



## **LT-8100S GMDSS VHF DSC CLASS A RADIO**

designed and built for the demanding and rough environment at sea

## LT-8100S VHF

The LT-8100S GMDSS VHF DSC Class A radio is a Lars Thrane A/S product supporting all GMDSS VHF radio requirements for SOLAS vessels. The LT-8100S VHF is Wheelmark approved and fully compliant and tested towards the newest SOLAS and IMO Type approval, Carriage, and Performance requirements.

## LT-8100S VHF IN SHORT

The LT-8100S VHF radio is a '2-box' solution, consisting of a Control Unit and a Transceiver Unit. The Transceiver Unit is powering the entire radio system and has connection blocks for internal and external wiring. The Handset PTT is connected on the back side of the Control Unit. Additional Handset PTT, Control Units, or Remote Controls must be connected via the Transceiver Unit.

- **2-box solution**
- **User interface via push buttons**
- **Intuitive DSC implementation**
- **Voice and DSC receiver**
- **No need for extra interconnection boxes**
- **Up to 4 additional Handset PTT, Remote Controls, or Control Units**

## PRODUCT DESCRIPTION

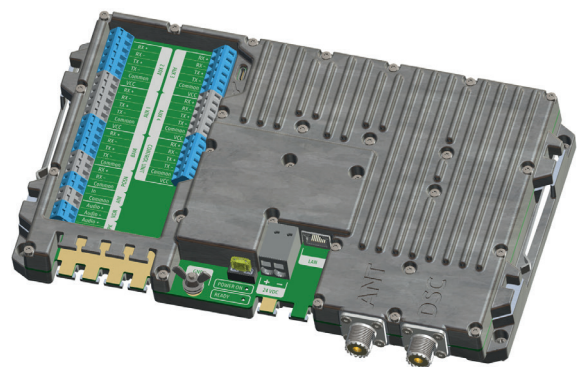


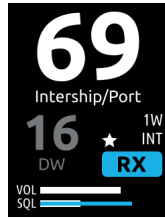
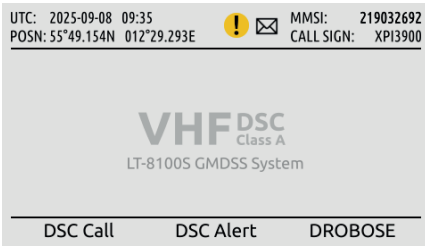
The LT-8100S VHF radio is offered in a box that includes Control Unit, Handset PTT, Cradle, Transceiver Unit, and connection cable. Power cable to Transceiver Unit, antennas, and coaxial cables must be ordered separately. The LT-8100S VHF radio can be configured from a PC Service Tool connecting the Service Cable to either the Control Unit or Transceiver Unit.

## VHF TRANSCEIVER UNIT

The LT-8130S VHF Transceiver Unit supports:

- 1 x VHF Control Unit
- 4 x AUX (additional equipment)
- 1 x BAM / 1 x POSN
- 1 x Alarm IN (discrete)
- 1 x VDR / 1 x External Speaker
- 1 x LAN (future use)
- 1 x Service Port (USB-C)
- 2 x Antenna conn.





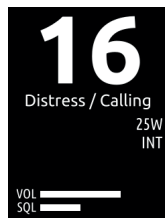
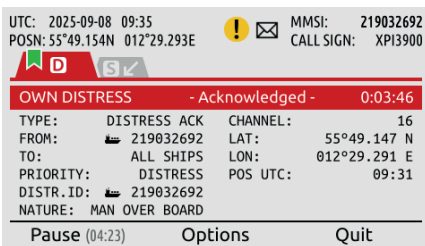
## General and Radio Displays

The LT-8100S VHF radio has a two display design, consisting of the general and the radio display. The radio display will always show the radio channel number including all related information. The general display will show everything about the DSC functionality, settings, and details. The general display will be used for the initial configuration of the radio.



## Activating Distress

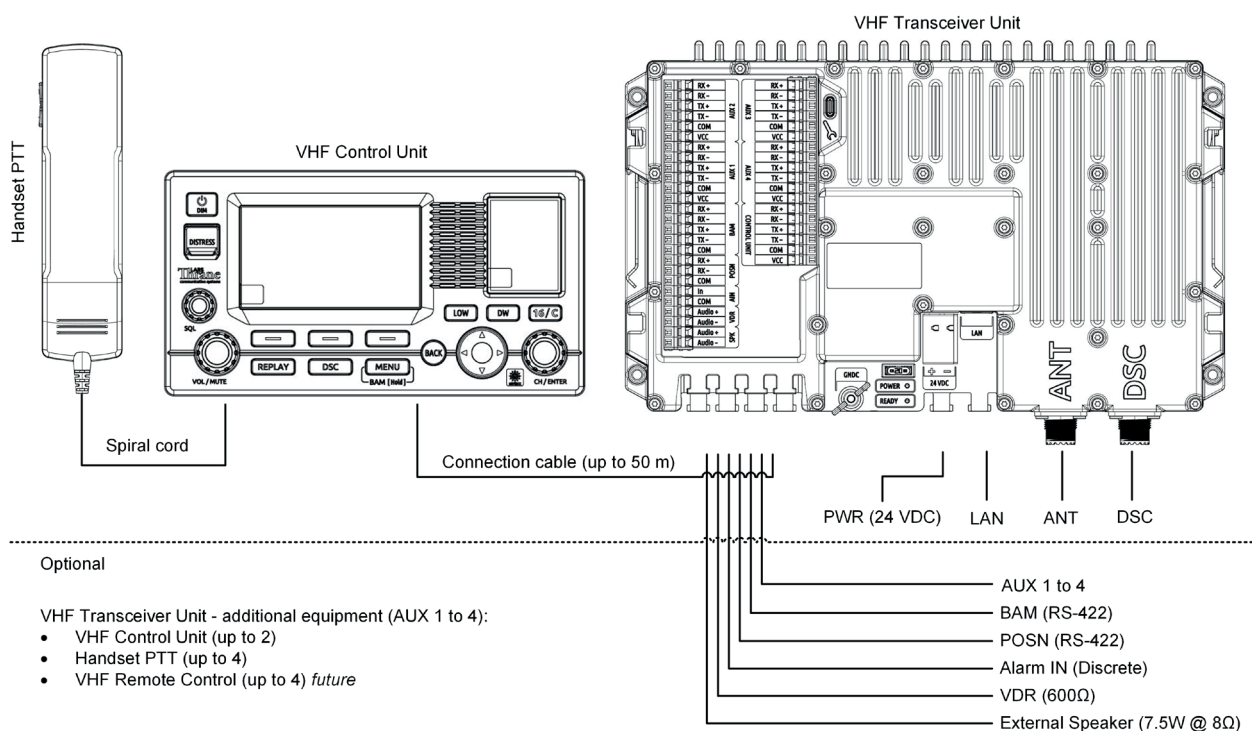
Distress Alert can be activated by pushing the DISTRESS button on the front of the control unit. A Distress Alert will be broadcasted on channel 16 once activated. The Distress button must be pushed for a minimum of 3 seconds.



## Distress Alert

The Distress Alert will be shown with details in the general display. The radio display will show channel 16 and the radio transmitter will change to 25W of transmitted power. Options are available (e.g. selecting Nature of Distress). Up to 7 DSC sessions can simultaneously be handled in the radio. Also, the active DSC session is clearly marked.

# SYSTEM CONFIGURATION



# SPECIFICATIONS

## LT-8100S VHF

Certification & standards	Maritime CE, FCC, ISED, RED, MED (Wheelmark), RoHS 2
Vibration, operational	IEC 60945
Vibration, shock	Half sine 20 g/11 ms
Compass Safe Distance, std.	0.3 - 1.4 m (1.0 - 4.6 ft)
Compass Safe Distance, steer.	0.3 - 0.9 m (1.0 - 3.0 ft)
Power consumption: operating mode, max	120 W
Power consumption: Idle	15 W

## LT-8110S VHF Control Unit

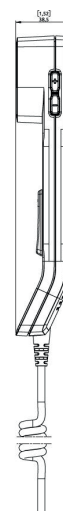
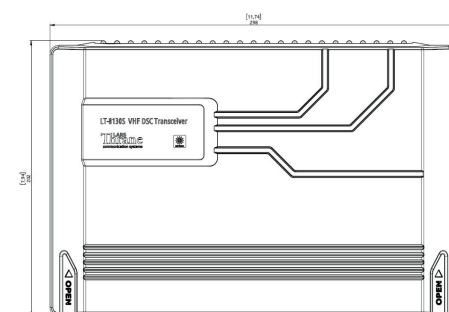
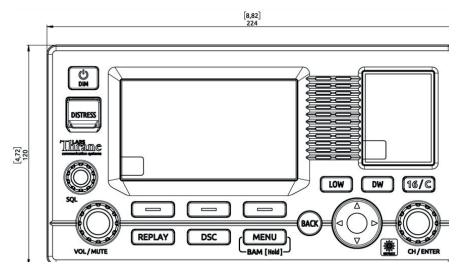
Weight	0.68 kg (1.49 lbs)
Dimensions	224.0 x 120.0 x 79.0 mm (8.82 x 4.72 x 3.11 in)
Temperature, operational	-15°C to +55°C (+5°F to +131°F)
IP rating, dust and water	IP32
Interfaces	Handset PTT, Transceiver Unit, and Service Port (USB-C)

## LT-8120 Handset PTT

Weight (handset + wire)	0.32 kg (0.70 lbs)
Dimensions	52.8 x 208.8 x 38.5 mm (2.08 x 8.22 x 1.52 in)
Temperature, operational	-15°C to +55°C (+5°F to +131°F)
IP rating, dust and water	IP32

## LT-8130S VHF Transceiver Unit

Weight	2.24 kg (5.19 lbs)
Dimensions	298.0 x 202.0 x 50.0 mm (11.74 x 7.94 x 1.97 in)
Temperature, operational	-15°C to +55°C (+5°F to +131°F)
IP rating, dust and water	IPX0
Interfaces	VHF Control Unit, AUX 1 to 4 (additional equipment), BAM (RS-422), POSN (RS-422), Alarm IN (discrete), VDR (600Ω), External Speaker (7.5W @ 8Ω), 1 x LAN, Service Port (USB-C), DC input (24 VDC), chassis ground, 2 x Antenna (UHF PL-259 connector, 50 Ω)
Input Voltage	24 VDC (5.0 A)
Warranty	2 year
Maintenance	None



## IN THE BOX

LT-8110S VHF Control Unit	P/N: 51-105082
LT-8120 Handset PTT	P/N: 51-103206
LT-3121 Cradle	P/N: 51-101181
LT-8130S VHF Transceiver Unit	P/N: 51-105084
Bracket Mount, Control Unit	P/N: 91-100771
Handset Cable Relief Kit	P/N: 91-103215
Transceiver Unit Connection Cable, 5m	P/N: 91-103217
User & Installation Manual	P/N: 95-103208

## ACCESSORIES

Flush Mount, Control Unit	P/N: 91-100772
VHF Antenna (3dB) - AC Antenna CX4, incl. N239F	P/N: 91-103210
VHF Antenna (6dB) - AC Antenna CX3 5/8, incl. N239F	P/N: 91-103211
Universal Mast Mount. SS316. Ø26-46mm (N299F)	P/N: 91-103212
Heavy Duty Mast Mount. Solid brass. Ø25-74mm (N270F)	P/N: 91-103213
Transceiver Unit Connection Cable, 5m, 20m, and 50m	
Coaxial Cable Ø10.3mm (up to 50m)	
Crimping Tool for Coaxial Cable Ø10.3mm	



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