



## Type 27S/D

For communications in the 27 MHz Marine and Citizens Band

Designed to provide high efficiency communications for all types of vessels and base stations using the 27 MHz communications bands.

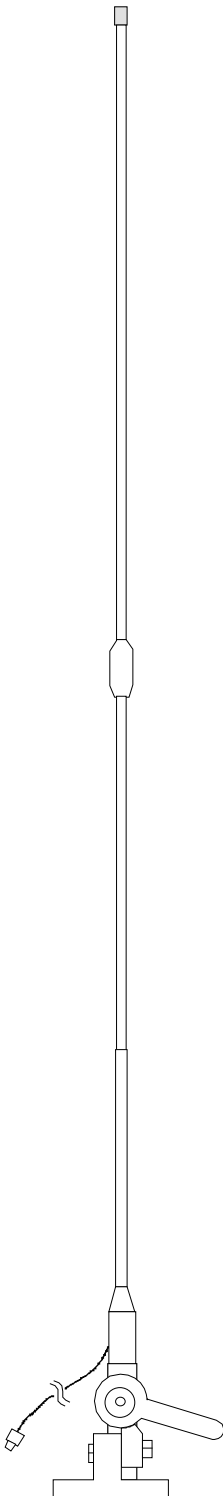
The 27S/D is compact 2.7 metre (8.9 ft) loaded half wave, self supporting whip that requires no ground plane or earth connections. Manufactured from marine grade tempered aluminium alloy tubing to obtain a large low loss radiating surface, it is coated with PVC for maximum protection from the marine environment and solar radiation. Fittings are of nylon and stainless steel. A high grade nylon insulator, 35mm (1.4 in) diameter is incorporated at the base. The antenna is supplied complete with coaxial cable and connector.

Mounting is normally by way of a polycarbonate quick release lever lock swingdown base which permits easy adjustment of antenna angle when obstructions are encountered or deck level stowage is necessary or desirable. A heavy duty stainless steel swingdown base or single bolt mount for permanent mounting, such as on buildings, are also available upon request.

The antenna is designed to operate between 27.5 and 28 MHz but may be tuned to other frequencies in the band outside this range upon request, such as the citizens band.

### Specifications

<b>Colour</b>	Standard is Black. Optional White.
<b>27 MHz Marine Band</b>	27.5-28 MHz
<b>Length</b>	2.7 metres (8.9 ft)
<b>Base Diameter</b>	35mm (1.4 in)
<b>Pattern</b>	Low angle, omnidirectional
<b>Polarisation</b>	Vertical
<b>Frequency Range</b>	27.5-28 MHz; other frequencies to order
<b>Bandwidth</b>	0.6 MHz (at 2:1 SWR)
<b>Impedance</b>	50Ω (nominal)
<b>Wind Loading</b>	1.5 kg at 100 km/h (3.3 lbs at 60 mph) 2.5 kg at 130 km/h (5.5 lbs at 81 mph)
<b>Power Capability</b>	25 watts CW, 50w PEP
<b>Mountings</b>	Normally supplied with polycarbonate swingdown mount; also available with 316 stainless steel swingdown mount or 12mm metric bolt for permanent mounting
<b>Connection</b>	3.65m (12 ft) 6mm (0.25 in) coaxial cable (50Ω) with PL259 UHF type connector
<b>Packed Weight</b>	3 kg (6.6 lbs)



Specifications subject to change – Issued 01/09/13

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# **TYPE 27 S/D INSTALLATION INSTRUCTIONS**

## **Mounting**

1. Place the base plate in the desired position and use it as a template.
2. Mark the position of the mounting holes.
3. Drill 4 x 6.4mm (1/4 in) dia. holes in the marked position.
4. Reinforce thin decks with metal or wooden backing plate to spread the load.
5. Fasten mount with stainless steel screws or bolts. Do not use brass screws with aluminium fittings.
6. For 1/2 in. bolt mount, drill 1/2 in. hole through deck for mounting bolt.

## **Important Factors**

1. For best results the antenna should be mounted vertically (not sloping).
2. Allow sufficient coaxial cable to permit antenna to swing down without cable strain, and use a good quality cable connector and 50 ohm cable. Supplied cable length may be exceeded and low loss cable should be used when over 20 metres long. It is advisable not to shorten the supplied length. Excess length may be wound in a neat coil behind the transceiver to allow for servicing and possible relocation.
3. While no ground plane or earth connector is required, it is important that the antenna is mounted at least 1 metre clear of metal masts, stays, etc., as these may distort the radiation pattern, modify the feed point impedance and reduce efficiency.
4. Waterproof securely any cable joints or connectors exposed to the weather, otherwise severe loss of power may result due to leakage.
5. Note that due to the internal arrangements in this antenna it will exhibit a short circuit if tested with an Ohmmeter or DC circuit tester.