Raymarine®

LightHouse 2 to LightHouse 3 upgrade

LightHouse 3 on eS and gS Series

eS Series and gS Series MFDs running the LightHouse™ 2 operating system can be upgraded to run the new LightHouse™ 3 operating system.

To ensure upgrading is the correct option for you, please ensure you fully understand and accept the differences between the 2 operating systems, before upgrading.

Upgrade considerations

Before you perform the upgrade, the following considerations need to be taken into account:

Digital switching

Upgrading to LightHouse™ 3 will erase all Digital switching files loaded on your MFD. Once erased, these files will be unrecoverable, potentially rendering the Digital switching system unusable.

Digital switching solutions must be converted, before performing the upgrade to LightHouse™ 3. Contact Raymarine Technical Support, who will guide you through the process and perform the necessary file conversion.

Autopilots

Legacy SeaTalk ® and SPX autopilots cannot be controlled by MFDs running LightHouse™ 3. A Pilot control head will be required to control legacy autopilot systems.

MFD networking

- LightHouse™ 2 MFDs cannot be connected to the same network as LightHouse™ 3 MFDs.

- a Series, c Series and e Series MFDs cannot be upgraded to LightHouse™ 3 and cannot be connected to the same network as MFDs running LightHouse™ 3.

- If you have a mixed MFD network all a Series, c Series and e Series MFDs must be permanently disconnected, before upgrading eS Series and gS Series MFDs to LightHouse™ 3.

- In a mixed Axiom™ / eS Series / gS Series MFD network, it is recommended that an Axiom™ MFD is selected as the Datamaster. Where this is not desirable, due to your electronics wiring layout, you may notice a difference in system performance when an eS Series or gS Series MFD is set as Datamaster.

MFD performance

LightHouse™ 3 was developed for use with the latest processing technology, utilized by Axiom™ MFDs. Performance of eS Series

and gS Series MFDs upgraded to use LightHouse™ 3 will be limited to the processing power available to the MFD.

Unsupported features

- Checking online for software updates is not supported.

- The Wireless (Miracast) display feature is not supported.

Compatible MFDs

The MFDs listed below can be upgraded to run Raymarine's new LightHouse™ 3 operating system.

eS Series MFDs

eS75 (E70263	eS77 (E70264)
eS78 (E70265)	eS97 (E70274)
eS98 (E70275)	eS127 (E70275)
eS128 (E70285)	

gS Series MFDs

gS95 (E70124)	gS95 INV (E70183)
gS125 (E70125)	gS125 INV (E70184)
gS165 (E70126)	gS165 INV (E70185)
gS195 (E70213)	

Feature differences

The table below shows the differences between LightHouse™ 2 R19 and LightHouse™ 3 version 3.3 running on an eS or gS Series MFD. If in any doubt, contact Raymarine Technical Support for advice.

Navigation

Feature	LightHouse™ 2	LightHouse™ 3
3D chart mode	Yes	No
Number of Boat icons	2 – changes automatically with boat type selection.	12 – independent selection.
Boat icon context menu	No	Yes
Chart measurement ruler	Yes	No
Chart synchronization — split screen pages	Yes	No
Enhanced AIS symbols	No	Yes
Find nearest (info)	Yes	No
Fuel manager	Yes	No
GRIB weather viewer	Yes	No
Nearby objects (selection)	No	Yes
Race sailing features	Yes	No
SAR (Search And Rescue) patterns	Yes	No
Target interception	Yes	No

Feature	LightHouse™ 2	LightHouse™ 3
Tide and Current graphs	Yes	No
Waypoint capacity	3,000	10,000
Waypoint search area box	Yes	No

Data and controls

Feature	LightHouse™ 2	LightHouse™ 3
Alarm history	Yes	No
Databars	Top Databar	Sidebar
Available data items	117	134
Dashboard — more available page layouts	10	7
Dashboard — each app instance unique	No	Yes
Digital switching alarm settings	Yes	No
Light color theme	Yes	No
Shared brightness	Yes	No

Sonar

Feature	LightHouse™ 2	LightHouse™ 3
Channel specific Homescreen sonar icons	No	Yes
Number of DownVision and SideVision color palettes	4	10
Fish alarm	Yes	No
Historical sensitivity	No	Yes
Range/zoom controls	Standard	Improved
* RealVision™ 3D	No	Yes
SideVision — Auto range	No	Yes
Scrollback (sonar history)	No	Yes
Disable all Sonar from Shortcuts page	No	Yes
VRM (Variable Range Marker	Yes	No

Note:

* Available when networked to a RV variant Axiom™ or Axiom™ Pro MFD.

Radar

Feature	LightHouse™ 2	LightHouse™ 3
Bearing ring	Standard	Enhanced
Place waypoints in Radar app	Yes	No

Feature	LightHouse™ 2	LightHouse™ 3
Radar overlay color options	No	Yes
True/Relative vector button	No	Yes

Camera / Thermal

Feature	LightHouse™ 2	LightHouse™ 3
Align Thermal camera to mobile device	Yes	No
ClearCruise IR analytics	No	Yes
Single app for both Thermal and daylight cameras	No	Yes
Unique Camera app instances	No	Yes
Camera cycling	Yes	No

Entertainment

Feature	LightHouse™ 2	LightHouse™ 3
Bluetooth audio control	Yes	No
Bluetooth — RCU-3 connection	Yes	No
Document (pdf) viewer	Yes	No
SiriusXM audio	Yes	No
Video player (demo movie)	Yes	No

General

Feature	LightHouse™ 2	LightHouse™ 3
Alarm Clock / Timer	Yes	No
App modes	No	Yes
Custom splash screens	Yes	No
Number of Data overlays	2	4
Data overlays movable	No	Yes
Homescreen — Lat/Lon display	No	Yes
Homescreen — Move pages	Yes	No
Homescreen — Wi-Fi and time info	No	Yes
Homescreen customization — drag and drop app pages	Yes	No
Menus — close when tapping away from menu	No	Yes
NMEA Logging	Yes	No
LiveView (in menu app display)	No	Yes
Sidebar	No	Yes

Feature	LightHouse™ 2	LightHouse™ 3
Simulated — Demo profiles	No	Yes
Simulator — Move boat here	No	Yes
Splitscreen app page — pane size adjustment	No	Yes
Transducer calibration	Yes	No
User profiles	No	Yes

Engine integration

Feature	LightHouse™ 2	LightHouse™ 3
Honda ECO mode	Yes	No
Trim tab calibration	Yes	No

Performing the LightHouse™ 3 upgrade

Performing the upgrade procedure will upgrade all eS Series and gS Series MFDs on the network.

Pre-requisites:

• Your eS or gS Series MFD must be running LightHouse™ 2 Release 15 or greater to perform the upgrade. Prior releases of LightHouse™ 2 will not recognise the software upgrade file.

• You should back up your user data and any media files before performing the upgrade.

1. Disconnect and remove any a Series, c Series or e Series MFDs from your network.
2. Download the LightHouse™ 3 upgrade file from the Raymarine® website:
   i. Go to ww.raymarine.com/software.
   ii. Click **MFD software**.
   iii. Click **eS & gS Series Models Only**.
   iv. Follow the instructions to download the upgrade file.
3. Perform a User data backup following the Saving all user data to a memory card procedure.
4. If you have any media files saved on your MFD that you want to keep, these should also be copied to a MicroSD card following the Copying media files procedure.
5. Copy the downloaded upgrade file to the root directory of your MicroSD card, ensuring that no other software update files are present on the card.
6. Insert the MicroSD card into a card reader slot on your MFD.
7. Perform the software update procedure:
   i. Select **Check Card for Updates** from the Maintenance menu: (**Homescreen > Set-up > Maintenance > Check Card for Updates**).
   ii. Select **OK**.
   iii. Select the check box for each MFD that you want to upgrade.

*When upgrading from LightHouse™ 2 to LightHouse™ 3 the Available software version column will remain blank and 'Re-install' is displayed. Select and hold on the Available column to confirm the version number of the software upgrade you are about to install and then select **Install**.*

   iv. Select **Install now**.

   The software upgrade procedure will commence. Please be patient and do not power off the MFD whilst the upgrade is in progress. During the upgrade process the MFD will re-boot. When complete your MFD will boot up with the new LightHouse™ 3 operating system.
8. Perform a Factory reset following the Performing a settings or factory reset procedure.
9. If applicable, update any Axiom™ MFDs so that the software version matches your upgraded eS or gS Series MFD.
10. If applicable, add any Axiom MFDs to your system or, add your upgraded eS or gS MFD to a system already containing Axiom™ MFDs.
11. If requested, select a Datamaster MFD and / or complete the Startup wizard.

   In a mixed MFD network it is recommended that an Axiom™ MFD is selected as the Datamaster.

12. If applicable, restore your user data following the Import user data procedure.
13. Familiarise yourself with the new LightHouse™ 3 operating system by reviewing the LightHouse™ 3 operation instructions available from the website.

Saving all user data to a memory card

You can save all user data to one archive file.

With the Homescreen displayed:

1. Ensure you have a memory card (NOT a chart card) inserted into a card slot.
2. Select **My Data**.
3. Select **Import/Export**.
4. Select **Save Data**.
5. Select **Save All**.

   The onscreen keyboard is displayed.
6. Using the keyboard, enter the filename you want to save the file as.
7. Select **SAVE**.

   The select external storage dialog is displayed.
8. Select **SD1** (single or top card reader slot) or **SD2** (bottom card reader slot).

   A confirmation dialog is displayed.
9. Select **OK**.

Copying media files

Recorded video and images, that are stored on your MFDs internal memory, can be copied to MicroSD card.

With a MicroSD card inserted into a card reader slot of your MFD:

From the **Homescreen**:

1. Select **My Files** from the **My Data** menu: (**Homescreen > My Data > My Files**.
2. Navigate to the required file by selecting folders to see its contents.
3. Highlight the file that you want to copy.
4. Select **Copy** from the File options.

   *If you have more than 1 MicroSD card inserted, you will need to select which card to save the file to by selecting **SD1** or **SD2**.*

5. Select **Yes**.

   The file will now copy to your MicroSD card.
6. Once the file has copied, select **OK** from the confirmation dialogue.
7. Repeat steps 2 to 5 above for each file that you want to copy.

Performing a settings or factory reset

Performing a **Factory reset** will erase ALL user data and reset the MFD's settings to Factory default values. Performing a **Settings reset** will restore your MFD's settings to factory defaults, whilst retaining user data.

1. Select **Settings reset**, from the **This display** tab: **Homescreen > Settings > This display > Settings reset** to perform a settings reset.
2. Select **Factory reset**, from the **This display** tab: **Homescreen > Settings > This display > Factory reset** to perform a factory reset.

Importing user data

You can import user data (i.e.: Waypoints, Routes and Tracks) to your MFD.

1. Insert the MicroSD card that contains your user data files into a card reader slot on your MFD.
2. Select **Import from card** from the Import/export page:(**Homescreen > My data > Import/export > Import from card**).
3. Select the relevant SD card slot from the file browser and then navigate to your User data file (.gpx)
4. Select the relevant GPX file.

   Your user data has now been imported.
5. Select **OK**.