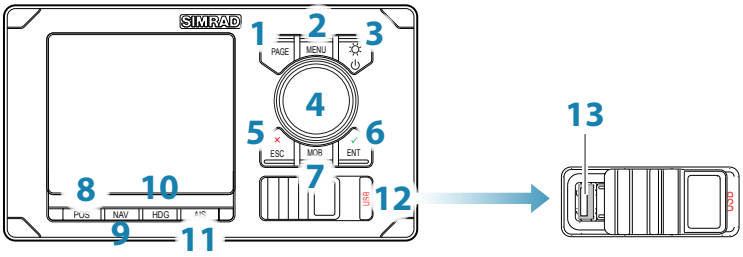
SIMRAD

GN70/MX610/MX612
QuickStart Guide

EN

The front panel



No.	Description
1	**PAGE** key: Brings up different screen page every time this key is pressed or switches between the tabs in the settings and tools menu.
2	**MENU** key: Brings up the quick menu dialog box.
3	**Power/Light** key: Short press will turn ON the unit. Momentary press brings up the backlight and night view controls. Series of short presses will cycle through 6 levels of display brilliance. Long press will turn power off.
4	**Rotary knob**: In menus; turn to select menu item and adjust value, press to confirm. Rotate to scroll through the menu icons or numbers in the virtual keypad. Press the center of the knob to select menu item or accept entry. Same entry action when you press the **ENT** key.
5	**CLR** key: In menus; press to return to previous menu level. Press to escape or back out of the menu or data entry.
6	**ENT** key: In menus; press to confirm menu selection/enter next menu level. Same entry action when you press the center of the rotary knob.
7	**MOB** key: Short press will save the present position L/L into the next vacant waypoint. Press and hold for 3 seconds will activate the Man-Over-Board (MOB) function.
8	**POS** hot key: Press to display the present postion Lat/Long, SOG, COG, Date and Time. Repeating presses will switch between POS1, POS2 and POS3 pages.
9	**NAV** hot key: Press to display the navigation information (RNG, BRG, COG, SOG, XTE). Repeating presses will switch between NAV1, NAV2 and NAV3 pages.
10	**HDG** hot key: Press to display the compass rose heading, Pitch, ROT and Yaw information coming from a gyro or a GPS compass. Repeating presses will switch between HDG1 and HDG2 pages.
11	**AIS**. Press to display the PLOT/AIS screen.
12	**USB**. Press to display the files contained in the USB (MX610/MX612 only).
13	USB connector (MX610/MX612 only).

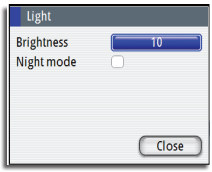
The screen



Icon	Description	Definition
	No Position fix	Not tracking satellites (no position update). This is normal the very 1st time you turn on the unit. It takes a few seconds to get a fix.
	DGPS Position	Position Fix is differentially corrected using RTCM corrections from beacon stations. This is the normal operating condition. Position accuracy is less than 2 meters.
	DGPS Position	Position Fix is augmented using the WAAS signal correction. Position accuracy is less than 5 meters.
	Good GPS position	GPS Position fix is good but the RTCM correction signal is temporarily not available. When DGPS mode menu is set to either Beacon or WAAS.
	Good GPS position	Good GPS position fix indication when unit is operated in autonomous GPS only mode and DGPS mode setting is OFF.

Power key

	• Press and hold:	Turn unit on/off
	• Single press:	Display light dialog
	• Repeated presses:	Toggle preset brightness levels



→ ***Note:*** *If holding down the power key after the display is turned off, a Power failure alarm will be activated. Press any other key on the unit to silence the alarm.*

Hot keys

GN70/MX61x screen

MX610/MX612 only screens

POS key













NAV key













HDG key









PAGE



1 Press to show the different page screens.*
2 Press to change tab under the MENU screen.*

AIS/PLOT



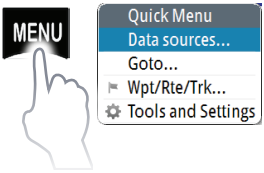


MOB/Mark



1 Saves poition L/L to the next vacant wapoint.*
2 Press and hold for 5 seconds, to calculate MOB.*

Menus



Show Quick menu



Return to prev. level, Remove menu

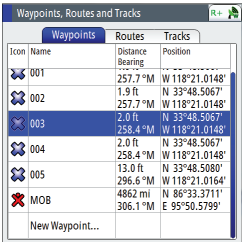


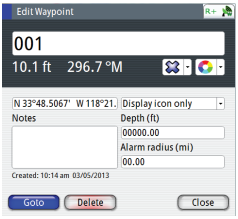
Select menu item, Adjust value

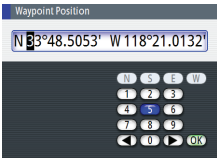


Confirm selection by pressing the center of knob or ENT key

Creating/Editing Waypoints



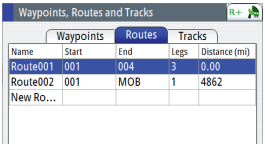




1. Press the **MOB** key momentarily, L/L of vessel will be saved in the next vacant waypoint.
2. To edit or enter a new waypoint manually, press the **MENU** key to bring up the quick menu.
3. Scroll to Wpt/Rte/Trk then press **ENT**. The waypoint list screen will be shown.
4. Highlight the desired waypoint number (or New Waypoint) then press **ENT**.
5. The "Edit Waypoint" dialog screen will appear showing the WPT #, L/L of the vessel.
6. Turn the rotary knob to highlight the L/L field, then press **ENT**.
7. Move the cursor by highlighting the right (or left) arrow on the virtual keypad then press **ENT** several times to position the cursor to the desired digit.
8. Turn the knob to the new number then press the **ENT** key.
9. Repeat the process to change other digits.
10. To finish entry, turn the knob to OK key and press **ENT**.
11. Turn the knob to highlight SAVE button and press the **ENT** key.
12. Press the **ESC** or any hot key to exit.

→ *Note: Other waypoint parameters can also be changed e.g. the waypoint name/number, icon symbol, icon color, alarm radius and depth.*

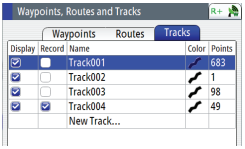
Creating/Editing Routes



1. To create (or edit) a route, press the **MENU** key to bring up the quick menu.
2. Scroll to Wpt/Rte/Trk then press **ENT**.
3. Press the **PAGE** key to change the tab to Routes.
4. Turn the knob to highlight "New Ro..." (or desired Route number to edit) then press **ENT** to bring up the "New Route" dialog screen.
5. The Route # field will be highlighted. You may change the route number to a name if desired by pressing the **ENT** key. The virtual alphanumeric keypad will become available. Enter a new name or number then highlight the Enter key and press **ENT**.
6. Turn the knob to highlight the "Select Waypoint" dialog box, which will show a listing of available waypoints or you can make a new waypoint.
7. Turn the knob to scroll to the desired waypoint number then press **ENT** to select it.
8. Repeat step 6 until all the route points are complete.
9. Press the **ESC** key.
10. Turn the knob to SAVE the route entry then press the **ENT** key.
11. Press the **ESC** or any hot key to exit.

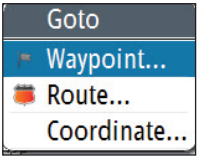
→ ***Note:*** *Other actions can be performed: Start = start the route going forward (or reverse), Delete = delete entry, or Cancel = cancel without saving.*

Creating/Editing Tracks



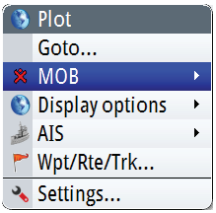
1. To create (or edit) a track, press the **MENU** key to bring up the quick menu.
2. Scroll to Wpt/Rte/Trk then press **ENT**.
3. Press the **PAGE** key several times to change the tab to Tracks.
4. Turn the knob to highlight "New Track..." (or desired Track number to edit) then press **ENT** to bring up the "Edit Track" dialog box.
5. The Track # field will be highlighted. You may change the number with a name if you wish or change other settings by turning the knob until the field is highlighted and then press the **ENT** key.
6. A track can be made into a route by highlighting the "Create Route" button and press **ENT**.
7. To delete a track, move the highlight to "Delete" button and press **ENT**.

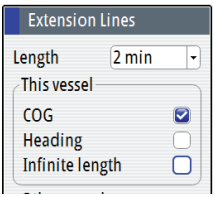
GOTO



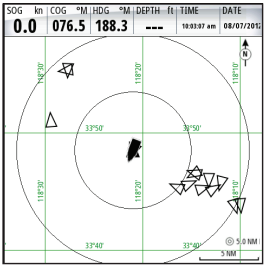
1. From any hot key screen, press the **MENU** key.
2. Scroll to "GOTO...", then press **ENT**.
3. From here, you can Cancel navigation, Restart from here, Waypoint, Route and coordinates.
4. Scroll to "Waypoint..." then press the **ENT** key. The list of waypoints will be shown.
5. Scroll to the desired waypoint number, press **ENT**.
6. Press the **NAV** key to display the RNG, BTW and other navigation information.

Setting up the AIS (PLOT) screen

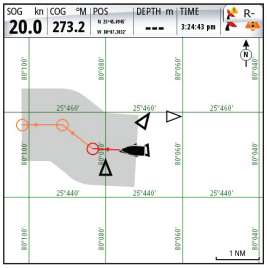




1. Press the **AIS** hot key.
2. Press the **MENU** key to bring up the Quick Menu.
3. Scroll to Display options, press **ENT.**
4. A list of setups will be shown.
5. Place check mark on which feature you want to appear on the AIS/PLOT screen.
6. To zoom in, turn the rotary knob clockwise. To zoom out, turn the knob counter clockwise.

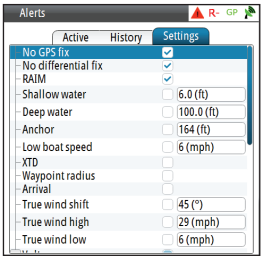


PLOT with Range Rings and AIS targets



PLOT with Route

Alerts

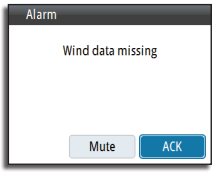


Alarm Settings dialog screen

List of alert messages (Type A = Alarm, Type W = Warning)

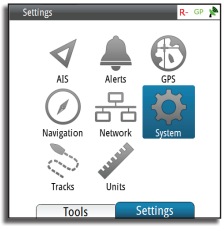
Alarm/Warning	Type	Trigger Condition
No GPS Fix	A	No position fix available from the smart antenna
No differential fix	A	No DGPS fix. GPS fix only
RAIM (R- or R?) (Receiver Autonomous Integrity Monitoring)	A	The position solution exceeded 100 meter error (R-) or when not enough satellites available (R?). RAIM safe condition is indicated with R+.
Shallow water	A	Depth less than limit
Deep water	W	Depth greater than limit
Anchor	A	Vessel drifts away from the anchor radius
Low boat speed limit	W	Boat speed below the limit
XTD (Cross Track Error)	A	Vessel drifts out of the crosstrack zone
Waypoint radius	A	Vessel enters the radius of the waypoint
Arrival	W	Vessel arrives at waypoint
High voltage	A	Input voltage above the limit
Low voltage	A	Input voltage below the limit
Depth data missing	A	No heading data from data source
Heading missing	A	No heading data from data source
Dangerous vessel	A	AIS target within the limit
AIS vessel lost	A	AIS target is outside of limit
Vessel message	A	Received an AIS message
Wind data missing	A	No wind data from data source
True wind shift	A	Wind shift above limit
True wind high/low	W	Wind speed above/below limit
CAN bus failure	A	Not possible to send or receive network data
Low CAN bus voltage	W	<9 V

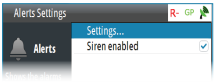
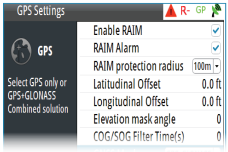
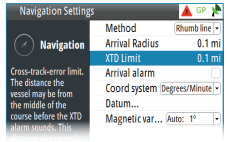
→ ***Note:*** *There is no time-out on the alert message or siren. These remain active until you acknowledge it or until the reason for the alarm is removed.*

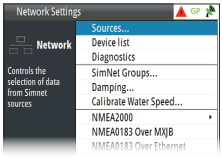
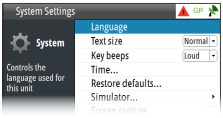
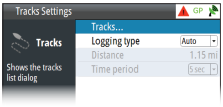
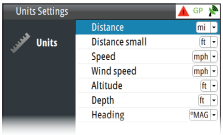


Option	Result
ACK	Stops the siren and removes the alert dialog. The alert icon will remain active, and the alert will be included in the alert listing.
Mute	Mutes the siren locally (for 30 seconds) for all units in the same SimNet display group. The alert dialog remains on the display.

Settings



		**MMSI** - sets the vessel's own MMSI#. Required for AIS. **Icon filters** - controls which vessels are shown on the chart and radar. **Dangerous vessels** - controls the CPA and TCPA limits which triggers the dangerous vessel alarm.
		**Settings** - shows the alarm dialog. Use to enable/ disable alarms and adjust levels. **Siren enabled** - controls the internal buzzer and external alarm output.
		**Enable RAIM** - check (enabled), no check (disabled). **RAIM Alarm**: On/Off. **RAIM protection radius** = 10/100 mtr. **Lat/Long Offset**: offset value between center of ship to antenna position. **DGPS Mode**: Select differential GPS mode. **WAAS PRN Number**: Auto/Manual.
		**Method**: Rhumbline or Great Circle calculation. **Arrival Radius**: Arrival range limit [0.1 NM (default)] **XTD Limit**: Cross-Track error limit [0.1 NM (default)] **Coordinate system**: controls the format for coordinates. **Datum**: Controls the datum used for calculation of coordinates [WGS84 (default)] **Magnetic Variation**: can be set manually for current location. When set to Auto, the local magnetic variation is calculated.

		**Sources** - select the source or data. **Device list** - shows all N2K devices connected in network. **Diagnostics**- shows the status of N2K network. **SimNet Groups** - controls the SimNet group for shared settings. **Damping** - controls the damping of heading, wind, boat speed and depth. **Calibrate Water Speed** - shows calibrating dialog box for this vessel's speed through water. **NMEA 2000 -** newly created wpts can be send to and receive from other N2K devices. **NMEA 2000 Over Ethernet** - shows the IP address and port settings for NMEA 0183 data over Ethernet (LAN). **Speed Log pulses** - enable and configure speed log pulses.
		**Text Size** - controls the size of the text used for menus, dialogs, etc. **Key beeps** - controls the loudness of beeper when keys are pressed. **Time** - controls the time zone offset and format of date and time.
		**Tracks** - shows the track list screen. **Logging Type** - controls when the tracks are recorded. They can be fixed, at time interval, fixed distance interval or at automatic rate.
		**Distance unit** - Nautical Miles, Kilometers or Miles. **Distance small** - when distance calculation is below 1 mile, it will change the unit either in feet, meters or yards. **Speed** - knots, kph or mph. **Wind speed** - knots, kph, mph or m/s. **Depth** - meters, feet or fathom. **Heading** - magnetic or true.

988-10369-002