JR CLANCY

HC-100B User Guide

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Part of the SceneControl® 5000 Family

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HC-100B User Guide

The **HC-100B** handheld controller is a local control device that is intended for use during machine setup and load installation to alleviate the need for an operator to stand by on the main operator station.

The **HC-100B** does not communicate directly with the RAYNOK controllers, instead the command signals from the **HC-100B** are routed directly to the drive. When the **HC-100B** is attached to a machine's motor panel, the machine enters a manual control mode - control from the main operator's station will be disabled until **HC-100B** is disconnected. Once enabled the drive responds directly to the FORWARD or REVERSE buttons of the **HC-100B**. Releasing the pressed button will stop the machine. Holding the EOT BYPASS SELECT switch in the ON position enables the drive to bypass end-of-travel limits, and holding the O/T BYPASS SELECT switch in either direction enables the drive to bypass overtravel limits.

Although the **HC-100B** does not communicate with the RAYNOK controller to control the drive, the RAYNOK controller must still be present and connected to the drive control circuit to supply the required 5VDC power to the encoder. Circumventing this signal with an external power supply could void the warranty on the installed equipment. Contact your system administrator for instructions should a situation arise that would require you to operate the system in this manner.

List of Parts

The **HC-100B** local control pendant is capable of operating all the fixed speed machines in the automated rigging control system. The **HC-100B** plugs into the front of the machine's control panel and can operate the connected machine separate from the control system. The interface components are explained below:

1.	***FAULT Indicators***	***- Motor:*** Illuminates when the relative machine's motor drive has faulted ***- O/T:*** Illuminates when an overtravel limit has been struck
2.	***O/T BYPASS switch***	- Used to activate the Overtravel bypass. Hold TRAVEL DOWN to bypass the switch on the top, or hold TRAVEL UP to bypass the switch on the bottom.
3.	***EOT BYPASS switch***	- Used to activate the End Of Travel bypass. Hold the switch to the ON position to bypass any forward or reverse limits. Stops all motion and disables the main Emergency Stop System
4.	***FORWARD Button***	- Used to activate the relative machine in the forward direction - The machine will only move in the forward direction while the button is pressed and held - releasing the button will stop motion
5.	***E-Stop Button***	- Stops all motion and disables the main Emergency Stop System
6.	***Status Indicators***	***- Power:*** Illuminates when the **HC-100B** is ready to operate ***- Control:*** Illuminates when the E-Stop system is ready. The **HC-100B** will not function if this indicator is not lit.
7.	***RESET Button***	- Resets the E-Stop System
8.	***REVERSE Button***	- Used to activate the relative machine in the reverse direction - The machine will only move in the reverse direction while the button is pressed and held - releasing the button will stop motion

Basic Operation

1. **BEFORE USING YOUR HC-100B BE SURE YOU UNDERSTAND AND FOLLOW ALL BASIC SAFETY GUIDELINES AS LAID OUT BY YOUR SYSTEM ADMINISTRATOR.**

2. Ensure that the E-stop button on the **HC-100B** is pushed in.

3. Press and pull out any local E-stop button to disable the system.

4. Plug the **HC-100B** into the desired machine interface panel. **Connecting the HC-100B to a machine will lock the machine out from the main operator's station.**

5. Pull out the E-stop button on the **HC-100B**

6. Press and hold the FORWARD or REVERSE Button. The machine will only move in that direction while the button is pressed and held - releasing the button will stop motion

7. When you are finished moving, disconnect the **HC-100B** from the panel.

Be aware that if you leave the **HC-100B** connected to a machine, that machine will be locked out from the main control station.

There are no high voltage signals inside the **HC-100B** handheld controller. Present signals do not exceed 24 VDC. Observe care in handling the cables; should a cable become worn or damaged remove the unit from service until repaired. A damaged cable with crossed or shorted command signals could cause serious damage to the drive electronics.

End of Travel Limit Bypass

Hitting the reverse or forward limits on a machine with the **HC-100B** will cause the machine to stop. To bypass these limits, follow the steps below.:

1. Press and hold the EOT BYPASS SELECT switch in the ON position.
2. Press and hold the desired direction of intended travel which will clear the limit.
3. Once the limit has been cleared the activated indicator on the panel will turn OFF.

Over Travel Limit Bypass

The **HC-100B** must be attached to the machine to locally verify and clear an overtravel limit. In the event of a machine travelling into an overtravel limit, motion of the machine will be stopped and locked out in both directions; the O/T FAULT indicator, located on the local panel interface will illuminate. The overtravel bypass must be activated to move the machine back into its designed range of motion. To bypass the overtravel limit follow the steps below:

1. Attach the **HC-100B** to the faulted machine's control panel.
2. Determine which overtravel limit has been struck
3. Press and hold the overtravel limit switch that you wish to bypass (TRAVEL DOWN or TRAVEL UP)
4. Press and hold the desired direction of intended travel which will clear the limit.
5. Once the overtravel limit has been cleared the activated indicator will turn OFF.
6. The machine is now ready for normal operation.

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