

PRODUCT ALL MODELS

OVERVIEW

Seakeeper is introducing the ConnectBox (P/N 20415) as the new control interface for Seakeeper 2, Seakeeper 3, Seakeeper 5/6, Seakeeper 9, Seakeeper 18, Seakeeper 26, and Seakeeper 40 models. The Seakeeper ConnectBox will replace the current 5" Touch Screen Display (P/N 30298) as the standard controller, just as it functions on the Seakeeper 1 today, and the 5" Touch Screen Display will be removed from the standard hardware scope of supply. This Product Update Bulletin outlines the benefits, display options, connection requirements, and relevant drawings for the Seakeeper ConnectBox integration on the relevant models.

Refer to the following timeline for the scheduled ship dates and cut in serial numbers of the ConnectBox:

- *Seakeeper 2: 2-232-1564; Shipped August 4, 2023*
- *Seakeeper 3: 3-232-4223; Shipped July 17, 2023*
- *Seakeeper 5/6: 6-232-5847; Shipped July 28, 2023*
- *Seakeeper 9: 9-233-4900; Shipped September 28, 2023*
- *Seakeeper 18: 18-233-1475; Shipped October 13, 2023*
- *Seakeeper 26: 26-233-0690; Shipped October 20, 2023*
- *Seakeeper 40: 40-234-0043; Shipped March 19, 2024*

See Figure 1 for the updated Seakeeper 3 with the ConnectBox integrated into the assembly. The ConnectBox is mounted to a bracket supported by the brake arm and the Cover Panel can be removed for installation and service without removing the ConnectBox.

The ConnectBox includes an ethernet cable extension to support integration with compatible MFDs, the extension cable length is the same as the display cable length supplied with the 5" Display today; 33 ft (10 m) for the Seakeeper 2 / 3 models and 82 ft (25 m) for Seakeeper 5 / 6 / 9 / 18 / 26 / 40 models.



Figure 1: Seakeeper 3 ConnectBox Integration

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CONNECTBOX BENEFITS

The ConnectBox, shown in Figure 2, will be integrated into the cover of each Seakeeper model and acts as a connection gateway that enables the gyro to communicate with third-party devices in addition to providing the following benefits to installers:

- Eliminates the Seakeeper display from the installation process, providing for a cleaner dashboard and integrated display functionality with compatible onboard MFDs.
- Interfaces with the Seakeeper Service Tool, a secure diagnostics tool that enables data collection for Seakeeper troubleshooting.
- Provides circular (Blackbox) logging capability by maintaining a running log of the CAN traffic when triggered by alarm codes, eliminating the need to replicate or simulate alarm codes for troubleshooting.
- Push-button control interface located on Seakeeper unit, with option for remote mount.
- Improves third-party compatibility/access for third-party platforms via HTML and NMEA 2000.
- Supports out-of-the-box MFD functionality with Seakeeper Ride across all compatible MFD Platforms.



Figure 2: Seakeeper ConnectBox Interface

An optional [ConnectBox Helm Mounting Kit \(P/N 90558\)](#) is available for remote mounting. The Seakeeper 5" Touch Screen Display will still be available as an option and is compatible with the ConnectBox interface.

CONNECTBOX CONNECTION REQUIREMENTS

The ConnectBox requires a connection to a compatible display and the vessel's NMEA 2000 backbone with an active GPS signal for Seakeeper operation, as outlined in the [ConnectBox Generic Wiring Diagram \(90663\)](#). The display options for the ConnectBox are as follows:

- Ethernet connection to a Seakeeper-compatible multi-function display (MFD). Compatible devices and ethernet cable part numbers are listed in the following section.
- A Seakeeper 5" Touch Screen Display.

Connection to an active NMEA 2000 compatible GPS signal is required on the vessel's NMEA 2000 backbone to operate the Seakeeper. *The NMEA 2k backbone connection is made via a drop cable, which cannot exceed 20 ft (6 m) in length. If the backbone is located more than 6 m from the Seakeeper, the backbone must be extended closer to the Seakeeper installation location or the ConnectBox must be remote mounted in the vicinity of the NMEA 2k backbone.*

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If no GPS signal is detected, a warning (Code 131) will be present on the Seakeeper App or Display, but the unit will still spool-up to its rated RPM. Refer to the [ConnectBox Connection Requirements \(90640\)](#) Technical Bulletin for a detailed overview of display and NMEA requirements.

Seakeeper or OEM Commissioning can be completed without a GPS signal and the Code 131 can be ignored during the commissioning process by navigating away from the Home Screen to the Info or Service screens as needed, see [Seakeeper Commissioning Form](#). This applies to commissionings being done indoors or for boats built without electronics.

Compatible MFDs are recommended over Seakeeper's 5" Touch Screen Display as they also provide the required GPS connection, via their NMEA 2k output, among broader features and functionality. Garmin, Raymarine, and Navico all offer compatible systems starting near \$1000.

DISPLAY OPTIONS

The following figures provide an overview of the two primary display options for the Seakeeper ConnectBox. The Seakeeper model specific Cable Block Diagrams will be circulated prior to the production cut-in.

The Seakeeper ConnectBox will include an ethernet extension cable that matches the link of the Display Cable supplied with Seakeeper models today, 10 m for DC Seakeeper Models, and 25 m for AC Seakeeper models.

COMPATIBLE MFD OPTIONS

The following MFD systems are currently compatible with the ConnectBox and can be connected via the ethernet extension cable (4-pin D-Code) included with the ConnectBox and an optional MFD Compatibility cable, as shown in Configuration 1 on the ConnectBox Generic Wiring Diagram:

1. Compatible Garmin MFDs, refer to [Technical Bulletin 90478](#):
 - a. GPSMAP Series 84XX, 86XX, 7X2 Plus, 7X2xs Plus, 9X2 Plus, 9X2xs Plus, 12X2 Plus, and 12X2xsv Plus series units.
 - b. One Helm is required for Garmin and Seakeeper compatibility.
 - c. Garmin Ethernet Wire Harness Cable Assembly, Seakeeper P/N 20373, required.
2. Compatible Raymarine MFDs, refer to [Technical Bulletin 90479](#):
 - a. Axiom, Axiom Pro, and Axiom XL series units.
 - b. Raymarine Ethernet Cable Assembly, Seakeeper P/N 20380, required.
3. Compatible Navico MFDs (includes Simrad, Lowrance and B&G) refer to [Technical Bulletin 90480](#):
 - a. Simrad: NSO Evo2, NSO Evo3, NSO Evo3S MFD, NSO Evo3S MPU, NSS Evo3, NSS Evo3S, GO9 XSE, and the GO12 XSE series units.
 - b. Lowrance: Elite FS, HDS Carbon, and HDS Live series units.
 - c. B&G: Vulcan 7, Vulcan 9, Vulcan 12, Zues3, Zues3S, Zues3 Glass Helm, Zues3 Glass Helm MFD, and the Zues3 Glass Helm MPU series units.
 - d. Navico Ethernet Wire Harness Cable Assembly, Seakeeper P/N 20346, required.
4. Compatible Furuno MFDs, refer to [Technical Bulletin 90479](#):
 - a. Furuno Hardware: TZT9F, TZT12F, TZT16F, TZT19F, and TZT2BB series units.
 - b. Furuno Ethernet Wire Harness Cable Assembly, Seakeeper P/N 20506, required.

CONNECTBOX INTEGRATION & DISPLAY OPTIONS - UPDATED

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SEAKEEPER 5" TOUCHSCREEN DISPLAY

The [Seakeeper 5" Display Kit](#) (P/N 90467) must be purchased as an accessory and installed if the Seakeeper unit is not connected to a compatible MFD, as shown in Configuration 3 on the ConnectBox Generic Wiring Diagram. The 5" Display Kit is available with CANBus extension cable lengths from 33 – 213 ft (10 - 65 m) with the following P/Ns:

- 90467-2SP-10M
- 90467-2SP-25M
- 90467-2SP-35M
- 90467-2SP-50M
- 90467-2SP-65M

SEAKEEPER OPERATION WITHOUT ELECTRONICS

An active NMEA 2000 GPS signal is required for Seakeeper operation with the ConnectBox. If a boat does not have a NMEA 2000 GPS signal available onboard, one must be temporarily installed to operate the Seakeeper for demo purposes. A Seakeeper Commissioning can be done without a GPS signal but does require a compatible display to record the Seakeeper information. If a GPS signal is not available, the Code 131 can be ignored during the commissioning process by navigating past the warning message on the Home Screen to the Service and Info Screens to complete the [Seakeeper Commissioning Form](#). Refer to the [ConnectBox Connection Requirements \(90640\)](#) Technical Bulletin for a detailed overview of display and NMEA requirements.

REVISION HISTORY

REVISION	DESCRIPTION OF CHANGES	DATE	APPROVED
2	Updated ConnectBox introduction timeline	11NOV2021	TSW
3	Updated ConnectBox introduction timeline. Add commissioning note.	10MAY2022	DMF
4	Updated ConnectBox introduction timeline. Added Furuno Compatibility.	14OCT2022	DMF
5	Updated ConnectBox introduction timeline, with specific dates for each model and preliminary Block Change	14MAR2023	DMF
6	Updated Seakeeper 2/3 cut-in SN. Added Seakeeper 3 graphic.	28APR2023	DMF
7	Updated cut-in SN and ship dates for Seakeeper 2/3/6. Updated Commissioning Form and TB90640 links. Added NMEA Drop Cable length maximum (6 m).	13JUN2023	DMF
8	Updated Cut-in SN and ship dates for Seakeeper 9 / 18 / 26, added Seakeeper 40. Corrected ethernet extension cable length, from 10 m to 25 m, for Seakeeper 5/6.	18AUG2023	DMF
9	Updated Seakeeper 40 cut-in SN.	6DEC2023	MBR
10	Updated Seakeeper 40 ship date.	22MAR2023	DMF