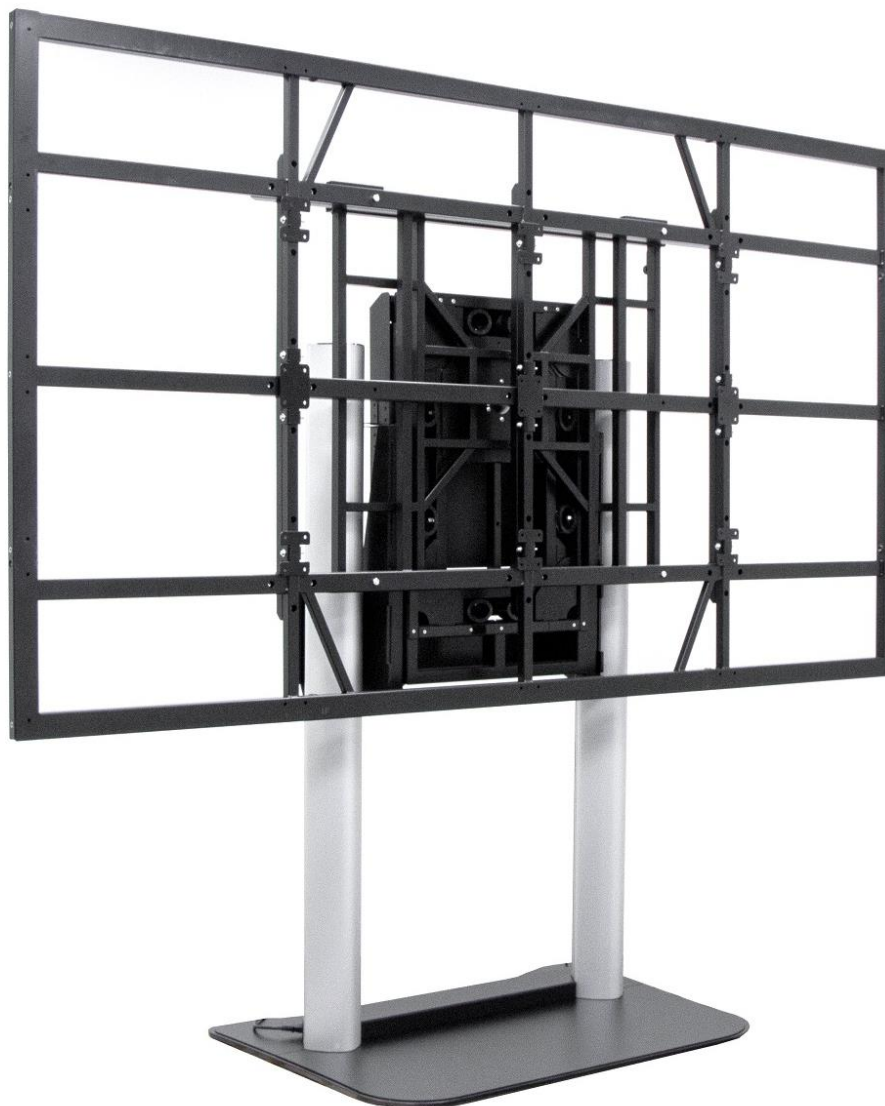


# TITAN Display Lifting System



## Manual Version 1.1

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## 1. Preamble

The TITAN Lifter has been developed and manufactured with the highest care and attention. However, improper handling can cause a risk for safety and / or damage. Read these instructions carefully before handling and installing the product so that you can safely enjoy your device.

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## 2. Safety instructions

### 2.1 Warnings

This manual must be handed over to the persons who install and operate the product. Please read the manual and all instruction carefully. If you ignore the safety instructions in this manual, humans may be seriously injured or there is a possibility of an accident or death. Installation, handling, service and the like must be carried out by qualified persons! Qualified persons, hereinafter referred to as “qualified persons”, are specialists such as electricians, event engineers and other specialist personnel with equivalent or higher qualifications.



**Warning: Electrical hazard! Electrical work shall only be done by a fully qualified and trained electrician. Follow the local laws and regulations.**



**Warning: Installation, operation and maintenance only by trained fully qualified personnel. The product should not be installed or used by people with impaired physical, sensory or mental abilities. Furthermore, the product may not be installed or used by children.**



**Warning: Risk of caught body parts between moving parts. Operate the lift only when no person is present in the near proximity of the lift. Use the rotating mechanism carefully and make sure no person is present in the near proximity of the lift.**



**Do not touch with your hands or fingers into the lifting columns.**

- Before opening the flightcase make sure that all the wheels are locked.
- Carefully open the flightcase hoods step by step. Do not open all closing latches at once. Only open the latches of the hood that you want to remove. Otherwise parts of the flightcase might accidentally fall down and cause serious injuries or product damage.
- The removed flightcase hoods need to be secured so that they do not tilt and fall after being removed from the flightcase. This may cause serious injuries or product damage.
- Transport the product always vertically. Do not tilt the product or its flightcase.
- Make sure to connect the power cable to the grounded current and connect PE (Protection Earth). Otherwise, persons may be electrocuted or injured.
- Use the rated voltage only. The product can be damaged or persons may be electrocuted or injured.
- Be careful not to step or place heavy objects on the power cord or AC adapter. Be careful not to damage the power cord or AC adapter with sharp objects, by bending, stretching, cutting or similar. Damaged power cords may cause a fire or electric shock.
- Do not drop an object or apply strong forces to the product. It can cause injury to humans and damage the product.
- When moving the lift up or down make sure not to clamp body parts of persons, cables or anything else.
- When lowering the base plate make sure that the area beneath is clean and flat. Risk of clamping the feet under the plate is high.
- Make sure not to clamp body parts of persons, cables or anything else when rotating the display unit. Make sure cables are long enough when rotating the display.
- The maximum continuous operation of the lifting mechanism is 2 minutes. This shall never be exceeded. Exceeding the continuous operation time might cause the lifting mechanism to overheat. Resulting damages are excluded from warranty.
- Never disassemble, repair or modify the TITAN Lift or any accessory. This may cause serious accidents or death. Contact your vendor if you are in the need of support.
- Never install displays to the TITAN Lift that are not validated and certified by the manufacturer.
- If smoke can be smelled/detected or if you hear a strange sound or anything else that is uncommon disconnect the device from mains power. Contact your vendor. If usage is continued, electrical shock or fire can occur.
- Make sure to position the TITAN Lift only on flat horizontal surfaces without any incline.
- Do not operate the TITAN Lift in an explosive atmosphere.
- Do not install the TITAN Lift in an environment where external forces such as wind might be applied to the system.
- Do not use the product outdoors. This product is made only for indoor usage. Using it outdoor can cause serious accidents and property damage.
- Do not expose the TITAN Lift to water or moisture to prevent any damage and danger.
- If water or any foreign substance goes inside the product, disconnect the mains power immediately and contact your vendor. Otherwise, this may cause a fire or electric shock due to damage to the product.

- **Keep away from heat sources like heaters. Electrical shock, fire, malfunction or deformation may occur.**
- **Set up the TITAN Lift and the installed display in an open area so that air intake and outlet are free to ensure a safe and good functionality. If ventilation is not working correctly fire can break out due to internal heat.**
- **The overall weight of TITAN Lift (including flightcase) and mounted Display might exceed an total weight of 770 kg. Make sure that the carrying structures during transport, setup, usage and maintenance are able to carry that weight safely.**
- **Prior to every installation, check all mounting threads as well as the complete housing for any kind of defect and ensure correct function. If a damage or defective function is detected do not keep using the product and contact your vendor for service.**
- **When lowering the TITAN Lift back in the flightcase, please make sure that the 2 round pins of the flightcase snap and glide into the two square pipes of the lift. Continue to lower until the base plate is flush with the floor of the flightcase!**
- **If you install the product in a place that does not meet the recommended conditions, this may cause injuries to humans and cause serious damage to the product's quality, life cycle, and appearance. This caution applies to places where there is an abundance of fine dust or oil mist, chemical substances are used, the temperature is very high or low or, the humidity is very high. This kind of conditions will invalidate the warranty.**

## 2.2 Risk situations

### **Insufficient load capacity of carrying structures during transport, setup, usage and maintenance**

- Protection objective: prevent personal injury and property damage.
- The transport vehicle (for example the truck), the transport route and the location where the TITAN Lifter will be installed must be able to support the combined weight of all the equipment (product itself plus flightcase and display). The total weight can easily exceed 770 kg.
- Ensure that during the entire procedure of transport, set up and operation, the TITAN Lifter is handled with suitable equipment and in suitable environments.

### **Risk of injury due to the possibility of falling objects during packing or unpacking of the TITAN Lifter into and out of its flightcase.**

- Protection objective: avoid injury from falling parts.
- Wear appropriate safety shoes, gloves and helmet.
- Carefully open the flightcase hoods step by step. Do not open all closing latches at once.

### **Risk of getting crushed by the flightcase hoods.**

- Protection objective: avoid injury from flightcase hoods
- Wear appropriate safety shoes, gloves and helmet
- Make sure that the place where you pack / unpack the TITAN Lifter has enough space to park the flightcase hoods and that the surface is flat.

### **Incorrect installation may lead to certain parts of the TITAN Lifter or the entire TITAN Lifter product to fall down.**

- Protection objective: prevent personal injury and property damage.
- Before turning the TITAN Lifter on, please double check the warnings list and make sure that all the conditions are fulfilled.

### **Risk of serious injury by clamping the upper and lower limbs between the moving parts of the TITAN Lifter.**

- Protection objective: prevent personal injury or property damage.
- Wear appropriate safety shoes, gloves and helmet.
- When the TITAN Lifter is lifting up from its case or when the screen is rotating, be careful not to catch the upper and lower limbs between the moving parts and especially underneath the base plate.

### **Risk of injury or death by electrical shock.**

- Protection objective: Prevent personal injuries or death.
- If the housing of the device is opened, persons who work on the device can touch parts that can cause an electrical shock.
- Always disconnect power supply before working on the device or opening the housing. Working on the device and opening the housing should only be done by fully qualified personnel. Follow local laws and regulations.

### **Risk of injury or death by electrical shock.**

- Protection objective: Prevent personal injuries or death.
- If the housing of the device is damaged, deformed etc. there is an increased risk that the inside is also damaged. Persons who touch the housing might get an electrical shock. This endangers all persons who might touch a damaged product.
- When there is any damage, disconnect power supply of the device by qualified personnel. Contact vendor / service partner.

### **Risk of injury or death by electrical shock.**

- Protection objective: Prevent personal injuries or death.

- Electrical failure might cause electrical power to be situated on the metal housing. Persons who touch the housing might get an electrical shock. This endangers all persons who might touch the affected product.
- Electrical devices should be tested in regular time frames depending on local laws and regulations. TITAN Lift is a device of protection class 1 and requires a protective grounding and may only be connected to circuits that are protected by a Residual Current Device (RCD).

### **Risk of injury, product damage or incorrect functionality.**

- Protection objective: prevent personal injury, product damage and incorrect functionality.
- Using non original spare parts may lead to incorrect functionality, broken devices or injury of humans. This endangers persons who are near the product and could be caused by falling objects, electrical shock etc.
- Avoid incorrect functionality or product damage or injury of persons by only using original spare parts. Only the manufacturer or a company certified by the manufacturer is allowed to do any kind of service or maintenance work.

### **Disposal.**

- Protection objective: avoid incorrect disposal and risk for humans and nature.
- Disposing the product needs to be done correctly following local laws and regulations. Wrong disposal endangers mankind and nature.

### **Risk of product damage or injury by non-intended usage.**

- Protection objective: avoid personal injury and product damage.
- The product shall not be used for other than its intended purpose.



### 3. Scope of delivery

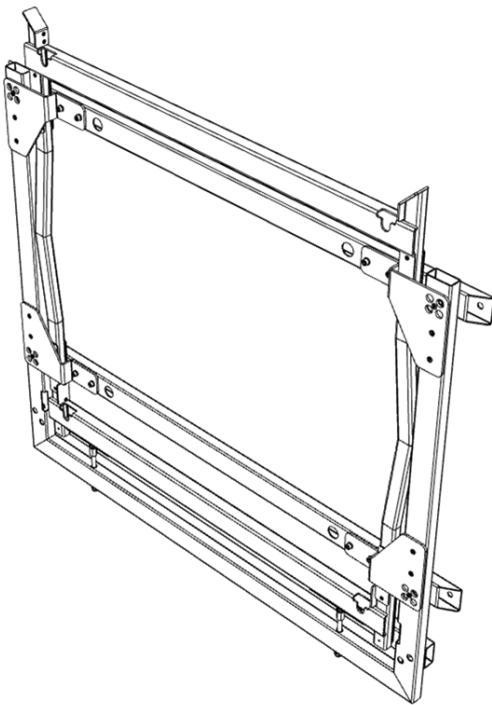


**Note:** Please check the delivery for completeness and damage immediately after you receive the shipment. Please contact your vendor in case of missing or damaged parts.

Item	quantity
Manual	1
Remote control wired	1
Power cable IEC-320-C13	1

### 4. Optional accessories (not included)

#### 4.1 Wall Mount



##### Wall Mount

Model Number: **TITAN-WM-01**

Optional accessory used to mount the Display unit on a wall.

For more information refer to the TITAN-WM-01 manual

Figure 1 TITAN wall mount

## 4.2 VESA Adapter

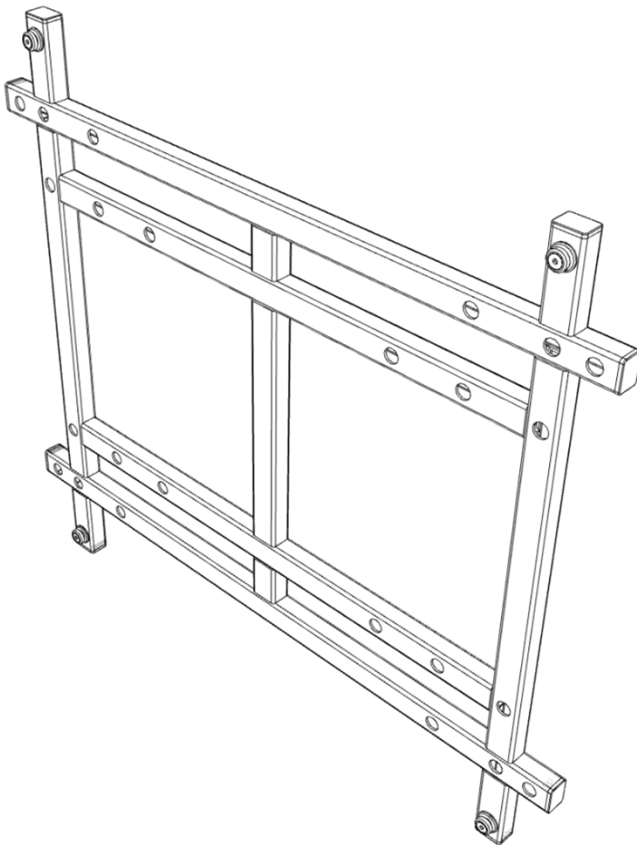


Figure 2 VESA Adapter

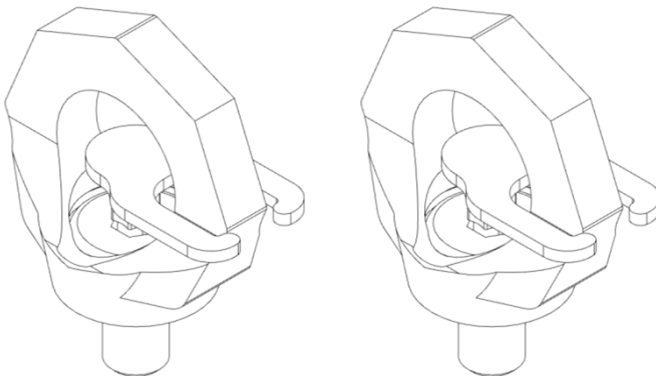
### **VESA Adapter**

Model Number: **TITAN-VESA-01**

Optional accessory used to mount displays with different VESA standards.

For more information refer to the TITAN-VESA-01 manual

## 4.3 Lifting eye bolts



### **2x Lifting eye bolts**

Model Number: **GN 581-M12-B**

Optional accessory used to hang the Display unit. Only these eye bolts are certified and recommended to be used for hanging the Display unit

For more information, please contact your vendor

## 5. Description of the product

### 5.1 Intended use

The TITAN Display Lifting System is a professional product for easy transport and set-up of display units. It combines a mobile lifting solution with a display unit and a transport flightcase. The lifting mechanism as well as the rotating mechanism have only a functional purpose and are not intended to be used for entertaining purposes. Neither the lifting nor the rotation mechanism is designed for a continuous operation, which could cause the system to overheat.



For indoor usage only

**Attention: TITAN Display Lifting Solution is only made for indoor usage!**



**Attention: Make sure there are no additional forces such as wind load applied to the TITAN Lift.**

### 5.2 Specifications

Parameter TITAN Base unit	Value
Weight TITAN Base unit [kg]	175
Dimensions	See: Chapter 9. Mechanical Drawing
Supply voltage	230V AC / 50Hz
Input Power (without display unit) [W]	Maximum: 360 W
Maximum load for TITAN Lift [kg]	285 kg
Protection class	I
Operating temperature [°C]	10 to 40
Operating humidity [%rH]	5 to 75 non condensing
Storing temperature [°C]	5 to 50
Storing humidity [%rH]	5 to 80 non condensing
Operating height over normal height null [m]	Max 1750
Noise emission during lifting [dB(A)]	Max 55
Angle of rotation	90° clockwise
Parameter of selected display units	
Weight flightcase fLED 136" [kg]	Approx. 332
Weight flightcase fLED 108" [kg]	Approx. 281
Weight display unit fLED 136" [kg]	Approx. 255
Weight display unit fLED 108" [kg]	Approx. 170
Dimensions	See chapter 9. Mechanical Drawing



**Note: The weight of flightcase or display units other to the ones mentioned above, may differ significantly and need to be requested individually.**

### 5.3 Main components

The TITAN Display Lifting System consist of three main components:

- The Flightcase is used for transporting and handling the TITAN Base unit as well as the mounted Display unit
- The TITAN Base unit is the core of the system and mounts the Display unit
- The Display unit is generally describing a display that is mounted to the TITAN Base unit.

Please find detailed description of those main components in the following three subchapters.

#### 5.3.1 Flightcase

The flightcase is a very robust, rollable transport box. It has two main cover hoods that need to be removed when setting up the TITAN Lift. It has 8 wheels which can be locked individually. The dimensions and the weight differ, depending on the size of the installed display unit.

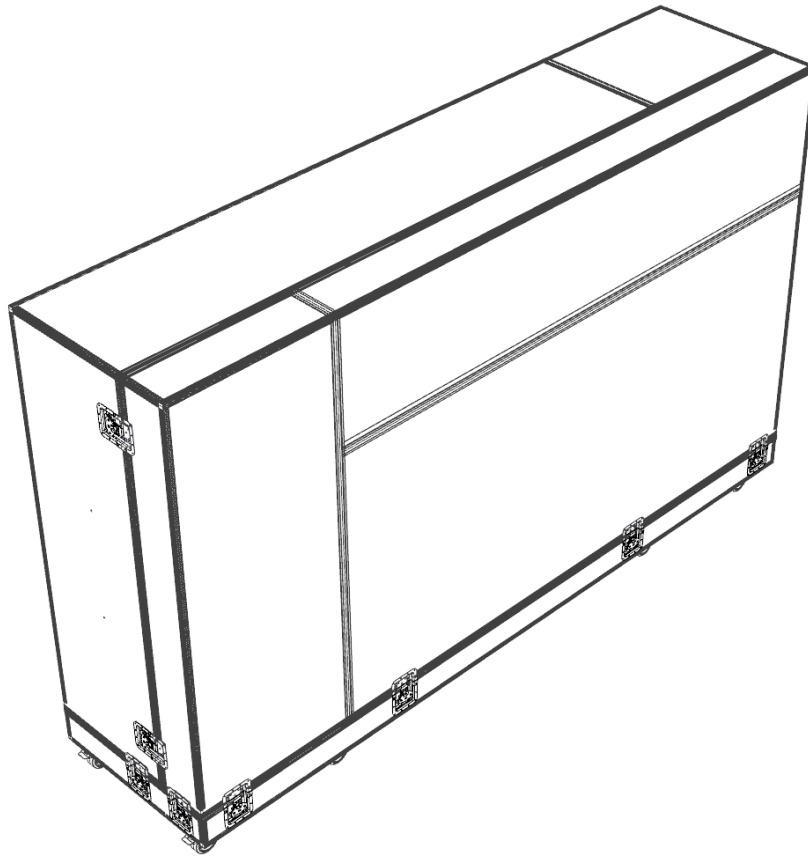


Figure 3 Flightcase

### 5.3.2 TITAN Base Unit

The TITAN Base Unit is the core and the main component of the system. It carries the display unit and has the capability to lift and to lower the display unit and also to rotate it to a 90° angle.

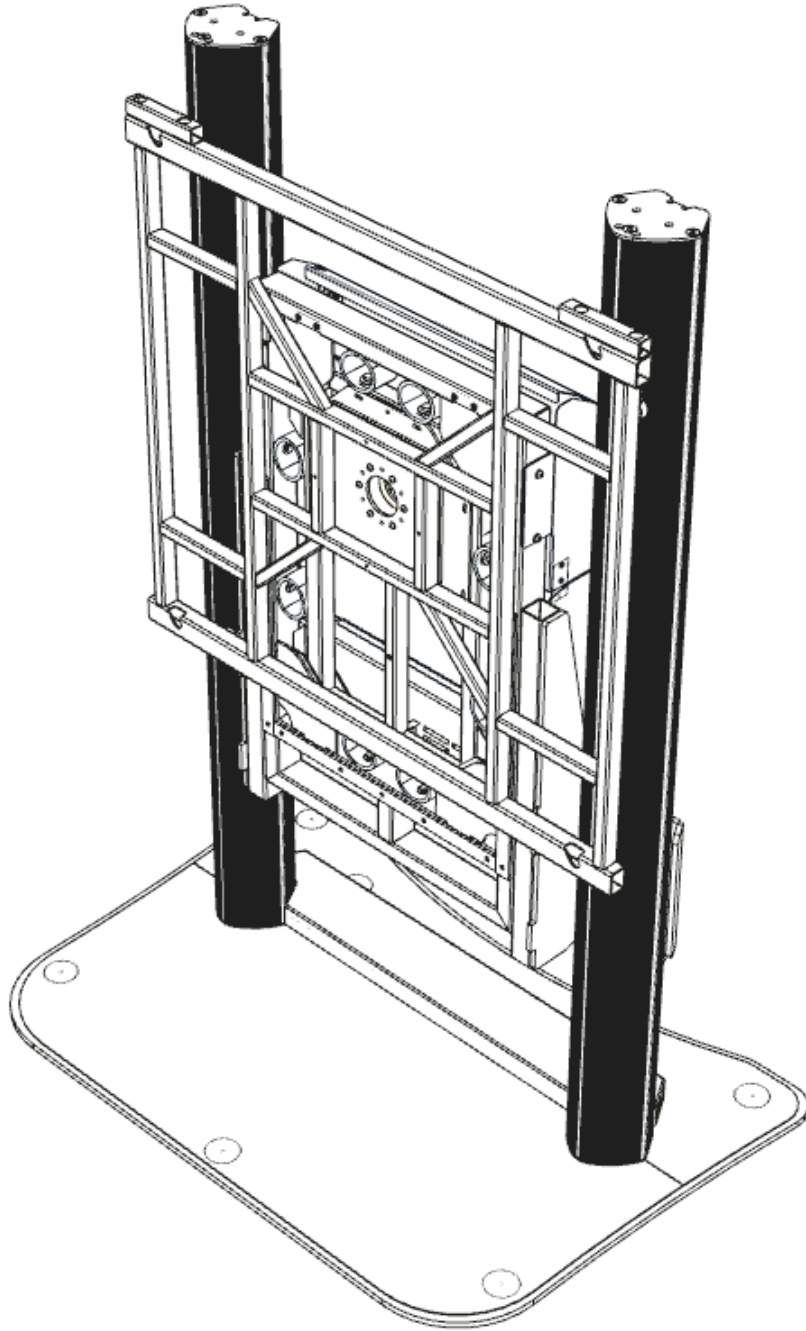


Figure 4 TITAN Base unit. Front isometric view

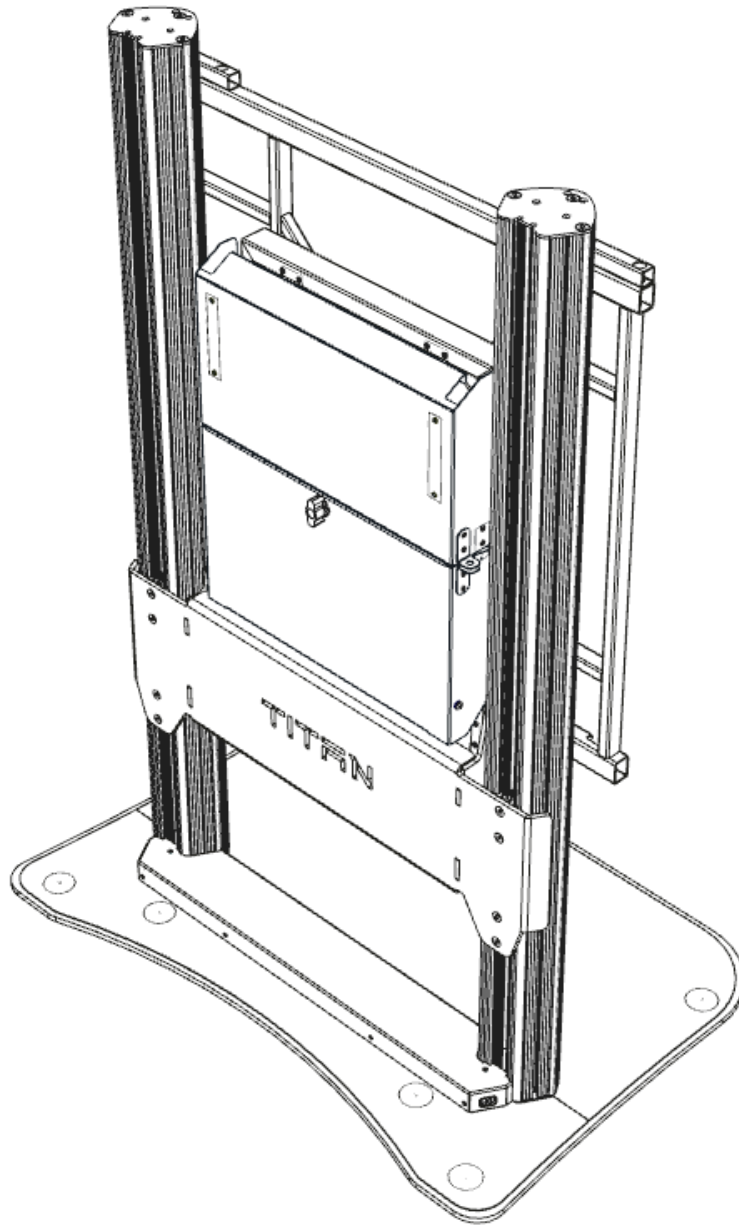


Figure 5 TITAN Base unit. Back isometric view

### 5.3.3 Display unit

Standard Display units that are designed to be mounted on the TITAN Base are the fLED screen 108" and fLED screen 136". Other custom displays can be also mounted on the TITAN Base, for more information please access the [www.exactsolutions.de](http://www.exactsolutions.de) website or contact us or your vendor.



**Warning: Only mount Display units that are validated by the manufacturer. Otherwise, accidents and property damage can occur and the guarantee will be lost.**

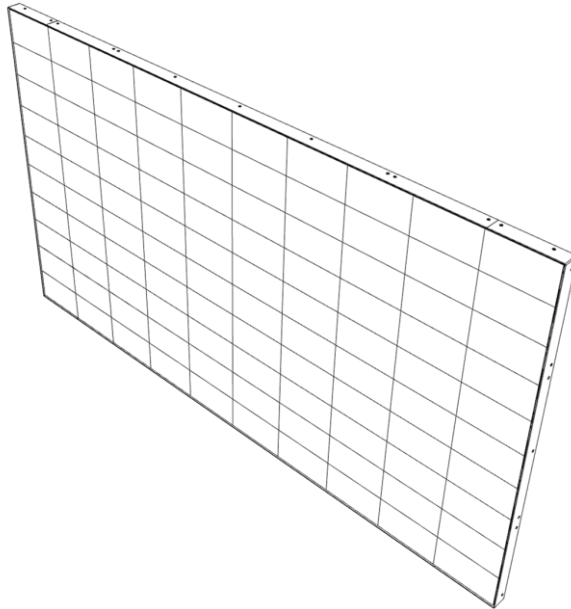


Figure 6 Display unit. Front isometric view

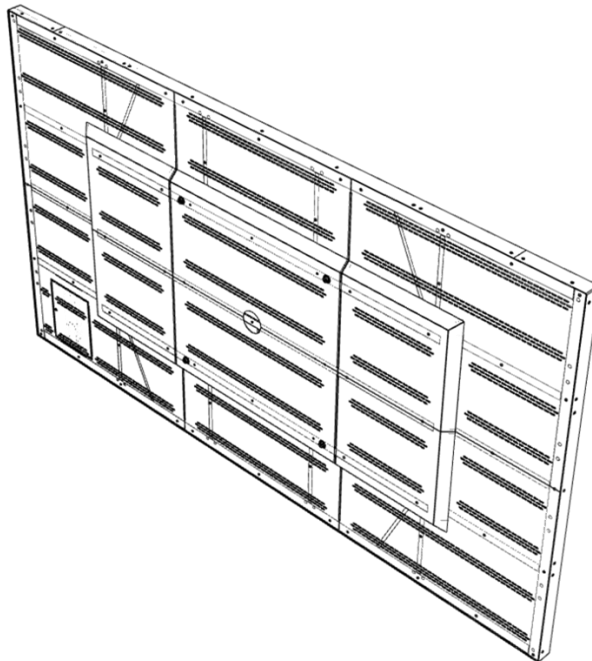


Figure 7 Display unit. Back isometric view

### 6. Setup and operation



**Warning: Setup, Handling, Service must be done by a qualified person!**  
Qualified persons are specialists like event engineers, electricians or persons with similar or higher qualification.



The overall weight of TITAN Lift (including flightcase) and mounted Display might exceed an overall weight of 770kg. Make sure that the carrying structures, tools etc. during transport, setup, usage and maintenance are able to carry that weight safely.



Transport, storage, setup and installation only in an upright position. Never tilt any of the components.



Handle the system carefully, do not drop, shock or anyhow else apply external force to the system.



**Note:** During lifting process a certain smell of oil is normal. This is caused by heating the lubricant inside the lifting mechanism.

#### 6.1 Notes on installation and operation

The TITAN Lifter was carefully inspected and subjected to a functional check before delivery. The high-quality Case is designed to prevent damage in transit. Even with the most careful handling, damage cannot be completely avoided. Examine the whole system prior every installation. Check that the cables, metal structure etc. are not damaged. Check the completeness of the delivery using the parts list.



**Attention:** The device shall only be installed with an intact power cable. Check cables and connectors before installation.



**Attention:** Make sure that the power supply is not interrupted while the TITAN Base Unit is moving. Otherwise, a reset drive might be necessary. See chapter 6.5 Troubleshooting.



The removable TITAN flightcase hoods weights around:

Case 136" = 85kg + 59kg

Case 108" = 67,5kg + 44,5kg.

Any handling of those parts must be carried out by at least two people. Additional people may have to be included in the installation or handling process.



For a safe and secure installation of a display unit to the TITAN Lift, a suitable tool (for example lifting crane) is necessary.



In rare situations the TITAN Base Unit might request a reset drive. Such a situation can be caused when for example the power supply is interrupted while the system is driving up or down. In this case the default solution is to drive the system to its highest position. For further details see chapter 6.5 Troubleshooting.



### 6.2 Flightcase

#### 6.2.1 Opening the flightcase

Move the TITAN Display Lift to the desired position. Secure the wheels by locking the brakes. Remove the two cover hoods of the flightcase one by one. To do so, open the butterfly latches only of one hood. Remove the first hood and secure it so that it cannot tilt and fall. Open the latch of the second hood, remove it and secure it. If you place the two hoods next to each other you can secure them with each other by closing the latches again.

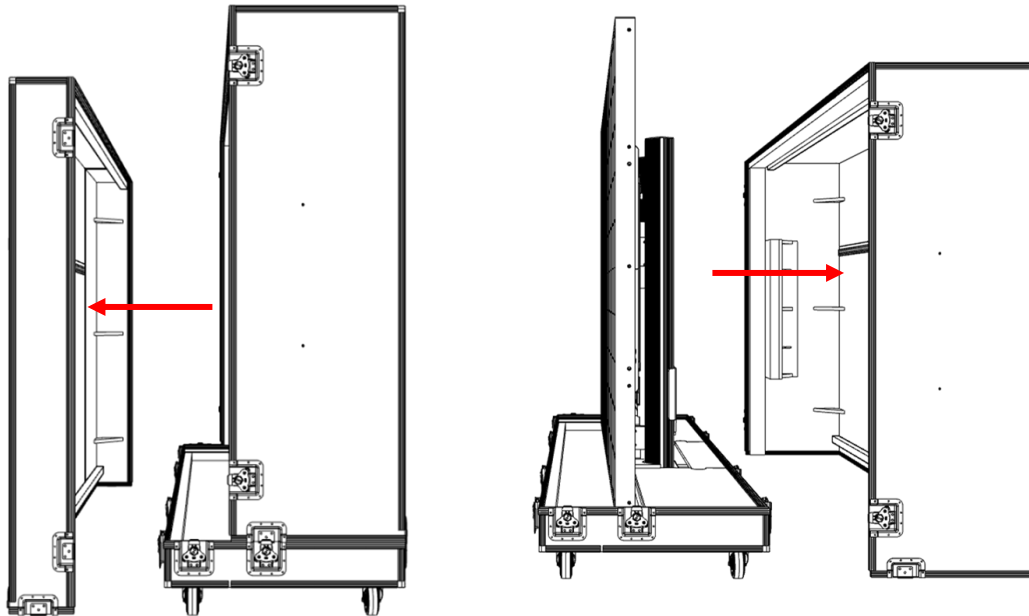


Figure 8 Removing the flightcase hoods

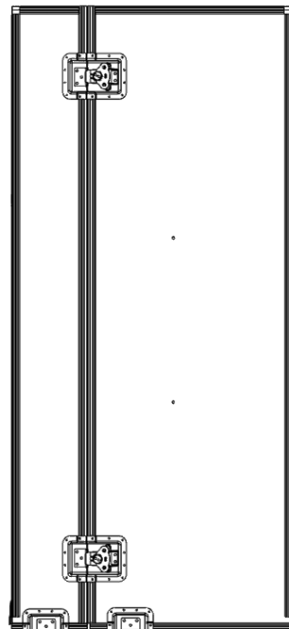


Figure 9 Secured hoods with closed latches

### 6.2.2 Unloading the TITAN Lift out of the flightcase

Remove the small back cover part of the flight case on the lower backside.

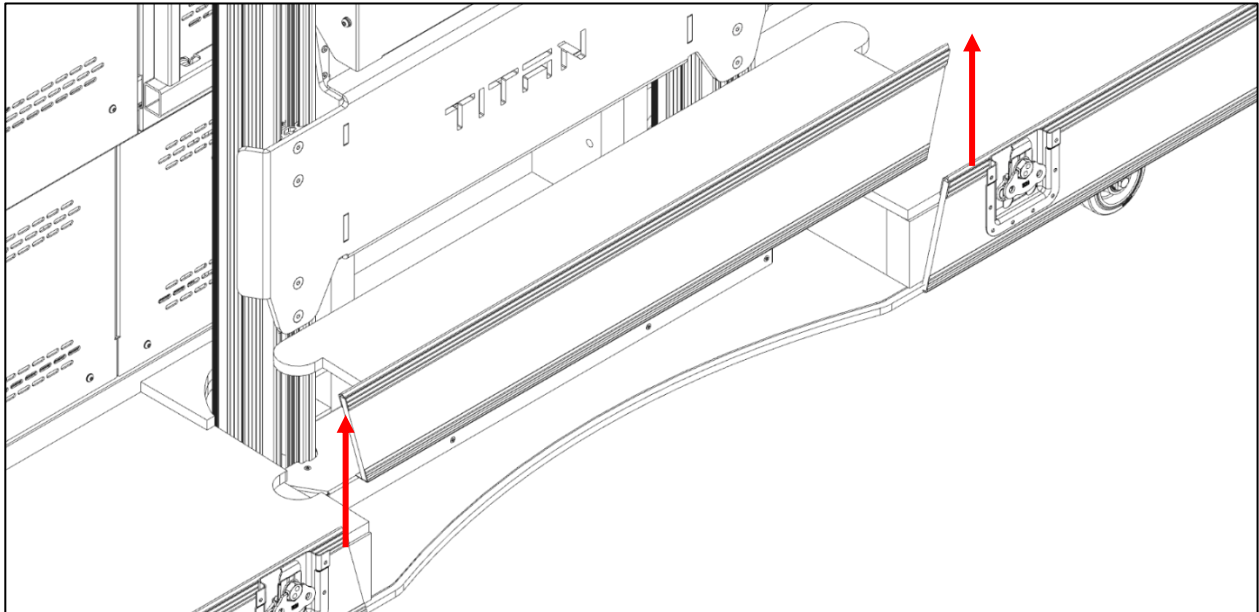


Figure 10 Removing back cover

Connect the wired remote control as well as the power cable to the control box.

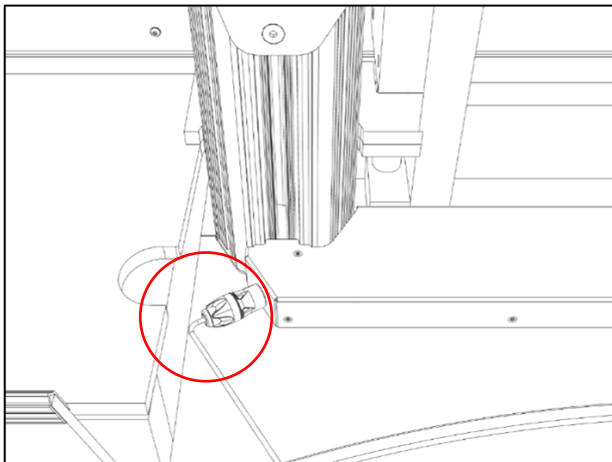


Figure 11 Connecting the remote control

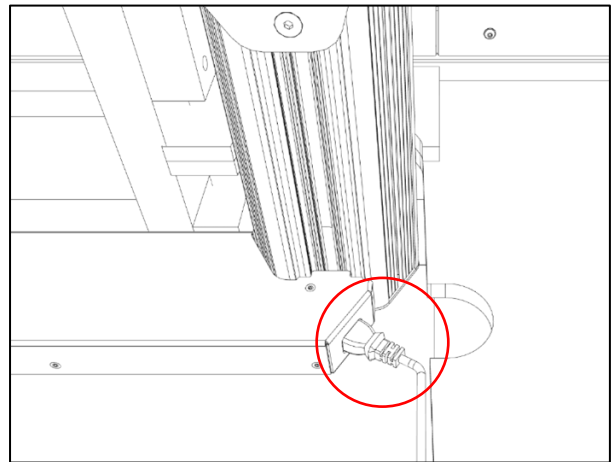


Figure 12 Connecting the power cable

## Manual TITAN Display Lifting System



When moving the lift up or down make sure not to clamp body parts of persons, cables or anything else. Only use the lift when no person is in the near proximity.



When lowering the base plate make sure that the area beneath is clean and flat. Risk of clamping the feet or hands under the plate is high.



The maximum continuous operation of the lifting mechanism is 2 minutes. Exceeding the continuous operation time might cause the lifting mechanism to overheat. Resulting damages are excluded from warranty. After 2 minutes of operation the system needs to cool down for 18 minutes.

Figure 13 shows the remote control that is used to operate the lifting mechanism.



Figure 13 Wired remote control

Press the “arrow up” button on the remote control to lower the base plate to the ground and to lift the display unit upwards.

While moving upwards, the display unit will slide gently out of the locking pins that are fixed to the flight case. Stop the process if the system is not moving smoothly and not gently sliding out of the locking pins. In this case contact the manufacturer or your vendor.

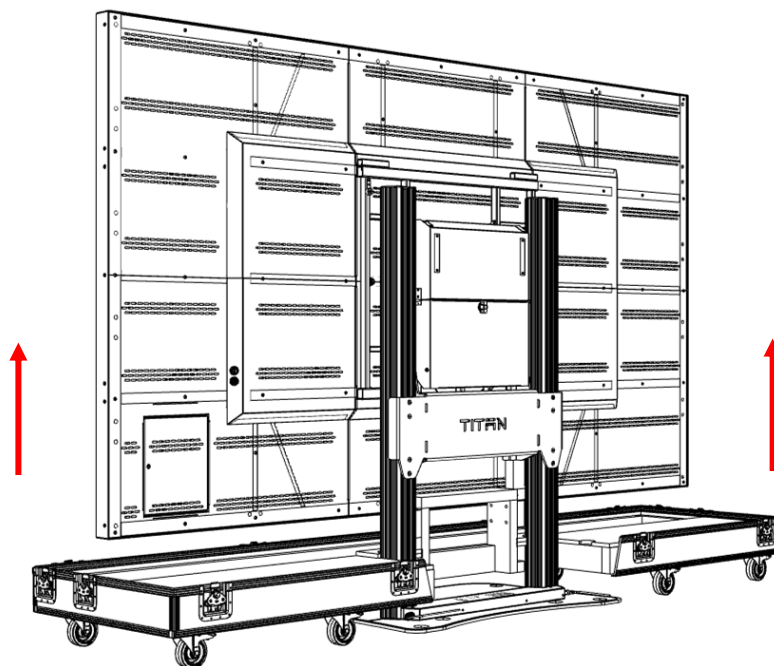


Figure 14 Display unit moving upwards

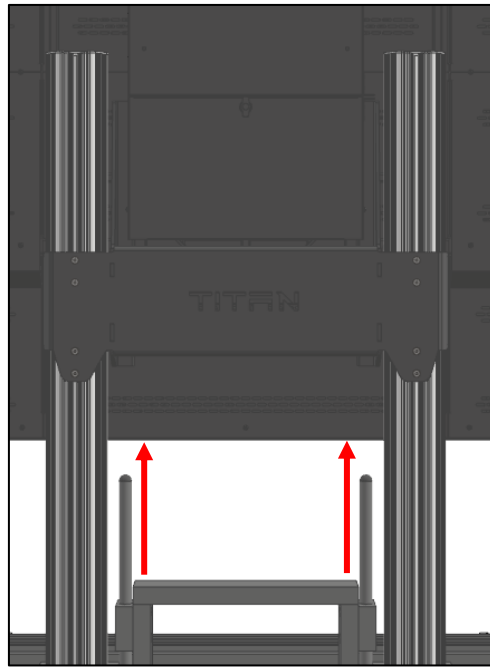


Figure 15 Display unit slides out of the locking pins

As soon as the display is completely out of the locking pins (as shown in Figure 15), gently move the bottom part of the flight case away from the columns of the TITAN Lift.

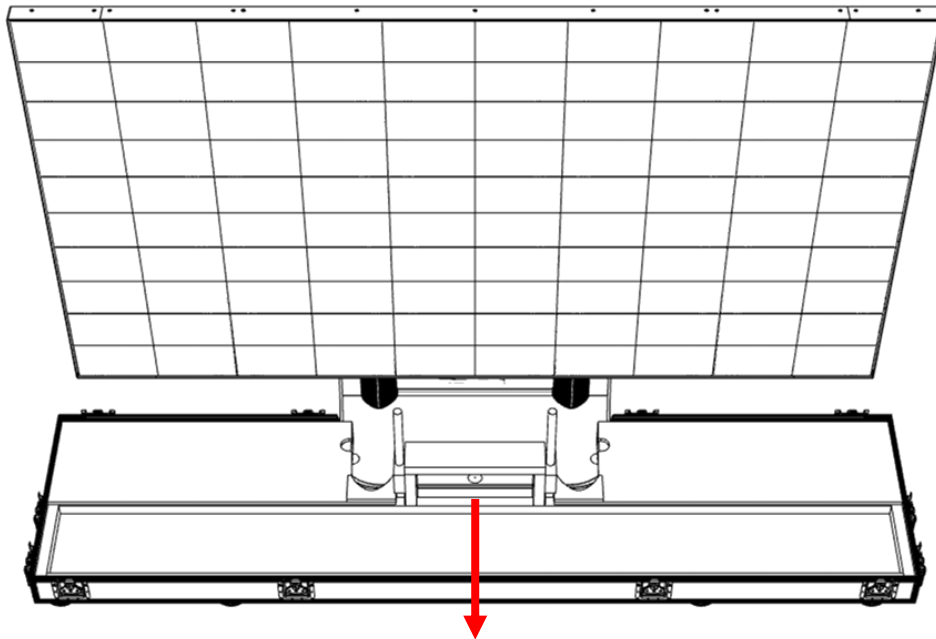


Figure 16 Removing bottom part of flightcase

Use the wired remote control and the “arrow up” and “arrow down” button or to move the display unit up or down depending on your desired height.

### 6.2.3 Rotating the display unit



Make sure not to clamp body parts of persons, cables or anything else when rotating the display unit. Make sure cables are long enough when rotating the display. Only use the rotation mechanism when no person is in the near proximity.



Make sure the display is high enough to be able to rotate the display unit without hitting the ground.

Open the backside cover by turning the knob counter clockwise.

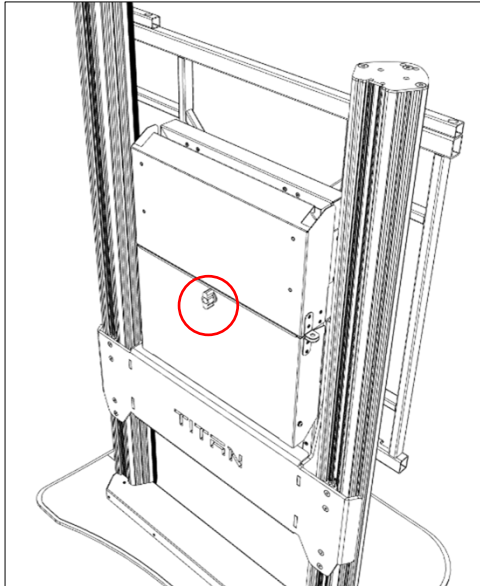


Figure 17 Backside cover closed

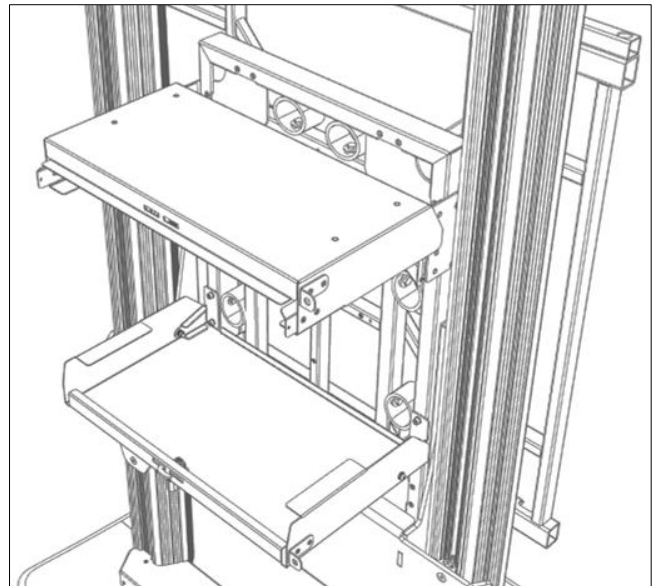


Figure 18 Backside cover opened

You will see two wing nuts, marked in red (Figure 20). By turning them counter clockwise, the rotating mechanism will be released and can be used.

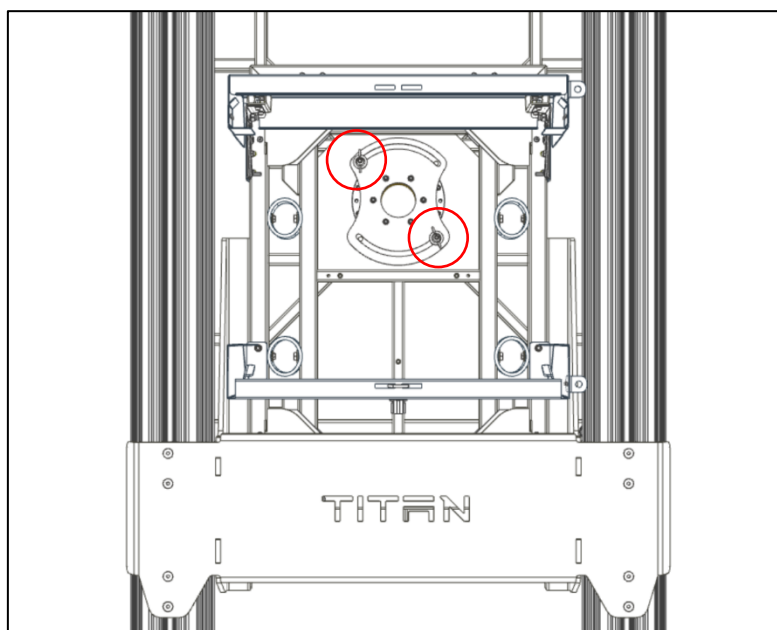


Figure 20 Rotating mechanism

## Manual TITAN Display Lifting System

Carefully rotate the display unit. Make sure only to grab robust parts of the display unit to rotate it.



**Note:** The process of rotating the display should be done without the need of force. It should rotate easily. If this is not the case, check if the two wing nuts are unscrewed. If the problem persists do not apply force. Contact your vendor.

After the display has reached its new orientation, tighten the two wing nuts again. Close the backside cover.



**Note:** The two allowed orientations are either landscape (0° rotation) or portrait (90° rotation). Anything in between is not allowed.

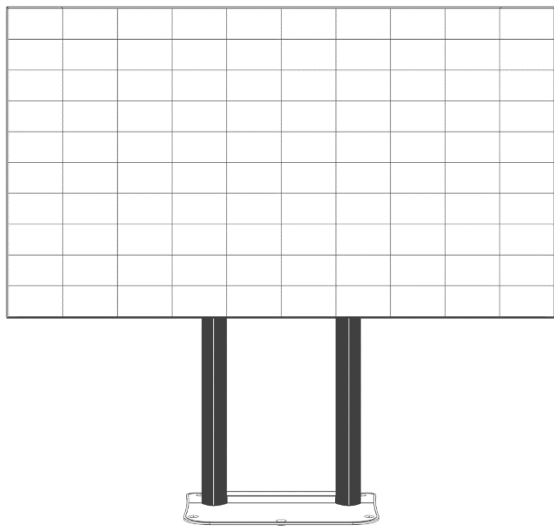


Figure 21 Landscape orientation (0° rotation)

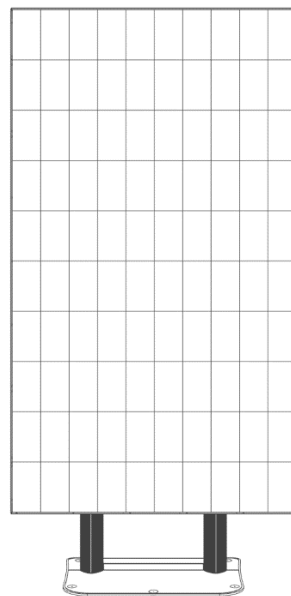


Figure 22 Portrait orientation (90° rotation)

### 6.2.4 Loading the TITAN Lift into the flightcase



When moving the lift up or down make sure not to clamp body parts of persons, cables or anything else. Only use the lift when no person is in the near proximity



When lowering the base plate make sure that the area beneath is clean and flat. Risk of clamping the feet under the plate is high.



The maximum continuous operation of the lifting mechanism is 2 minutes. Exceeding the continuous operation time might cause the lifting mechanism to overheat. Resulting damages are excluded from warranty. After 2 minute of operation the system needs to cool down for 18 minutes.

Rotate the display unit back to landscape orientation (0° rotation) (6.2.3 Rotating the display unit).

Connect the wired remote control as well as the power cable to the control box (See subchapter 6.2.2 Unloading the TITAN Lift out of the flightcase).

Press the “arrow up” button on the remote control (see Figure 13) to lift the system high enough so that the bottom part of the flight case fits underneath the display unit. As soon as the display is high enough, gently move the bottom part of the flightcase towards the columns of the TITAN Lift so that the corresponding part of the flightcase touches the columns of the TITAN Lift.

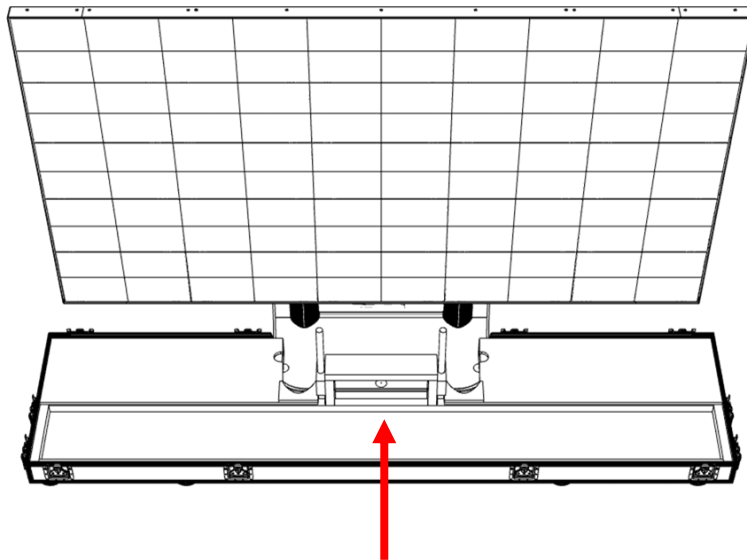


Figure 23 Positioning the bottom part of the flightcase

Press the “arrow down” button on the remote control to move the system downwards. The display unit will move downwards and slide into the locking pins of the flight case. Make sure the flightcase is situated correctly and the two locking pins smoothly slide into the corresponding holes on the display unit. Stop the process if the system is not moving smoothly and not gently sliding over the locking pins. In this case contact the manufacturer or your vendor.

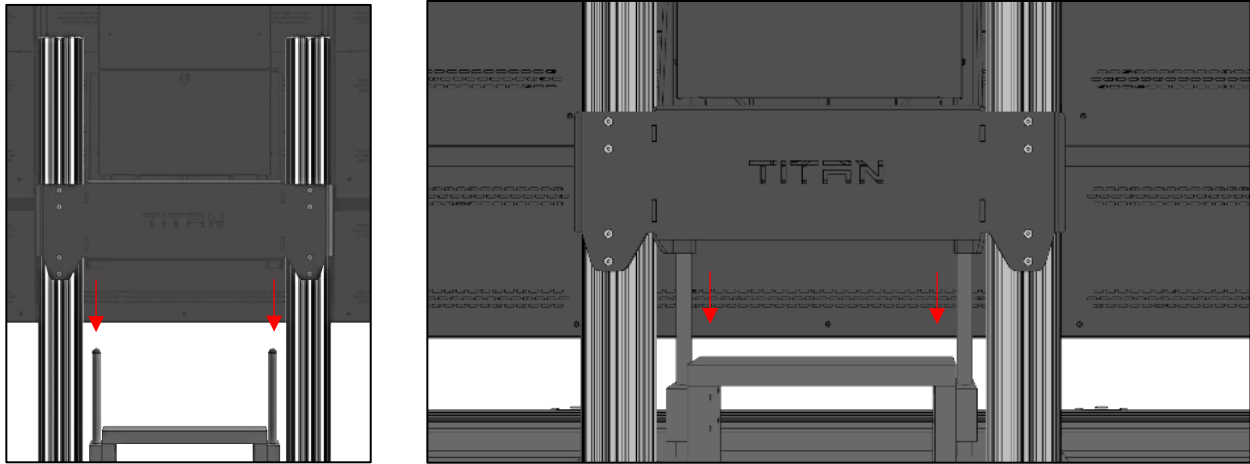


Figure 24 The Display unit moved down and slides into the locking pins

The locking pins help guiding the display unit to its correct position. The display unit will rest on the corresponding part in the flightcase and load its weight to the flightcase.

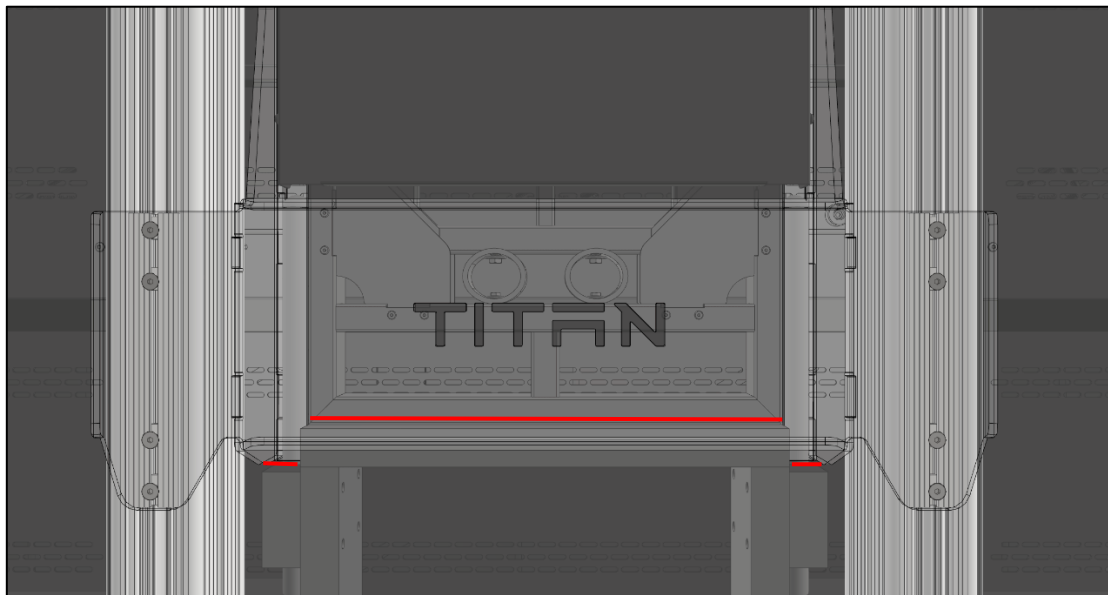


Figure 25 The Display resting surface inside the case

The base plate of the TITAN Lift will now move upwards and touch the lower side of the flightcase. The base plate will gently compress damping elements that are mounted on the lower side of the flightcase. The movement will stop on its own when the desired position is reached. Double check if the base plate fully touches the damping elements.



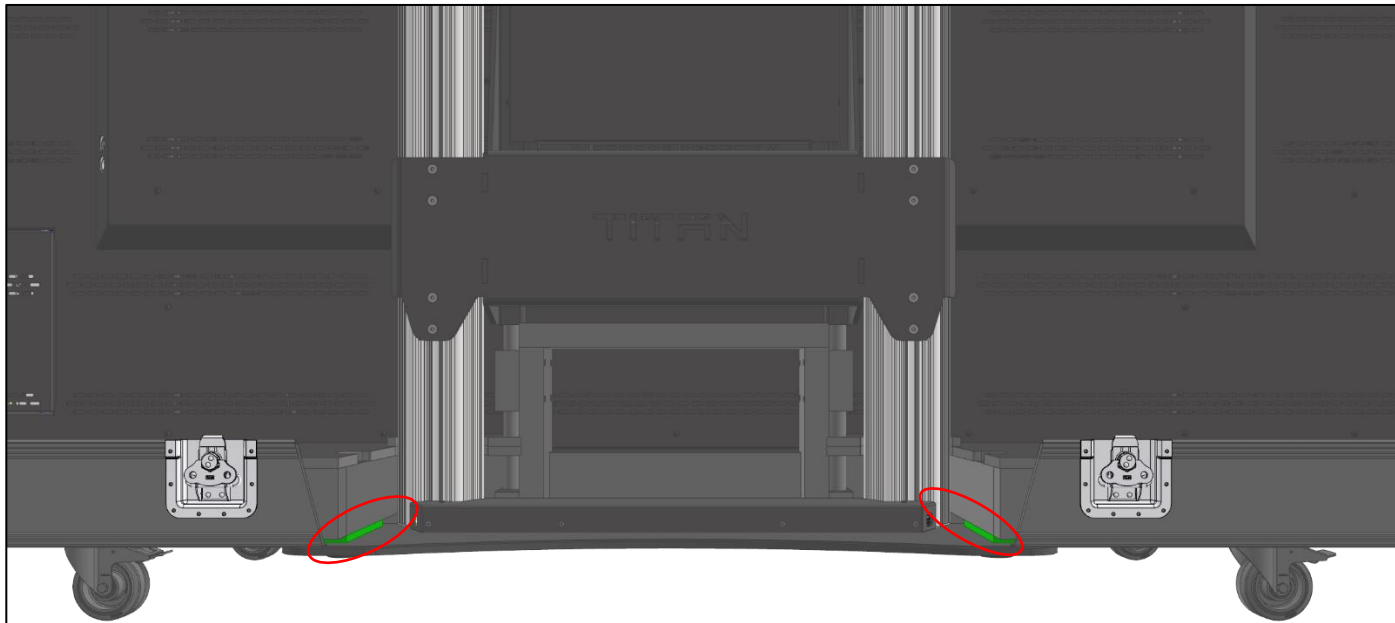


Figure 26 Base plate gently compresses damping elements (marked in red)

Remove the connected cables. Install the small back cover part of the flight case on the lower backside.

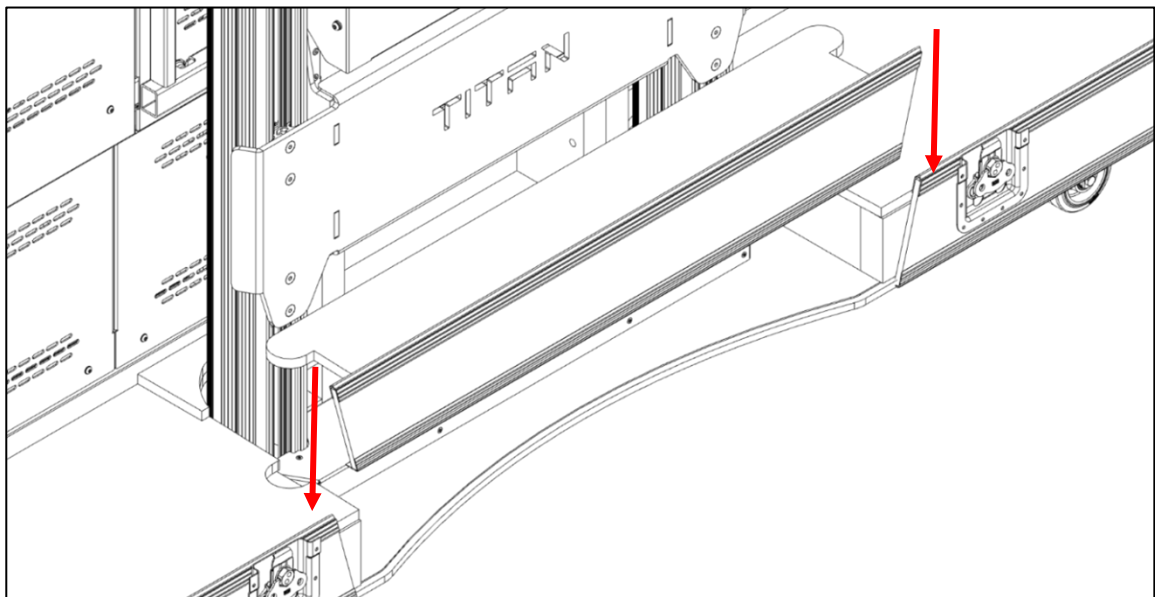


Figure 27 Install back cover

### 6.2.5 Closing the flightcase

Secure the wheels by locking the brakes. Install the two cover hoods of the flightcase one by one. Close all latches.

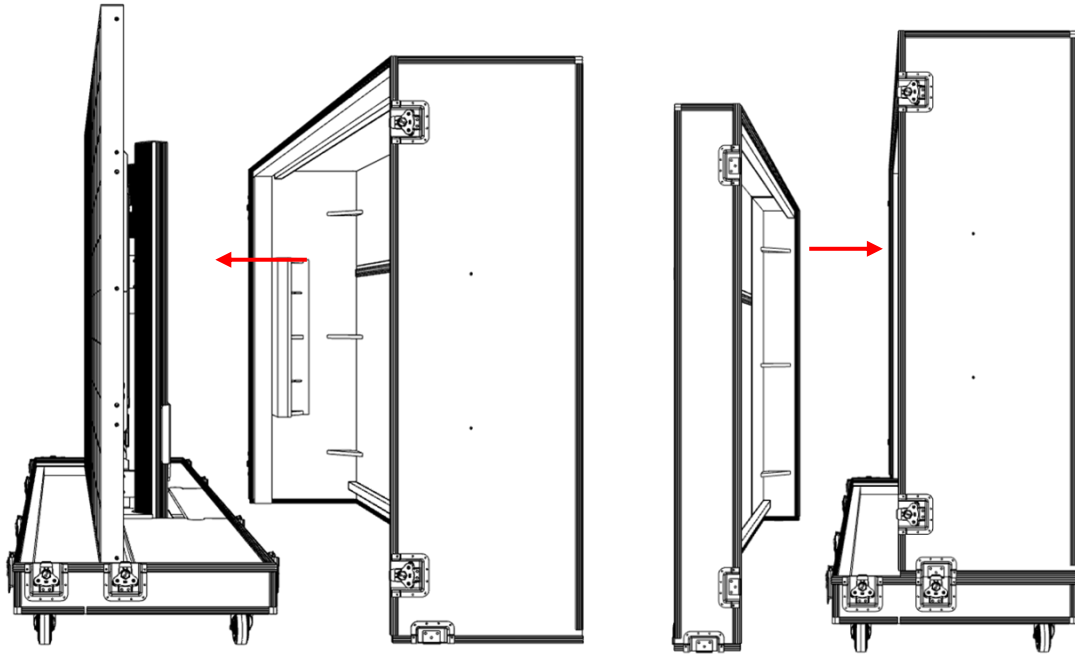


Figure 28 Closing the flightcase

### 6.3 Mounting a display unit



**WARNING:** Because the screen is very heavy, a faulty handling can lead to serious injuries. This operation has to be made only by qualified persons that can operate a crane or a forklift capable to carry and handle the weight of the screen.



**WARNING:** Please only use the correct lifting eye bolts and other lifting equipment. Make sure everything is mounted properly, otherwise accidents can occur.



**WARNING:** If not handled properly, the risk of clamping the upper and lower limbs between the TITAN Base and the screen can occur. Make sure no persons are near the back of the TITAN Display Unit and the front of the Base Unit.

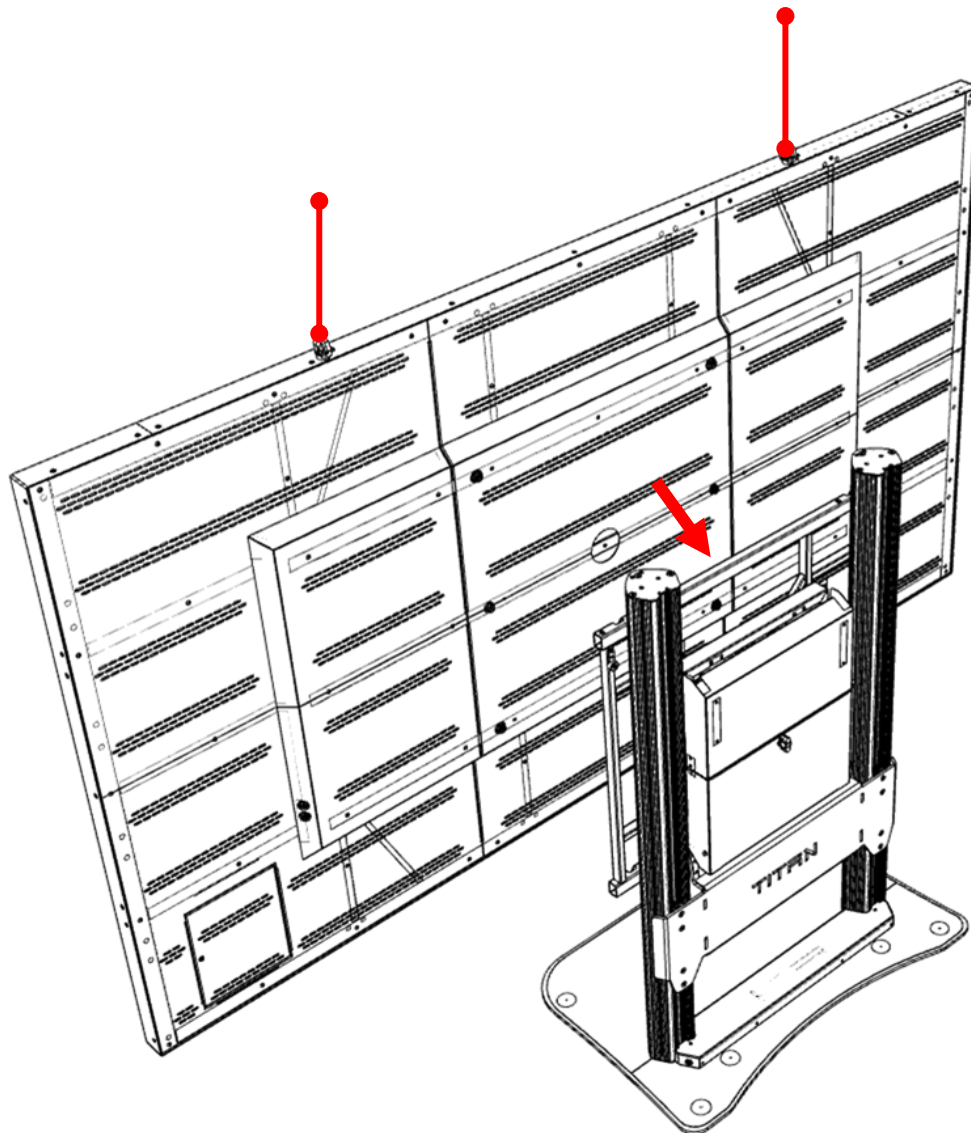


Figure 29 Mounting the Display unit

## Manual TITAN Display Lifting System

Make sure that the four hanging screws are mounted to the back of the Display unit and securely fastened.



**All four hanging screws must be mounted to the back of the Display and need to be securely fastened.**

Carefully drive the Display unit towards the TITAN Base and while being lowered please be careful that the four hanging screws (marked in red in Figure 30) are smoothly sliding in the corresponding holes.

Stop the process if the hanging screws are not sliding smoothly in the corresponding holes. In this case contact the manufacturer or your vendor.

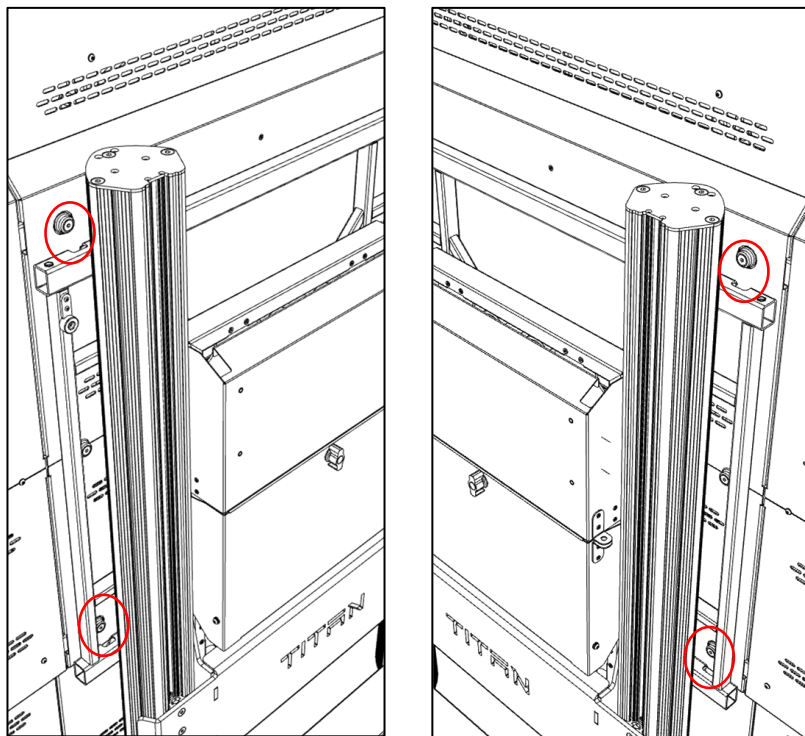


Figure 30 Hanging screws in the corresponding holes



**Make sure all four hanging screws are at their correct position! Otherwise, the display unit is not correctly fixed and might fall down. This might cause serious accidents!**

Make sure the Display unit is now correctly attached to the TITAN Base. It is attached correctly if all four mounting screws (marked in red in Figure 30) are safely situated at their corresponding holes. Figure 31 shows the correct position of a mounting screw in its corresponding hole.

Now secure the Display unit with the two small square pipes. To secure the pipes, please fasten them by using the four M8x20 screws and the corresponding 8,2 mm washers. See also Figure 32.

If this step is not correctly executed, the Display unit can fall out of the TITAN Base when the Display unit is rotated.



**The Display unit has to be safely secured with the two square pipes. Otherwise, it can fall out of the TITAN Base when the Display unit is rotated. Serious accidents may occur!**

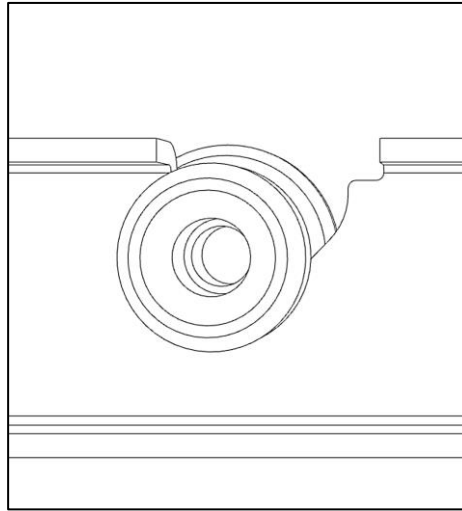


Figure 31 Correct position of the mounting screw in its corresponding hole

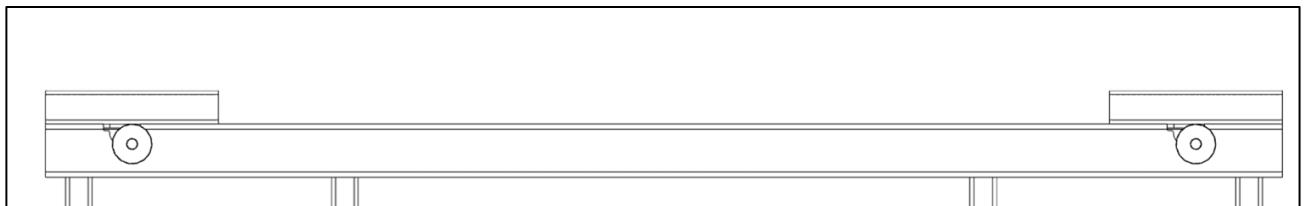
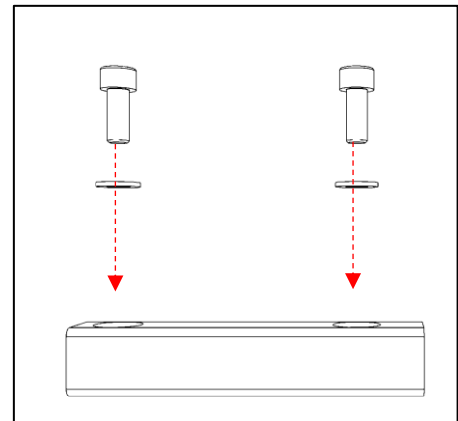
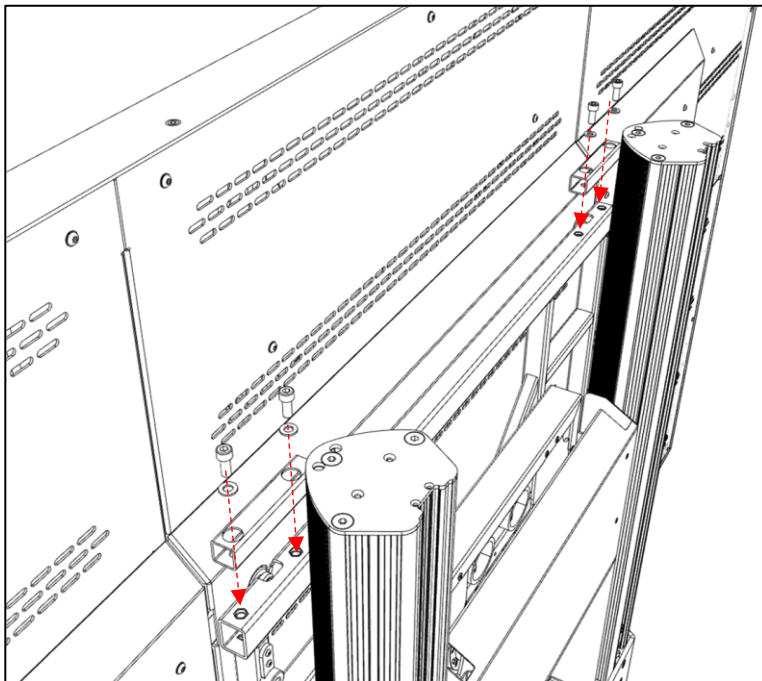


Figure 32 Securing the Display unit with the square pipes

### 6.4 Unmounting a display unit



**WARNING:** Make sure that the TITAN Lifter and the screen are disconnected from power and image signal.



**WARNING:** Because the screen is very heavy, a faulty handling can lead to serious injuries. This operation has to be made only by qualified persons that can operate a crane or a forklift capable to carry and handle the weight of the screen.



**WARNING:** Please only use the provided lifting eye bolts and make sure that they are tighten properly, otherwise accidents can occur.



The first step in the unmounting process is to unscrew the two small square pipes. If this step is forgotten the Display unit cannot be detached from the TITAN Base and injuries and property damage can occur.



**WARNING:** If not handled properly, the risk of clamping the upper and lower limbs between the TITAN Base and the screen can occur. Make sure no persons are near the back of the TITAN Display Unit and the front of the Base Unit.

Rotate the display unit back to landscape orientation (0° rotation) (6.2.3 Rotating the display unit). Remove the two square pipes that secure the Display unit. Please see Figure 33.

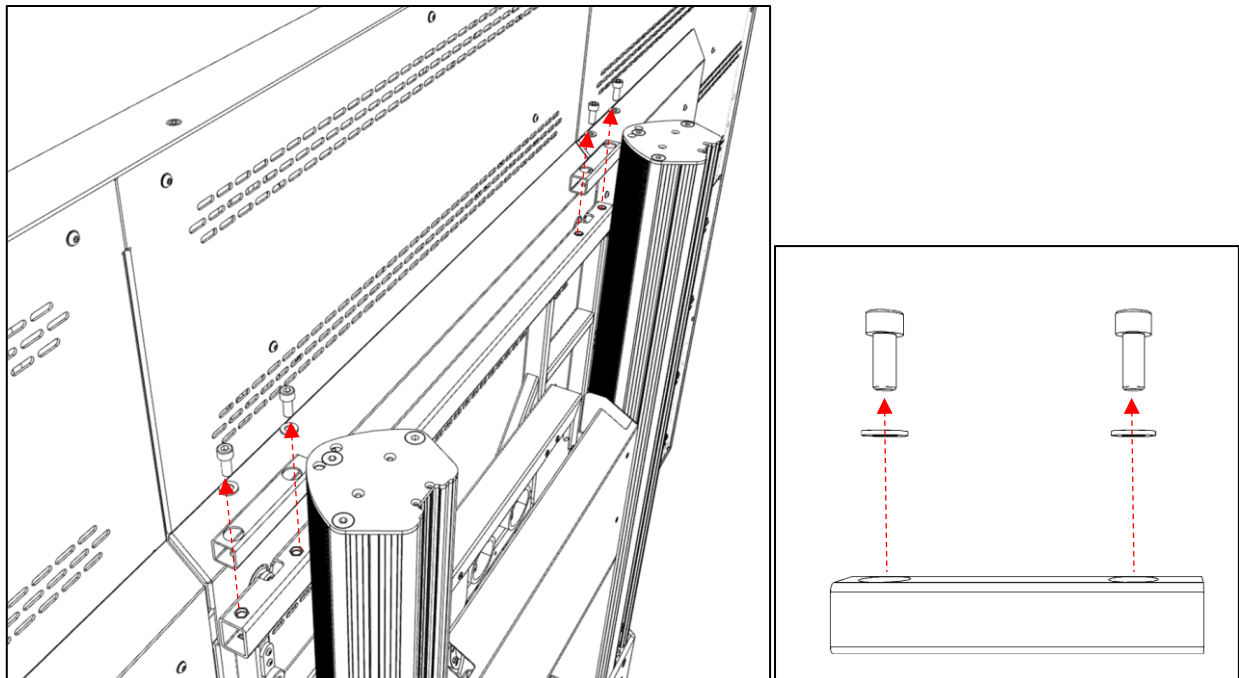


Figure 33 Unscrewing the two small square pipes



## Manual TITAN Display Lifting System

Tie the corresponding tow straps to the two lifting eye bolts. Please be careful that the tow straps are capable to lift and sustain the weight of the Display unit.

Carefully lift the Display unit upwards and make sure the four mounting screws gently slide out of their positions. Stop the process if the hanging screws are not sliding smoothly out of the corresponding holes. In this case contact the manufacturer or your vendor.

As soon as the four mounting screws are no longer attached to the TITAN Base Units, carefully move the Display unit away from the TITAN Base.

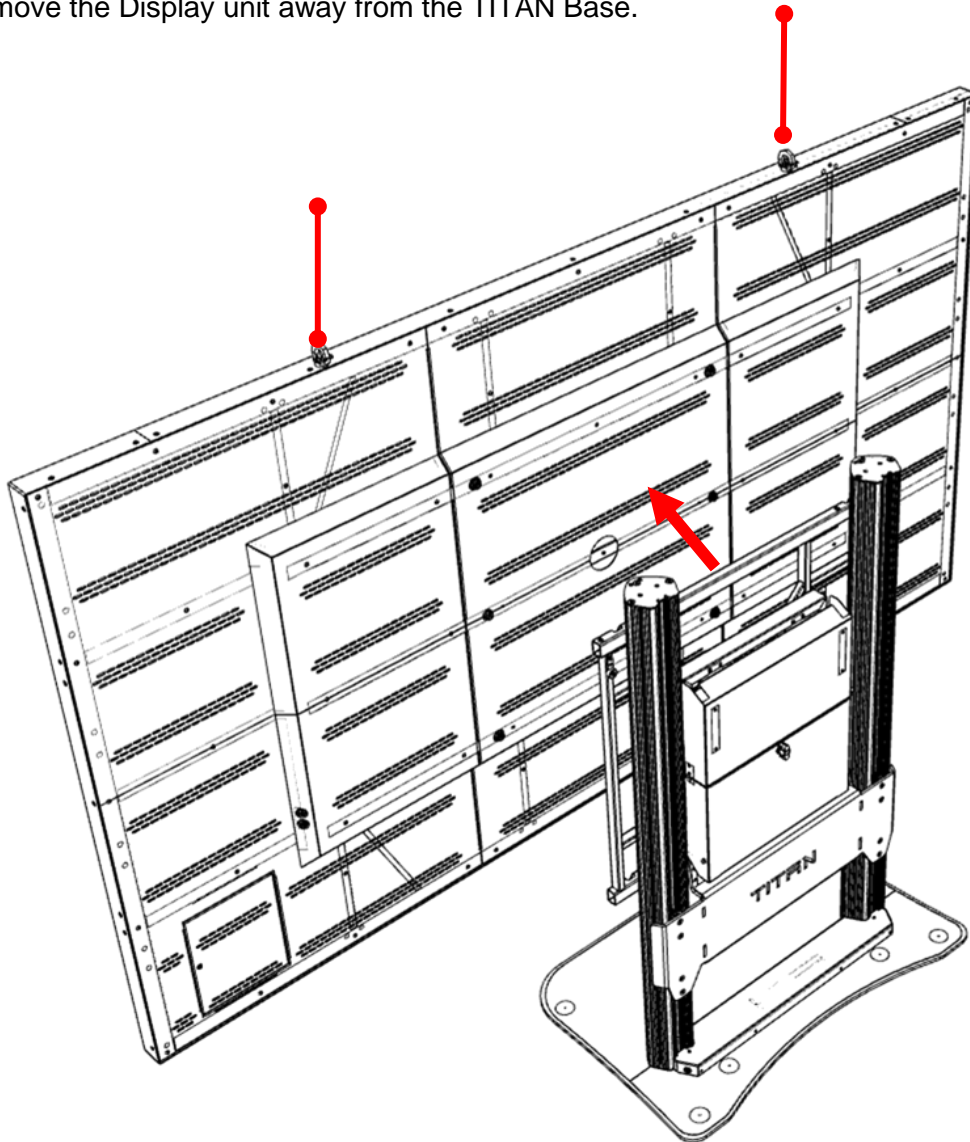


Figure 34 Driving the Display unit away from the TITAN Base

### 6.5 Troubleshooting

In the following section you will find possible errors, their causes and measures. Contact us or your vendor if malfunctions or errors occur.

Problem	Cause and Solution
Flightcase hoods do not fit	Make sure the hoods are at the correct position. Make sure groove and tongue are aligned. Check that nothing is caught in between the segments.
Flightcase does not roll or does not roll smoothly	Make sure the brakes of the wheels are unlocked. Check if all wheels are in a good condition or if they might be somehow broken. If a wheel is broken, contact your vendor or service partner to replace the wheel.
The TITAN lift has no power. The wired remote control does not light up.	Check that the power supply cable is plugged in (see 6.2.2 Unloading the TITAN Lift out of the flightcase). Check if the power cable is connected to a power source.
The remote control lights are blinking and the lifter does only move up when pressing up button.	Lifter reset is necessary. Press the "arrow up" until the highest position is reached. Press the "arrow up" button again for about 5-10 seconds. Now the System is initialized and can be used again normally. Note the necessary height! fLED 108" = 2,65m fLED 136" = 2,80m  Note: The need of such a reset drive can be caused when for example the power supply is interrupted while the system is driving up or down. This should be avoided at all time.
The display of the wired remote control shows the message "hot".	The lifting mechanism is protecting itself as it has been operated continuously. To avoid overheating, wait for approx. 18 minutes until the message disappears.



### 7. Maintenance

Flightcase: Clean with pure water with the help of a soft cloth. If needed, add some amount of neutral cleaning liquid to the water.

TITAN Lift: Clean with the help of a soft cloth.

Display unit: Clean the metal frame and metal covers with a soft cloth. For cleaning the display or LED cabinets always follow the manufacturers recommendation.

### 8. Disposal of components

#### 8.1 Electronical components

The electronic ballast and the other electronical components can be recycled via the waste electrical equipment disposal.

#### 8.2 Steel parts and packaging

All steel parts and packaging can be recycled.

#### 8.3. Disposal of entire devices

You have the possibility to send old devices back to us. Please note that you have to take over the transportation costs for this. Please send the devices to:

EXACT solutions GmbH

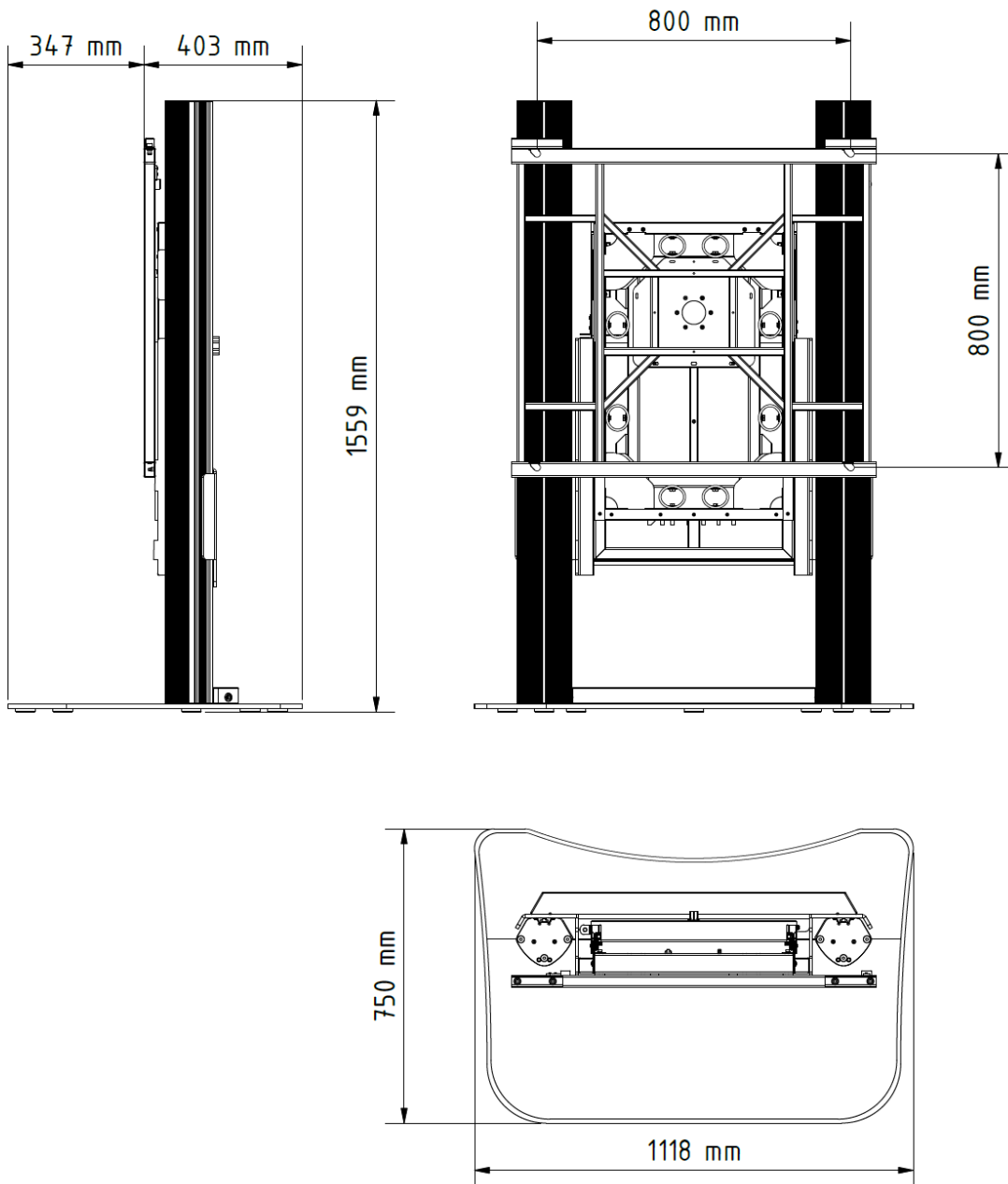
Lustheide 85

51427 Bergisch Gladbach

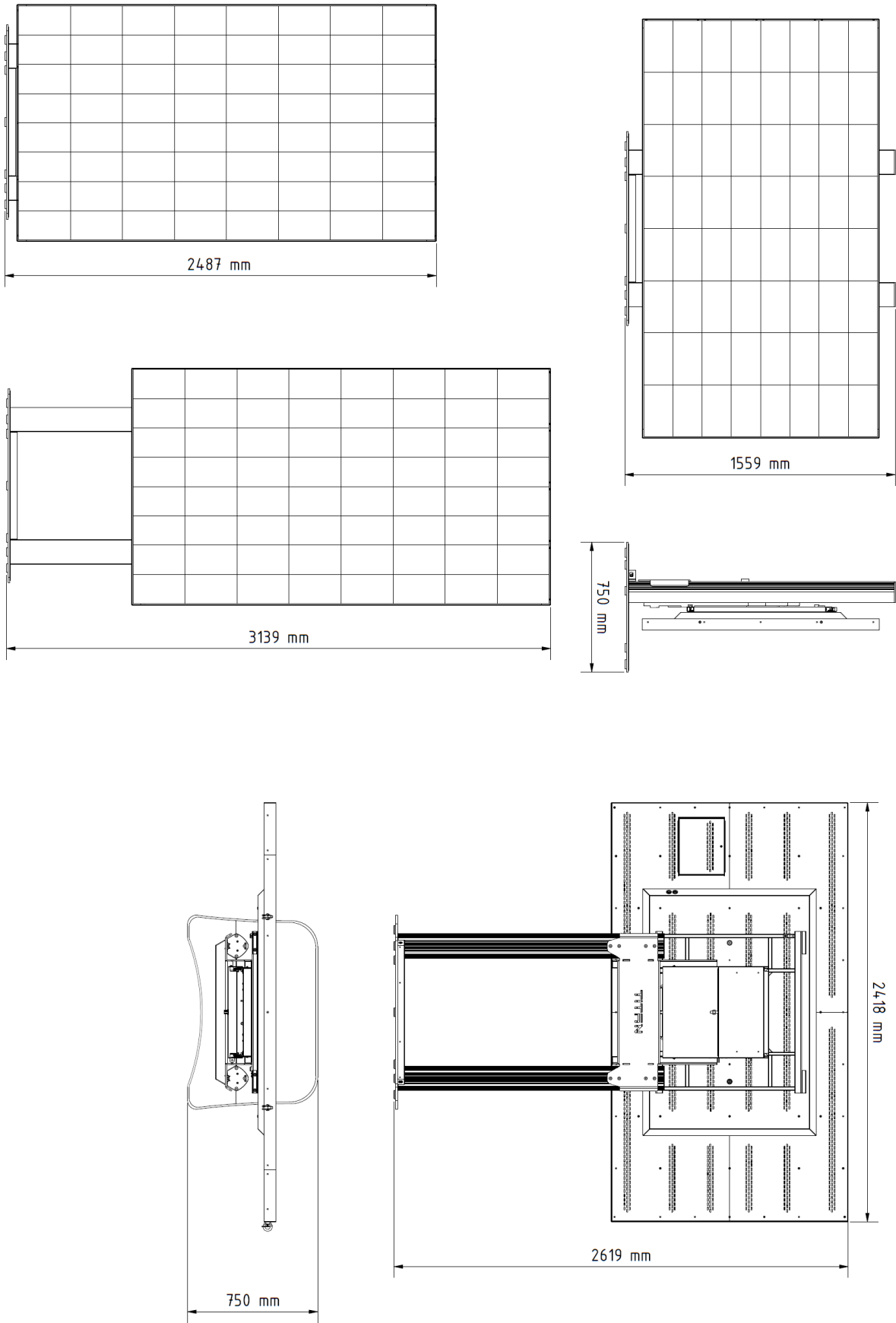
GERMANY

## 9. Mechanical Drawing

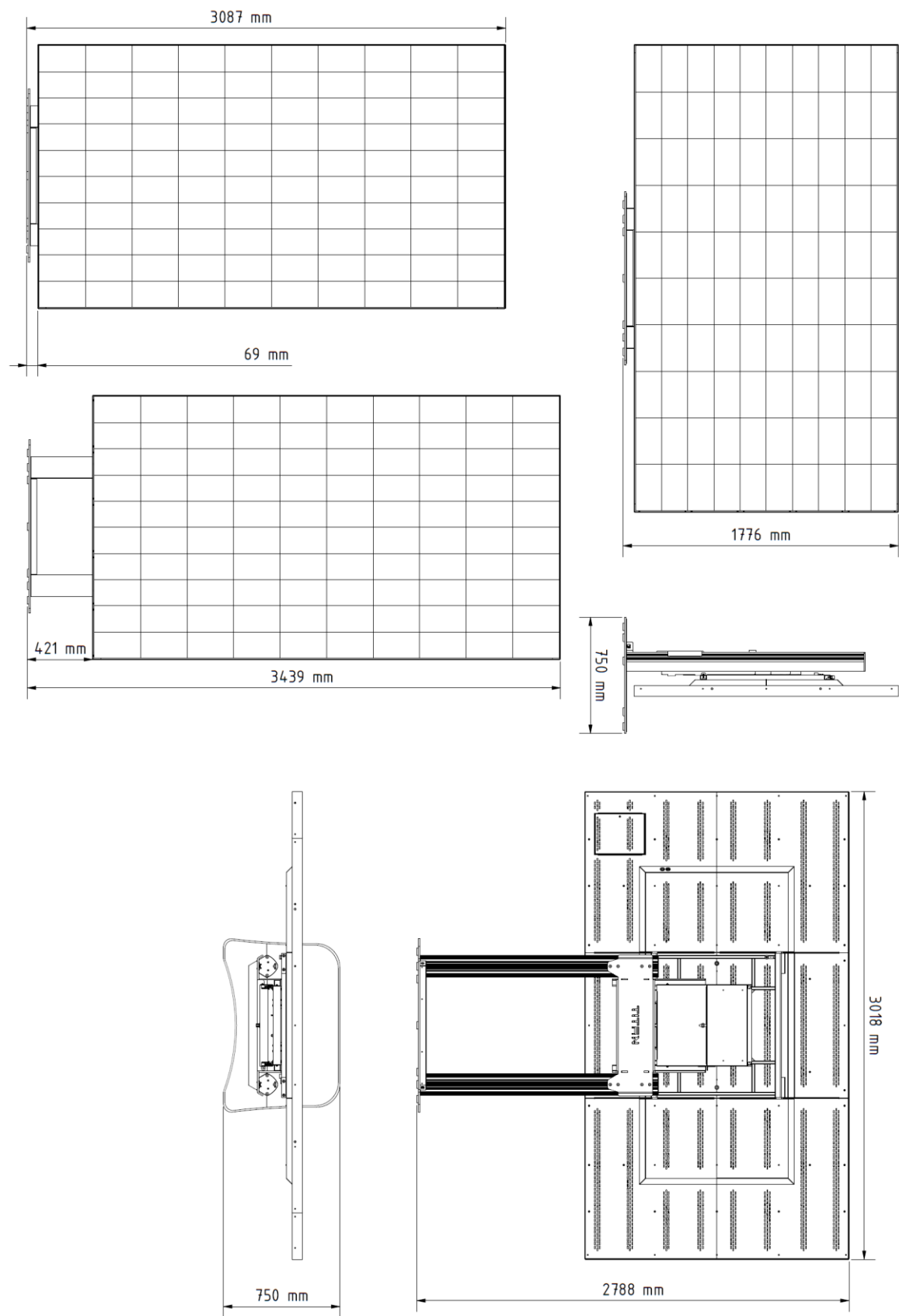
### 9.1 TITAN Base Unit



9.2 TITAN Base Unit and fLED Screen 108”



9.3 TITAN Base Unit and fLED Screen 136"



## Imprint

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