Before you do it your way, please try it our way.
MECHANICAL TO ELECTRICAL CONVERTER MODULE
CA8001/CA8002

Installer: these instructions contain important safety information and must be forwarded to the boat owner.

The CA8001 and CA8002 gives mechanical control owners the ability to interface with an electronic control system. The mechanical control position information is passed along the 3300/33C style cable and is translated into electrical information in the converter module. This information is then sent directly to the engine or to a CH67000 Interface Module for a CANBus interface.

The Converter Module is offered in four configurations:
- Single Throttle
- Dual Throttle
- Single Shift and Throttle
- Dual Shift and Throttle (requires two single Shift and Throttle units).

The throttle units are typically used for direct engine interface applications. The shift and throttle units are typically used to connect a traditional mechanical control to a NMEA 2000® CANBus. This usually requires a CH67000 Series interface module in addition to the Converter Module.

Harness installation and connections must be made in accordance with the motor manufacturer’s instructions. To insure best performance, free operation of all linkages and the mechanical to electrical converter module is essential. Follow the manufacturer’s recommended procedures for adjustment and lubrication. All specifications and features are subject to change without notice.

Before starting installation read these instructions and engine makers instructions thoroughly. Failure to follow either of these instructions or incorrect assembly can result in loss of control and cause property damage, injury, or death.

DO NOT substitute parts from other manufacturers, they may cause a safety hazard for which SeaStar Solutions cannot accept responsibility.

SeaStar Solutions highly recommends the installation and usage of an engine shut off switch as a important emergency safety feature for boats. This switch should be connected by a cord to the boat driver. Should the driver be thrown from the helm position, the engine will automatically shut off.

This shut off switch is not a standard part of this control. It can, however, be obtained from most marine dealers and distributors.
This device should not be used as a navigational aid to prevent collision, grounding, boat damage or personal injury. When the boat is moving, water depth may change too quickly to allow time for you to react. Always operate the boat at very slow speeds if you suspect shallow water or submerged objects.

This product contains lead, a chemical known to the State of California to cause cancer, birth defects, and other reproductive harm.

Components

THROTTLE UNIT.
The Converter Module connects directly to Engine.

SHIFT AND THROTTLE UNIT.
The Converter Module connects to CH67000 for CANBus.

Mounting

LOCATION OF UNIT.
The Converter Module must be mounted where the three foot long mechanical cables can reach the control head WITHOUT extending the cable. Avoid bending the cable tighter than a 6 inch radius. Try to route the cable so that the total bends are less than 90 degrees.
Cable Connections

THROTTLE CONVERTER.

**STEP 1.** Snap the black collar onto the notch on the cable. Position the cable above the notch on the cable mount, but do not seat at this time.

**STEP 2.** Thread the barrel onto the end of the cable until the barrel extension is directly above the hole in the throttle assembly. When it is in the correct position, thread the jam nut onto the end and tighten slightly against the barrel. It is critical to have the barrel properly positioned so that the cable is not extended during this part of the assembly.

**STEP 3.** After the jam nut is on, seat the collar into the notch on the cable mount and the barrel extension into the hole on the throttle assembly.

**STEP 4.** Fit the retainer over the cable mount, aligning the holes on top and the cutouts along the side with the counterparts on the cable mount. Snap the retainer into place.

**STEP 4.** While holding the barrel in place, move the control handle to full forward or reverse. Put the cotter pin into the hole in the barrel extension and bend over. Return the handle to neutral.

**NOTICE**

This throttle converter is typically used with a mechanical shift, which should be connected in the traditional manner.
Electrical Connections

THROTTLE CONVERTER.
Connect Direct to Engine Converter Module

SHIFT AND THROTTLE CONVERTER.
Connect to CH67000 Converter Module
If you must photocopy this mounting template for use, check ALL measurements using a measuring device prior to using as a template.