EEC-3 Configuration Sections, v3.5

Entering Configuration Mode:

1. Move both handles to full ahead at the main station (this is the station that comes up in control when the system is first started up).
2. Turn system ON.
3. Press and release the warm button 3 times. All the LEDs will start flashing indicating that you have entered the configuration main menu.

Using Configuration Mode:

1. Press and release the sync button to advance through the configuration sections listed below. The flashing LEDs indicate which section you are currently at. After the last section it will cycle back to the main menu (all LEDs flashing).
2. After advancing to the desired configuration section using the sync button, press the warm button to enter the configuration section.
3. Use the sync button to cycle through the selections in the sub-menu (Troll types for example).
4. Press the warm button to store the desired selection, this will return the configuration to the main menu (all 4 button LEDs flashing).

Configuration Sections:

Section #0, Main Menu (All button LEDs flashing):

Section #1, Troll type (Take LED flashing):

0. No troll (default). No LEDs.
1. Increasing current towards lockup with 500mA maximum range. (Similar to the old IRM type). Take LED.
2. Decreasing current towards lockup with 500mA maximum range (Similar to the old BW type). Sync LED.
3. Increasing current towards lockup with 1000mA (1A) maximum range. Take and Sync LEDs.
4. Decreasing current towards lockup with 1000mA (1A) maximum range (Similar to the old Twin Disc type). Warm LED.
5. Increasing voltage towards lockup (0-5V range). Take and Warm LEDs. This type can be used for Twin Disk E-Troll and ZF Auto-Troll.
Note: Press the warm button to store the selection.

Section #2, Throttle on top of troll (Sync LED flashing):

0. No throttle on top of full lockup (default). No LEDs.
1. Throttle on top of full lockup (1/3 throttle range). Take LED.
Note: Press the warm button to store the selection.

Section #3, Troll delay (Take & Sync LEDs flashing):

0. No troll delay (default).
1. 0.5 second delay. Take LED.
2. 1.0 second delay. Sync LED.
3. 1.5 second delay. Take & Sync LED.
4. 2.0 second delay. Warm LED.
5. 2.5 second delay. Take & Warm LED.

Note: Press the warm button to store the selection.

Section #4, Throttle delay (Warm LED flashing):

0. No throttle delay.
1. 0.5 second delay. Take LED.
2. 1.0 second delay (default). Sync LED.
3. 1.5 second delay. Take & Sync LED.
4. 2.0 second delay. Warm LED.
5. 2.5 second delay. Take & Warm LED.

Note: Press the warm button to store the selection.

Section #5, Gear delay (Take & Warm LEDs flashing):

0. No gear delay (default).
1. 0.5 second delay. Take LED.
2. 1.0 second delay. Sync LED.
3. 1.5 second delay. Take & Sync LED.
4. 2.0 second delay. Warm LED.
5. 2.5 second delay. Take & Warm LED.

Note: Press the warm button to store the selection.

Section #6, Setting the first high idle step size (Sync & Warm LEDs flashing):

0. 0.5% of throttle range.
1. 1% of throttle range. Take LED.
2. 2% of throttle range. Sync LED.
3. 3% of throttle range. Take & Sync LED.
4. 4% of throttle range(default). Warm LED.
5. 5% of throttle range. Take & Warm LED.
6. 10% of throttle range. Sync & Warm LED.
7. 20% of throttle range. Take, Sync & Warm LED.
8. 30% of throttle range. Troll LED.

Note: Press the warm button to store the selection.

Section #7, Setting the remaining high idle step sizes (steps 2-10) (Take, Sync & Warm LEDs flashing):

0. 0.5% of throttle range.
1. 1% of throttle range. Take LED.
2. 2% of throttle range (default). Sync LED.
3. 3% of throttle range. Take & Sync LED.
4. 4% of throttle range. Warm LED.
5. 5% of throttle range. Take & Warm LED.

Note: Press the warm button to store the selection.

Section #8, System startup mode (Troll LED flashing):

0. Warm Mode/Gear lockout (default).
1. Normal run mode. Take LED.

Note: Press the warm button to store the selection.

Section #9, Station transfer method (Take & Troll LEDs flashing):

0. Transfer at any matched handle position (default).
1. Transfer at neutral only. Take LED.

Note: Press the warm button to store the selection.

Section #10, Sets all configuration settings to the default values (Sync & Troll LEDs flashing).

Note: Press the warm button to store all default selections.

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EEC-3 Dynamic Calibration Sections

Section #1, Setting Troll Output Range:

This procedure is used to independently calibrate the troll output range for each side (port/stbd). This procedure is done by running the boat or by using a troll break-out box and storing the full slip and full lockup values for each side. Follow the procedure listed below to calibrate the troll range:

1. Make sure that the CP has the troll feature installed and that the control handles have 4 buttons (required for troll operation).
2. Make sure that the system is configured for the correct troll type.
3. Move both handles to full ahead at the main station (this is the station that comes up in control when the system is first started up).
4. Turn the system ON.
5. Press and release the troll button 3 times.
6. Move the handles to neutral. The system will start up in troll mode (troll light lit).
7. Move the port handle until the troll output reaches the desired full slip position.
8. Press the take button to store the full slip position.
9. Move the port handle until the troll output reaches the desired full lockup position.
10. Press the sync button to store the full lockup position.
11. Move the port handle to neutral.
12. Move the starboard handle until the troll output reaches the desired full slip position.
13. Press the warm button to store the full slip position.
14. Move the starboard handle until the troll output reaches the desired full lockup position.
15. Press the troll button to store the full lockup position.
16. Move the starboard handle to neutral.
17. Turn the system OFF.
18. Turn the system ON, the system will now use the newly stored troll output ranges.

Section #2, Setting Sync Throttle Skew:

This procedure is used to match the rpm in sync for engines that do not control rpm based on the command signal (MAN engines for example). This procedure is done by running the boat at cruising speed and storing the skew percentage. Follow the procedure listed below to set the throttle skew percentage:

1. Move both handles to full ahead at the main station (this is the station that comes up in control when the system is first started up).
2. Turn the system ON.
3. Press and release the sync button 3 times.
4. Move the handles to neutral. The system will start up in normal run mode (take light lit). The boat will operate in normal run mode (normal gear and throttle control). You will not be able to enter any other modes such as warm or sync mode during this procedure.
5. Run the boat up to normal cruising speed.
6. Manually synchronize the engines as accurately as possible.
7. Press the sync button to store the throttle sync skew percentage.
8. Slowly move handles to neutral idle.
9. Turn the system OFF.
10. Turn the system ON. The system will now use the newly stored throttle skew percentage until the procedure is repeated.

REVISIONS	ECN #	CHANGES	By	DATE
1	2385NP	Initial release.	NM	03/29/05

Owner: ✔ *Nils Matt*   Date: 03/29/05

Management Representative: ✔   Date: 03/29/05