PURPOSE

The purpose of this Technical Bulletin is to outline example electrical wiring diagrams for DC Seakeeper models with a variety of vessel-side 12VDC systems. The DC Seakeeper models can be powered by the House Battery Bank, creating a single combined Seakeeper/House Battery Bank, or by a dedicated Seakeeper Battery Bank. The following diagrams illustrate possible vessel wiring configurations for installing DC Seakeepers on boats with different outboard engine and battery bank configurations.

OUTBOARD ENGINE NOTES

It is important to note Yamaha and Mercury outboards have different alternator lead configurations. Yamaha outboard engines have two leads (one for the engine's starting battery and an auxiliary lead). Mercury outboards only have one alternator lead, typically connected to the engine's starting battery. For Mercury outboards, ACRs (Automatic Charging Relays) are required to provide charging power to a House Battery Bank and/or Seakeeper Battery Bank.

DRAWING NOTES

NOTE: The outboard engine brand and configuration should dictate which drawing to refer to for different Seakeeper integrations. For example, a Seakeeper 1 can be installed on a boat with twin Yamaha engines, therefore either drawing 90585 or 90586 should be used as a reference.

NOTE: Seakeeper recommends a combined Seakeeper and House Battery Bank for DC Seakeeper installations. The benefit of a combined Seakeeper/House Battery Bank is the engine alternators only power one integrated House Battery Bank after charging the starting batteries. This configuration requires less overall equipment and provides more reliability than creating separate house and Seakeeper battery banks. The Seakeeper has an internal alarm to power down if the Voltage of its power supply drops below 11 V. Refer to TB_90454 DC Seakeeper Automatic Low-Voltage Shutdown for more details.

DISCLAIMER: The wiring diagrams included herein is intended for reference only. The installer is responsible for hardware selection and proper installation per the manufacturer specific installation manuals for the equipment installed.
NOTES:

1) THIS DOCUMENT REPRESENTS AN EXAMPLE ELECTRICAL VESSEL SIDE WIRING ARRANGEMENT FOR A SEAKEEPER 1 INTEGRATION ON A VESSEL WITH A SINGLE ENGINE (ONE ALTERNATOR AVAILABLE FOR BATTERY CHARGING AT SEA).

2) THE WIRING DIAGRAM INCLUDED HEREIN INTENDED FOR REFERENCE ONLY. THE INSTALLER IS RESPONSIBLE FOR HARDWARE SELECTION AND PROPER INSTALLATION PER THE MANUFACTURER SPECIFIC INSTALLATION MANUALS FOR THE EQUIPMENT INSTALLED ONBOARD.

*REFERENCE ONLY TO ILLUSTRATE TYPICAL SEAKEEPER ELECTRICAL INTEGRATION, REFER TO SEAKEEPER 1 INSTALLATION MANUAL (90519) AND CABLE BLOCK DIAGRAM (90511) FOR SPECIFIC INSTRUCTIONS.
NOTES:

1) THIS DOCUMENT REPRESENTS AN EXAMPLE ELECTRICAL VESSEL SIDE WIRING ARRANGEMENT FOR SEAKEEPER 1 INTEGRATION ON A VESSEL WITH A SINGLE OUTBOARD ENGINE (ONE ALTERNATOR AVAILABLE FOR BATTERY CHARGING AT SEA).

2) THE WIRING DIAGRAM INCLUDED HEREIN IS INTENDED FOR REFERENCE ONLY. THE INSTALLER IS RESPONSIBLE FOR HARDWARE SELECTION AND PROPER INSTALLATION PER THE MANUFACTURER SPECIFIC INSTALLATION MANUALS FOR THE EQUIPMENT INSTALLED ONBOARD.

*REFERENCE ONLY TO ILLUSTRATE TYPICAL SEAKEEPER ELECTRICAL INTEGRATION, REFER TO SEAKEEPER 1 INSTALLATION MANUAL (90519) AND CABLE BLOCK DIAGRAM (90511) FOR SPECIFIC INSTRUCTIONS.
NOTES:

1) THIS DOCUMENT REPRESENTS AN EXAMPLE ELECTRICAL VESSEL SIDE WIRING ARRANGEMENT FOR A SEAKEEPER 2 INTEGRATION ON A VESSEL WITH TWIN OUTBOARD ENGINES (TWO ALTERNATORS AVAILABLE FOR BATTERY CHARGING AT SEA)

2) THE WIRING DIAGRAM INCLUDED HEREIN IS INTENDED FOR REFERENCE ONLY. THE INSTALLER IS RESPONSIBLE FOR HARDWARE SELECTION AND PROPER INSTALLATION PER THE MANUFACTURER SPECIFIC INSTALLATION MANUALS FOR THE EQUIPMENT INSTALLED ONBOARD.

*REFERENCE ONLY TO ILLUSTRATE TYPICAL SEAKEEPER ELECTRICAL INTEGRATION, REFER TO SEAKEEPER 2 INSTALLATION MANUAL (80488) AND CABLE BLOCK DIAGRAM (90470) FOR SPECIFIC INSTRUCTIONS.
1) THIS DOCUMENT REPRESENTS AN EXAMPLE ELECTRICAL VESSEL SIDE WIRING ARRANGEMENT FOR A SEAKEEPER 3 INTEGRATION ON A VESSEL WITH TRIPLE OUTBOARD ENGINES (THREE ALTERNATORS AVAILABLE FOR BATTERY CHARGING AT SEA).

2) THE WIRING DIAGRAM INCLUDED HEREIN IS INTENDED FOR REFERENCE ONLY. THE INSTALLER IS RESPONSIBLE FOR HARDWARE SELECTION AND PROPER INSTALLATION PER THE MANUFACTURER SPECIFIC INSTALLATION MANUALS FOR THE EQUIPMENT INSTALLED ONBOARD.

*REFERENCE ONLY TO ILLUSTRATE TYPICAL SEAKEEPER ELECTRICAL INTEGRATION, REFER TO SEAKEEPER 3 INSTALLATION MANUAL (90378) AND CABLE BLOCK DIAGRAM (90377) FOR SPECIFIC INSTRUCTIONS.
NOTES:

1) THIS DOCUMENT REPRESENTS AN EXAMPLE ELECTRICAL VESSEL SIDE WIRING ARRANGEMENT FOR A SEAKEEPER 3 INTEGRATION ON A VESSEL WITH TRIPLE OUTBOARD ENGINES (THREE ALTERNATORS AVAILABLE FOR BATTERY CHARGING AT SEA).

2) THE WIRING DIAGRAM INCLUDED HEREIN IS INTENDED FOR REFERENCE ONLY. THE INSTALLER IS RESPONSIBLE FOR HARDWARE SELECTION AND PROPER INSTALLATION PER THE MANUFACTURER SPECIFIC INSTALLATION MANUALS FOR THE EQUIPMENT INSTALLED ONBOARD.

*REFERENCE ONLY TO ILLUSTRATE TYPICAL SEAKEEPER ELECTRICAL INTEGRATION, REFER TO SEAKEEPER 3 INSTALLATION MANUAL (90378) AND CABLE BLOCK DIAGRAM (90377) FOR SPECIFIC INSTRUCTIONS.