

# FIXED MOUNT VHF AND LOUD HAILER SPECIFICATIONS

## Fixed Mount VHF Radios

MODEL	GX6500/GX6000	GX2200/GX2000	GX1850GPs/GX1850/GX1800GPs/GX1800	GX1400GPs/GX1400
<b>GENERAL</b>				
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	13.8VDC ±20 %	13.8VDC ±20 %	13.8VDC ±20 %	13.8VDC ±20 %
Current Drain	Standby: 0.55 A Receiver: 0.9 A Transmit: 5.0 A (Hi), 1.0 A (Lo)	Standby: 0.55 A / 0.45 A Receiver: 0.9 A / 0.8 A Transmit: 5.0 A (Hi), 1.0 A (Lo)	Standby: 0.45 A Receiver: 0.8 A Transmit: 5.0 A (Hi), 1.0 A (Lo)	Standby: 0.3 A Receiver: 1.2 A Transmit: 5.0 A (Hi), 1.0 A (Lo)
Overall Dimensions	6.9" W × 4.3" H × 6.8" D (175.5W × 110H × 173.3D mm)	7.1" W × 3.1" H × 6.3" D (180W × 80H × 160D mm)	5.9" W × 3.4" H × 3.3" D (150W × 85H × 82D mm)	6.14" W × 2.4" H × 3.94" D (156W × 61H × 100D mm)
Flush-Mount Dimensions	6.2" W × 3.7" H × 6.2" D (158W × 94H × 158D mm)	6.3" W × 2.6" H × 5.9" D (161W × 65H × 150D mm)	5.4" W × 2.8" H × 3.4" D (138W × 73H × 95D mm)	5.15" W × 1.97" H × 4.72" D (131W × 50H × 120D mm)
Weight	3.7 lbs (1.66 kg)	3.2 / 3.1 lbs (1.45 / 1.4 kg)	2.1 lbs (940 g)	1.8 lbs (800 g)
PA/FOG Power Output	25 W with listen back	30 W with listen back / 30 W no listen back	-	-
<b>TRANSMITTER</b>				
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 -80 dBc (Hi), -66 dBc (Lo)
Frequency Stability	±3 ppm (-4° F to +140° F)	±3 ppm (-4° F to +140° F)	±3 ppm (-4° F to +140° F)	±3 ppm (-4° F to +140° F)
FM Hum and Noise	50 dB	50 dB	50 dB	50 dB
<b>RECEIVER (for Voice and DSC)</b>				
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 / 70 dB for AIS)	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 / 70 dB for AIS)	80 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.493-13	Class D ITU-R M.493-13	Class D ITU-R M.493-13	Class D ITU-R M.493-13
Frequency for AIS (Transmitter*)	161.975 MHz (AIS CH A) 162.025 MHz (AIS CH B)	-	-	-
<b>RECEIVER (for AIS)</b>				
Sensitivity	0.5 µV	0.5 µV*2	-	-
Selectivity	Spurious and Image Rejection 70 dB Intermodulation and Rejection 70 dB	Spurious and Image Rejection 70 dB*2 Intermodulation and Rejection 70 dB*2	-	-
<b>NMEA Input/Output</b>				
NMEA 2000	Compatible	-	Compatible (GX1850GPs/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*2, GLL*2, GNS*2, RMC*2, GSA*2 and GSV*2 (4800 bps) AIS Output: VDM*2 (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 (4800 bps) Output: DSC, DSE, GGA*4, GLL*4, GNS*4, RMC*4, GSA*4 and GSV*4 (4800 bps)
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, VDM and VDO*1 (38400 bps) AIS Output: VDM and VDO*1 (38400 bps)	Input: GGA, GLL, GNS, RMC, GSA, GSV and VDM (38400 bps) Output: DSC, DSE, GGA*2, GLL*2, GNS*2, RMC*2, GSA*2, GSV*2 and VDM*2 (38400 bps) AIS Output: VDM*2 and VDO*1 (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*4, GLL*4, GNS*4, RMC*4, GSA*4 and GSV*4 (38400 bps)

\*1 GX6500 only \*2 GX2200 only \*3 GX1850GPs and GX1800GPs \*4 GX1400GPs only

## Loud Hailer

MODEL	VLH-3000A
<b>GENERAL</b>	
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
<b>AF Output</b>	
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	300mA
Operating temperature	-4° F to +131° F
Storage temperature	-22° F to +158° F
Water integrity performance	IPX7 (3 ft for 30 min) for the front panel
Overall Dimensions	7.1" W × 4.3" H × 5.5" D (180W × 110H × 140D mm)
Flush mount dimensions	6.5" W × 3.6" H × 4.5" D (165W × 92H × 115D mm)
Weight	2.97 lbs (1.35 kg)

## GPS Specifications

MODEL	GX6500/GX2200/GX1850GPs/GX1800GPs/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 VHF SPECIFICATIONS

MODEL	HX890	HX40	HX210	HX300	HX100	HX400/HX400IS	HX407	HX380	
<b>GENERAL</b>									
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 156.050 - 163.275 MHz	Marine Band: 156.025 - 163.275 MHz LMR Band: 134 - 174 MHz	UHF Band 406.100 - 470.000 MHz	Marine Band: 156.025 - 163.275 MHz LMR Band: 134 - 174 MHz	
Battery type / Capacity	Li-Ion 1800 mAh	Lithium Polymer 1850 mAh (Built-in)	Lithium Polymer 1850 mAh (Built-in)	Li-Ion 1560 mAh	Ni-MH 700mAh	Li-Ion 2550 mAh	Li-Ion 2300 mAh	Li-Ion 1600 mAh	
Input Voltage	7.4 VDC	7.4 VDC	7.4 VDC	3.7 VDC	4.8 VDC	7.4 VDC	7.4 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 / 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 / 2.5 W / 1 W)	Standby: 60 mA Receive: 330 mA (MAX AF Output) Transmit: 1.6 A / 1.0 A / 0.9 A (6 W / 2.5 W / 1 W)	Standby: 20 mA Receive: 330 mA (Typical at MAX AF Output) Transmit: 2.3 A / 0.9 A (5 W / 1 W)	Standby: 15 mA Receive: 300 mA (MAX AF Output) Transmit: 1.1 A / 0.8 A (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: 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)	Standby: 50 mA Receive: 320 mA (MAX AF Output) Transmit: 1.6 A / 0.8 A (5 W / 1 W)
Overall Dimensions	2.60" W × 5.43" H × 1.50" D (66W × 138H × 38D mm)	2.05" W × 3.74" H × 1.3" D (52W × 95H × 33D mm)	2.36" W × 5.20" H × 1.57" D (60W × 132H × 40D mm)	2.32" W × 5.04" H × 1.3" D (59W × 128H × 33D mm)	2.4" W × 5.3" H × 1.5" D (62W × 135H × 38.5D mm)	2.24" W × 5.24" H × 1.57" D (57W × 133H × 40D mm)	2.24" W × 5.24" H × 1.57" D (57W × 133H × 40D mm)	2.24" W × 5.24" H × 1.3" D (57W × 133H × 33D mm)	
Weight	10.94 oz (310 g) (w/SBR-131L, Hand Strap, Belt Clip & Antenna)	8.1 oz (230 g) (w/ Hand Strap, Belt Clip & Antenna)	9.88 oz (280 g) (w/ Hand Strap, Belt Clip & Antenna)	8.4 oz (240 g) (w/SBR-27L, Belt Clip & Antenna)	8.6 oz (245 g) (w/SBR-125, Belt Clip & Antenna)	12.3 oz (350 g) (w/SBR-29L/SBR-29LIS, Belt Clip & Antenna)	12.3 oz (350 g) (w/FNB-115L, Belt Clip & Antenna)	11.3 oz (320 g) (w/FNB-V105L, Belt Clip & Antenna)	
<b>TRANSMITTER</b>									
RF Output	6 W / 2 W / 1 W (@7.4 V)	6 W / 2.5 W / 1 W (@7.4 V)	6 W / 2.5 W / 1 W (@7.4 V)	5 W / 1 W (@3.7 V)	2.5 W / 1 W (@4.8 V)	5 W / 1 W (@7.4 V)	5 W / 1 W (@7.4 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	-75 dBc Typical	-75 dBc Typical	-75 dBc Typical	-75 dBc Typical	At least 36 dBm below	
Frequency Stability	±3 ppm (-4° F to +140° F)	±3 ppm (-4° F to +140° F)	±3 ppm (-4° F to +140° F)	±5 ppm (-4° F to +140° F)	±5 ppm (-4° F to +140° F)	±2.5 ppm (-22° F to +140° F)	±2 ppm (-22° F to +140° F)	±2.5 ppm (-22° F to +140° F)	
FM Hum and Noise	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	
<b>RECEIVER</b>									
Sensitivity (12 dB SINAD)	0.25 µV	0.25 µV	0.25 µV	0.25 µV	0.3 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)	25 kHz (-70 dB)	25 kHz (-65 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	600 mW	600 mW	600 mW	500 mW	700 mW	700 mW	700 mW	
DSC Format	Class-H ITU-R M.493-14	-	-	-	-	-	-	-	
NMEA 0183 In/Out	Input/Output: DSC, DSE, GGA, GLL, RMC, GSA and GSV	-	-	-	-	-	-	-	
<b>GPS</b>									
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	-	-	-	-	-	-	-	

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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