



M O O N R A K E R

MDHB G3

High Gain Broadband Collinear antenna for marine or land VHF Marine Band communications

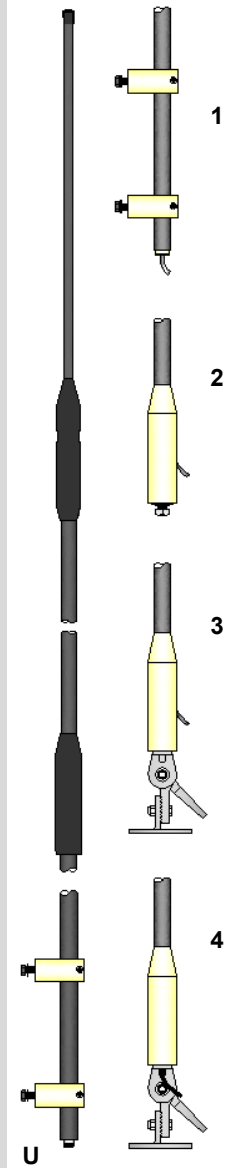
A rugged lightweight 5/8 wave ground independent collinear to give efficient and dependable performance.

The type MD-G3 has been designed as a robust, high gain antenna system and is ideally suited for base station and marine mobile use. It is constructed of marine grade, low corrosion, tempered aluminium alloy tubing which is finished with a high durability epoxy based coating, highly resistant to chemical attack, abrasion and the effects of ozone and ultra-violet radiation. All metal parts are at DC earth potential for static discharge.

Moonraker MD G3 antennas have a proven service history in harsh marine environments from tropical waters to shipboard applications in Antarctica.

The MD G3 antenna has also found favour with both recreational and commercial offshore fisherman and marine search and rescue groups for it's excellent range and suitability for marine use.

Mounting is easily affected by way of nylon side mount insulators, (or by straps or clamps to mast or tower section), by 12mm metric base bolt or by a heavy duty stainless steel swingdown mount adjustable in two planes.



KEY FEATURES

- Excellent range
- Efficient
- Durable
- Fully Marineised
- Long Service Life
- Over 45 years antenna design experience

Frequency Range	150 -170MHz (can be tuned to an alternative frequency ranges)
Polarisation	Vertical , Omnidirectional
Power	75 watts
Bandwidth	12 MHz at <1.5:1 VSWR; 30 MHz at <2:1 VSWR
Gain	+5 dBi
Impedance	50 ohms (nominal)
Length	2.78m
Section Diameter	Base : 22.3mm , Top : 10mm
Wind Loading	2.35 kg at 100 km/h (5.2 lbs at 60 mph) 3.56 kg at 120 km/h (7.8 lbs at 75 mph)
Temperature	-50 to +55°C 100% humidity
Connection	5 metres RG58 coaxial cable with PL259 (UHF) connector; or female N Type connector permanently fitted in base of mounting tube (sidemount type)
Mounting (see illustration)	U : Connector in base (no cable), Side mounted via insulators or clamps 1 : Base fed cable with connector, Side mounted via insulators or clamps 2 - Side fed cable with connector, Base mount with M12 bolt 3 - Side fed cable with connector, Base mount with 1" x 14 TPI 4 - Base fed cable with connector, Base mount with 1" x 14 TPI
Colour	Standard is Black. White optional
Packed Weight	3kg
Warranty	12 months

Specifications subject to change. Issued : 31/10/16

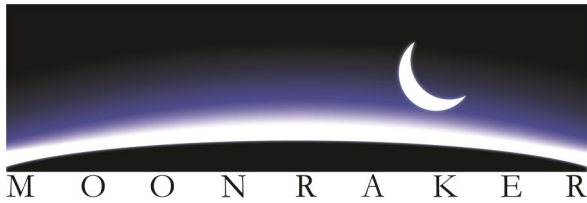


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TYPE MD G3 INSTALLATION INSTRUCTIONS MOUNTING

SWINGDOWN MOUNT

- Place the base plate of the mount in the desired position and use it as a template.
- Mark the position of the mounting holes.
- Drill 4 x 6.4mm (1/4 in) dia holes.
- Bolt the mount/antenna in place

M12 BASE MOUNT ADAPTOR

- Mark the mounting position on a horizontal surface or mount and drill a 12mm hole in the marked position.
- Using a 12mm (metric thread) stainless steel or galvanised bolt, fasten antenna down firmly.

SIDE MOUNTING

- For sidemount insulators: slide the two mounts onto the mounting tube. Mounts should be spaced not less than 25cm (10 in.) apart.
- Mark the positions and drill the holes for the sidemount set bolts
- Hose clamps or similar may be used to mount the antenna to a mounting pole, however suitable insulation should be used to prevent metal to metal contact.
- Do not over tighten straps or clamps so as to damage the coating or crush mounting tube.
- Keep antennas matching section (first "bulge") clear of support pole.

Important Factors

- The mounting tube must not be drilled or damaged in any way.
- The antenna should be mounted as high as possible and kept clear of nearby metal objects which may affect antenna tuning, and for best results, should be vertical, not sloping.
- 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 between inner and outer of coaxial cable.
- Ensure coaxial connections are sealed against water ingress.
- Do not allow the coaxial connector to take the cable strain. Secure cable with cable ties or tape.
- When using a swingdown mount allow sufficient coaxial cable slack to permit antenna to swingdown without cable strain.



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