

## MARINE VHF RADIOTELEPHONE

Model **FM-4800**

Model **FM-4850**

### *The Ultimate 5-in-1 Tool of VHF Radios*

*GPS, AIS, Loud Hailer, NMEA2000 and DSC calling, all-in-one*



FM-4800



Handset HS-4800



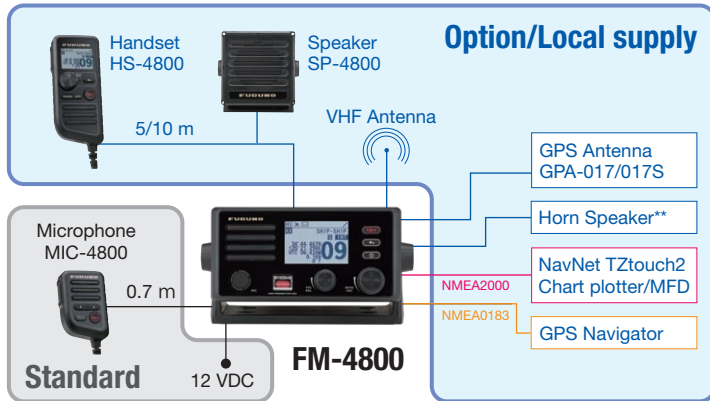
FM-4850 (Black Box type)

- ▶ Built-in 72 Channels GPS (FM-4800)
- ▶ Built-in AIS receiver
- ▶ 25 W/1 W output power
- ▶ Class D DSC
- ▶ Loud Hailer/Fog Horn
- ▶ NMEA2000 and NMEA0183 networking
- ▶ Dual Station with optional handset
- ▶ ATIS mode for inland waterway
- ▶ 10 weather channels
- ▶ Fully waterproof (IP67)
- ▶ Up to 3 Handsets HS-4800/Speakers SP-4800 connectable (FM-4850)

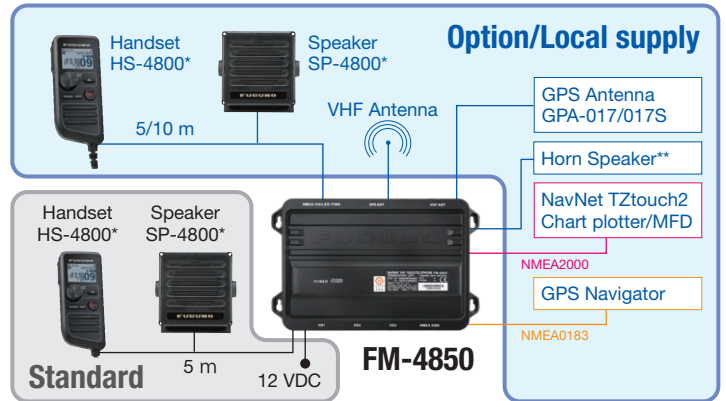


# Everything needed for Hailing and Calling in one unit

## FM-4800 Configuration



## FM-4850 Configuration



\*Up to 3 handset/speakers connectable  
\*\* Local Supply

## SPECIFICATIONS

### 1. GENERAL

Channels	International, USA and Canada
Frequency stability	Within $\pm 1.5$ kHz
Communication system	Simplex / Semi-duplex
Antenna impedance	50 ohms
Display	Monochrome, 192 x 128 dot (FM-4800, HS-4800)

### 2. TRANSMITTER

Frequency Range	156.025 MHz to 162.000 MHz
Output power	25 W max., 1 W at power reduction
Frequency deviation	$\pm 5$ kHz max.
Spurious emission	Standby: less than 2 nW Transmit: less than 0.25 $\mu$ W
Modulation	16K0G3E (F3E) Voice, 16K0G2B (F2B) DSC

### 3. RECEIVER

Frequency range	155.500 MHz to 162.0375 MHz
Sensitivity	+6 dB $\mu$ V (e.m.f.) or less (SINAD 20 dB)
Channel selectivity	70 dB or more
Spurious response	70 dB or more

### 4. DSC

Protocol	Class D DSC
Sensitivity	0 dB $\mu$ V (e.m.f.) or less (BER < 1%)
Channel selectivity	70 dB or more
Spurious response	70 dB or more

### 5. AIS RECEIVER

Receiver frequency (CH)	161.975 MHz (AIS1), 162.025 MHz (AIS2)
Sensitivity	-107 dBm or less (PER < 20%)
Channel selectivity	70 dB or more
Spurious response	70 dB or more

### 6. GPS RECEIVER

Receiving frequency	1575.42 MHz
Number of channel	72 channels
Accuracy	10 m
Position fixing time (cold start)	120 sec typical
Position update interval	1 sec

### 7. LOUD HAILER / FOG HORN

Output power	30 W max. (4 ohms)
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### 8. INTERFACE

Number of port	NMEA0183 2 ports (IN: 1, OUT: 1), NMEA2000 (3LEN) 1 port
NMEA0183 sentence	DTM, GGA, GLL, GNS, RMA, RMC
Input	DSC, DSE, GLL, RMC, VDM
Output	
NMEA2000 PGN	
Input	059392/904, 060160/416/928, 065240, 126208, 127258, 129026/029/044
Output	059392, 060928, 126208/464/993/996/998, 129025/026/029/038/039/040/041/540/793/794, 129795/797/798/801/802/808/809/810

### 9. POWER SUPPLY

12.0 VDC (-10%, +30%) 5.0 A Max
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### 10. ENVIRONMENT

Ambient temperature	-15°C to +55°C
Relative humidity	93% or less at +40°C
Degree of protection	IP67 (FM-4800, FM-4850, HS-4800, SP-4800)

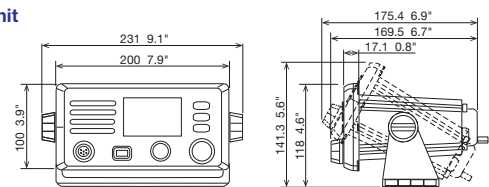
### EQUIPMENT LIST

FM-4800	FM-4850
<b>Standard</b>	<b>Standard</b>
Transceiver Unit FM-4800	Transceiver Unit FM-4850
Microphone MIC-4800	Handset HS-4800
Installation materials	Speaker SP-4800
<b>Option</b>	<b>Option</b>
Handset HS-4800	Handset extension cable (5 m)
Speaker SP-4800	Installation materials
Handset extension cable (5/10 m)	<b>Option</b>
GPS Antenna GPA-017/017S	Handset HS-4800
	Speaker SP-4800
	Handset extension cable (5/10 m)
	GPS Antenna GPA-017/017S

### Transceiver Unit

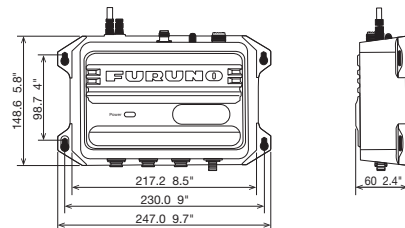
#### FM-4800

1.7 kg 3.8 lb



#### FM-4850

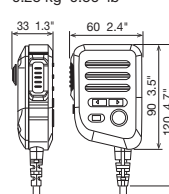
1.75 kg 3.85 lb



### Microphone (FM-4800 only)

#### MIC-4800

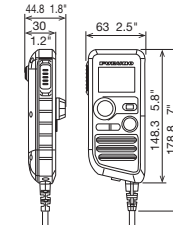
0.25 kg 0.56 lb



### Handset (FM-4800 only)

#### HS-4800

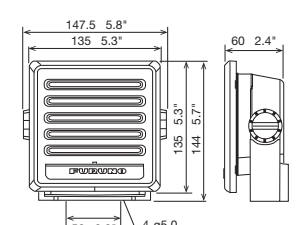
0.3 kg 0.66 lb



### Speaker (FM-4800 only)

#### SP-4800

0.76 kg 1.69 lb



Beware of similar products

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE