

Echosounder/GPS Chartplotter

HDS[®] High Definition System

Award-winning brilliance in display, form and functions.



HDS-10 Multifunction Echosounder/GPS Chartplotter

Massive, high-definition 26.4 cm/10.4 in., 600V x 800H pixel Super VGA colour detail. Brighter SolarMAX™ PLUS display for superior sunlight and wider-angle viewing. Pure-white LED screen/keypad backlighting fully adjusts to zero-dim for night viewing.

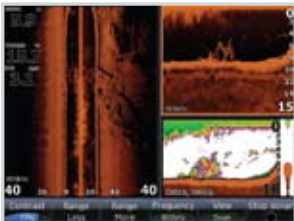
Displays showing optional StructureScan™ sonar imaging expansion option.



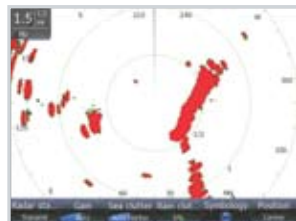
HDS-8 Multifunction Echosounder/GPS Chartplotter

All the same high-definition, Super VGA colour clarity viewing of the HDS-10 in an award-winning, 21.3 cm/8.4 in. display package size.

HDS Performance Expansion Options



StructureScan™ sonar imaging
Picture-perfect echosounding detail with true panoramic viewing – left, right and straight down – with plug-and-play ethernet networking. Pages 14, 16-17



Broadband Radar™ – The greatest advancement in radar since radar itself. For tune-free, close-in, high-detail navigation without harmful radiation. A radome that is easy and safe to mount anywhere, with ethernet networking connectivity. Pages 14, 18-19



HD Digital Radar – Advanced, high-definition radomes with digital signal processing for target detection with superb accuracy in dark and foul weather. Dependable compact high-performance that networks with ethernet. Pages 14, 20



AIS – AIS focuses your awareness on all vessels in your vicinity and helps reduce the risk of collision by exchanging safety data between them.

Switch to HDS® and Get the Big Picture

HDS-10 and HDS-8: Award-winning and wildly popular among serious anglers for stunning detail and performance. Larger, high-definition displays accommodate maximum viewing efficiencies even in the tightest spaces. What you see is phenomenal. How you see it comes from the finest Lowrance echosounder and GPS chartplotter innovations for finding fish and precisely finding your way. Technology so advanced, it's easy to operate, and even easier to expand with a host of multifunction performance options. Incredible capabilities and performance at a modest price puts HDS-10 and HDS-8 in a league of their own.

Model	Part
HDS-10	
No Transducer	000-0140-03
HDS-8	
No Transducer	000-0140-08

Standard HDS® Features Set a Higher Standard.

Award-winning Broadband Sounder™

Advanced digital processing technology renders peerless, high-detail echosounder target displays in cover, thermoclines, wrecks or structure, and all water conditions, to depths of 1,000 m and more, even at high vessel speeds.

Internal 16-channel GPS antenna

With the newest high-sensitivity technology, the built-in 16-channel GPS+EGNOS+ MSAS GPS antenna lends spot-on location accuracy for HDS navigation, while it also shares GPS data to other displays when connected to any onboard NMEA 2000® network.

Stunning SolarMAX™ Viewing

Exclusive SolarMAX™ PLUS colour display renders the best viewing possible in the brightest sunlight, and at the widest angles of any marine electronics, whilst super-white LED backlighting is adjustable to zero-dim for night vision protection.

Better and Faster Display Control

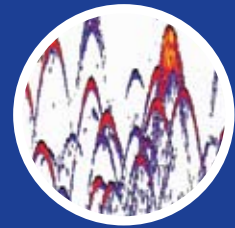
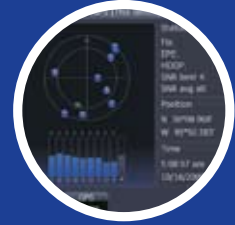
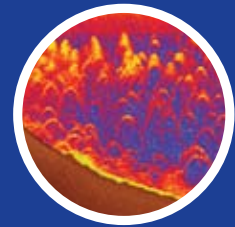
Unique FlyWheel™ scroll dial and display-dedicated soft command keys give the fastest and easiest access to functions adjustment and control. Special, intuitive graphic + text user interface displays are easy to grasp and speed access and control of feature functions selection.

SD Memory Card Conveniences

The Lowrance innovation of bringing a waterproof media card port to marine electronics is further refined with HDS, with up to two slots to load Navionics® chartcards for display, record/save vital data, and to upload future HDS software features updates downloaded free from the Lowrance website.

Out-of-the-Box Networking

HDS features full plug-and-play connectivity for multifunction networking performance expansions – with high-speed ethernet for Broadband Radar™ or HD radar options, and NMEA 2000® for the LGC-4000 5 Hz GPS antenna, plus a wide array of gauges and sensors to optimize vessel operation and fuel economies.



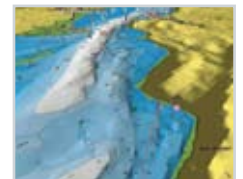
High-Accuracy GPS Antenna – Enhanced and incredible accuracy in a 5 Hz 16-channel GPS+EGNOS+MSAS module with true position updates five (5) times every second when connected to HDS. Networks with NMEA 2000®. Pages 15, 22



Vessel Systems & Fuel Management – From Lowrance innovation comes the most comprehensive selection of NMEA 2000® network gauges and sensors for improved vessel systems management and fuel economies. Pages 15, 22-23



VHF Communications – Remarkable quality, features, dependability and value in a choice of fixed-mount and handheld VHF marine communications. Pages 15, 28-30



Navionics® Charting – HDS is fully compatible with the best-in-class Navionics® Platinum+ and Platinum chartcard options, as well Gold and legacy cards. Page 34

HDS[®] Ethernet Expansion

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 feature ethernet networking for onboard radar display sharing.

HD 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.



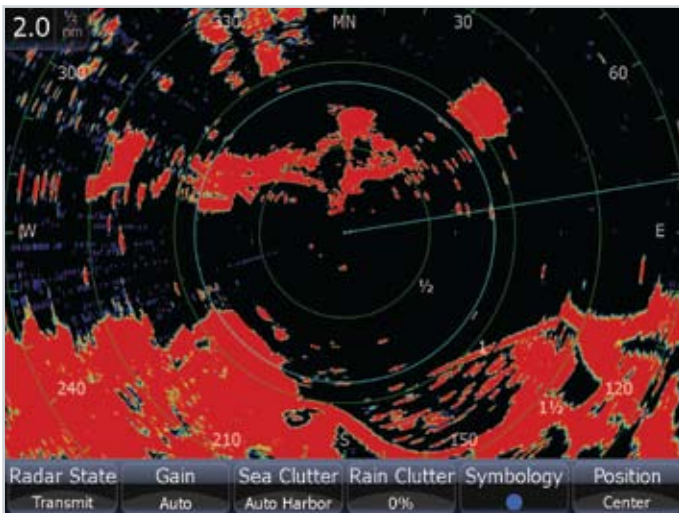
LRA-1800 Radome

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

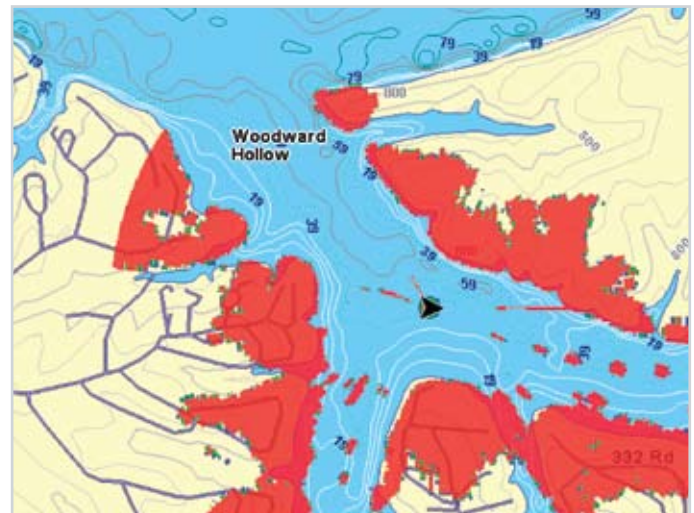


LRA-2400 Radome

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



HDS high-definition radar display.



Radar chart overlay display.

Model	Part
LRA-1800 for HDS	000-0121-38
LRA-2400 for HDS	000-0121-39

NMEA 2000 [®] heading sensor options to activate radar/chart overlay display.	
FC40 Fluxgate Compass, includes 5 m SimNet NMEA 2000 [®] cable	22090187
FC42 Rate Gyro Fluxgate Compass, includes 5 m SimNet NMEA 2000 [®] cable	22090195
Required for both compasses above:	
Adaptor Kit connects heading sensor to network, with SimNet-to-NMEA 2000 [®] male adaptor, SimNet-2 joiner, T connector	000-0127-45

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

Specifications

HDS® Echosounder/ Chartplotter



	HDS-10	HDS-8	HDS-7	HDS-5	HDS-5x
Display	10.4" Diag. (26.4 cm) 16-bit colour SolarMAX™ PLUS TFT	8" Diag. (20.3 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 Output	250W/32W RMS actual; 30,000W/3,750W RMS analog equivalent	250W/32W RMS actual; 30,000W/3,750W RMS analog equivalent	250W/32W RMS actual; 30,000W/3,750W RMS analog equivalent	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	50/200 kHz or 83/200 kHz	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*	To 5,000' (1,524 m) Based on transducer*	To 5,000' (1,524 m) Based on transducer*	To 5,000' (1,524 m) Based on transducer*
Operating Voltage	10-17 vDc	10-17 vDc	10-17 vDc	10-17 vDc	10-17 vDc
GPS Receiver/ Antenna	Internal high-sensitivity 16-channel GPS + WAAS+ EGNOS+ MSAS	Internal high-sensitivity 16-channel GPS + WAAS+ EGNOS+ MSAS	Internal high-sensitivity 16-channel GPS + WAAS+ EGNOS+ MSAS	Internal high-sensitivity 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, ethernet networking compatible	NMEA 2000®, NMEA 0183, ethernet networking compatible	NMEA 2000®, NMEA 0183, ethernet networking compatible	NMEA 2000®, NMEA 0183, ethernet networking compatible	NMEA 2000®, NMEA 0183, ethernet networking 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-10m	HDS-8m	HDS-7m	HDS-5m
Display	10.4" (26.4 cm) 16-bit colour SolarMAX™ PLUS TFT	8" (20.3 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
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
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
Operating Voltage	10-17 vDc	10-17 vDc	10-17 vDc	10-17 vDc
GPS Receiver/ Antenna	Internal high-sensitivity 16-channel GPS + WAAS+ EGNOS+ MSAS	Internal high-sensitivity 16-channel GPS + WAAS+ EGNOS+ MSAS	Internal high-sensitivity 16-channel GPS + WAAS+ EGNOS+ MSAS	Internal high-sensitivity 16-channel GPS + WAAS+ EGNOS+ MSAS
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
Communication	NMEA 2000®, NMEA 0183, ethernet networking compatible	NMEA 2000®, NMEA 0183, ethernet networking compatible	NMEA 2000®, NMEA 0183, ethernet networking compatible	NMEA 2000®, NMEA 0183, ethernet networking compatible
Languages	Choice of 23	Choice of 23	Choice of 23	Choice of 23
Memory Card Slots	Two (2) SD/MMC slots for car- tography, or recording sonar and navigation data	Two (2) SD/MMC slots for car- tography, or recording sonar and navigation data	One (1) SD/MMC slots for car- tography, or recording sonar and navigation data	One (1) SD/MMC slots for car- tography, 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

Specifications

Echosounder Detail



	X50 DS	X67c	X52	X59 DF	M52i
Display	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	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	Incandescent Screen - Keypad	White LED Screen - Keypad	White LED Screen - Keypad	White LED Screen - Keypad	White LED Screen - Keypad
Power	1,500W 188W RMS	800W 100W RMS	1,500W 188W RMS	2,400W 300W RMS	800W 100W RMS
Frequency	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/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
Water Temp	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™	COLOURLINE®, 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 ds, plus internal 12-channel GPS
Alarms	Deep/Shallow/Fish	Deep/Shallow/Fish	Deep/Shallow/Fish	Deep/Shallow/Fish	Sonar and GPS alarms
Speed/Distance	None	Optional	Optional	Standard (w/select transducers)	Optional
Case Size	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

Radar



	LRA-1800	LRA-2400	BR24
Type	Pulse Radome	Pulse Radome	FMCW Radome
Size/Weight	18 in. (45 cm)/ 9 lbs. (4.2 kg)	24 in. (60 cm)/ 22 lbs. (10 kg)	19 in. (48.8 cm)/ 16 lbs. (7.4 kg)
Output Power	2 kW	4 kW	100 mW
Max. Range Scale	24 nm	48 nm	24 nm
Beamwidth (H/V)	5.2°/25°	4°/25°	5.2°/30°
Voltage Required	10.8 – 15.6 vDC	10.8 – 42 vDC	9 – 31.2 vDC
Rotation Speed	27 RPM	27 RPM	24 RPM



** Specifications are subject to change without notice