Prevent Unauthorized Operation of Rental Boats

Inputs & Outputs

Light Indicates Vessel Currently Operating at reduced power under non-authorized user

Light Indicates Battery is charging

Inputs

- **RFID Reader Output**
- **Motor Running Sensor Output**
- **To & From Engine Control Unit (ECU)**
- **Frequency Input for Clock**
- **Optional Gearshift input**
- **Optional RPM input**

Black Box

Note: Some of the inputs listed are actually generated inside the black box, such as reading the RFID wristband, counting for a clock, etc. Others can be read from the Engine Control Unit (ECU) via CAN bus.

Similarly several of the outputs are generated within the black box such as the signal lights, buzzer, speaker, recorded message, event timer. etc.

RFID Reader

Battery Compartment or External Power

Outputs

- **On/Off Indicator Light**
- **Operator Authorized Status Lights (Red/Green)**
- **Buzzer**
- **to Music System**
- **Speaker w/recorded message**
- **4 Battery Condition Lights**
- **Optional High Visibility Flashing Light**
- **Optional Event Timer Output counts time driven by unauthorized operators**

Some RFID wristbands can be permanently rendered inoperative when they are removed from your wrist. This can prevent passing it to another person.

Secret Off-On Switch

System Test Button

Power

Many of the inputs are currently available via CANBus / Smart Craft / similar systems which might also supply power to this unit. Or some of the decision making could be offloaded to the Engine Control Unit ECU.

Most of the outputs are lights or buzzers that will directly be displayed on the unit. The event timer output could be downloaded by the marina or maybe displayed on a cell phone.

While it is obviously possible to combine this device with a virtual lanyard, we suggest keeping them separate. This device does not require all the testing and conformance with standards.

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