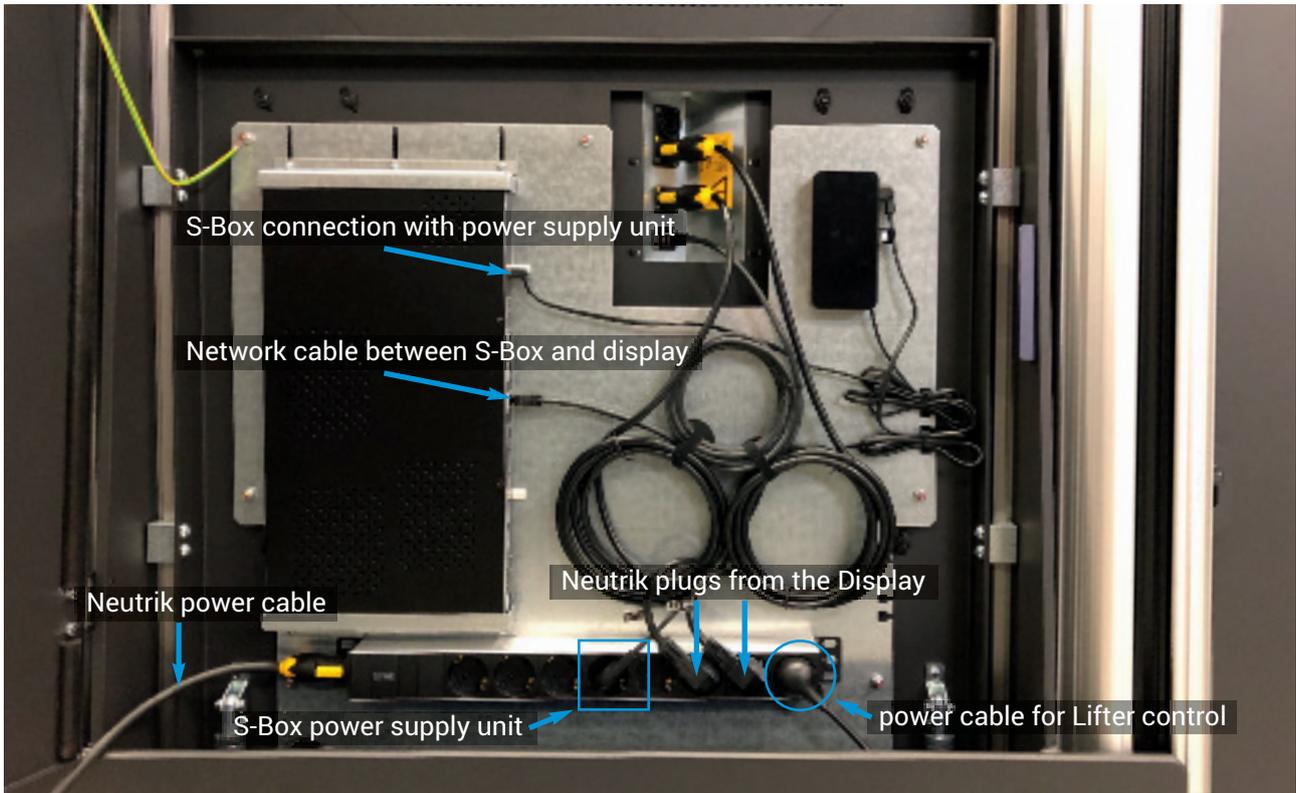
Clear dimensions for transport:

Door opening size 2000mm x 850mm (HxW),
maneuvering clearance after door: 3300mm

Voltage Input: 220V – 240V / 50/60Hz

Line Fuse: One 16A or two 10A line

XIV. Cabling and Wiring



Check that all connections are plugged in and locked.

Connections to the socket strip:

- 1x Neutrik power cable
- 2x Neutrik plugs from the display
- S-Box power supply unit on socket strip
- 1x power cable for Lifter control

Connections S-Box:

- S-Box connection with power supply unit
- Network cable between S-Box and display

