

creative conners, inc.

Curtain CallTM Reference Manual

Version 1.0

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Curtain Call Reference Manual

1 - Getting Started

Congratulations on your purchase of the Curtain Call traveller track winch from Creative Conners, Inc. **Curtain Call** is a winch designed to meet the demands of scenic automation.

This manual will direct you through:

1. Unpacking
2. Installing & testing
3. Operation procedures

If you need help along the way contact us either on our website (www.creativeconners.com), via email (support@creativeconners.com), or by phone (401.289.2942)

1.1 - Safety

The Curtain Call is a fantastic machine for moving scenery and curtains on many different types of traveller tracks. Curtain Call is a friction drive winch, and grips the operating line to pull scenery or curtains along the traveller track. It offers great flexibility but also requires serious planning and safety. The Curtain Call is not intended for any use other than lateral movement on a traveller track.

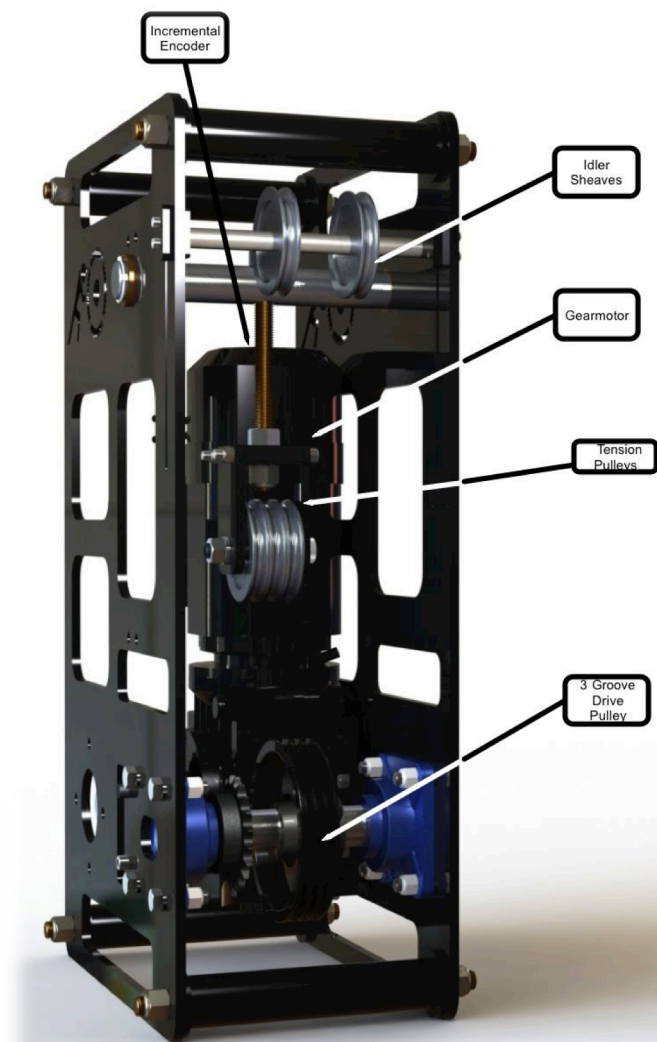
Curtain Call is rated for 180 pounds of line pull and a maximum travel speed of 36 in/sec at 60Hz.

1.2 - Curtain Call Overview

Curtain Call can be used with a variety of traveler tracks and durable enough for the rigors of day-to-day life in the theater industry. The major components of the Curtain Call are shown below:

- Gearmotor
- Electromechanical Brake
- Speed Reducer
- Incremental Encoder
- 3-Groove Drive Pulley
- 3-Groove Tension Pulley
- Adjustable Idler Sheave

Figure 1.1

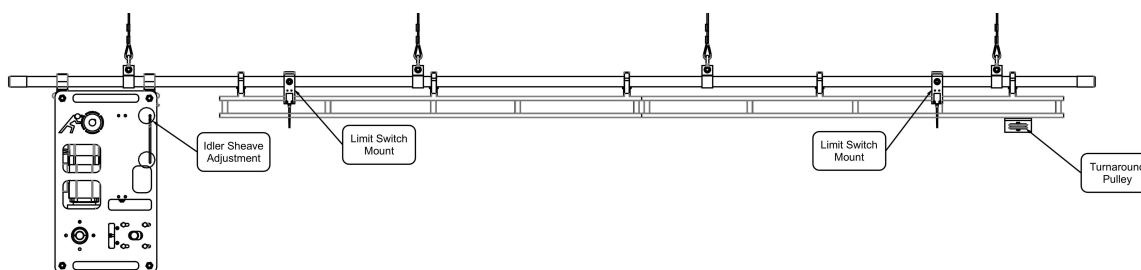


1.3 - Installing the Curtain Call

1.3.1 - Mounting the Curtain Call

Curtain Call can be easily mounted to either a batten or truss. Place the Curtain Call at the end of your batten/truss and attach with the provided Mega Clamp®. When positioning the Curtain Call, take a little time to ensure that it is hanging plumb, if the machine isn't plumb it could lead to improper tension in the system. After Curtain Call is secured to the batten/truss adjust the idler sheave to the height of the tracks return/turnaround pulley.

Figure 1.2



1.3.2 - Connecting the Curtain Call to a Stagehand

Prior to rigging the Curtain Call lets make sure the machine working properly. To power up the Curtain Call you will need a Stagehand 1HP-2HP controllers (refer to your Stagehand manual for installation instructions). With the Stagehand installed, make the following connections between the Curtain Call and Stagehand:

1. Connect the encoder to the encoder socket.
2. Connect the brake to the brake socket.
3. Connect the motor to the motor socket.
4. Connect either the forward limit or a limit jumper to the forward limit socket.
Note: A limit jumper is a ML1 plug that has a wire connected between the two pins on the plug. This will simulate a normally closed limit switch, thus allowing travel in the forward direction.
5. Connect either the reverse limit or a limit jumper to the reverse limit socket.
6. Using a network cable (RJ45 Cat5), connect the Ethernet socket to an Ethernet hub.
7. Using a Showstopper cable (5-pin XLR) connect the Showstopper to the E-Stop inlet on the Stagehand AC.

1.3.3 - Testing the Curtain Call

It is important to confirm your Curtain Call is properly connected to the Stagehand, to do so you should test these conditions:

1. *E-Stop* – Release the E-Stop button on Showstopper. You should hear a “click” from inside the Stagehand, this is the E-Stop contactor closing. The LCD display should show that the E-Stop is released by switching the status display to:

Figure 1.3



“Not Connected” indicates that the Stagehand is not communicating with a computer running Spikemark.

2. *Brake release* – Press the **fwd** jog button. You should hear a distinct “click” from your brake. This is the sound of the brake releasing. Release the fwd jog button. You should hear a click of the brake engaging.
3. *Motor Motion* – Press the fwd jog button and slowly turn the knob clockwise. The motor should begin moving. Turn the knob counterclockwise to slow the motor to a stop, then release the jog button. Repeat with the rev jog button.
4. *Limit Switches* – Manually activate (or unplug) first the forward limit, then the reverse limit. The LCD display on the Stagehand should indicate when a limit is detected.

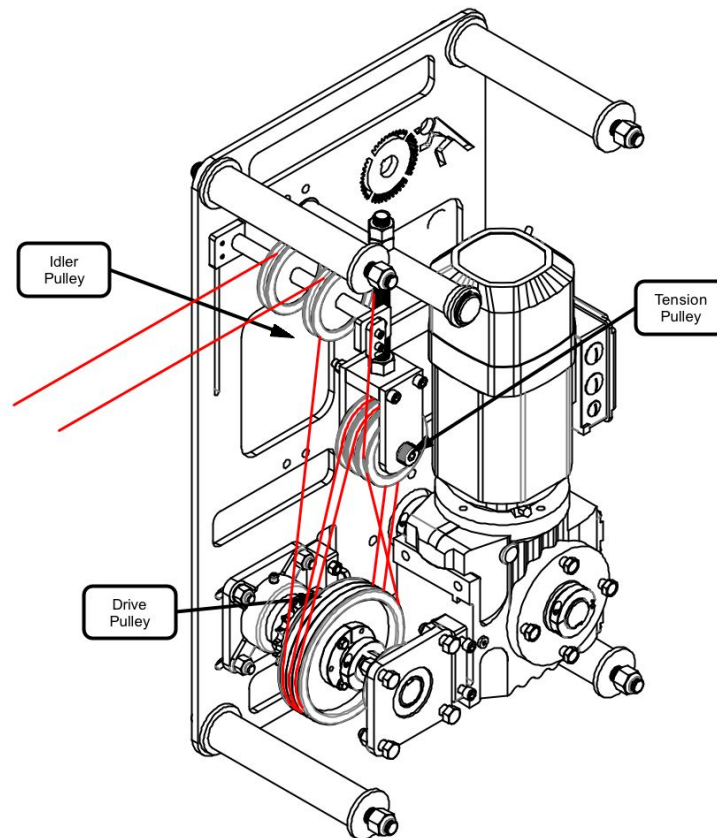
Figure 1.4



2 - Rigging the Curtain Call

Once you have confirmed the Curtain Call is properly functioning without a load attached the machine can now be rigged. Because the Curtain Call uses friction to pull the scenery or curtain, proper tension and the type of hauling line have a big impact on accuracy. For best results we recommend to using ¼” OD Coated Wire Rope, McMaster-Carr #8912T539.

Figure 2.1 (With Side Plate Removed)

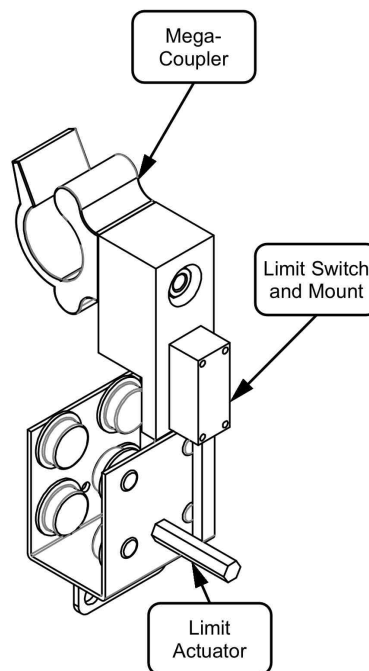


1. Cut the length of required wire rope, often twice your traveller length plus 10'-0" (i.e. 40'-0" traveller length, $(4 \times 40'-0" + 10'-0" = 90'-0")$)
2. Adjust the tensioner so the pulleys are as low as they will go on the winch.
3. Rig the return line first by attaching one end of your wire rope to your Master Carrier and attach it to the side furthest from the Curtain Call.
4. Run the wire rope through the track turnaround pulley and head back to the Curtain Call
5. Run the wire rope through the idler pulley and down to the 3-Groove Drive Pulley
6. Run the cable up to the tension and back down to the drive pulley, do this twice.
7. Once the 3-Groove drive pulley is full take the cable back up to the remaining tension pulley, run the line in front of the pulley and up to the remaining idler pulley.
8. Now secure the cable to the Master Carrier.
9. Begin to take tension out the system by the bottom nut on the tensioner assembly, use a 1-1/8" wrench, do this slowly.
10. Begin to drive the Curtain Call in a slow speed while you take tension, this allows tension to be taken equally throughout the system. Repeat until the tension in the system meets a satisfactory level. After tension is completed tighten the top

and bottom nut in the tensioner assembly to ensure the tensioner won't come loose over time.

11. Once system is rigged, place the limit switches in their respective spots on the pipe and install the Limit Actuator on the Master Carrier.
12. Install the Limit Switch Actuator to the Master Carrier. The Master carrier will have holes allowing you to install the Actuator with the supplied $\frac{1}{4}$ "-20 bolt. See Figure 2.2 for clarification.
13. Test to ensure the Limit Switch Actuator is making contact with the Limit Switch and registering on your Stagehand.

Figure 2.2



Your Curtain Call is now ready to move your scenery!

3 – Troubleshooting

Though the combination of the Curtain Call, Spikemark, Stagehand, and Showstopper strive to make automation easy and plug and play, sometimes things don't operate properly. This part of the guide will point out some culprits to keep an eye out for throughout your troubleshooting process.

Motor is jerky.

Check tension of wire rope. The wire rope should be taught throughout the system. Any slack in the system could cause backlash. Make sure the rope isn't too taught.

Adjust tuning parameters in Spikemark.

When running a cue, proper accuracy isn't being achieved.

Check tension of wire rope, the wire rope could be slipping on the drive pulley causing unstable positioning.

Check the termination in master carrier to ensure the haul line isn't slipping through the terminations.

When running a cue, the motor speeds fast in the wrong direction and then turns off.

The polarity of the motor is reversed. Open up the motor plug and switch any two of the three power wires (always leave the green wire connected to the ground pin).

Technical Support

Though we try our best to produce reliable products and clear instructions, there may come a time when you need personal support.

Phone Support

You can call our technical support at 401-289-2942 Monday-Saturday from 8am – 6pm EST. Phone support is free for 90 days, after that a rate of \$30/hr. may apply to support calls.

Web Support

There is an active user support forum on our website.

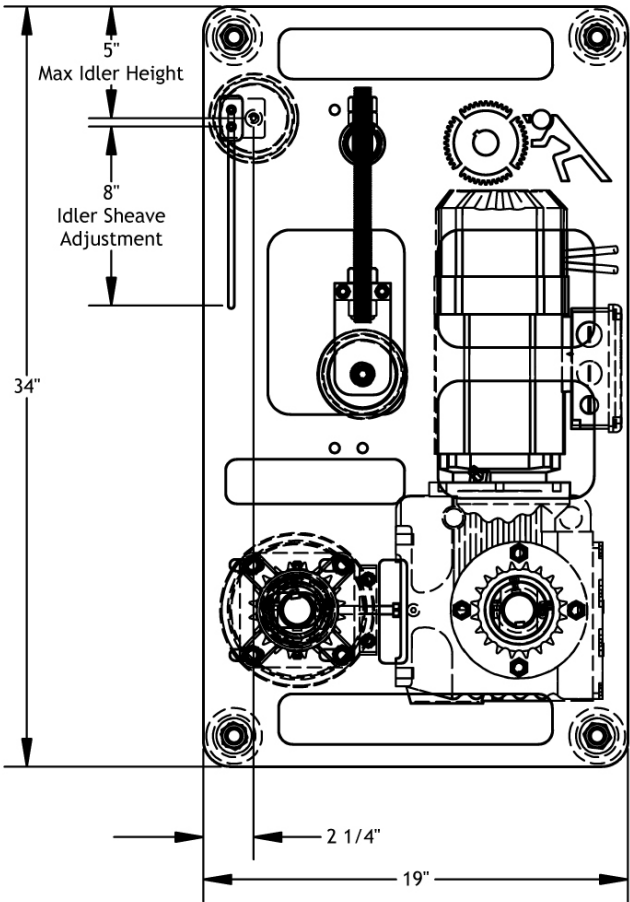
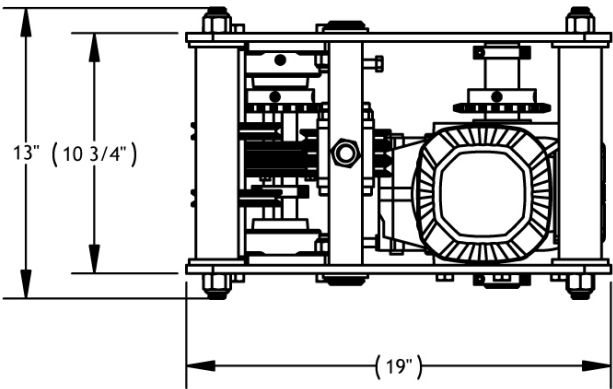
<http://www.creativeconners.com/phpBB3/index.php>

Email

If you have a technical question you can email technical support support@creativeconners.com.

4 – Specifications

4.1 Physical Specifications



4.2 Specifications

Input voltage	230V 60Hz 3-phase
1hp AC	
Max input current	
1hp AC	3.2 amps
Max line pull	
1hp	180 lbs.
Max line speed	36 in/sec
Suggested Haul Line	¼" OD Coated Wire Rope, McMaster #8912T539