

# QUICK M21000 START UP



## Power Up

MAKE SURE THE 24V & 230V BREAKERS ARE "ON", AS WELL AS THE SEA WATER PUMP BREAKER (DEPENDING ON POWER SYSTEMS CONFIGURATION)

TO START GYRO MOTOR PRESS "RUN". THE RUN LIGHT WILL FLASH AS THE FLYWHEEL SPOOLS UP. THE LOCK LIGHT WILL ALSO BE LIT.



## Spool Up

WHEN THE FLYWHEEL HAS REACHED 3.0 KRPM, THE RUN LIGHT WILL BE SOLID. THE LOCK LIGHT WILL STILL BE LIT.



## READY TO STABILIZE

AT 3.0 KRPM YOU MAY STABILIZE THE VESSEL. THE RUN LIGHT WILL BE SOLID. PUSH "SEA". THE GYRO WILL THEN UNLOCK, PRECESS FORE AND AFT, AND STABILIZE THE VESSEL. THE UNIT WILL CONTINUE TO SPEED UP TO 4.0 KRPM.



## TO STOP STABILIZATION & POWER GYRO OFF

TO STOP GYRO AND SPOOL DOWN, PRESS "LOCK" TO LOCK THE GYRO, AND PRESS "STOP". THE STOP LIGHT WILL FLASH UNTIL FLYWHEEL STOPS. THE LOCK LIGHT WILL BE LIT.

Turn "OFF" the boat's AC breakers that supply power to the motor drive and seawater pump. Leave the DC breaker that supplies power to the gyro control box "ON". Turning off AC breaker triggers a time delay relay that will automatically shut off 24VDC to gyro control box in 1.5 hours.

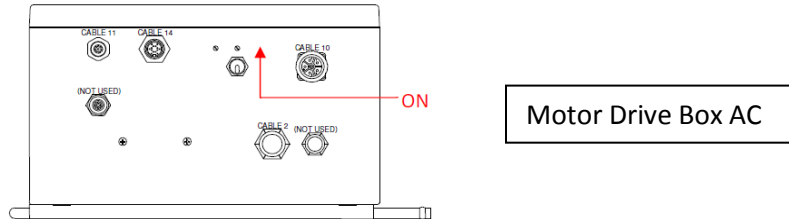
*-PLEASE READ FULL OPERATION DETAILS IN OPERATION MANUAL BEFORE USE-  
MANUAL CAN BE VIEWED & DOWNLOADED AT [WWW.SEAKEEPER.COM](http://WWW.SEAKEEPER.COM)*

## TROUBLE SHOOTING

Most problems occur due to lack of power to the Gyro. There are 2 sources of power:

- 24 Volts DC which powers the controls/electronics in the Gyro Control Box.
- 208-230 Volts AC (+/-10%) which powers the Motor Drive Box.

There is an ON/OFF Switch on the Motor Drive Box that must be ON. This box is mounted near the Gyro.



**Display and Keypad are blank** - Verify the boat's AC and DC power breakers are ON. You must have the AC power for the DC power to get to the Gyro Control Box.

**Display and Keypad are illuminated** - Verify the Motor Drive Box switch is ON.

If you have power to the electronics and motor, depressing "RUN" should begin to spool flywheel up to speed.

### COMMON ALARMS & ALERTS



**DRIVE FAULT** - If power is verified and you experience this alarm, Press RUN to clear the alarm and restart the motor. If DRIVE FAULT does not clear then:

- Turn OFF Boat's DC Power to the Gyro, then turn it back ON.
- Turn OFF Boat's AC Power to the Gyro, then turn it back ON.
- Press RUN button to attempt motor start.
- If Motor Amps remain at 0.0 and DRIVE FAULT occurs in 1 minute, the Gyro does NOT have power. Check AC power switch on the Gyro Motor Drive Box and the boat's AC breaker.
- If Motor Amps increase briefly then return to 0.0 and DRIVE FAULT occurs in 1 minute, the gyro DOES have power to operate, but has another problem within the drive. CONTACT SEAKEEPER 610-775-4976.



**VACUUM LEAK** - The vacuum pressure level will fluctuate due to changes in temperature and use of the gyro. Monitor the pressure level on the Drive/Enclosure page. The nominal value is 10 Torr.

- If the TORR level continues to increase with no sign of peaking CONTACT SEAKEEPER 610-775-4976.

**FOR ANY AND ALL TEMPERATURE, BEARING, SENSOR, ACCEL, OR BRAKE PRESSURE ALARMS CONTACT SEAKEEPER 610-775-4976**

PLEASE SEE M21000 MANUAL FOR FULL TROUBLESHOOTING GUIDE AND ALARM LIST OR  
DOWNLOAD AT [WWW.SEAKEEPER.COM](http://WWW.SEAKEEPER.COM)