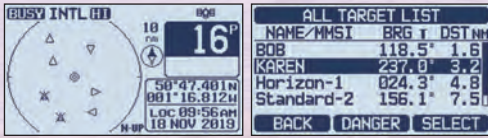


Fixed Mount VHF Radios

POWER, PERFORMANCE, RELIABILITY

ADVANCED FEATURES

- Integrated dual channel AIS **BUILT-IN AIS**
(Automatic Identification System) Receiver Built-in



AIS Display

Target List

- Second Station Capability**
Optional wireless RAM4X*1 or wired RAM4 Remote access Microphone
- NMEA2000 and NMEA0183 Compatible**
- Built-in Integrated 66 Channel GPS receiver**
- Noise Cancelling function for both Receive and Transmit audio**
- Integrated 32 Code Voice Scrambler and 4 Code Voice Scrambler**

*1 Requires Optional Wireless Access Point SCU-30



Optional Wireless Remote Access Microphone RAM4X (SSM-72H)
* Requires optional Wireless Access point (SCU-30)

Optional Wireless Access point (SCU-30) with 1.5m cable



MATRIX NMEA2000 GPS **NEW**

FIXED MOUNT DSC VHF WITH BUILT-IN AIS /GPS RECEIVER, NMEA2000 & NMEA0183 SUPPORT, 30W PA/ FOG, RAM4/RAM4X COMPATIBLE

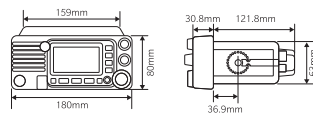


BUILT-IN AIS **GPS** **ITU CLASS D**

GX2410GPS/E: for Europe / GX2410GPS: for Asia and Australia

- Supplied Accessories:
Power Cord, Mounting Bracket and USB Cable

Body colour: ● Black



IPX8
Submersible
1.5m for 30min

3 Year
WARRANTY



- Meets ITU-R M.493-16 Class D (Digital Selective Calling)
- Separate Receiver for CH70 (Receiving DSC Calls)
- AIS/AIS SART target display: MMSI, Call Sign, Ship Name, BRG, DST, SOG and COG
- E2O (Easy to Operate) Icon & Menu System
- Preset key stores up to 10 favourite channels
- Intercom Feature between the Radio and an Optional Second Station: RAM4 or RAM4X
- Programmable Scan, Priority Scan, and Multi Watch
- DSC position request and report functions
- GPS Compass, Waypoint and GPS status pages
- Enter, Save, and Navigate to a waypoint using the Compass page
- Navigation (LAT/LON, SOG, and COG) information shown on display
- Programmable CPA (Closest Point of Approach) or TCPA (Time to Closest Point of Approach) collision avoidance alarms
- Commercial grade receiver (Spurious & Image rejection better than 80dB)
- 30 Watt PA/Loud Hailer with programmed fog signals and listen back
- GM (Group Monitor) using DSC Group Position Call
- MOB (Man over Board) Operation
- Excellent Visibility with Busy LED Indicator
- Selectable Night Mode Display
- ATIS mode for European Inland waterways (GX2410GPS/E)

Icon Function List



EXPLORER Series

FIXED MOUNT MARINE VHF COMPATIBLE WITH NMEA 2000

GX1850GPS/E



GPS ITUCLASSO

GX1850



ITUCLASSO

FIXED MOUNT MARINE VHF

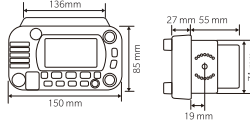
GX1800GPS/E



GPS ITUCLASSO

► Supplied Accessories:
Power Cord and Mounting Bracket

Body colour: ● Black ○ White



IPX8
Submersible
1.5m for 30min

3 Year
WARRANTY



- Meets ITU-R M.493-15 Class D (Digital Selective Calling)
- Separate Receiver for CH70 (Receiving DSC Calls)
- Ultra-slim and compact Rear case design (D=82mm)
- Built-in Integrated 66 Channel GPS receiver (GX1850GPS/E, GX1800GPS/E)
- NMEA2000 Compatible (GX1850GPS/E, GX1850)
- NMEA 0183 Connectivity
- E2O (Easy to Operate) Icon & Menu System
- Preset key stores up to 10 favourite channels
- Second Station Remote Microphone (Optional RAM4 SSM-70H)
- Intercom Feature between the Radio and an Optional Second Station



Optional RAM4
Second Station

Model	Europe and Asia		Asia
	GX1850GPS/E	GX1800GPS/E	GX1850
Body Colour	Black	Black	Black/White
GPS	●	-	-
NMEA2000	●	-	●

- Programmable Scan, Priority Scan, and Multi Watch
- Automatic DSC polling of up to 6 ships GPS positions
- GPS Compass, Waypoint and GPS status pages*2
- Enter, Save, and Navigate to a waypoint using the Compass page*2
- Navigation (LAT/LON, SOG, and COG) information shown on display*2
- GM (Group Monitor) Using DSC Group position Calling
- MOB (Man over Board) Operation
- Selectable Night Mode Display
- Noise cancelling microphone with channel change selection, 16/S and H/L keys
- ATIS mode for European Inland waterways (GX1850GPS/E, GX1800GPS/E)

ECLIPSE Series

FIXED MOUNT MARINE VHF WITH GPS

GX1400GPS/E



GX1400GPS



GPS ITUCLASSO

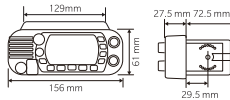
FIXED MOUNT MARINE VHF

GX1400

ITUCLASSO

► Supplied Accessories:
Power Cord and Mounting Bracket

Body colour: ● Black ○ White



IPX8
Submersible
1.5m for 30min

3 Year
WARRANTY



- Meets ITU-R M.493-14 Class D (Digital Selective Calling)
- Separate Receiver for CH70 (Receiving DSC Calls)
- Ultra-Compact Case design (156W x 61H x 100Dmm)
- Built-in Integrated 66 Channel GPS receiver (GX1400GPS/E, GX1400GPS)
- NMEA 0183 Connectivity
- E2O (Easy to Operate) Icon & Menu System
- Preset key stores up to 10 favourite channels



Model	Europe	Asia and Australia	
	GX1400GPS/E	GX1400GPS	GX1400
Body Colour	Black	Black/White	Black/White
GPS	●	●	-

- Programmable Scan, Priority Scan, and Multi Watch
- Automatic DSC polling of up to 6 ships GPS positions
- DSC test call and Auto DSC channel change selection
- NMEA Input and Output Connections to a Compatible GPS Chart Plotter
- Programmable soft keys
- Noise cancelling microphone with channel change selection, 16/S and H/L keys
- ATIS mode for European Inland waterways (GX1400GPS/E)

Fixed Mount VHF Radio Accessories

Model	Microphone / Cable			Access Point / GPS Antenna			Cover	External Speaker	Hail / PA Speaker	Bracket	
	SSM-72H Wireless Remote Access Microphone RAM4X*5	SSM-70H Remote Access Microphone RAM4	CT-100 7m extension cable for SSM-70H	SCU-38 External GPS antenna with 5m of cable	SCU-30 Wireless Access Point for SSM-72H (RAM4X) 1.5m of cable	SCU-31 External GPS antenna with 15m of cable	Dust Cover	MLS-410SP External Speaker	220SW 130mm Round PA/hailing horn 30W 4 Ohm	240SW W224 x H163mm Rectangular PA/hailing horn 40W 4 Ohm	Flush mount bracket
GX2410GPS/E	●	●	●	●	●	●	●	●	●	●	MMB-84
GX2410GPS	●	●	●	●	●	●	●	●	●	●	MMB-84
GX1850GPS/E	●	●	●	●	●	●	●	●	●	●	MMB-97
GX1850	●	●	●	●	●	●	●	●	●	●	MMB-97
GX1800GPS/E	●	●	●	●	●	●	●	●	●	●	MMB-97
GX1400GPS/E	●	●	●	●	●	●	●	●	●	●	MMB-84
GX1400GPS	●	●	●	●	●	●	●	●	●	●	MMB-84
GX1400	●	●	●	●	●	●	●	●	●	●	MMB-84

*2 GX1850 requires connection to external GPS device *3 GX1850GPS/E, GX1800GPS/E only

*4 GX1400GPS/E, GX1400GPS only

*5 Requires optional Wireless Access point (SCU-30)

Floating Handheld VHF Radios

Ergonomic Design with the Most Advanced Features
Leading with Class H DSC & GPS Marine Communications

ADVANCED FEATURES

- Built-in Integrated 66 Channel GPS receiver 
 - Rounded Case design provides excellent handheld comfort and easy front panel operation
 - Professional grade construction meets MIL-STD-810F 
 - ITU-R M.493-16 Class-H DSC (Digital Selective Calling) & Built-in dedicated CH70 DSC call receiver
 - Oversized Full-dot Matrix Display & E20 (Easy to Operate) Icon/Menu System
- E20 Menu Night Mode Group Monitor MOB Waypoint
- Noise Cancelling function for both Receive and Transmit audio
 - Supplied with 7.4V 1800mAh Li-ion battery
 - Built in FM Broadcast Radio Receiver



Navy Blue

Solid Black

CLASS-H DSC & GPS FLOATING 6W VHF **NEW**

HX891BT/E

► Supplied Accessories:

CAT460 Antenna, SBR-13LI 7.4V 1800mAh Li-ion Battery Pack, SBH-32 Charger Cradle, SAD-25 AC Adapter, E-DC-19A DC Cable with Cigarette Lighter Plug for SBH-32, SBT-13 Alkaline Battery Case (AAA x 5), CLIP-22 Belt Clip, Hand Strap and T9101648 USB Cable

Body colour: ● Navy Blue ● Solid Black

Overall Dimensions: 66mm x 138mm x 38mm
Weight: 310g (with: SBR-13LI, Hand Strap, Belt Clip & Antenna)

- Floating
- Extended Range 6W (5W)*1 Transmit Power Output (Selectable 6 (5)/2/1W)
- 700mW Loud Audio Output
- Preset key stores up to 10 favourite channels
- Scanning operation and Multi-Watch (Dual Watch and Triple Watch)
- CH16/S Quick Access (S: Sub-channel)
- 11 hours operating time with supplied Li-ion Battery*2
- ATIS mode for European Inland waterways
- Selectable Night Mode Display
- GM (Group Monitor) using DSC Group position Calling

IPX8
Submersible
1.5m for 30min



3 Year WARRANTY

Bluetooth®



- DSC Test Calling and Auto DSC Channel Change Selection
- Automatically poll the GPS positions of vessels using DSC
- Equipped with DSC DISTRESS Alert Transmission button
- Navigation (LAT/LON, SOG, and COG) information shown on display
- Waypoint Navigation: Navigate to the stored locations using the compass screen
- Navigate to the location of a DSC Distress Call using the Compass Page
- MOB (Man over Board) Operation
- Water Activated Emergency Strobe Light
- Integrated 32 Code Voice Scrambler and 4 Code Voice Scrambler
- micro USB Data Port for NMEA sentence output, configuration of the transceiver settings and downloading GPS logger data

Handheld VHF Radio Accessories

Model	Antenna / Adapter		Battery		Battery Charger				Belt clip / Holster		
	SRA-19B VHF Marine Antenna	CN-3 BNC-SMA Adapter	Rechargeable	Alkaline Battery tray	Cradle	AC Adapter	SAD-27 USB AC Adapter	USB Cable USB Type-A to USB Type-C Charging Cable	DC Cable (with Cigarette Lighter Plug)	Belt Clip	SHB-110 Quick Release Holster
HX891BT/E	●*3	●	SBR-13LI 1800mAh Li-Ion*3	SBT-13 (5 x AAA)*3	SBH-32*3	SAD-25*3			E-DC-19A*3	CLIP-22*3	
HX320E	●*3	●	2100mAh (Dealer replaceable)		SBH-49*3		●*3	●*3		CLIP-22*3	●
HX210E	●*3	●	1850mAh (Dealer replaceable)		SBH-25*3	SAD-25*3			E-DC-19A*3	CLIP-22*3	
HX40E	●*3	●	1850mAh (Dealer replaceable)		SBH-27*3	SAD-25*3			E-DC-19A*3	CLIP-19*3	

*1 5W TX power required in some countries *2 Based on Duty Cycle =(TX)5:(RX)5: (Standby)90, with 6W TX Power, GPS:ON, DSC:ON, Battery Save:ON(50%) *3 The same as the supplied accessory



COMPACT FLOATING VHF HANDHELD
WITH BLUETOOTH® CAPABILITY
HX320E

IPX7
Submersible
1m for 30min

FLOATING

3 Year WARRANTY

Bluetooth®

SUBMERSIBLE
6W
LOUD AUDIO
E20
16+5

Li-Polymer Battery
USB Charger Included
OPTIONAL MC HEADSET
FM Broadcast Radio Receiver
STROBE LIGHT

► Supplied Accessories:

SRA-19B Antenna, SAD-27 USB AC Adapter, SBH-49 Charger Cradle, USB Type-A to USB Type-C Charging Cable, CLIP-22 Belt Clip and Hand Strap

Overall Dimensions: 60mm x 133mm x 42mm
Weight: 290g (with: Hand Strap, Belt Clip & Antenna)

- Floating
- Compact Case design (60W x 133H x 42Dmm)
- 6W (5W)*1 transmit power output (Selectable 6 (5)/2.5/1W)
- 700mW Loud Audio Output
- Preset key stores up to 10 Favourite channels
- Easy to Operate Menu System
- Scanning operation and Multi-Watch (Dual Watch and Triple Watch)
- CH16/S Quick Access (S: Sub-channel)
- Built-in Lithium Polymer Battery Pack (7.4V, 2100mAh)
- ATIS mode for European Inland waterways
- Bluetooth® Wireless Operation
- USB (Type-C) Charging system
- FM Broadcast Radio Receiver
- Water activated light

*1 5W TX power required in some countries



COMPACT FLOATING VHF HANDHELD
HX210E

IPX7
Submersible
1m for 30min

FLOATING

3 Year WARRANTY

SUBMERSIBLE
6W
LOUD AUDIO
E20
16+5

Li-Polymer Battery
AC and DC Charger Included
OPTIONAL MC HEADSET
FM Broadcast Radio Receiver
STROBE LIGHT

► Supplied Accessories:

SRA-19B Antenna, SBH-25 Charger Cradle, SAD-25 AC Adapter, E-DC-19A DC Cable with Cigarette Lighter Plug, CLIP-22 Belt Clip and Hand Strap

Overall Dimensions: 60mm x 132mm x 40mm
Weight: 280g (with: Hand Strap, Belt Clip & Antenna)

- Floating
- Compact Case design (60W x 132H x 40Dmm)
- 6W (5W)*1 transmit power output (Selectable 6 (5)/2.5/1W)
- 600mW Loud Audio Output
- Preset key stores up to 10 Favourite channels
- Easy to Operate Menu System
- Scanning operation and Multi-Watch (Dual Watch and Triple Watch)
- CH16/S Quick Access (S: Sub-channel)
- Built-in Lithium Polymer Battery Pack (7.4V, 1850mAh)
- ATIS mode for European Inland waterways
- FM Broadcast Radio Receiver
- Water activated strobe light

*1 5W TX power required in some countries



ULTRA COMPACT VHF HANDHELD
HX40E

IPX7
Submersible
1m for 30min

FLOATING*

3 Year WARRANTY

* When fitted into optional flotation case

SUBMERSIBLE
6W
LOUD AUDIO
E20
16+5

Li-Polymer Battery
AC and DC Charger Included
OPTIONAL MC HEADSET
FM Broadcast Radio Receiver

► Supplied Accessories:

SRA-19B Antenna, SBH-27 Charger Cradle, SAD-25 AC Adapter, E-DC-19A DC Cable with Cigarette Lighter Plug, SHB-19 Belt Clip and Hand Strap

Overall Dimensions: 52mm x 95mm x 33mm
Weight: 230g (with: Hand Strap, Belt Clip & Antenna)

- Floating (When fitted into optional flotation case)
- Ultra-Compact Case design (52W x 95H x 33Dmm)
- 6W (5W)*1 transmit power output (Selectable 6 (5)/2.5/1W)
- 600mW Loud Audio Output
- Preset key stores up to 10 Favourite channels
- Easy to Operate Menu System
- Scanning operation and Multi-Watch (Dual Watch and Triple Watch)
- CH16/S Quick Access (S: Sub-channel)
- Built-in Lithium Polymer Battery Pack (7.4V, 1850mAh)
- ATIS mode for European Inland waterways
- FM Broadcast Radio Receiver


*1 5W TX power required in some countries

	Case / Hanger		Speaker Microphone / Headset / Earpiece Microphone							
Model	SHC-29 Flotation case	SCH-11 Belt Clip Hanger	SSM-21A Submersible speaker microphone with earphone jack	SSM-17H Speaker microphone	MH-73A4B Submersible speaker microphone	CMP460 Submersible speaker microphone	SEP-10A Earphone for SSM-21A	SSM-BT20 Bluetooth® Headset	SSM-64A Vox Headset	SSM-517A Earpiece/microphone
HX891BT/E		•	•	•	•	•	•	•	•	•
HX320E		•	•	•	•	•	•	•	•	•
HX210E		•	•	•	•	•	•	•	•	•
HX40E	•	•	•	•	•	•	•	•	•	•

Commercial Grade Marine VHF

BUILT BY PROFESSIONALS FOR PROFESSIONALS

ADVANCED FEATURES

- Capable of connecting two wired RAM4 or one wired RAM4 and four wireless RAM4X*1 optional microphones
- Integrated NMEA 2000 interface supporting all PGNs for Navigation, GPS, AIS and DSC functions
- Integrated Dual Channel AIS Receiver
- 66 Channel External GPS antenna included 
- GPS Compass, Waypoint and GPS status pages
- Dual Zone 25W PA/Loud Hailer with preprogrammed fog signals and listen back
- Submersible IPX8 (1.5 meters for 30 minutes)
- Integrated 32 Code Voice Scrambler and 4 Code Voice Scrambler

*1 Requires Optional Wireless Access Point SCU-30



Optional Wireless Access point (SCU-30) with 1.5m cable

Optional Wireless Remote Access Microphone (RAM4X SSM-72H)

* Requires optional Wireless Access point (SCU-30)

Fixed Mount VHF Radio

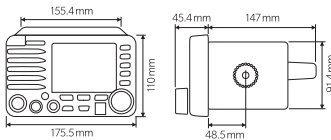
FIXED MOUNT VHF WITH NMEA 2000 AND INTEGRATED DUAL CHANNEL AIS RECEIVER

GX6000E QUANTUM AIS



Supplied Accessories:

Hand Microphone SSM-76H, Power Cord, Mounting Bracket, External GPS Antenna SCU-31, USB Cable



- Meets ITU-R M493-14 Class D DSC (Digital Selective Calling)
- NMEA 2000 and NMEA 0183 compatible
- AIS/AIS SART target display: MMSI, Call Sign, Ship Name, BRG, DST, SOG and COG
- Front panel microphone can be connected to rear panel and extended 6m using MEK-4 mic extension kit
- E20 (Easy to Operate) Icon & Menu System
- User customisable soft keys for easy menu operation
- Programmable CPA or TCPA collision avoidance alarms
- Commercial grade receiver (Spurious & Image rejection better than 80dB)
- Local/Distance receiver Attenuator
- Noise cancelling for both transmit and receive audio

- Intercom Feature between the Radio, RAM4 and wireless RAM4X
- Integrated Voice Recorder to playback up to two minutes of RX (receive) audio
- Selectable Night Mode Display
- GM (Group Monitor) using DSC Group Position Call
- MOB (Man Overboard) Operation
- Contact Class A and Class B AIS ships using the DSC individual call
- Programmable Scan, Priority Scan, and Multi Watch
- Automatic polling of up to 7 ships GPS positions
- Enter, Save, and Navigate to a waypoint using the Compass page
- Navigation (LAT/LON, SOG, and COG) information shown on display
- Navigate to the location of a DSC Distress Call using the Compass Page
- ATIS mode for European Inland waterways

Loud Hailer

30W DUAL ZONE LOUD HAILER

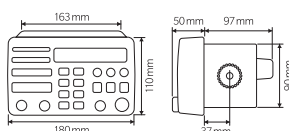
VLH-3000A



* for the Front panel

Supplied Accessories:

Mounting Bracket, Power Cord and Dust Cover



- PA/Hailer 30W output with Listen Back
- Dual Zone - Forward, Aft or Both
- 6 Preprogrammed Fog Signals: Underway, Stop, Sail, Tow, Anchor and Aground
- Horn and Siren
- Noise cancelling microphone
- Easy push button control

- 2W Loud internal speaker audio Output
- Compatible with optional MLS-410LH intercom speaker with IC1 and IC2 Push-to-Alert Button
- Compatible with MLS-410SP and MLS-410PA (10W amplified) external speakers
- Adjustable Backlight



COMMERCIAL GRADE VHF WITH LMR CHANNELS

HX400E

IPX8
Submersible
1.5m for 30min

3 Year
WARRANTY

HX400IS

(Non-CE version)

INTRINSICALLY SAFE INFORMATION:
The HX400IS, SBR-45LIIS Li-Ion battery pack and optional SSM-21A and CMP460 speaker microphones meet the ANSUI/UL 913-5th Ed. Requirements for: Class I: Flammable Gases, Vapors, or Liquids Div. 1 Group C (Ethylene) Group D (Propane) Class II: Combustible Dusts Div. 1 Group E (Metals) Group F (Coal) Group G (Grain) Class III: Ignitable Fibers and fillings

► Supplied Accessories (HX400E/HX400IS):

CAT460 Antenna, SBR-45LI (HX400E) 7.2V 3200mAh/SBR-45LIIS (HX400IS) 7.2V 3200mAh Li-Ion Battery Pack, SBH-36 Charger Cradle, SAD-25 AC Adapter, CLIP-22 Belt Clip and Hand Strap

Overall Dimensions (HX400E/HX400IS): 57mm x 133mm x 40mm
Weight: 350g (with: SBR-45LI (HX400E) / SBR-45LIIS (HX400IS), Belt Clip & Antenna)



- Selectable 5 and 1 Watt transmit power output
- Marine VHF with 40 Programmable Land Mobile Channels 134MHz to 174MHz
- 700mW Loud Audio Output
- Supplied with 3200mAh Li-Ion battery (HX400E only)
- Built-in Noise cancelling microphone
- Voice Scrambler
- Scanning operation and Multi-Watch (Dual Watch or Triple Watch)
- Certified Intrinsically Safe (HX400IS only)
- Supplied with Intrinsically safe 3200mAh Li-Ion battery (HX400IS only)



COMMERCIAL GRADE UHF ON-BOARD RADIO

HX407E On-board

IPX8
Submersible
1.5m for 30min

3 Year
WARRANTY

► Supplied Accessories:

SRA-14 Antenna, SBR-45LI 7.2V 3200mAh Li-Ion Battery Pack, SBH-36 Charger Cradle, SAD-25 AC Adapter, Clip-22 Belt Clip and Hand Strap

Overall Dimensions: 57mm x 133mm x 40mm
Weight: 350g (with: SBR-45LI, Belt Clip & Antenna)



- Selectable 1.5 and 0.5 Watt transmit power output
- 32 Programmable Marine UHF Channels
- 700mW Loud Audio Output
- Supplied with 3200mAh Li-Ion battery
- Noise cancelling function for transmit and receive audio
- Voice Scrambler
- Scanning operation and Dual Watch



COMMERCIAL VHF WITH LMR CHANNELS

HX380

(Non-CE version)

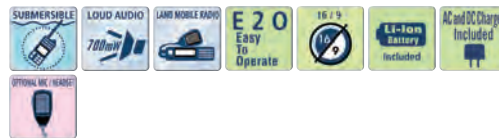
IPX7
Submersible
1m for 30min

3 Year
WARRANTY

► Supplied Accessories:

CAT460 Antenna, SBR-41LI 7.4V 1750mAh Li-Ion Battery Pack, CD-48 Charger Cradle, SAD-25 AC Adapter and CLIP-920 Belt Clip

Overall Dimensions: 57mm x 133mm x 33mm
Weight: 320g (with: SBR-41LI, Belt Clip & Antenna)



- Selectable 5 and 1 Watt transmit power output
- Marine VHF with 40 Programmable Land Mobile Channels 134MHz to 174MHz
- 700mW Loud Audio Output
- Supplied with 7.4V 1750mAh Li-Ion battery
- Scanning operation and Dual Watch



Fixed Mount VHF Radio and Loud Hailer Accessories

	Microphone / Cable				Access Point / GPS Antenna	
Model	SSM-72H Wireless Remote Access Microphone RAM4X*2	SSM-70H Remote Access Microphone RAM4	CT-100 7m extension cable for SSM-70H	MEK-4 Microphone Extension Kit (6m)	SCU-30 Wireless Access Point for SSM-72H (RAM4X) with 1.5m of Cable	SCU-31 External GPS Antenna with 15m of Cable
GX6000E	•	•	•	•	•	•*3
VLH-3000A	•	•	•	•	•	•
Model	Bracket	External Speaker			Hail / PA Speaker	
Model	MMB-84 Flush Mount Bracket	MLS-410SP External Speaker	MLS-410PA External Speaker with 10W amplifier	MLS-410LH Loud Hailer Intercom Speaker (with CALL button)	220SW 130mm Round PA/hailing horn 30W 4 Ohm	240SW W224 x H163mm Rectangular PA/hailing horn 40W 4 Ohm
GX6000E	•	•	•	•	•	•
VLH-3000A	•	•	•	•	•	•

Handheld VHF/UHF Radio Accessories

	Antenna / Adapter			Battery		Battery Charger			
Model	CAT460 VHF Marine Antenna	SRA-14J *5 UHF Marine Antenna	CN-3 BNC-SMA Adapter	Rechargeable	Alkaline Battery tray	Cradle	AC Adapter	SAD-1460 6 Unit Multi Charger	
HX400E	•*3	•	•	SBR-45LI 3200mAh Li-Ion*3	FBA-42 (6 x AA)	SBH-36*3 *6	SAD-25*3 *7	•	
HX400IS*4	•*3	•	•	SBR-45LIIS*3 Intrinsically Safe 3200mAh Li-Ion	FBA-42 (6 x AA)	SBH-36*3 *6	SAD-25*3 *7	•	
HX407E On-board	•	•*3	•	SBR-45LI 3200mAh Li-Ion*3	FBA-42 (6 x AA)	SBH-36*3 *6	SAD-25*3 *7	•	
HX380	•*3	•	•	SBR-41LI 1750mAh Li-Ion*3	FBA-40 (6 x AA)	CD-48*3	SAD-25*3	•	
Model	Speaker Microphone / Vox Headset / Earpiece Microphone						Belt clip / Hanger		Case
Model	SSM-21A *4 Submersible speaker microphone with earphone jack	SSM-17H Speaker microphone	MH-73A4B Submersible speaker microphone	CMP460 *4 Submersible speaker microphone	SEP-10A Earphone for SSM-21A	SSM-517A Earpiece / microphone	SSM-64A Vox Headset	SCH-11 Belt Clip Hanger	SHC-18 Leather Case w / belt loop and shoulder strap
HX400E	•	•	•	•	•	•	•	•	•
HX400IS*4	•	•	•	•	•	•	•	•	•
HX407E On-board	•	•	•	•	•	•	•	•	•
HX380	•	•	•	•	•	•	•	•	•

*2 Requires Optional Wireless Access Point SCU-30 *3 The same as the supplied accessory

*4 Intrinsically Safe Version

*5 SRA-14J: for 440 - 470MHz

*6 Requires SAD-25

*7 Requires SBH-36

FIXED MOUNT AND LOUD HAILER SPECIFICATIONS

Fixed Mount VHF Radios

MODEL	GX6000E	GX2410GPS/E, GX2410GPS ^{*1}	GX1850GPS/E, GX1850, GX1800GPS/E ^{*2}	GX1400GPS/E, GX1400GPS, GX1400 ^{*4}
GENERAL				
Frequency Range	Marine Band 156.025 - 163.275 MHz	Marine Band 156.025 - 163.275 MHz	Marine Band 156.025 - 163.275 MHz	Marine Band 156.025 - 163.275 MHz
Input Voltage	13.8 VDC ±20 %	13.8 VDC ±20 %	13.8 VDC ±20 %	13.8 VDC ±20 %
Current Drain	Standby: 0.55 A Receive: 0.9 A Transmit: 5.0 A (Hi), 1.0 A (Lo)	Standby: 0.55 A Receive: 0.9 A Transmit: 5.0 A (Hi), 1.0 A (Lo)	Standby: 0.45 A Receive: 0.8 A Transmit: 5.0 A (Hi), 1.0 A (Lo)	Standby: 0.3 A Receive: 1.2 A Transmit: 5.0 A (Hi), 1.0 A (Lo)
Overall Dimensions	175.5W x 110H x 173.3D mm	180W x 80H x 152.6D mm	150W x 85H x 82D mm	156W x 61H x 100D mm
Flush-Mount Dimensions	158W x 94H x 158D mm	161W x 65H x 157D mm	138W x 73H x 95D mm	131W x 50H x 120D mm
Weight	1.66 kg	1.5 kg	940 g	800 g
PA/FOG Power Output	25 W with listen back	30 W with listen back	-	-
TRANSMITTER				
RF Output	25 W (Hi), 1 W (Lo)	25 W (Hi), 1 W (Lo)	25 W (Hi), 1 W (Lo)	25 W (Hi), 1 W (Lo)
Conducted Spurious Emissions	Less than -80 dBc (Hi), -66 dBc (Lo)	Less than -80 dBc (Hi), -66 dBc (Lo)	Less than -80 dBc (Hi), -66 dBc (Lo)	Less than -80dBc (Hi), -66 dBc (Lo)
Frequency Stability	±3 ppm (-20° C to +60° C)	±3 ppm (-20° C to +60° C)	±3 ppm (-20° C to +60° C)	±3 ppm (-20° C to +60° C)
FM Hum and Noise	50 dB	50 dB	50 dB	50 dB
RECEIVER (for Voice and DSC)				
Sensitivity (12 dB SINAD)	0.30 µV	0.30 µV	0.25 µV	0.25 µV
Spurious and Image Rejection	80 dB for Voice (75 dB for DSC)	80 dB for Voice (75 dB for DSC)	75 dB for Voice (75 dB for DSC)	75 dB for Voice (70 dB for DSC)
Intermodulation and Rejection	80 dB for Voice (75 dB for DSC)	75 dB for Voice (75 dB for DSC)	75 dB for Voice (70 dB for DSC)	70 dB for Voice (70 dB for DSC)
Audio Output	10 W	4.5 W	4.5 W	4.5 W
DSC Format	Class D ITU-R M.493-14	Class D ITU-R M.493-16	Class D ITU-R M.493-15	Class D ITU-R M.493-14
Frequency for AIS	161.975 MHz (AIS CH A) 162.025 MHz (AIS CH B)	-	-	-
RECEIVER (for AIS)				
Sensitivity	0.5 µV	0.5 µV	-	-
Spurious and Image Rejection	70 dB for AIS	70 dB for AIS	-	-
Intermodulation and Rejection	70 dB for AIS	70 dB for AIS	-	-
NMEA Input/Output				
NMEA 2000	Compatible	Compatible	Compatible (GX1850GPS/E, GX1850)	-
NMEA-0183 4800 Baud Selected	Input: GGA, GLL, GNS, RMC, GSA and GSV (4800 bps) Output: DSC, DSE, GGA, GLL, GNS, RMC, GSA and GSV (4800 bps)	Input: GGA, GLL, GNS, RMC, GSA and GSV (4800 bps) Output: DSC, DSE, GGA, GLL, GNS, RMC, GSA and GSV (4800 bps) AIS Output: VDM (38400 bps)	Input: GGA, GLL, GNS, RMC, GSA and GSV (4800 bps) Output: DSC, DSE, GGA ^{*3} , GLL ^{*3} , GNS ^{*3} , RMC ^{*3} , GSA ^{*3} and GSV ^{*3} (4800 bps)	Input: GGA, GLL, GNS, RMC, GSA and GSV (4800bps) Output: DSC, DSE, GGA ^{*5} , GLL ^{*5} , GNS ^{*5} , RMC ^{*5} , GSA ^{*5} and GSV ^{*5} (4800bps)
NMEA-0183-HS 38400 Baud Selected	Input: GGA, GLL, GNS, RMC, GSA and GSV (38400 bps) Output: DSC, DSE, GGA, GLL, GNS, RMC, GSA, GSV and VDM (38400 bps) AIS Output: VDM (38400 bps)	Input: GGA, GLL, GNS, RMC, GSA and GSV (38400 bps) Output: DSC, DSE, GGA, GLL, GNS, RMC, GSA and GSV (38400 bps) AIS Output: VDM (38400 bps)	Input: GGA, GLL, GNS, RMC, GSA and GSV (38400 bps) Output: DSC, DSE, GGA ^{*3} , GLL ^{*3} , GNS ^{*3} , RMC ^{*3} , GSA ^{*3} and GSV ^{*3} (38400 bps)	Input: GGA, GLL, GNS, RMC, GSA and GSV (38400 bps) Output: DSC, DSE, GGA ^{*5} , GLL ^{*5} , GNS ^{*5} , RMC ^{*5} , GSA ^{*5} and GSV ^{*5} (38400 bps)

*1 GX2410GPS/E: for Europe, GX2410GPS: for Asia and Australia *2 GX1850GPS/E and GX1800GPS/E: for Europe and Asia, GX1850: for Asia
*3 GX1850GPS/E and GX1800GPS/E *4 GX1400GPS/E: for Europe, GX1400GPS and GX1400: for Asia and Australia *5 GX1400GPS/E and GX1400GPS

Loud Hailer

MODEL	VLH-3000A
GENERAL	
Input Voltage	13.8 VDC ± 20 %
PA Horn Output	30W : 2ch (at 4 ohm 10 % distortion)
Intercom Output	4W : 2ch (at 4 ohm 10 % distortion)
Listen-Back Input Level	2 mV
AF Output	
EXT SPK Output	4 W (at 4 ohm 10 % distortion)
INT SPK Output	2 W (at 8 ohm 10 % distortion)
Mic sensitivity	10 mV
Drain current	7 A (MAX) when Forward and Aft Horns are used.
Idle current	300 mA
Operating temperature	-20° C to +55° C
Storage temperature	-30° C to +70° C
Water integrity performance	IPX7 (1 m for 30 min) for the front panel
Overall Dimensions	180W x 110H x 140D mm
Flush mount dimensions	165W x 92H x 115D mm
Weight	1.35 kg

GPS Specifications

MODEL	GX6000E GX2410GPS/E, GX2410GPS GX1850GPS/E, GX1800GPS/E, GX1400GPS/E, GX1400GPS
Channels	66 channels
Sensitivity	Less than -147 dBm
Time to First Fix	1 min typical (@Cold Start) 5 sec typical (@Hot Start)
Geodetic Datum	WGS84
SBAS Correction	WAAS, EGNOS, MSAS and GAGAN

HANDHELD SPECIFICATIONS

MODEL	HX891BT/E	HX320E	HX210E	HX40E	HX400E/HX400IS	HX407E On-board	HX380	
GENERAL								
Frequency Range	Marine Band 156.050 - 163.275 MHz	Marine Band 156.025 - 163.275 MHz	Marine Band 156.025 - 163.275 MHz	Marine Band 156.025 - 163.275 MHz	Marine Band: 156.025 - 162.000 MHz LMR Band: 134 - 174 MHz	Marine Band: 457.525 - 467.575MHz	Marine Band: 156.025 - 163.275 MHz LMR Band: 134 - 174 MHz	
Battery type / Capacity	Li-Ion 1800 mAh	Lithium Polymer 2100 mAh (Built-in)	Lithium Polymer 1850 mAh (Built-in)	Lithium Polymer 1850 mAh (Built-in)	Li-Ion 3200 mAh	Li-Ion 3200mAh	Li-Ion 1750 mAh	
Input Voltage	7.4 VDC	7.4 VDC	7.4 VDC	7.4 VDC	7.2 VDC	7.2 VDC	7.4 VDC	
Current Drain	Standby: 130 mA (GPS On), 110 mA (GPS Off) Receive: 380 mA (MAX AF Output) Transmit: 1.6 A / 1.0 A / 0.7 A (6 W (5 W) ^{*6} / 2 W / 1 W)	Standby: 100 mA Receive: 330 mA (MAX AF Output) Transmit: 1.6 A / 1.0 A / 0.7 A (6 W (5 W) ^{*6} / 2.5 W / 1 W)	Standby: 60 mA Receive: 330 mA (MAX AF Output) Transmit: 1.6 A / 1.0 A / 0.7 A (6 W (5 W) ^{*6} / 2.5 W / 1 W)	Standby: 100 mA Receive: 330 mA (MAX AF Output) Transmit: 1.6 A / 1.0 A / 0.7 A (6 W (5 W) ^{*6} / 2.5 W / 1 W)	Standby: 50 mA Receive: 320 mA (MAX AF Output) Transmit: 1.6 A / 0.8 A (5 W / 1 W)	Standby: 70 mA Receive: 320 mA (MAX AF Output) Transmit: 0.8 A / 0.5 A (Hi / Lo)	Standby: 70 mA Receive: 320 mA (MAX AF Output) Transmit: 1.6 A / 0.8 A (5 W / 1 W)	Standby: 50 mA Receive: 320 mA (MAX AF Output) Transmit: 1.6 A / 0.8 A (5 W / 1 W)
Overall Dimensions	66W x 138H x 38D mm	60W x 133H x 42D mm	60W x 132H x 40D mm	52W x 95H x 33D mm	57W x 133H x 40D mm	57W x 133H x 40D mm	57W x 133H x 33D mm	
Weight	310 g (w/SBR-13LI, Hand Strap, Belt Clip & Antenna)	290 g (w/ Hand Strap, Belt Clip & Antenna)	280 g (w/Hand Strap, Belt Clip & Antenna)	230 g (w/Hand Strap, Belt Clip & Antenna)	350 g (w/SBR-45LI/SBR-45LIS, Belt Clip & Antenna)	350 g (w/ SBR-45LI, Belt Clip & Antenna)	320 g (w/SBR-41LI, Belt Clip & Antenna)	
TRANSMITTER								
RF Output	6 W (5 W) ^{*6} / 2 W / 1 W (@7.4 V)	6 W (5 W) ^{*6} / 2.5 W / 1 W (@7.4 V)	6 W (5 W) ^{*6} / 2.5 W / 1 W (@7.4 V)	6 W (5 W) ^{*6} / 2.5 W / 1 W (@7.4 V)	5 W / 1 W (@7.2 V)	1.5W / 0.5W (@7.2 V)	5 W / 1 W (@7.4 V)	
Conducted Spurious Emissions	Less than 0.25 µW	Less than 0.25 µW	Less than 0.25 µW	Less than 0.25 µW	-75 dBc Typical	-75 dBc Typical	At least 36 dBm below	
Frequency Stability	±3 ppm (-20° C to +60° C)	±3 ppm (-20° C to +60° C)	±3 ppm (-20° C to +60° C)	±3 ppm (-20° C to +60° C)	±2.5 ppm (-30° C to +60° C)	±2 ppm (-30° C to +60° C)	±2.5 ppm (-30° C to +60° C)	
FM Hum and Noise	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	
RECEIVER								
Sensitivity (12 dB SINAD)	0.25 µV	0.25 µV	0.25 µV	0.25 µV	0.25 µV	0.25 µV	0.25 µV	
Selectivity	12 kHz / 25 kHz (-6 dB / -60 dB)	12 kHz / 25 kHz (-6 dB / -60 dB)	12 kHz / 25 kHz (-6 dB / -60 dB)	12 kHz / 25 kHz (-6 dB / -60 dB)	12 kHz / 25 kHz (-6 dB / -60 dB)	12 kHz / 25 kHz (-6 dB / -60 dB)	12 kHz / 25 kHz (-6 dB / -60 dB)	
Audio Output	700 mW	700 mW	600 mW	600 mW	700 mW	700 mW	700 mW	
DSC Format	Class-H ITU-R M.493-16	-	-	-	-	-	-	
NMEA Output	DSC, DSE, GGA, GLL, RMC, GSA and GSV	-	-	-	-	-	-	
GPS								
Channels	66 channels	-	-	-	-	-	-	
Sensitivity	Less than -147 dBm	-	-	-	-	-	-	
Time to First Fix	1 min Typical (@Cold Start) 5 sec Typical (@Hot Start)	-	-	-	-	-	-	
Geodetic Datum	WGS84	-	-	-	-	-	-	
SBAS Correction	WAAS, EGNOS, MSAS and GAGAN	-	-	-	-	-	-	

*6 5 W TX power required in some countries

Standard Horizon reserves the right to make changes and enhancements to products at our discretion. Current specifications are therefore subject to change without notice.

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