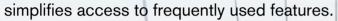


Contents



Welcome to the new world of functional advancements in marine electronics with HDS.

The new Lowrance HDS (High-Definition System) series of multifunction displays are a revolutionary step forward in fish-finding and navigation-electronics innovation, combining best-in-class Lowrance technology and radar solutions, an attractive case design that is more convenient to install, plus a new easier-to-use operating system that





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HDS Highest-Definition Broadband Fishfinding

Incredible and award-winning, exclusive Broadband Sounder digital technology is now inside all HDS sonar models for the best Lowrance fishfinding ever! As the vital link between the transducer and your HDS display, Broadband is proven to find more fish with greater sensitivity, higher definition and more display clarity with superior target separation in all cover, in thermoclines and in all water conditions.





Less Noise, More Targets

Thanks to unique and specialized Lowrance digital signal processing software, noise goes way down and sensitivity goes way up with Broadband. The result: the ultimate in target discrimination with incredible high-definition separation of those distinctive Lowrance "fish arch" targets from structure and other fish!

Crystal-Clear Clarity

With advanced digital filtering, Broadband vastly improves at-a-glance display clarity, sharpens bottom images and paints a much cleaner picture of targets that others will miss or show poorly.

Greater Shallow-Water Detail and Coverage

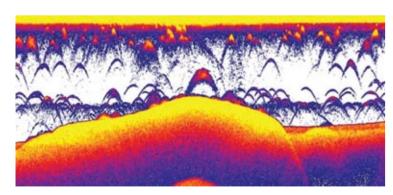
To cover even more water, Broadband automatically adds 83 kHz operation to a Lowrance 200 kHz single-frequency transducer. At 83 kHz, you get full 120-degrees of wide-angle coverage with greatly enhanced definition of fish arches.

Incredible Deep-Water Performance

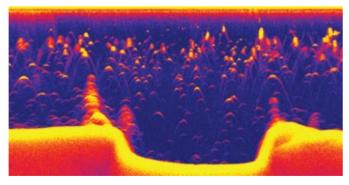
Broadband sounding is serious electronics when the hunt is on for fish in any deep water weather condition. Even at higher boat speeds, Broadband keeps a bottom lock at depth, with exceptional targeting of fish on the bottom, around wrecks and other seabed structure. And when used with a high-power transducer, strong bottom locks and water column detail reach down to thousands of feet!

Expandability at No Extra Cost

For added value, HDS Broadband-equipped models can turn an HDS M-series (or GlobalMap® chartplotter with yellow ethernet connector) into a powerful combination fishfinder/chartplotter with complete sonar graph control when networked by Lowrance Ethernetworks.



Broadband with 83 kHz (shown with white-screen background) provides wider coverage and enhanced target returns, to more easily identify suspended fish in thermoclines and near the surface.



Broadband with 200 kHz (shown with blue-screen background) provides crystal-clear images of fishing hotspots -- like this creek channel with trees at the top of each bank and surrounded by suspended bait and gamefish.

HDS Mapping Options Go All-Platinum

For navigational reference, HDS chartplotters now come with a Navionics® worldwide background map. Plus, your trusted favorites in Lowrance 2D chart cards, like FreedomMaps™ and NauticPath™ are still fully functional with HDS.

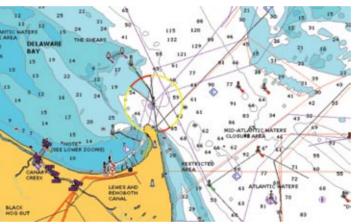
Now, Lowrance expands your world of high-detail, high-definition 3D charting options with total HDS compatibility with all 2009 (and earlier) Navionics® chartcards. Thanks to next-generation mapping technology, HDS will continue to guide dedicated anglers to fishing success in the years to come.

Platinum+ and Platinum – Revealing 3D views of bottom structure, and incredibly detailed satellite imagery, for the ultimate enhancement to navigation and fishing.

Exclusive TurboView™ Advantage – This exclusive HDS built-in graphics engine delivers seamless zooms and 2D-3D chart displays, real-time 3D map nav data overlay, striking depth views in 2D and 3D, plus high-speed panning/zooming with detailed aerial views for all Platinum chartcards, and seamless zoom for Navionics® Gold.

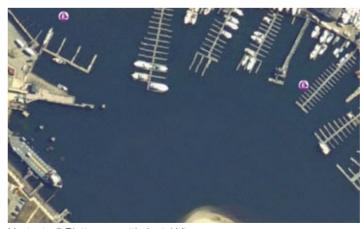
Plays Navionics® Favorites – HDS is also fully compatible with your library of Navionics® Gold, Silver and Classic chartcards.

Navionics® chart/mapping compatibilty with free HDS software upgrade in Q1 2009



Navionics® Platinum+ 2D View.

Navionics® Platinum+ 3D View.



Navionics® Platinum+ with Aerial View



Navionics® Platinum+ with Aerial View.

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HDS Redefines 'Ease of Use'

Viewing and control has never been easier, nor more user-friendly. From basic operation to advanced professional functionality, HDS is thoughtfully designed to take you to the next level.



Stylish and Retrofit-Ready -

True, HDS sports a more modern design to enhance any boat helm. Yet, by design, HDS makes it easy to upgrade your Lowrance electronics. HDS is compatible with late-model Lowrance transducers, plus yellow Ethernetworks and NMEA 2000® network connectors.



Eniov Our New Menu Selection -

The new, more versatile and flexible HDS operating system presents a whole new way to view and select Lowrance features. This new menu format is both easy to grasp and thoughtfully functional.



A Touch Better -

For even easier and quicker control, HDS-8, -8m, -10 and -10m models feature a unique new FlyWheel™ scroll dial, as well as a bank of soft command keys for the fastest access to functions. So, you can spend less time operating and more time fishing.



LGC-4000

Better to Find Yourself -

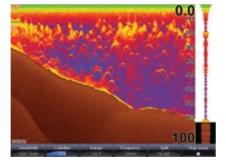
With a built-in, high-sensitivity 16-channel GPS+WAAS antenna HDS is a superior solution for both bracket mount, and in-dash installs with the convenience of front mounting. Plus, it also networks with NMEA 2000® systems for data sharing. No external antenna to place, no mess, no fuss. Just exquisite, advanced GPS accuracy with strong satellite locks and less track plot wander.

For closed-cabin installs there's also a new and compact LGC-4000 external GPS+WAAS antenna module option for HDS with a true, real-time satellite signal update rate of 5 times per second for incredible location accuracy. See page 26 for more.



Screen Star -

In the easy-to-view category, HDS really shines. All feature the new SolarMAX™ PLUS colour display for the best in brilliant detail in bright sunlight, the best wide-angle viewing ever achieved. In fact, most now deliver nearly twice the brilliance with significantly-reduced power draw than before! Plus, superwhite LED backlighting has zero-dim for eye-soothing night vision protection.



HDS Newly-Defined Expandability Options

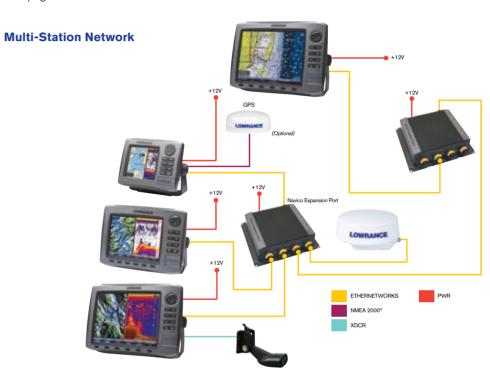
Advanced Networking

Ethernetworks NEP-1 Expansion Port

All HDS models come fully ethernet-ready to share high-bandwidth data among all multi-function HDS displays on the boat, including sonar graphs and radar.

For a connected onboard system, the optional NEP-1 ethernet expansion port module links up to four HDS displays for high-speed data distribution. A robust, 100-megabit switch, it's rugged and IPX-7 waterproof to resist corrosive marine environments.

See page 27 for more.



NEP-1

LOWRANCE

High Definition Digital Radar LRA-1800 2 kW and LRA-2400 4 kW Radomes

Two choices in Lowrance high-performance digital radar for optimal safety in poor weather or low-light conditions, with added chart overlay feature, are now easily networked for HDS displays via Ethernetworks. See page 17 for more.

LRA-1800 LRA-2400

Full NMEA 2000® Networking

HDS comes with full NMEA 2000® connectivity for the advanced standard in boat systems data sharing, backed by the most extensive and affordable selection of smart sensors for boat systems monitoring, including engine and fuel flow for optimum operating economies.

LMF Multi-Function Gauges

Lowrance LMF models are NMEA 2000® certified digital gauges that are truly impressive in precision and versatility for real-time monitoring of engine and boat systems on the NMEA 2000® network. LMF gauges display up to 16 different pages with 13 customizable screen types in graphic analog and alpha-numeric styles. Plus, they're backed by the most extensive and affordable selection of smart sensors, including Fuel Flow for optimum fuel management economies. Available in a choice of two standard dash gauge sizes, both deliver superb viewing in direct sunlight. See page 26 for more.



LMF-400

Electronic Probe Sensors

Only Lowrance offers the most NMEA-2000® sensors for vital boat data monitoring, each with a built-in "smart module," that's fully programmable for greater accuracy in data delivery. That includes expanded engine and fuel flow readings for optimum operating economies. See page 26 for more.



Echnosounders/GPS Chartplotters



Fantastic HDS Features

- Built-in Broadband Sounder
- Internal 16-channel GPS+EGNOS+MSAS Antenna
- New, Brighter SolarMAX™ PLUS Display

- Chartcard Options Now Include Navionics® Platinum+ with TurboView™
- Ethernetworks and NMEA 2000[®] Performance Networking Options



NEW HDS-8 Fishfinder/GPS Chartplotter

An easy fit with an easy-to-see display, this HDS delivers high-definition, Super VGA colour brilliance and clarity in an award-winning, 8.4"/21.3 cm display package. Plus it offers all the same advanced Lowrance HDS sounder and navigation technologies and features of the HDS-10, while it is likewise fully ready to build a complete onboard system.

NEW HDS-10 Fishfinder/GPS Chartplotter

The finest of new Lowrance echosounding and GPS navigation technologies with massive, high-definition 10.4"/26.4 cm Super VGA colour viewing. The new, brighter SolarMAX™ PLUS display renders brilliant detail in sunlight with the best wide-angle viewing available, while advanced pure-white LED screen/keypad backlighting fully adjusts to zero-dim for night viewing. The unique new FlyWheel™ dial and command soft keys give you easier and quicker control of Broadband Sounder echosounder and satellite navigation precision via the built-in 16-channel GPS+EGNOS+MSAS antenna. HDS includes a new Navionics® worldwide background map. Plus, HDS is now fully compatible with all Navionics® Platinum+ and Platinum chartcards, with two high-speed SD card slots. Fully ready to build your complete stand-alone or networked onboard system.

Model	Part
HDS-10	
Worldwide background map, no transducer	140-03
Build Your Own System Options	Page
NMEA 2000® & Fuel Management	26
NMEA 2000® & Fuel Management HD Digital Radar	26 17
HD Digital Radar	17



COURT OF THE PARTY	

Model	Part
HDS-8	
Worldwide background map, no transducer	140-08
Build Your Own System Options	Page
NMEA 2000® & Fuel Management	26
HD Digital Radar	17
Transducers, up to 1 kW	30
Ethernetworks	27
VHF Marine DSC radios	22



Echosounders/GPS Chartplotters



Fantastic HDS Features

- Built-in Broadband Sounder
- Internal 16-channel GPS+EGNOS+MSAS Antenna
- Brilliant, New SolarMAX™ PLUS Display

- Chartcard Options Now Include Navionics[®] Platinum+ with TurboView[™]
- Ethernetworks and NMEA 2000[®] Performance Networking Options



NEW HDS-7 Fishfinder/GPS Chartplotter

This large-but-compact solution with 6.4"/16.3 cm full VGA colour viewing that renders astounding echosounder and navigation details. It also includes the new, brighter SolarMAX™ PLUS bright-sunlight/wide-angle display with pure-white LED screen/keypad backlighting that fully adjusts to zero-dim for night vision.HDS also includes built-in Broadband high-definition sounder technology and the high-sensitivity 16-channel GPS+EGNOS+MSAS antenna. HDS includes a new Navionics® worldwide background map. Plus, this HDS is now fully compatible with all Navionics® Platinum+ and Platinum chartcards with one high-speed SD card slot. Fully ready to build your complete stand-alone or networked onboard system.



Model	Part
HDS-7	
Worldwide background map, no transducer	140-37
Build Your Own System Options	Page
NMEA 2000® & Fuel Management	26
HD Digital Radar	17
Transducers, up to 1 kW	30
Ethernetworks	27
VHF Marine DSC radios	22

NEW HDS-5 Fishfinder/GPS Chartplotter

Presenting big color definition and multifunction performance in a popular space-saving design. Viewing performance is exceptionally enhanced with its exclusive, high-resolution 5"/12.7 cm 256-colour SolarMAX™ PLUS daylight display with adjustable screen and keypad backlighting. Of course, Broadband high-definition sounder and ultra-precision 16-channel GPS+EGNOS+MSAS antenna are inside. HDS includes a new Navionics® worldwide background map. Plus, this HDS is now fully compatible with all Navionics® Platinum+ and Platinum chartcards with one high-speed SD card slot. Like all HDS models, it's ready to build your complete stand-alone or networked onboard system.



Model	Part
HDS-5	
Worldwide background map, with 83/200 kHz transducer	140-01
Worldwide background map, no transducer	140-33

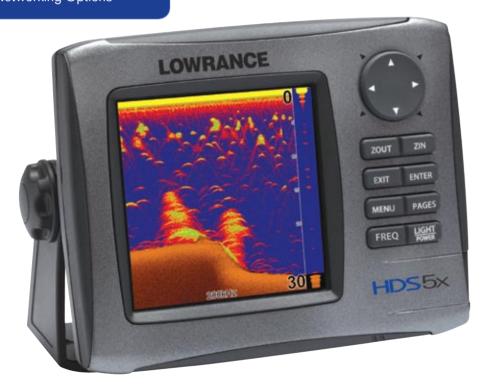
Build Your Own System Options	Page
NMEA 2000® & Fuel Management	26
HD Digital Radar	17
ransducers, up to 1 kW	30
Ethernetworks	27
/HF Marine DSC radios	22



Multifunction Echosounder

HDS Fishfinder Features

- Built-in Broadband Sounder
- Brilliant, New SolarMAX™ PLUS Display
- Ethernetworks and NMEA 2000[®] Performance Networking Options



NEW HDS-5x

The legendary Lowrance X-series lives on in this next-generation advancement in echosounding for the serious and professional angler. Its exceptionally enhanced features and performance are precisely revealed on a high-definition 5"/12.7 cm 256-colour SolarMAX™ PLUS display with adjustable screen and keypad backlighting. Best of all, Lowrance Broadband Sounder is now built in. So you can find more fish with greater sensitivity, higher definition, more display clarity, much less clutter and the best separation of fish from cover ever achieved by Lowrance.

Plus, you can quickly and easily save waypoints using the HDS-5x when networked with any HDS chartplotter or multifunction unit.

Model	Part
HDS-5x	
With 83/200 kHz transducer	140-27
With 50/200 kHz transducer	140-28
No transducer	140-29
Optional Accessories	Page
Optional Accessories Transducers, up to 1 kW	Page
•	
Transducers, up to 1 kW	30



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GPS Chartplotters



HDS Chartplotter Features

- Internal 16-channel GPS+EGNOS+MSAS Antenna
- New, Brighter SolarMAX™ PLUS Display
- Chartcard Options Now Include Navionics® Platinum+ with TurboView™

Part

17

27

22

140-04

HDS-10m with worldwide background map

Build Your Own System Options

NMEA 2000® & Fuel Management

HD Digital Radar

VHF Marine DSC radios

Ethernetworks

 Ethernetworks and NMEA 2000® Performance Networking Options, including Broadband Sounder



NEW HDS-8m Multifunction GPS Chartplotter

All the same features of the HDS-10 in an award-winning, right-sized package, featuring high-definition, Super VGA colour brilliance and clarity in a 8.4"/21.3 cm SolarMAX™ PLUS display.

NEW HDS-7m Multifunction GPS Chartplotter

Enjoy big performance and color detail in this largebut-compact system with a 6.4"/16.3 cm full VGA colour display, with the sunlight and wide-angle viewability of the new SolarMAX™ PLUS screen technologies. With rocker arrow keys and single keypad and SD card slot.

NEW HDS-5m Multifunction GPS Chartplotter

This excellent space-saving choice in the new HDS line of performance multifunction chartplotters is the ideal choice for installations on smaller boats. Its exclusive, high-resolution 5"/12.7 cm 256-colour SolarMAX™ PLUS display with adjustable backlighting makes it a viewing wonder, day or night. With rocker arrow keys and single keypad and SD card slot.

Model	Part
HDS-8m with worldwide background map	140-11
HDS-7m with worldwide background map	140-18
HDS-5m with worldwide background map	140-25
Build Your Own System Options	Page
NMEA 2000® & Fuel Management	26
	20
HD Digital Radar	17
HD Digital Radar	17





NEW HDS-10m Multifunction GPS Chartplotter

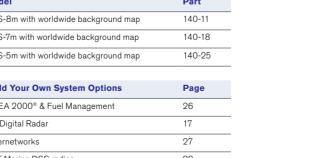
Lowrance presents a new dimension in multifunction chartplotters with large-scale, high-definition 10.4"/26.4 cm Super VGA colour viewing. The chartcards with two high-speed SD card slots.

new, brighter SolarMAX™ PLUS display renders brilliant detail in sunlight with the best wide-angle viewing available, with advanced pure-white LED screen/keypad backlighting. A unique new FlyWheel™ dial and command soft keys give you control with the greatest of ease and speed, and to precisely guide your way, a new high-sensitivity 16-channel GPS+EGNOS+MSAS antenna is internal. HDS built-in cartography features a new Navionics® worldwide background map. Plus, this HDS is now fully compatible with all Navionics® Platinum+ and Platinum

Advanced Networking & Expandability on All HDS Chartplotters

For building an onboard system, HDS provides truly advanced definition in multi-tasking compatibilities.

- High Definition Digital Radar with chart overlay
- Ethernetworks high-speed network sharing of sonar and radar
- NMEA 2000® connectivity for single- or multi-station boat and engine systems monitoring
- Fishfinder graphs with full functions control when networked with any HDS sounder



GlobalMap® GPS Chartplotter



GlobalMap® 5150C

A high-resolution colour Lowrance chartplotter with excellent features, precision and versatility in a full-size format to fit most boats. Non-NMEA 2000® or Ethernetworks.

- Special 5"/12.7 cm diag. 640V x 480H pixel TFT colour display for excellent viewing in sunlight and at wide angle
- · Adjustable cold-cathode screen and keypad backlighting
- 12-channel GPS with external antenna and spat cone pole mount
- Outputs NMEA 0183 to link with DSC VHF or autopilot
- Compatible with Navionics[®] Gold and Lowrance NauticPath[™] chartcards
- Stores up to 1,000 waypoints, 1,000 event markers, and 100 routes
- Saves up to 100 retraceable trails with up to 10,000 points in any trail
- Sealed and waterproof for the harshest marine environments

Model	Part
GlobalMap® 5150	116-32



High-Definition Digital Radar

Advanced Lowrance digital signal processing in high-definition radome choices for HDS. Fast, detailed radar detection of even small and distant targets with superb accuracy in dark, fog and rain alike. Compact, dependable and high-performance, both network with Ethernetworks for onboard radar display sharing.

LRA-1800

LRA-2400

HDS Digital Radome Features

Radar/Chart Overlay.

Interfaces charts and radar detail in a single, detail-rich display when coupled with an optional, compatible NMEA 2000® heading sensor.

Clearest Viewing.

Automatic Tune, Gain and Sea Clutter adjustment.

Smart STC.

Digital Sensitivity Time Control curves reject clutter with setting of return strength/distance thresholds.

Colour Recognition.

Colour palette choices for improved target distinction based on viewing conditions.



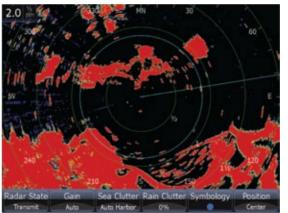
LOWRANCE

LRA-1800 Radome

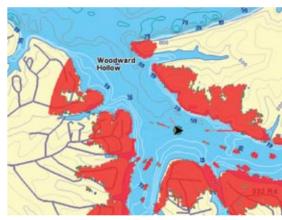
- 2 kW, 18"/46 cm scanner w/2 kW processor
- 5.2° horizontal beamwidth, 25° vertical
- Up to 24 nm range

NEW LRA-2400 Radome

- 4 kW, 24"/61 cm scanner w/2 kW processor
- 4° horizontal beamwidth, 25° vertical beamwidth
- Up to 48 nm range







Radar chart overlay display.

Simrad NMEA 2000® heading sensor options to activate radar/chart overlay display.		
Compass, includes 5M SimNet NMEA 2000® cable	22090187	
o Fluxgate Compass, includes 5M SimNet NMEA 2000® cable	22090195	
oth compasses above:		
A 2000® cable to Micro-C male	24005729	
et Joiner without Terminator	44172260	
PK-T-RD NMEA 2000® T-connector	119-79	

Model	Part
LRA-1800 for HDS	102-38
LRA-2400 for HDS	102-39

Radar range depends on fog, rain and other atmospheric conditions.

Legendary Echosounders

Find fish like a pro when you have a real performance edge with these legendary Lowrance echnosounders.

Legendary Lowrance Fish-Finding Features:

- Astounding LCD screen visibility in the brightest sunlight with monochrome FSTN and daylight colour TFT displays
- High-sensitivity receiver design enhances fish target acquisition and separation
- High-speed 200kHz Skimmer® transducer with built-in temp sensor and up to 60° of wide-scan fish detection
- GRAYLINE® or COLORLINE™ feature vastly improves target definition and defines bottom composition
- FishReveal™ enhanced display feature exposes fish targets hidden in cover and clutter (monochrome models)
- Adjustable Ping Speed with HyperScroll[™] for high-speed sounding
- FlashGraf™ combines scrolling sonar graph with LCD flasher for two ways of finding fish in one screen display
- FasTrack™ vertical bar flasher feature shows real-time returns and strength of echos
- ASP™ Advanced Signal Processing features automatic sensitivity adjustments for the best, clutter-free picture possible

Color Compact

X67c 200 kHz with New, Brighter Colour Viewing

Enjoy dazzling 256-colour fishfinder performance with incredible visibility in sunlight, now enhanced with a brighter screen, at an attractive price!

- New 3.5"/8.9 cm diag. 320Vx240H pixel, active matrix TFT display for exceptional sonar detail is now even more visible in sunlight
- White LED backlit screen and keypad
- 800W peak-to-peak power/100W RMS, depths to 6001/183 m

Model	Part
X67c	110-50





Network with NMEA 2000®



X135 200 kHz

The most popular and powerful, high-resolution Lowrance grayscale fishfinder ever!

- High-detail 5"/12.7 cm diag. Film SuperTwist display with 16-level grayscale definition and sharp 480x480 pixel resolution is perfectly sunlight-readable
- Advanced white LED backlit screen and keypad
- 4,000W peak-to-peak power/500W RMS, depths to 1,000'/305 m
- NMEA 2000® network connectivity



X52 200 kHz

A perennial best-buy favorite in a true fishfinder performer that's nicely-sized and nicely-priced to match.

- High-contrast 4"/10.2 cm diag. Film SuperTwist display has 16-level grayscale definition with 240Vx160H pixel resolution and superior viewing in direct sunlight
- Backlit screen and keypad
- 1,500W peak-to-peak power/188W RMS, depths to 800'/274 m
- NMEA 2000® network connectivity



X136 pf 50/200 kHz

The dual-frequency coastal model of the X135 for deeper salt water or downrigger tracking.

- High-detail 5"/12.7 cm diag. Film SuperTwist display with 16-level grayscale definition and sharp 480x480 pixel resolution is perfectly sunlightreadable
- Advanced white LED backlit screen and keypad
- 4,000W peak-to-peak power/500W RMS, depths to 2,5007/62 m @ 50 kHz
- Speed/distance sensor aids in precision trolling
- NMEA 2000® network connectivity



X59 pf 50/200 kHz

The dual-frequency coastal model of the X52 for deeper salt water or downrigger tracking.

- High-contrast 4"/10.2 cm diag. Film SuperTwist display has 16-level grayscale definition with 240Vx160H pixel resolution and superior viewing in direct sunlight
- Backlit screen and keypad
- 2,400W peak-to-peak power/300W RMS, depths to 1,500'/457 m @ 50 kHz
- High-speed dual-frequency 50/200 kHz Skimmer® transducer with built-in temp sensor
- NMEA 2000® network connectivity

Model	Part
X135	117-01
X135 without transducer	117-13
X136 DF	117-02

110-61

110-63

www.lowrance.com

X59 DF

LOWRANCE www.i

Legendary Echosounders

Monochrome Marvels



X125 200 kHz

Uncompromising Lowrance features in a performance package for fishing success.

- High-detail 5"/12.7 cm diag. Film SuperTwist display with 16-level grayscale definition and sharp 480x480 pixel resolution is perfectly sunlight-readable
- Amber LED backlit screen and keypad
- 2,400W peak-to-peak power/300W RMS, depths to 900'/274 m



X50 DS 83/200 kHz

A versatile and innovative fishfinder with dual-search 83/200 kHz sounding for excellent shallow and deep water fish target marking.

- Dual-search Skimmer® transducer with built-in temp sensor and up to 120° of wide-coverage fish detection @83 kHz
- High-contrast 4"/10.2 cm diag. Film SuperTwist display with 4-level grayscale, 240Vx160H pixel resolution and superior viewing in direct sunlight
- Screen backlighting
- 1,500W peak-to-peak/188W RMS depths to 1,000/305 m



X96 200 kHz

The popular champion-grade choice with fullsize picture and sonar performance features at a fantastic price.

Model

X125

X96

Model

X50c ps

M52i S/MAP

Part

110-07

117-76

110-68

116-091

- High-contrast 5"/12.7 cm diag. Film SuperTwist display has 16-level grayscale definition with 320x320 pixel resolution and superior viewing in direct sunlight
- Incandescent backlit screen and keypad
- 1,500W peak-to-peak power/188W RMS, depths to 900'/274 m



M52i S/MAP 200 kHz Echosounder/GPS

Compact monochrome echosounder with built-in GPS for added navigation flexibility and safety. Excellent entry-level marine electronics at a great price.

- High-detail 4"/10.2 cm diag. Film SuperTwist display has 16-level grayscale definition with 240Vx160H pixel resolution and superior viewing in direct sunlight
- Screen and keypad backlighting
- 800W peak-to-peak power/100W RMS, depths to 600½183 m
- All standard Lowrance echosounder features except FishReveal™
- 12-channel GPS with internal antenna
- Stores up to 1,000 waypoints, 1,000 event markers, and 100 routes
- Saves up to 100 retraceable trails with up to 10,000 points in any trail
- Echosounder and GPS alarms



X67c offers a palette of multiple colour display modes to match water conditions, angler preference light levels for viewing and exposing fish targets.



Grayline® (Colorline™ on the X67c) helps separate fish and important structure from the actual bottom. Also, the width of the lighter band distinguishes between hard and soft bottoms.



FasTrack™ displays flasherstyle sonar returns in a narrow vertical column at the far right of the sonar screen. Especially useful for stationary fishing – at anchor or on ice.





VHF Marine Radios

For safety's sake, get in touch with the unbeatable quality, features, price and especially, the dependability of Lowrance VHF marine communications.



LVR-880 DSC VHF+FM Fixed-Mount Marine Radio

The first with an FM and NMEA® 2000 interface for Track-Your-Buddy®. Plus other premium features in an exceptional 25W/1W DSC marine radio.

Select Features

- VHF plus stereo FM radio receiver with powerful dual audio amps
- Dual NMEA 0183 and NMEA 2000® DSC integration
- Exclusive "Track-Your-Buddy" feature connects DSC hi-res
 position polling to Lowrance NMEA 0183 and NMEA 2000®
 chartplotters to show the location of up to three boating friends on
 the GPS chart display
- GREAT CIRCLE NAVIGATION to WAYPOINT with data transfer capability to chartplotters
- 200 waypoints with up to six character alpha/numeric naming
- Full Class D DCS automatic distress operation transmits/receives hi-res vessel position and group calls via NMEA 0183/NMEA 2000® output to chartplotters
- Channel naming
- Immediate GPS boat position and time when connected to a compatible GPS chartplotter
- ATIS function for inland waterways
- Simplified intercom with talkback plus built-in 22W hailer-horn
- Extra-large and bright custom full-matrix FSTN screen with lat/lon position display without scrolling
- Large 2.24" (57 mm) speaker for great audio output when running at high speed
- Six tactile microphone keys with powerful speaker and easy left- or right-handed control
- Rotary Channel control with press-to-enter
- Three favourite channel mode with scan
- Instant "GO" and MOB key
- 3W external speaker jack
- Case and microphone fully waterproof (JIS 7 submersible)
- All International and country-specific channels
- Flush mount kit and dust cover included

What's Track-Your-Buddy?

This special function is for safety, teamwork, convenience, and even just for fun.

It's a great feature that allows you to connect your VHF DSC position polling with chartplotter to show the location of up to three boating friends on the chart display.

It's also easy to set up: You need a Lowrance LVR-880 fixed mount (or LHR-80 handheld) VHF, the MMSI number of your buddies' VHF DSC radios and a Lowrance HDS GPS chartplotter. Your VHF will regularly poll your buddies' positions and the chartplotter will regularly update their locations by MMSI number on your screen.

Track-Your-Buddy is a truly great aid in locational awareness of your friends in a group boating excursion.

Model	Part
LVR-880	022-22

Optional Accessories	
LVR-880	
VA-1 3½9 m stainless steel VHF antenna	022-25
VA-2 8'/2.4 m fiberglass VHF antenna	AA000352
VA-1LB Antenna mounting bracket	124-48
VA-MTG-Nylon quick-fit antenna mount	AA000223
VA-MTG-SS Stainless steel quick-fit antenna mount	AA000224



LVR-250 DSC VHF Fixed-Mount Marine Radio

Solid reliability and attractive features without the high price in a high-quality 25W/1W fixed-mount VHF marine radio with DSC.

Select Features

- Full Class D DCS automatic distress operation with hi-res position polling and group calling via NMEA 0183 output to chartplotters
- Immediate GPS boat position and time when connected to a compatible GPS chartplotter
- Large, clear FSTN screen with lat/lon position display without scrolling
- Channel naming
- ATIS function for inland waterways
- Weather alert
- Six tactile microphone keys with SCAN, powerful speaker and easy left- or right-handed control
- Rotary Channel control with press-to-enter
- Super-large 16 calling channel key
- Three favourite channel mode with scan
- Local/Distant feature eliminates interference
- Dual Watch
- Selectable Dual and TriWatch modes
- 3W external speaker and GPS interface
- Case and microphone fully waterproof (JIS 7 submersible)
- All International and country-specific channels
- Flush mount kit and dust cover included

What's DSC?

Digital Selective Calling (DSC) provides for instant distress calls and digital messaging, and is a component of the international Global Maritime Distress and Safety System (GMDSS).

When connected with a GPS, the time, precise location and unique ID of the vessel in trouble is automatically broadcast when the DISTRESS button is pressed. So simple, it allows even a non-experienced VHF user to send this continuous distress message with a one-button procedure.

With DSC you can privately hail another DSC-equipped vessel, or shore station, with a known MMSI (Maritime Mobile Service Identity) number. It will also "ring" and notify you that you have a private hail, and automatically switch you to the open channel your caller is waiting on.

You can also send and receive messages digitally with DSC -- between one selected vessel, a group of vessels or ship-to-shore – by dialing-in the MMSI number(s).

Model	Part
LVR-250	022-21

Optional Accessories	
LVR-250	
VA-1 3'/.9 m stainless steel VHF antenna	022-25
VA-2 872.4 m fiberglass VHF antenna	AA000352
VA-1LB Antenna mounting bracket	124-48
VA-MTG-Nylon quick-fit antenna mount	AA000223
VA-MTG-SS Stainless steel quick-fit antenna mount	AA000224

VHF Marine Radios

NEW LHR-80 VHF/GPS Handheld Marine Radio

Advanced and affordable 5/1W waterproof VHF handheld features built-in 12-channel GPS receiver, trackplotter, Great Circle navigation, and more. Plus it floats!

Select Highlights

- Floatable and totally JIS-7 waterproof
- Huge 128x128 pixel bit-mapped LCD backlit display for maximized
- Built-in 12-channel GPS receiver with lat/lon output, trackplotter display, local waypoint icons and cursor control
- Great Circle navigation display with 500 waypoints with up to six character alpha/numeric naming
- Plotter with 12 range scales and 360 point of track history with interval control
- Instant "GO" and MOB key
- Long-life (up to 8+ hours), high-capacity 1400mAh Li-Polymer battery with rapid charger
- Unique Get-Buddy feature
- Dual Watch channel monitoring

Radio Detail

- All International and country-specific channels
- Selectable 5/1W transmit power
- NMEA 0183 output while on cradle
- ATIS function for inland waterways
- Volume, Channel and SQL Control with Up/Down
- Great Circle navigation to Waypoint
- Three favourite channel mode with scan
- Instant 16 key
- Illuminated Function Keys
- Keylock
- Power Saving Circuitry
- Battery indicator with 1-4 bars
- RTCM SC-101 compliance
- SMA antenna connector
- Power Source: 7.4 vDC (7.4V 1400mAh Li-Polymer battery pack)
- Battery Life:
 - 8 Hours (5W Power on 5%:5%:90% ratio, GPS on) 9 Hours (5W Power on 5%:5%:90% ratio, GPS off)
- Dimensions:
- 2.7"W x 5.5"H x 1.5"D (68 x 140 x 38 mm)
- Display Size: 1.5"W x 1.5"H (38.7 x 38.7 mm)
- Weight: .70 lbs. (.318 kg)

Includes

- Radio with 1400mAh Li-Ion battery pack
- Rubber Duck Antenna
- Desk Top Charging Cradle
- 220V AC to 12V DC 800mA Power Adapter
- Wrist strap
- Belt clip
- Operation Manual





LHR-80





Networking & Digital Gauges

Lowrance NMEA 2000® Networking

Lowrance offers a full array of non-proprietary antennae, gauges and sensors for NMEA 2000® networking for onboard systems monitoring. And only Lowrance offers the most choices, the most complete/configurable user interface for devices monitoring, and waypoint/sonar depth sharing on the network.



LGC-4000

NEW LGC-4000 GPS Receiver Antenna

A mighty new 16-channel NMEA 2000® GPS+EGNOS+MSAS antenna scores high in superior sensitivity for signal acquisition, with incredible position accuracy, in a new compact size that's easier to flush-mount.

- Works with any NMEA 2000® network for enhanced location accuracy and improved satellite-signal fix with reduced wandering
- Advanced performance for Lowrance HDS models with a true update rate of 5 times per second for the most accurate speed-over-ground readings
- New, compact 3"/75mm diameter module is just 1.3"/33 mm high and offers top mounting ease
- Rugged for all marine environments and fully waterproof
- Spat cone for pole mounting

LMF Multi-Function Gauges

Lowrance LMF models are NMEA 2000® certified digital gauges providing precision and versatility for real-time monitoring of engine and boat systems on the NMEA 2000® network. Plus, they're backed by the most extensive and affordable selection of smart sensors, including Fuel Flow for optimum fuel management economies.

- Allows building of custom screens with up to four different data readings in choice of analog-style graphics or alpha/numeric styles
- Shows data from engines and other sensors on 13 customizable screen
- Displays up to 16 pages with choice of static or manual and timer screen rotation
- Features standard or metric fuel economy readings when used in conjunction with EP-60R Fuel Flow sensor and speed sensor: EP70R Speed, EP90R Pressure or networked GPS antenna



LMF-400

- 2.5"/6.4 cm 132x132 pixel Film SuperTwist 4-level gravscale display with superb viewing in direct sunlight
- Advanced white LED screen backlighting
- Sealed and waterproof
- Fits standard 3-3/8" (86 mm) dia. hole

- 1.4"/3.6 cm 65x65 pixel Film SuperTwist 4-level grayscale display with superb viewing in direct sunlight
- Advanced white LED
- Sealed and waterproof to IPX-7
- mm) dia, hole

LMF-200

- screen backlighting
- Fits standard 2-1/8" (55

NEP-1 Ethernet Expansion Port

Ethernetworks

Advanced, plug-and-play and high-speed ethernet networking, with a choice of

performance module options to take you to the next level of fishing success.

A plug-and-play hub for high-speed data-sharing of multiple HDS, LCX, LMS and GlobalMap® products across the onboard network. Waterproof expansion ports resist corrosive marine environments. Unused expansion ports capped for future expansion.

- Robust 100-megabit switch for high-speed data
- Compatible with all HDS models, plus 2007 and later LCX, LMS, X and GlobalMap® models with yellow 5-pin ethernet connector
- Transmits sonar graphing display/control on GlobalMap® and HDS chartplotters when networked with sonar-equipped Lowrance units
- Rugged and fully waterproof to IPX-7

Multi-Station Network

- Connectivity for up to four compatible head units per expansion module
- Links with other Expansion Port-1 modules for added/ future expansion

LBS-1 Broadband Sounder Module

Making the best sonar even better, Broadband marks fish targets in, around and through structure, while operating at high speeds in challenging conditions, perfect for sounding shallows to extraordinary depths.

For use with a single Lowrance unit, or networked with a wide choice of compatible Lowrance models using the NEP-1 Expansion Port. Lowrance Broadband Sounder also converts any compatible chartplotter into a fishfinder/GPS chartplotter combo.

- Phenomenal separation of fish targets from structure. baitfish, thermoclines, clutter and bottom
- Improved underwater fish-holding structure identification; channels, rock piles, stump beds, submerged standing timber, drop-offs and more
- Exceptional fish-finding performance in any water/ weather situation, at all depths and at any speed
- Compatible with all 2007 and later LCX, LMS, X and GlobalMap® chartplotter models with yellow 5-pin ethernet connector
- Connects to any existing Lowrance transducer: Skimmer®, pod, shoot-thru and bolt-thru hull
- Automatic operation at any frequency selected: 50, 83 and 200 kHz
- Tested sounding depths to 5,000' / 1,525 m

Ethernetworks Cables

Rugged, high-speed, moisture- and solvent-resistant data cables withstand the toughest onboard marine environments. For Lowrance models with 5-pin yellow ethernet connector.

EP Electronic Probe Sensors

Only Lowrance offers the most NMEA 2000® sensors for vital boat data monitoring, each with a built-in "smart module," that's fully programmable for greater accuracy in data delivery.

EP-60R Fuel Flow

Configurable, for petrol only, one per engine. Sapphire bearing technology extends life and increases accuracy even at low flow. Outputs Fuel Flow, Fuel Used, Trip Fuel Used and Seasonal Fuel Used data to the network for fuel management. NMEA 2000® certified.

EP-65R Fluid Level

Compatible with standard U.S. and European sending units and a range of fluids: fuel; fresh, waste or black water; live well; and oil. Allows calibration for more accurate fluid level readings for boats with odd-shaped tanks. NMEA 2000® certified.

EP-70R Speed

Paddle wheel for speed and distance display; NMEA 2000® certified.

EP-80R Temperature

Configurable sensor for surface water, livewell, baitwell, cabin and engine room temp readings, -20°C to 80°C (-4° to 176°F). NMEA 2000® certified.

EP-80R TH Temperature

Configurable surface water temp sensor for thru-hull installation. NMEA 2000® certified.

EP-85R Storage Device

Accumulates and stores real-time engine data of fuel flow messages for up to three engines connected to a NMEA 2000® network for fuel range calculations and display, NMEA 2000® certification pending.

EP-90R Pressure

Outputs pitot speed or engine pressure readings - boost, coolant, fuel, engine or transmission oil. 100 psi max. NMEA 2000® certification pending.

Engine Interface Sensors

Cabled sensors for top outboard brands connects engines to NMEA 2000® networks to display engine data.

Yamaha (late model) Suzuki (DF Series) Evinrude (E-TEC)

NMEA 2000® Network Starter Kit

Here's how to easily start your own NMEA 2000® onboard network, allowing future expansion to add sensors and displays. NMEA 2000® compliant components include two T-connectors, 2-foot cable, 15-foot cable, two terminating resistors and network power cable.

N2K-EXP-RD-2 124-69



Networking & Digital Gauges

In-Dash Digital Gauges

LCF-1440 LCD Flasher

Enjoy real-time fishfinder performance with this feature-rich, easy-to-use LCD flasher. Features convenient in-dash fit, crisp glare-free viewing, high-speed operation, solid Lowrance reliability and a great low price.

- 200 kHz Skimmer® transom-mount transducer with built-in temp sensor with up to 60° fish detection coverage
- 800 w peak-to-peak / 100 w RMS; depths to 600' / 183 m
- Auto and manual depth ranges: 10, 20, 40, 80, 160, 320 and 640 feet
- Automatic Advanced Signal Processing (ASP™) operation
- Fits standard 3-3/8" (86 mm) diameter hole



Reliability, accuracy and simplified operation mark this digital depth gauge with water temp readings. Ideal for inland and in-shore coastal boats.

- High-contrast dot matrix display with advanced white LED backlighting
- 200 kHz Skimmer® transom-mount transducer with built-in temp sensor
- Depths to 700' / 213 m
- Shallow and deep depth alarms
- Temp readings to nearest 0.1° F
- Fits standard 2-1/8" (55 mm) diameter hole



Precise, sensitive water surface temp digital readings in an attractive, compact case.

- High-contrast dot matrix display with advanced white LED backlighting
- Temp readings to nearest 0.1° F
- Temp sensor included
- Fits standard 2-1/8" (55 mm) diameter hole

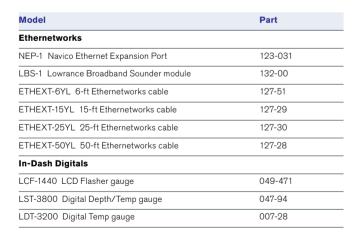




LST-3800



LDT-32



Model	Part
NMEA 2000®	
N2K-EXP-RD-2 Starter Kit	124-69
LGC-4000 16-channel 5Hz GPS+WAAS antenna	125-28
LMF-400 2.5" multifunction gauge with EP-60R sensor	049-62
LMF-400 1.4" multifunction gauge	049-541
LMF-200 2.5" multifunction gauge with EP-60R sensor	049-611
LMF-200 1.4" multifunction gauge	049-551
EP-60R Fuel Flow sensor	120-39
EP-65R Fluid Level sensor	120-41
EP-70R Speed sensor	120-49
EP-80R Temperature sensor	120-51
EP-80R TH Thru-hull Temperature sensor	120-53
EP-85R Storage Device	120-73
EP-90R Pressure sensor	120-29
Yamaha Engine Interface cable	120-37
Suzuki DF Series Engine Interface cable	120-55
Evinrude E-TEC Engine Interface cable	120-62



Performance Transducers

Lowrance integrates with the widest choice of high-sensitivity transducers to suit your boat, your preference and your expectations for superior performance in fishfinding and bottom sounding, at virtually any depth.

Transom-Mount Skimmer® Transducers

Popular, proven and so much better by design, they're patented. High-speed Skimmer® transom-mount transducers slice smoothly through water without sonar-interfering bubbles. So you enjoy ideal sounding performance and the cleanest sonar readings, even at speeds up to 70 mph/61 kts. Ideal for aluminum- and steel-hull outboard and stern-drive (I/O) boats, each Skimmer® includes a built-in sensor for water temp readings. Plus, the special "kick-up" bracket helps prevent accidental strike damage.



COVERAGE

200 kHz Skimmer®

The choice for inland freshwater and in-shore coastal saltwater angling. Built-in temp sensor and up to 120° of wide fish detection coverage with the added 83 kHz operation feature when used with HDS models. Also used for shoot-thru sounding (without temp readings) on fiberglass hulls with proper installation.

50/200 kHz Skimmer®

for shoot-thru-hull use.

For deeper salt water or downrigger

tracking with built-in temp sensor. Not



200 kHz Skimmer® Portable

For go-anywhere portability, and a handy option for the IceMachine™ portable, with easy-mounting suction cup bracket. Built-in temp sensor and up to same 120° coverage with HDS sounder connection. Not for high-speed use.



Versatile 200 kHz Pod **Transducers**

Expanded underwater coverage with the versatility of trolling motor mount, or shoot-thru operation on solid fiberglass hulls. Contour curve top and slot for hose clamp simplifies motor-mounting. Available with or without built-in temp sensor, all deliver wider fish detection coverage with high-sensitivity settings.



Deep-Sounding Transducers

Lowrance also connects with a wide selection of Airmar thru-hull and in-hull transducers made for ultimate deep-sounding performance while reducing or eliminating drag.



P79 In-Hull - 50/200 kHz, 600W RMS

Easily adjusts to hull deadrise angles up to 22° to ensure the beam is correctly oriented for accurate depth readings. The base is bonded to the hull and filled with liquid, and the transducer then attaches to the base with a twist lock. The sound waves travel more efficiently though the liquid, giving the best possible performance.



P319 Thru-Hull -50/200 kHz. 600W RMS

Features a 50/200 kHz, dualfrequency, single-ceramic element in a low-profile housing. Plastic, bronze or stainless steel models are available to accommodate all hull types with a flush design that minimizes drag.



M260 In-Hull -50/200 kHz. 1kW RMS

A high performance model for 300 W-1 kW echosounders with separate 50 kHz and 200 kHz elements for excellent deep-water performance and exceptional bottom and water column detail. Designed for bow stern or port starboard in-hull mounting, the narrow beam provides crisp image detail especially suited for fishing shelves, intricate bottom structures and wrecks with precise readings even at boat speeds above 20 knots.



B164 Thru-Hull -50/200 kHz, 1kW RMS

Tilted Element™ technology lets you step up to higher 1kW power without a fairing. Flush mounted with less than 6.35 mm (0.25") hull exposure, it can sit on trailer rollers and bunks with no damage at all. Perfect for fast, trailered tournament sport fishing vessels who cannot have a high-performance fairing, the internal tilted ceramic array focuses the perfect vertical beam with maximum energy directly below your boat.



B60 Thru-Hull – 50/200 kHz, 600W RMS

The bronze B60-12° provides a vertical beam without a fairing. An internal ceramic element is tilted to provide built-in deadrise compensation providing excellent echo returns for more accurate depth readings. The nearly flush housing minimizes drag.



B258 Thru-Hull -50/200 kHz, 1kW RMS

Excellent sportfishing performance for a moderately priced 1 kW transducer. The economical, four-ceramic element design provides deep water sounding with superb target and bottom definition. Airmars high-performance fairing recommended for the best possible results.



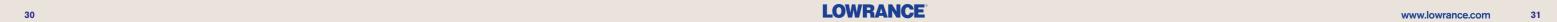
B260 Thru-Hull -50/200 kHz, 1kW RMS

One of the best high-performing 1 kW bronze thru-hull for 300 W to 1 kW echosounders, Separate 50 kHz and 200 kHz elements for unparalleled deep water performance and unmatched bottom and water column detail. Provides crisp image detail for fishing shelves, intricate bottom structures and wrecks.



B744V Thru-Hull -50/200 kHz, 600W RMS

Drill only one hole in your boat with this TRIDUČER® multisensor model that features depth, speed, and temperature in a single housing. Single ceramic 50/200 kHz dual frequency element for excellent shallow water detail and deep water bottom tracking. Extended stem length provides extra height for steep deadrise vessels or thick cored hulls.



iFINDER® Handheld GPS



iFINDER® HUNT c

This popular IPX7 waterproof GPS handheld is perfect for any sportsman who needs highly precise navigation with digital compass and barometric altimeter with weather alerts.

- Scout mode and 17 hunting icons let you set hunting perimeter and mark game signs, blind/stand locations, etc.
- Mapping options including Lowrance FreedomMaps™ and NauticPath™ plus Navionics® Gold displayed on 3"/7.6 cm diag., 256-colour, hi-res LED screen
- Voice notes tied directly to waypoints help you record navigation/hunting tips
- Electronic compass, barometric altimeter with weather alerts
- Waterproof to IPX7 standards
- Up to 16 hours operation on two AA batteries (not included)



iFINDER® EXPEDITION c

When you need a reliable, color handheld GPS with built-in compass and altimeter that is easy on the budget, there is no better product than the iFINDER® EXPEDITION c. This fully loaded GPS is perfect for hiking, backpacking, hunting and works with a wide variety of optional maps including Lowrance FreedomMaps™ and NauticPath™ plus Navionics® Gold.

- 16 Channel GPS+EGNOS+MSAS
- 2.83"/7.2 cm diag., 320Vx240H pixel, 256-colour TFT display
- Compatible with high-detail, plug-andplay map cards
- Unique "Scout Mode" to create zones and perimeter borders
- 63 colour icons to mark waypoints
- Up to 1,000 waypoints, 1,000 event markers, and 100 routes
- Submersible (IPX7)
- Compact 2.5"V x 5.6"H x 1.2"D (6.4 x 14.2 x 3 cm) size
- 12V DC power adapter included
- Up to 14 hours operation on two AA batteries (not included)



iFINDER® H2O c

This popular IPX7 waterproof handheld is compatible with a wide range of plug-and-play maps, including Lowrance FreedomMaps™ and NauticPath™ plus Navionics® Gold.

- 16 Channel GPS+EGNOS+MSAS
- 2.83"/7.2 cm diag., 320Vx240H pixel, 256-colour TFT display
- Compact 2.5"V x 5.6"H x 1.2"D (6.4 x 14.2 x 3 cm) size
- Stores up to 1,000 waypoints, 1,000 event markers, and 100 routes
- Saves up to 100 retraceable trails with up to 10,000 points in any trail
- Submersible (IPX7)
- 12V DC power adapter included
- Up to 14 hours operation on two AA batteries (not included)



iFINDER® H20

Step up to a handheld GPS that is affordable and reliable, yet allows you to customize your experience with plug-and-play maps, including Lowrance FreedomMaps™ and NauticPath™ plus Navionics® Gold. A great choice for the sports enthusiast whether traveling on the water or on the trail.

- 12 channel GPS+EGNOS+MSAS provides fast and continuous location and navigation
- 3"/7.6 cm diag., backlit, grayscale display
- Compatible with high-detail, plug-andplay map cards
- Stores up to 1,000 waypoints, 1,000 event markers, and 100 routes
- Saves up to 100 retraceable trails with up to 10,000 points per trail
- Submersible (IPX7)
- 12V DC power adapter included
- Up to 12 hours operation on two AA batteries (not included)



iFINDER® GO2

This portable and affordable handheld GPS is perfect for general outdoor activities or to use as a reliable back-up to a primary marine navigation system. Responsive, accurate, easy to use and loaded with features in a compact waterproof package.

- 16 channel GPS+EGNOS+MSAS provides fast and continuous location and navigation
- 2"/5 cm diag. backlit, grayscale display
- 64 MB onboard memory with regional background maps where available
- 42 graphic icons to mark 1000 waypoints and track up to 1000 routes or 100 retraceable trails
- Submersible (IPX7)
- Up to 50-hour operation on two AA batteries (not included)





Part
112-661
112-861
112-671
112-151
112-492

Optional Accessories	
iFINDER® (except GO2)	
HL-10 Protective slip case with belt clip	093-20
VHT-2 Alkaline battery tray – LHR-20 (batteries not included)	113-46
MB-12 Handlebar mounting bracket with arm and cradle	113-50

Cartography

Superb coverage with powerful plug-and-play electronic charting choices for supreme navigational awareness. Simply insert into your compatible Lowrance chartplotter for the greatest of detail.

Navionics®

Lowrance gives a greater dimension in charting selections for all HDS chartplotters with full Navionics® compatibility -- the world's largest and most experienced provider in worldwide electronic marine cartography.

Platinum+

The most advanced technology and best imaging available in multidimensional charts provide complete coast pilot, high-resolution top-down photo/chart overlay, full-view panoramic pictures, improved 3D view and high-definition fishing detail included on the same chartchip. www.navionics.com for more.

Platinum

The first and most award-winning multi-dimensional electronic charts for chartplotters, each provide a whole new perspective for navigation with complete coastal pilots and satellite imagery overlays and 3D view and panoramic pictures, plus free high-definition fishing detail is now included. www.navionics.com for more.

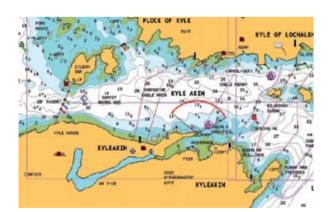
Platinum Charts Powered by TurboView™

As embedded software in all Lowrance HDS chartplotter models, TurboView™ greatly enhances the display of all Navionics Gold and Platinum chartcards for supreme situational awareness. The result is seamless zooming and with Platinum transition between 2D and 3D modes, improved shadowing for greater depth perception, real-time overlay of nav data on 3D contour profiles, and a special FlyThru feature that integrates high-speed chart panning and zooming with photography for a new and helpful boater perspective.

Navionics $^{\! \otimes}$ chart/mapping compatibility with free HDS software upgrade in Q1 2009.

Gold

Navionics® Gold electronic charts are a fundamental tool of navigation, with features tuned for serious fishing and cruising such as wrecks, port services enhancements, major coastal roads and high-definition fishing detail showing near-shore and offshore structure, ledges and canyons. www.navionics.com for more.



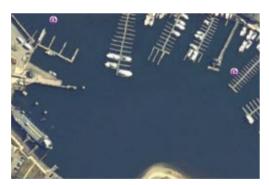
Navionics® Gold



Navionics® Platinum+ 2D View



Navionics® Platinum+ 3D View



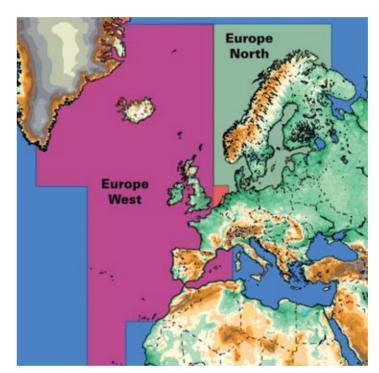
Navionics® Platinum+ Aerial View.

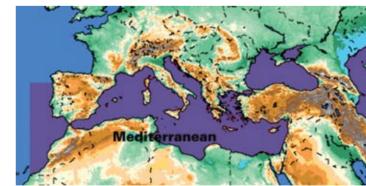
Lowrance

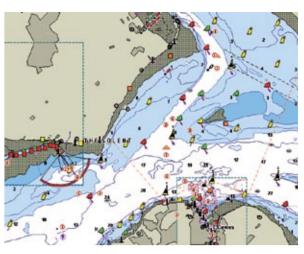
Excellence in coverage, detail and choices with amazing affordability in comprehensive coastal coverage.

Lowrance NauticPath™ International

When going global, you can experience excellence in 2D marine charting, preloaded on SD memory card for your Lowrance GPS. Presenting high-level NauticPath™ offshore/coastal navigational electronic chart detail and information, with worldwide coverage choices, at an affordable price point compared to any other. Each NauticPath™ International choice is preloaded on SD memory card for plug-and-play convenience with your compatible Lowrance GPS. For exhibits on individual chartcard coverage areas, visit the Mapping pages of www.lowrance.com.







Cartography Options	Part
Il Navionics® charts	www.navionics.com
lauticPath International	
NP-Europe West	108-195
NP-Europe North	108-196
NP-Mediterranean	108-197
NP-Africa/Middle East/India	108-198
NP-SE Asia/Pacific Island	108-199
NP-Australia/New Zealand	108-200
NP-Japan/East Asia	108-201

Specifications

HDS











	HDS-10	HDS-8	HDS-7	HDS-5	HDS-5x
Display	10.4" Diag. (26.4 cm) 16-bit colour SolarMAX™ PLUS TFT	8.4" Diag. (21.3 cm) 16-bit colour SolarMAX™ PLUS TFT	6.4" Diag. (16.3 cm) 16-bit colour SolarMAX™ PLUS TFT	5" Diag. (12.7 cm) 16-bit colour SolarMAX™ PLUS TFT	5" Diag. (12.7 cm) 16-bit colour SolarMAX™ PLUS TFT
Resolution	Super VGA 600V x 800H pixels	Super VGA 600V x 800H pixels	Full VGA 480V x 640H pixels	High Contrast 480V x 480H pixels	High Contrast 480V x 480H pixels
Backlighting	Pure white LED screen/ keypad adjusts to zero dim	Pure white LED screen/ keypad adjusts to zero dim	Pure white LED screen/ keypad adjusts to zero dim	Fluorescent cold cathode adjustable screen/keypad	Fluorescent cold cathode adjustable screen/keypad
Power	250W/32W RMS actual; 30,000W/3,750W RMS analog equivalent	250W/32W RMS actual; 30,000W/3,750W RMS analog equivalent			
Operating Frequency	50/200 kHz or 83/200 kHz	50/200 kHz or 83/200 kHz			
Depth Capability	To 5,000' (1,524 m) Based on transducer*	To 5,000' (1,524 m) Based on transducer*			
Operating Voltage	10-17V DC	10-17V DC	10-17V DC	10-17V DC	10-17V DC
GPS Receiver/ Antenna	Internal high-sensitvity 16-channel GPS + WAAS+ EGNOS+ MSAS	None			
Waypoint Management	5,000 waypoints, 200 routes, 10 trails up to 12,000 points each; specific icons for navigation and fishing	5,000 waypoints, 200 routes, 10 trails up to 12,000 points each; specific icons for navigation and fishing	5,000 waypoints, 200 routes, 10 trails up to 12,000 points each; specific icons for navigation and fishing	5,000 waypoints, 200 routes, 10 trails up to 12,000 points each; specific icons for navigation and fishing	Waypoints with network only
Communication	NMEA 2000®, NMEA 0183, Lowrance Ethernetworks compatible	NMEA 2000®, NMEA 0183, Lowrance Ethernetworks compatible			
Languages	Choice of 23	Choice of 23	Choice of 23	Choice of 23	Choice of 23
Memory Card Slots	Two (2) SD/MMC slots for cartography, or recording sonar and navigation data	Two (2) SD/MMC slots for cartography, or recording sonar and navigation data	One (1) SD/MMC slots for cartography, or recording sonar and navigation data	One (1) SD/MMC slots for cartography, or recording sonar and navigation data	None
Case Size	8.85" H (22.5 cm) 12.28" W (31.2 cm) 3.63" D (9.2 cm) Sealed and waterproof, suitable for saltwater use	7.76" H (19.7 cm) 10.59" W (26.9 cm) 3.68" D (9.4 cm) Sealed and waterproof, suitable for saltwater use	6.46" H (16.4 cm) 8.78" W (22.3 cm) 3.46" D (8.8 cm) Sealed and waterproof, suitable for saltwater use	5.72" H (14.5 cm) 7.24" W (18.4 cm) 3.46" D (8.8 cm) Sealed and waterproof, suitable for saltwater use	5.72" H (14.5 cm) 7.24" W (18.4 cm) 3.46" D (8.8 cm) Sealed and waterproof, suitable for saltwater use

HDS Chartplotter













HDS Chartplotter				Glob	palMap®
	HDS-10m	HDS-8m	HDS-7m	HDS-5m	GlobalMap® 5150c
Display	10.4" (26.4 cm) 16-bit colour SolarMAX™ PLUS TFT	8.4" (21.3 cm) 16-bit colour SolarMAX™ PLUS TFT	6.4" (16.3 cm) 16-bit colour SolarMAX™ PLUS TFT	5" (12.7 cm) 16-bit colour SolarMAX™ PLUS TFT	5" (12.7 cm) 16-bit colour TFT
Resolution	Super VGA 600V x 800H pixels	Super VGA 600V x 800H pixels	Full VGA 480V x 640H pixels	High contrast 480V x 480H pixels	Full VGA 640V x 480 pixels
Backlighting	Pure white LED screen/ keypad adjusts to zero dim	Pure white LED screen/ keypad adjusts to zero dim	Pure white LED screen/ keypad adjusts to zero dim	Fluorescent cold cathode adjustable screen/keypad	Fluorescent cold cathode adjustable screen/keypad
Operating Voltage	10-17V DC				
GPS Receiver/ Antenna	Internal high-sensitivity 16-channel GPS +WAAS+ EGNOS+ MSAS	External 12-channel GPS			
Waypoint Management	5,000 waypoints, 200 routes, 10 trails up to 12,000 points each; specific icons for navigation and fishing	5,000 waypoints, 200 routes, 10 trails up to 12,000 points each; specific icons for navigation and fishing	5,000 waypoints, 200 routes, 10 trails up to 12,000 points each; specific icons for navigation and fishing	5,000 waypoints, 200 routes, 10 trails up to 12,000 points each; specific icons for navigation and fishing	1,000 waypoints, 100 routes; up to 100 trails with up to 10,000 points per trail; specific icons for navigation and fishing
Communication	NMEA 2000*, NMEA 0183, Lowrance Ethernetworks compatible	NMEA 2000®, NMEA 0183, Lowrance Ethernetworks compatible	NMEA 2000®, NMEA 0183, Lowrance Ethernetworks compatible	NMEA 2000®, NMEA 0183, Lowrance Ethernetworks compatible	NMEA 0183
Languages	Choice of 23	Choice of 23	Choice of 23	Choice of 23	Choice of 10
Memory Card Slots	Two (2) SD/MMC slots for cartography, or recording sonar and navigation data	Two (2) SD/MMC slots for cartography, or recording sonar and navigation data	One (1) SD/MMC slots for cartography, or recording sonar and navigation data	One (1) SD/MMC slots for cartography, or recording sonar and navigation data	One (1) SD/MMC slots for cartography, or recording sonar and navigation data
Case Size	8.85" H (22.5 cm) 12.28" W (31.2 cm) 3.63" D (9.2 cm) Sealed and waterproof, suitable for saltwater use	7.76" H (19.7 cm) 10.59" W (26.9 cm) 3.68" D (9.4 cm) Sealed and waterproof, suitable for saltwater use	6.46" H (16.4 cm) 8.78" W (22.3 cm) 3.46" D (8.8 cm) Sealed and waterproof, suitable for saltwater use	5.72" H (14.5 cm) 7.24" W (18.4 cm) 3.46" D (8.8 cm) Sealed and waterproof, suitable for saltwater use	5.4" H (13.6 cm) 6.9" W (17.6 cm) 3.4" D (8.6 cm) Sealed and waterproof, suitable for saltwater use

^{*} Actual depth capabilities depend on transducer configuration and installation, bottom composition and water conditions. All sonar units typically read deeper in fresh water than salt water.

Echosounder Detail

















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Detail				MA .	9		-	3	•
	X135	X136c DF	X125	X96	X50 ps	X67 c	X52	X59 DF	M52i
Display	5" Diag. (12.7 cm) Film SuperTwist	5" Diag. (12.7 cm) Film SuperTwist	5" Diag. (12.7 cm) Film SuperTwist	5" Diag. (12.7 cm) Film SuperTwist	4" Diag. (10.2 cm) Film SuperTwist	3.5" Diag. (8.9 cm) 256-colour Active Matrix TFT	4" Diag. (10.2 cm) Film SuperTwist	4" Diag. (10.2 cm) Film SuperTwist	4" Diag. (10.2 cm) Film SuperTwist
Resolution	480V x 480H (230,400 pixels)	480V x 480H (230,400 pixels)	480V x 480H (230,400 pixels)	320V x 320H (102,400 pixels)	240V x 160H (38,400 pixels)	320V x 240H (102,400 pixels)	240V x 160H (38,400 pixels)	240V x 160H (38,400 pixels)	240V x 160H (38,400 pixels)
Backlighting	White LED Screen - Keypad	White LED Screen - Keypad	Amber LED Screen - Keypad	Incandescent Screen - Keypad	Incandescent Screen - Keypad	White LED Screen - Keypad	White LED Screen - Keypad	White LED Screen - Keypad	White LED Screen - Keypad
Power	4,000W 500W RMS	4,000Watts 500W RMS	2,400W 300W RMS	1,500W 188W RMS	1,500W 188W RMS	800W 100W RMS	1,500W 188W RMS	2,400W 300W RMS	800W 100W RMS
Frequency	200 kHz	50/200 kHz	200 kHz	200 kHz	83/200 kHz (Dual-Search)	200 kHz (Freshwater or Saltwater Packs)	200 kHz	50/200 kHz	200 kHz
Depth	To 1,000' (305 m) w/200 kHz	To 2,500' (762 m) w/50 kHz	To 900' (274 m) w/200 kHz	To 800' (244 m) w/200 kHz	To 1,000' (305 m) w/83 kHz	To 600' (183 m) w/200 kHz	To 600' (183 m) w/200 kHz	To 1,500' (457 m) w/50 kHz	To 600' (183 m) w/200 kHz
Operating Voltage	10-17V DC	10-17V DC	10-17V DC	10-17V DC	10-17V DC	10-17V DC	10-17V DC	10-17V DC	10-17V DC
Water Temp	Standard (w/select transducers)	Standard (w/select transducers)	Standard (w/select transducers)	Standard (w/select transducers)	Standard (w/select transducers)	Standard (w/select transducers)	Standard (w/select transducers)	Standard (w/select transducers)	Standard (w/select transducers)
Key Features	GRAYLINE™, ASP™, Split- Screen Zoom, HyperScroll™, FishReveal™, NMEA 2000®	GRAYLINE™, ASP™, Split- Screen Zoom, HyperScroll™, FishReveal™, NMEA 2000®	GRAYLINE™, ASP™, Split- Screen Zoom, HyperScroll™, FishReveal™	GRAYLINE™, ASP™, Split- Screen Zoom, HyperScroll™, FishReveal™	GRAYLINE™, ASP™, Split- Screen Zoom, HyperScroll™	COLORLINE™, ASP™, Split- Screen Zoom, HyperScroll™	GRAYLINE™, ASP™, Split- Screen Zoom, HyperScroll™, FishReveal™, NMEA 2000®	GRAYLINE™, ASP™, Split- Screen Zoom, HyperScroll™, FishReveal™, NMEA 2000®	Same as X50 ps, plus internal 12-channel GPS
Alarms	Deep/Shallow/ Fish/Zone	Deep/Shallow/ Fish/Zone	Deep/Shallow/ Fish/Zone	Deep/ Shallow/Fish	Deep/ Shallow/Fish	Deep/ Shallow/Fish	Deep/ Shallow/Fish	Deep/ Shallow/Fish	Sonar and GPS alarms
Speed/ Distance	Optional	Standard (with select transducers)	Optional	Optional	None	Optional	Optional	Standard (w/select transducers)	Optional
Case Size	6.9" W (17.6 cm) 5.4" H (13.8 cm) 3.4" D (8.6 cm) Sealed and waterproof	6.9" W (17.6 cm) 5.4" H (13.8 cm) 3.4" D (8.6 cm) Sealed and waterproof	6.9" W (17.6 cm) 5.4" H (13.8 cm) 3.4" D (8.6 cm) Sealed and waterproof	6.9" W (17.6 cm) 5.4" H (13.8 cm) 3.4" D (8.6 cm) Sealed and waterproof	4.3" W (10.8 cm) 5.8" H (14.7 cm) 2.5" D (6.4 cm) Sealed and waterproof	4.3" W (10.8 cm) 5.8" H (14.7 cm) 2.5" D (6.4 cm) Sealed and waterproof	5.4" W (13.6 cm) 5.2" H (13.2 cm) 2.6" D (6.6 cm) Sealed and waterproof	5.4" W (13.6 cm) 5.2" H (13.2 cm) 2.6" D (6.6 cm) Sealed and waterproof	4.3" W (10.8 cm) 5.8" H (14.7 cm) 2.5" D (6.4 cm) Sealed and waterproof



Specifications

VHF







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VHF/GPS Characteristics	Fixed Mount LVR-880	Fixed Mount LVR-250	Portable Combo LHR-80
Dimensions (HWD) and weight – w/o Bracket, Mike, or antenna	3.8" x 7.1" x 6.1" 96 x 180 x 156mm 3.7 lbs (1.66 kg)	2.8" x 6.3" x 6.1" 72 x 160 x 156mm 2.8 lbs (1.29 kg)	5.50" x 2.67" x 1.50" 139 x 67.8 x 38.1 mm 0.70 lbs (0.318 kg) with battery
LCD Display (HW)	Backlighted FSTN Full bitmapped (64 x 128) 1.3" x 2.6"; 33 x 71mm	Backlighted FSTN 1.0" x 1.8"; 26 x 46mm 4 line x 12 Character + Icons	Backlighted FSTN Full bitmapped (128 x 128) 1.52" x 1.52"; 38.7 x 38.7mm
Channel Bank and Select Operation	All International and country-specific channels	All International and country-specific channels	Al International and country-specific channels with channel naming
Hand Mike Features	PTT button, Hi/Lo, CH16, 3CH, channel up/ down, built-in speaker and backlighting	PTT button, Hi/Lo, CH16/, 3CH, channel up/ down, built-in speaker and backlighting	-
Power Supply/Battery Life	13.8 vDC±15%	13.8 vDC±15%	7.4V – 1400 mAh Li-Polymer >8 hr (5W 5%, 5%, 90% ratio, GPS on). 230ma in Standby >9 hr (1W 5%, 5%, 90% ratio GPS off). 70ma in Standby With battery level indicator
Audio Output Power	$2W$ - 8Ω @ 10% distortion 94dBA internal speaker $4W$ - 4Ω @ 10% distortion with external speaker	$2W$ - 8Ω @ 10% distortion 89dBA internal speaker $4W$ - 4Ω @ 10% distortion with external speaker	250mW internal speaker
Digital Selective Calling - DSC	Full Class D	Full Class D	_
DSC Call Types	All calls are available - including high resolution position polling and Track-Your-Buddy	All calls are available - including high resolution position polling	-
Directory/MMSI Entry	20 Individual + Group MMSI + User MMSI	20 Individual + Group MMSI + User MMSI	ATIS MMSID
Get Buddy	_	_	YES
Call Logs	20 Individual/10 Distress	20 Individual/10 Distress	_
GPS Input + Output	NMEA 0183/NMEA 2000®	NMEA 0183	NMEA 0183 output while on cradle
Hailer with Intercom Talkback/ External Speaker	Powerful 22W Hailer with Auto/manual sounds and listen-back, plus external speaker jack	No Hailer - has external speaker jack	-
Navigation with Waypoints and MOB	200 Waypoints with instant GO control	_	500 Waypoints with instant GO control. One track with 360 Trackpoints/control. Selection to show nearest 5 Waypoints
FM Stereo Radio	USA/EU/AUS bands	_	_
Local/Distance	YES	YES	YES
3 Favourite Channel Select/Scan	YES	YES	YES
12db Sinad Sensitivity	.25uV (distant)/2.5uV (local)	.25uV (distant)/2.5uV (local)	.25uV
Other Standard Features	Flush mount kit and sun cover	Flush mount kit and sun cover	IT FLOATS. Built-in 12-channel GPS receiver with lat/lon output, Great Circle navigation trackplotter display, local waypoint icons and cursor

All VHFs share the following features:

Tx Power: 25W/1W fixed, 5W/1W portable + indicators **Current Drain:** 6A at 25W/1.5 at 1W fixed mount **Battery monitor:** Yes – level indicator with portable **Compass safe distance:** 0.45m – fixed mount **Temperature Range:** 5 to 122°F (-15 to 50°C)

Waterproof Rating: JIS7

Antenna Connector: SO-239; SMB – portable

Transmitter Protection: Open/Short circuit of antenna **Modulation Distortion:** <4% at 1kHz with ±3Khz deviation

Frequency Control: PLL with ±10ppm stability

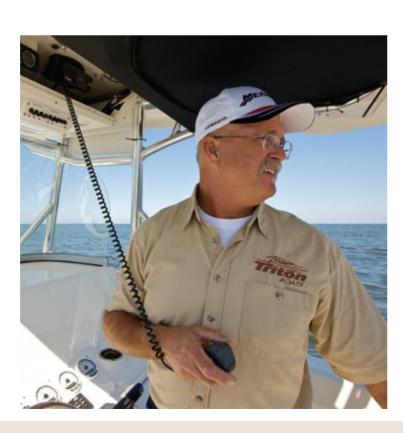
Max frequency deviation: ±5Khz

Dual Watch Monitoring: Yes

Residual Noise Level: More than -40dB unsquelched

Adjacent Noise Level: More than 65dB Spurious Response: More than 65dB

Intermodulation Rejection Ratio: More than 65dB Residual Noise Level: More than -40dB unsquelched



iFINDER® Handheld GPS











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	iFINDER® HUNT c	iFINDER EXPEDITION™ c	iFINDER® H ₂ 0 c	iFINDER® H ₂ 0	iFINDER® GO2
Receiver	16-channel GPS+WAAS	16-channel GPS+WAAS	16-channel GPS+WAAS	12-channel GPS+WAAS	16-channel GPS+WAAS
Display	2.83" Diag. (7.2 cm) 256-color TFT 320V x 240H pixel white LED backlit	2.83" Diag. (7.2 cm) 256-color TFT 320V x 240H pixel white LED backlit	2.83" Diag. (7.2 cm) 256-color TFT 320V x 240H pixel white LED backlit	3" Diag. (7.6 cm) Film SuperTwist 240V x 180H pixel white LED backlit	2" Diag. (5 cm) Film SuperTwist 200V x 140H pix amber LED backlit
Chart Options	MMC/SD memory card slot to display FreedomMaps™, NauticPath™ and Navionics®	MMC/SD memory card slot to display FreedomMaps™, NauticPath™ and Navionics®	MMC/SD memory card slot to display FreedomMaps™, NauticPath™ and Navionics®	MMC/SD memory card slot to display FreedomMaps™, NauticPath™ and Navionics®	None
Key Features	Compass, Barometer, Hunt Mode, Scout Mode, MP3, Voice Notes, 10 languages, NMEA 0183, Back-up memory	Compass, Barometer, Hunt Mode, Scout Mode, MP3, Voice Notes, 10 languages, NMEA 0183, Back-up memory	10 languages, NMEA 0183, Back-up memory	10 languages, NMEA 0183, Back-up memory	10 languages, NMEA 0183, Back-up memory
Position Points	Up to 2,000 waypoints & 1,000 event markers	Up to 1,000 waypoints & 1,000 event markers	Up to 1,000 waypoints & 1,000 event markers	Up to 1,000 waypoints & 1,000 event markers	Up to 1,000 waypoints & 1,000 event markers
Routes/Trails	Up to 100 routes & 100 plot trails (10,000 points/trail)	Up to 100 routes & 100 plot trails (10,000 points/trail)	Up to 100 routes & 100 plot trails (10,000 points/trail)	Up to 100 routes & 100 plot trails (10,000 points/trail)	Up to 100 routes & 100 plot trails (10,000 points/trail)
Graphic Icons	63, + 17 exclusive hunting icons	63	63	42	42
Zoom	40 ranges, .02-4,000 miles 32 ranges .02-4,000 km	40 ranges, .02-4,000 miles 32 ranges .02-4,000 km	40 ranges, .02-4,000 miles 32 ranges .02-4,000 km	40 ranges, .02-4,000 miles 32 ranges .02-4,000 km	40 ranges, .02-4,000 miles 32 ranges .02-4,000 km
Case Size	2.5" W (6.4 cm) 5.6" H (14.2 cm) 1.2" D (3 cm)	2.5" W (6.4 cm) 5.6" H (14.2 cm) 1.2" D (3 cm)	2.5" W (6.4 cm) 5.6" H (14.2 cm) 1.2" D (3 cm)	2.5" W (6.4 cm) 5.6" H (14.2 cm) 1.2" D (3 cm)	2.12" W (5.4 cm) 5.15" H (13.1 cm) 1.24" D (3.15 cm)
Input Power	3 vDC (2 AAs) or 5-35 vDC accessory power cable	3 vDC (2 AAs) or 5-35 vDC accessory power cable	3 vDC (2 AAs) or 5-35 vDC accessory power cable	3 vDC (2 AAs) or 5-35 vDC accessory power cable	3 vDC (2 AAs) or 5-35 vDC accessory power cable
Battery Life (w/1-second updates)	Up to 16 hours	Up to 14 hours	Up to 14 hours	Up to 12 hours	Up to 50 hours
Weight (w/batteries)	8.7 oz (247 g)	8.7 oz (247 g)	8.7 oz (247 g)	8.7 oz (247 g)	5.36 oz (152 g)

Radar





	LRA-1800	LRA-2400
Туре	Radome	Radome
Size/Weight	18 in. (45 cm)/ 9 lbs. (4.2 kg)	24 in. (60 cm)/ 22 lbs. (10 kg)
Output Power	2 kW	4 kW
Max. Range Scale	24 nm	48 nm
Beamwidth (H/V)	5.2°/25°	4°/25°
Voltage Required	10.8 – 15.6 vDC	10.8 – 42 vDC
Rotation Speed	27 RPM	27 RPM



^{**} Specifications are subject to change without notice



About Navico

Navico is the parent company to five leading marine electronics brands: B&G, Eagle, Lowrance, Northstar and Simrad. Navico has approximately 2,500 employees globally and is headquartered in Oslo, Norway. The company has development and manufacturing facilities in the USA, Mexico, the UK, Norway and New Zealand.

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