## **Brunswick**<sup>®</sup>

# Installation Instructions

### eRUN (Emergency Run) Display

The eRUN Display provides a way to continue to run the Envoy lane machine in an emergency situation without the GUI. The eRUN will only be able to run pattern #1, so it is a good idea to make sure that pattern #1 is your most popular pattern set in the clean and condition mode. Also follow the End of Lane Speed Adjustments noted after the following basic Installation and Operation Instructions.

#### **eRUN** Display Installation Instructions

- 1. Turn the power off to the Envoy using the switch on the LH side cover.
- 2. Disconnect the non-functioning GUI and send it to the Brunswick for repair. (Contact Brunswick Electronic Repair or your Distributor if you are unsure of how to return electronic parts for repair.)
- 3. Locate the eRUN keypad extension cable (P/N 14-100899-000) from the eRUN package.
- 4. Connect one end of this cable to the T-handle keypad cable that was just disconnected from the GUI (Emergency Run Cable Connections figure is shown below).
- 5. Connect the other end of this cable into the "eRUN Keypad" port on the RH side of the electronic enclosure.
- 6. Locate the eRUN display cable (P/N 14-100897-000).
- 7. Connect the one end of this cable into the "eRUN Display" port on the RH side of the electronic enclosure.
- 8. Connect the other end into the port on the eRUN enclosure.
- 9. Snap the eRUN enclosure onto the GUI support, using the spring-loaded ball detent similarly to the attachment of the GUI.



Figure 1

#### **eRUN** Operation Instructions

- 1. Turn the power back on to the Envoy using the switch on the LH side cover.
- 2. Observe the 2-line eRUN Display text as it initially displays the firmware version and then indicates that the GUI is not detected and you are running in the eRUN mode.
- 3. Press the OK on the T-handle keypad as the eRUN text prompts you 'Preparing Lane?'.
- 4. Observe the eRUN text as it is 'Preparing' (lowering the squeegee/duster cloth and setting the conditioner pressure).
- 5. Push the Envoy onto the lane when the eRUN text prompts you to put the machine onto the lane.
- 6. Press OK to start running that lane.
- 7. Repeat steps 3 through 6 for each lane that you choose to run.
- 8. Simple error messages will be displayed, but the eRUN has limited functionality and should be replaced with a functional GUI as soon as possible.

**NOTE:** The Envoy GUI provides many functions that the eRUN will NOT provide. One of these functions is the ability to adjust the travel speed to compensate for the changing battery voltage. Because the eRUN can not adjust the travel speed to compensate for the changing battery voltage, it is important that the End of Lane Speed Adjustment is optimized while the GUI is functional. The following preparation should reduce the chance that the Envoy would either travel too slowly and stall in the pin deck or travel too fast and run off the end of the lane when operating with the eRUN display.

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Figure 2

### Preparing End Of Lane Speed Adjustment for eRUN

The End Of Lane speed adjustment allows you to increase or decrease the speed for the last 12" of machine travel on the pin deck. The default value is 0, but this value can be increased or decreased in steps of 15 units. The goal of this adjustment process is to determine the upper limit for the End Of Lane speed adjustment before the Envoy travels off the end of the lane with a fully charged battery. The optimal End Of Lane speed adjustment can then be set to a value of 8 units below this upper limit. This setting should allow enough margin for the eRUN to operate without the ability to compensate for the changing battery voltage.

Conduct the following preparation instructions while the functional GUI is installed on the Envoy.

- 1. Go to the System menu
- 2. Select "Settings" and press "OK"
- 3. Use the left/right arrows to navigate to "End Of Lane Speed Adjustment"
- 4. Use the up arrow to increase the End of Lane Speed by a quantity of 5 units
- 5. Press "exit" to save and return to the previous screen
- 6. Navigate to the "Operator" screen and run pattern #1 for two lanes
- 7. Observe while the Envoy travels through the pin deck on the second lane:
- **I NOTE:** Because the pinsetter blocks the view, it can be difficult to determine why the machine has stopped in the pin deck. The best indication is to compare where the Envoy rear cover is positioned when the machine has stopped.

#### Upper Limit for End Of Lane Speed Adjustment

The Envoy rear cover should travel  $\sim 2^{\circ}$  past the 2-3 pinspots with the proper speed when it stops and reverses direction. If this happens, repeat steps 4 through 7 except increment the End Of Lane Speed by a quantity of 2 units in step 4 until you determine the upper limit for the End Of Lane speed adjustment as explained below:

When the Envoy stops in the pin deck with the rear cover is positioned ~4" past the 2-3 pinspots, then you have determined the upper limit where the drive wheels have traveled just past the end of the tail plank from travelling too fast. (You can verify this by pressing the green OK button on the T-handle to see if the wheels are already turning in reverse and you can pull the machine back onto the lane, but make sure that you get out of the way when the machine continues to travel back to the foul line.) Follow steps 1 through 4 above except set the End of Lane Speed to a value of 8 units less than the upper limit value that was just determined. Run pattern #1 for a few lanes at this setting to verify that the Envoy will travel through the pin deck properly with the GUI. As an extra precaution, you may also replace the GUI with the eRUN Display and run (default pattern #1) for all lanes at this setting to verify that the Envoy will travel through the pin deck properly as your battery voltage varies.

For additional assistance, please contact your authorized Distributor or the Brunswick Technical Support (BTS) in the United States at 1-800-YES-BOWL, or internationally at 231-725-4966. For non emergency support, e-mail techsupport@brunbowl.com.