ShowTex User Manual
HiSpeed Roll Up

ShowTex

AMAZING STAGE FABRICS IN MOTION

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Introduction

- The HiSpeed Roll-Up (HSRU) is a motor driven roll up system with a fast roll up speed of 2m/second.
- The screen is attached to a 3m, 6m or 9m cylinder and installed in a 20/40 truss.
- The screen height extends to 15m.
- The unique step-less positioning system is compatible with DMX, easy to install and handy for touring.
- When trusses are connected together, the cylinders can be connected through built in axis connectors. When used in the Venetian configuration, the width can be extended every 3m or 6m and steered by one motor.

Safety Instructions

- Read this user manual carefully.

- The roll up system may only be used to move curtains and screens.
  Never use this system to move people, animals, or any other heavy objects.

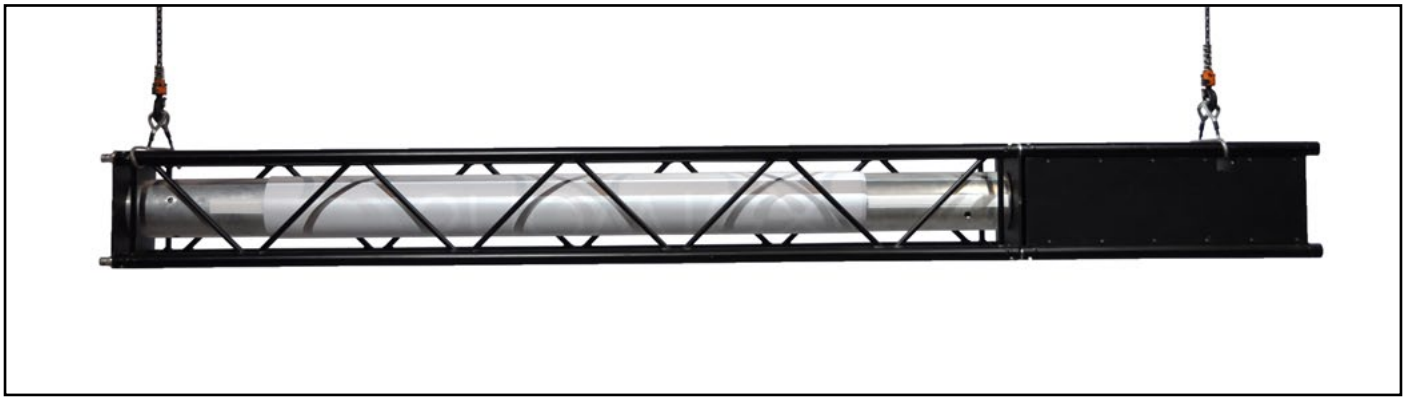
- Make sure that no people or objects are in the area under the system during use.

- The operator must keep eye contact with the system during use.

- Do not hang lighting or any other heavy weight objects on the truss.
  The truss is for mounting the HiSpeed Roll-Up only.

Component Parts

The HSRU system consists of the following parts:



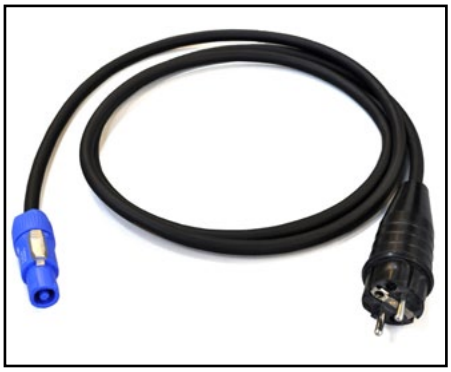
HSRU System

Motor Unit

Truss

Emergency Unit

Remote Unit

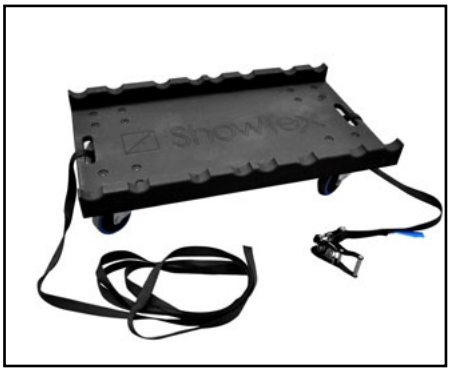


Power Supply Cable

Emergency Stop Cable

DMX Cable

Isolation Transformer



Truss-Trolley

Component Parts

Name	Art.nr.	Colour	Weight	Information	Diameter As
Motor Unit	8140 3112 0017		100 kg/piece		
Truss	8140 3115 3007		125 kg/piece	Length: 300 cm	200 mm
	8140 3115 6007		160 kg/piece	Length: 600 cm	200 mm
	8140 3115 9007		225 kg/piece	Length: 900 cm	250 mm
Emergency Unit	8140 0768 0010		2,46 kg/piece	Length: 25m	
Remote Unit	8140 0766 0010		5,75 kg/piece	Length: 25 m	
Power Supply Cable	8150 0912 0027		0,41 kg/piece	Length: 2 m	
Emergency Stop Cable	8140 7202 1000		0,87 kg/piece	Length: 10 m / Verlengkabel	
	8140 7202 2500		2,64 kg/piece	Length: 25 m / Verlengkabel	
DMX Cable	8050 7220 5107		0,69 kg/piece	Length: 10m	
	8050 7220 5127		0,85 kg/piece	Length: 12,5 m	
Isolation Transformer	8140 7260 0010		40,40 kg/piece		
Truss-Trolley	8140 6050 0407		15,20 kg/piece	For 30 cm and 40 cm trusses, including 5 stack elements + 1 fastener with ratchet.	

Specifications

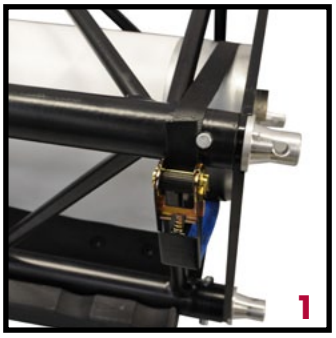
Length cylinder	Roll-Up- and drop speed	Max. screen width	Comments
3 m	1,5 m/s	285 cm	
6 m	1,5 m/s	585 cm	
9 m	2 m/s	885 cm	On request

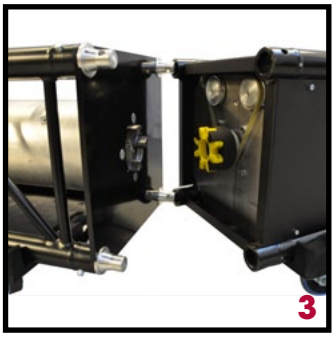
Assembly

In order for the system to operate correctly the following steps should be taken:

1 Connect the motor to the axis

If these are already connected go to step 2.





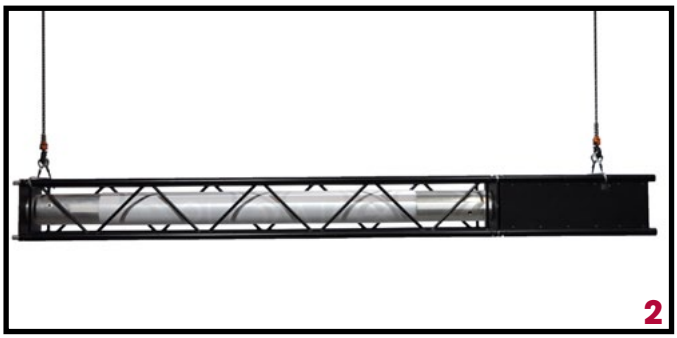
1 Secure the screen with a ratchet strap so that it can't drop from its own weight

2 Check that the rubber part is inserted in the jaw clutch coupling. If this is not done correctly, the screen will roll up or drop too far or not far enough. Never run the motor without a screen attached to the unit.

3 Slide the motor part and the axis connectors into each other.

4 Secure with the spigot and R-spring safety. Always position the spigot opening to the front to ensure an easy fit of the safety R-spring.

2 'Installing' the roll-up system



1 Attach the roll-up system to the hoists with steel cables or clamps at the position of the motor on one side (and insert in the opening provided) and on the other side at the position of the bearing

Attention: If the span of het roller is larger than 3m, then the steel cables or clamps must be attached at both ends at the position of the bearings (and not at the motor position).

2 Hang the truss horizontally and at working height. Then remove the elastic strap that secures the screen.

Assembly

3 Connecting the cables

• Plug the Emergency Stop Unit into the "Emergency Stop Input" (7 pin XLR)

• Plug in the power cable and connect to a 230V 16A circuit with a 300mA differential switch. At less than 300mA the safety device will eject and the motor will not start. In this case, connect the power cable to the isolation transformer and connect the isolation transformer to the power source.

• The DMX may only be connected after the soft limits have been set!

• When several motors are used, the Emergency Stop Unit can be connected by means of the 'Emergency Stop Link' socket (7-pin XLR).

4 Starting the HSRU system

1 Disengage the "Enable"-button and release the Emergency Stop on the Emergency Stop Unit.

2 Set the switch on the motor unit to 'Manual' and press the 'On/Off' button to start up the motor.
When the roll-up system has started, the green 'On/Off' button will light up and after several seconds the 'Drive Ready' button will also light up (if not, press 'Reset').

Activate 'Enable' on the Emergency Stop Unit; this green button will light up.

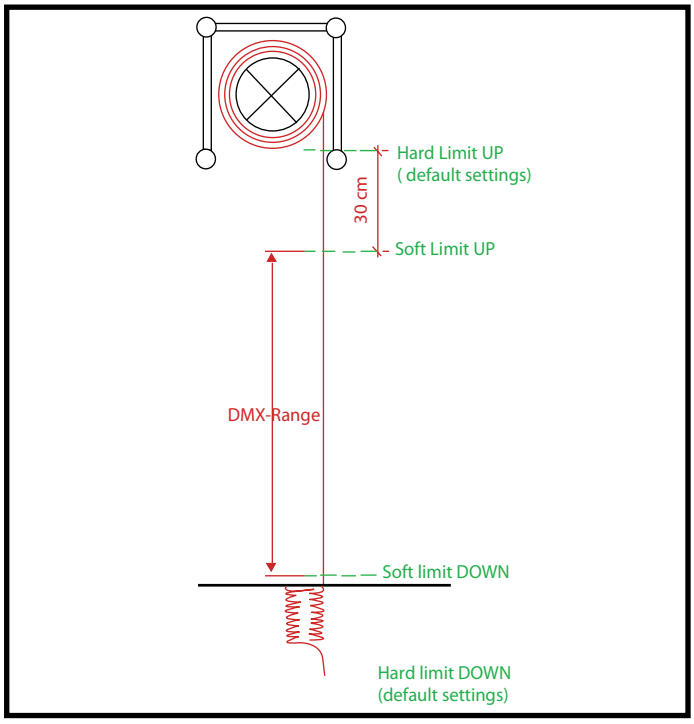
The "Enable" button serves as a safety mechanism to stop the roller immediately when the screen is rolling up or dropping. By pushing the button again, the roller will continue to the programmed position.

Attention: The emergency stop may only be used in case of emergency. Wait 30 seconds before releasing the emergency stop to prevent regulator damage

3 If the screen is still suspended inside the structure (transport position), one meter must first be unrolled in order to release the hard limits. This is done using the 'Up/Down' button on the motor unit.

Assembly

5 Setting the soft limits



• The system has soft limits and hard limits. The hard limits determine the absolute safe limits (UP/DOWN) allowed by the system. The soft limits are always within the boundaries of the hard limits and are determined and set by the user.

• The hard limits have been set by the manufacturer during installation of the screen or curtain on the roller. When the curtain or screen is adjusted or replaced, please contact our technical dept. for advice to prevent damage to the hard limits.

• When adjusting the soft limits make sure the screen or curtain never rolls up into the truss, reaching the top hard limit. If this happens, the system will not respond to DMX. In this case use the manual control by adjusting the "Up/Down" button on the motor-unit. The standard soft limit is at 30cm below the truss.

Attention: The soft limits should only be considered when the system is connected to DMX. In case of manual operation, make sure the system doesn't surpass the hard limits. If this should occur, roll out the screen to 1m length to release the hard limits.

There are 2 ways to set the soft limits: by using the remote control or on the control panel of the motor-unit.

5.1 Setting the soft limits with the remote control unit.

• Plug in the Remote control.

• Hoist the HiSpeed Roll-Up system up to the desired height.

• Roll the screen down, using the "Up/Down" button on the remote-unit until the screen is at the desired bottom point. Now press the "STORE" button (blue) and keep it pressed in. Confirm the position by pressing on "Enter" button (green).

Attention: Do not release the "STORE" button.

• First go to the top position without releasing the "STORE" button.

• Then, press the "ENTER" button when you reach the desired top position.
Now you can release the "STORE" button.

• Both soft limits are now set at the correct height. Go to step 6.

Assembly

5.2 Setting the soft limits with the control panel of the motor-unit

1 Roll the screen down, using the "Up/Down" button on the motor-unit until the screen is at the desired lowest point.

2 Press the button ◀ or ▶ until "soft limit min" appears on the screen. Then press the ◀ and the ⤒ button at the same time, and confirm the position by pushing the ↵ button. The bottom soft limit is now set.

Use the "Up/Down" button on the motor-unit to move the screen to the desired top point.

3 Press the button ◀ or ▶ until "soft limit max" appears on the screen. Then press the ◀ and ⤒ button at the same time, and confirm the position by pushing the ↵ button.

Both soft limits are now set at the correct height. Go to step 6.

6 Switching to DMX

• Press the "enable" button on the Emergency Stop Unit (so that it is no longer lit up) to keep the system from reacting instantly to DMX.
To prevent damage and irregularity to the system, the DMX addresses must first be correctly entered.

• The roll-up requires 3 DMX channels, channel 1 and 2 for the 16 bit positioning and a third channel to regulate speed.

• Set the correct DMX address by pushing the ◀ and ▶ buttons on the control board of the motor-unit until "DMX address" appears on the screen. (the DMX address can be adjusted by using the ▲ and ▼ buttons). When you arrive at the desired address push the ↵ button to confirm. The DMX address is now set.

• If the remote control unit isn't necessary for the show, remove it and move the switch on the motor-unit to DMX.

• Plug in the DMX-cable to the "DMX In" outlet on the control panel of the motor-unit.

Attention: Make sure the system is hung at the desired height and that no one is standing under the load. Always keep the Emergency Stop control within arm's length.

• When you activate the "Enable"-button on the Emergency Stop unit, the roll-up will respond to DMX.

Attention: The third channel (speed) must always be at least 5% open. Otherwise, speed will be set to 0 and the system won't respond.

7 Test the system's general operation.

Attention: Always ensure that the Emergency stop controller "Enable"-button is disengaged before performing system maintenance.

8 Disassembling the HSRU system

1 Set the switch on the motor-unit to manual.

2 Position the screen to the transport position. To do this, roll up the screen to its top hard limit by using the "Up/Down"-button.

3 Disengage the "Enable"-button of the emergency stop controller.

4 Push the "On/Off"-button of the motor-unit to disengage the motor.

5 Now the rest of het system can be safely disassembled.

Care and Maintenance

- The High Speed Roll Up system has components that must be regularly checked, maintained, and replaced in order to ensure safety and keep it in good condition.

- The best way to maintain the HSRU system is to use it often. Each mechanical part should be used at least once a week. In this way, residue and dirt can't collect in the bearings and irregular noises can be discovered in time.

- More frequent maintenance is recommended in case of frequent use or in case the system is installed in a space with a high degree of moisture, dust, or differences in temperature.

- When necessary, disassemble the system in the same way it was installed.

Trouble Shooting

What to do if the system stops working?

- Verify that the system is correctly connected to the power supply.
- Verify that all cables are connected to the correct outlets and that none of them are damaged.
- In case of DMX: The third channel (speed) must always be at least 5% open. Otherwise, speed will be set to 0 and the system won't respond.

If the soft limits were incorrectly set and the screen has reached the hard limits, perform the following steps·

- The system may only be operated manually in this case. (see STEP 4).
- Roll out 1m of screen to release the hard limits. (see STEP 4).
- Reset the soft limits (STEP 5).
- Attention: The soft limits should only be considered when the system is connected to DMX.

The emergency stop was activated and the system stopped responding?

- Wait 30 seconds before releasing the emergency stop to prevent regulator damage (see STEP 4).

For more technical assistance please contact your local ShowTex office.
(see back cover of manual)

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ShowTex

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