Ray54E VHF Radio νi

Certificate No.

RT044

Raymarine[®]

EC Declaration of Conformity

We Raymarine Limited **Anchorage Park** Portsmouth Hampshire **England P035TD**

declare, under our sole responsibility, that the products identified in this declaration, and to which this declaration relates, are in conformity with the essential requirements of European Parliament and Council

1999/5/EC on radio equipment and telecommunication terminal equipment and the mutual recognition of their conformity.

| Product Name: | Raymarine RAY 54E VHF Radio with Class |
|---------------|--|
| | "D" DSC |

E43024 (White) Product Number(s): E43025 (Black)

The products have been assessed to Conformity Procedure Annex IV of the Directive and by application of all or part of the following standard(s):

Non-Harmonised Standards(s): EN 60945, EN 301 025-1, EN 300 698-1 **IEC 62238**

The satisfactory assessment of the above, allows a presumption of Conformity to the following Harmonised standards:

Harmonised Standard(s): EN 301 025-2, EN 300-025-3, EN 300 698-2 EN 300 698-3, EN 301 843-1, EN 301 843-2

The assessment is consistent with a Technical Construction File showing conformity with the essential requirements of the Directive and has been reviewed by Notified Body No. 0168

The product is labelled with the CE conformity marking, the identification number of the Notified Body and class identifier.

Signatory: Name **Adil Abbas International Compliance Manager** Title

Company Name **Raymarine Limited** Company Address **Anchorage Park** Portsmouth, Hampshire **England PO3 5TD**

Signature

Date May 2004

Appendix A: Specifications

General

| Size (H x W x D) | 3.11" (79 mm) x 6.57" (167 mm) x 6.73" (171mm) | |
|---|---|--|
| Weight | 2.87 lbs (1.3kg) | |
| Mounting | Bracket or flush mount | |
| Power | 13.6 VDC ±15% | |
| Environmental: Operating Range: Storage Range: Humidity: | Waterproof to IPX7 –15°C to +55°C –20°C to +70°C up to 95% | |
| Frequency Range: Transmit Receive | 156.050 To 162.425 MHz 156.050 To 163.275 MHz | |
| Channels | All available International VHF Marine Bands. US and Canadian channels also available if so programmed. | |
| Oscillate Mode | PLL | |
| Modulation | FM(16K0G3E) DSC(16K0G2B) | |
| Channel Spacing | 25 kHz Increments | |
| Frequency Stability | +/- 10PPM (+/- 0.001%) | |
| External Speaker Power | 2 watts @ 4 ohms | |
| Internal Speaker Power | 1 watt @ 16 ohms | |
| Microphone Impedance | 600 ohms | |
| Antenna Impedance | 50 ohms | |
| | | |

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Receiver

| Intermediate Frequency: | | |
|-------------------------------|--------------------|---------------------|
| ' | 1st | 21.4 MHz |
| | 2nd | 455 KHz |
| Sensitivity | | 0.25μV (12dB SINAD) |
| Squelch Sensitivity | | > 0.7µV at tight |
| Spurious Respons | se Rejection Ratio | 70 dB |
| Adjacent Channe | l Selectivity | 70 dB |
| Intermodulation F | Rejection Ratio | 68dB |
| S/N at 3KHz Dev. | | 40 dB |
| Audio Output Power At THD 10% | | 2 W |
| Audio Distortion | | 10% |
| Current Drain at: | | |
| | Max Audio Power | 1.5 A |
| | Stand-By | 0.5 A |

Transmitter

| RF Power: | | |
|------------------------|------------------|-------------------------|
| | Hi Mode | 23 ±2 W |
| | Lo Mode | $0.8 \pm 0.1 \text{W}$ |
| Maximum Deviation | | ±5 KHz |
| S/N at 3KHz D | ev | 40 dB |
| Modulation D | istortion | 3KHz = 7%</td |
| Audio Respor | ise | 1KHz EIA STANDARD dB |
| Spurious/Har | monic Emissions: | 0.25µW |
| Modulation Sensitivity | | = 12mv</td |
| Current Drain | At 13.6V DC: | |
| | Hi Power | = 6 A</td |
| | Lo Power | = 1.5A</td |