

# TV-FM antenna Mark 20CA

Mark 20CA is an omni-directional wide band antenna (40-860 MHz) TV-FM, for maritime purposes. It is based on a construction of circular dipoles coupled to an amplifier via a broadband filter.

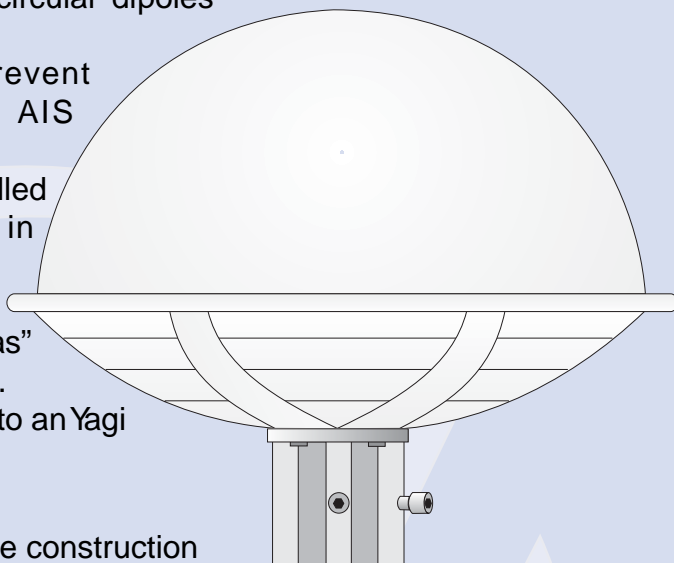
High efficiency suppression filters prevent interference from VHF telephone and AIS transmitters.

Mark 20CA is made of ABS plastic and filled with polyurethane foam. Mounting base in saltwater proof special alloy and bolts in stainless acid-proof steel.

Mark 20CA is tested by "Det Norske Veritas" for the same approval as for radar equipment.

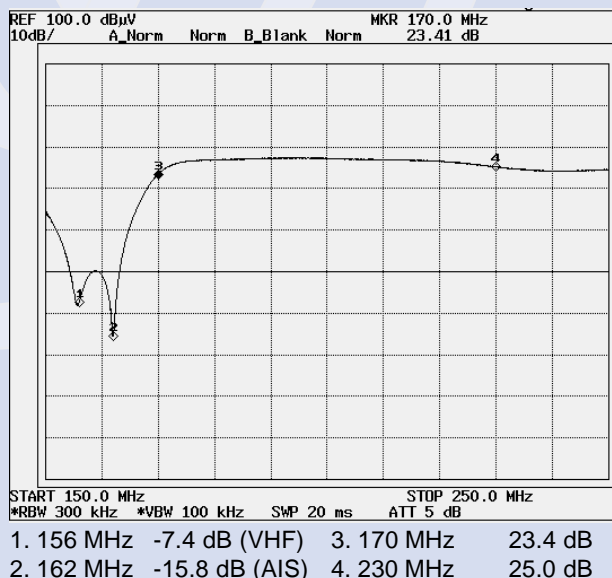
The advantages of Mark 20CA compared to an Yagi antenna system are:

- Rigid, non-corrodible, maintenance free construction
- Small dimensions and easy to mount.
- Omni-directional, no adjustments.
- Replaceable amplifier.
- Integrated VHF/AIS suppression filters.



## TECHNICAL SPECIFICATIONS

Frequency range:	40-860 MHz
Gain:	14-25 dB
	<-10 dB@156 MHz (Radio telephone)
	<-10 dB@162 MHz (AIS)
Noise factor:	6.0 dB
Max. output level:	111 dB $\mu$ V
(2 signals -50db IMA)	
Output impedance:	75 ohm
Connector:	BNC male
Supply voltage:	15 V DC
Current consumption:	approx. 140 mA
EMC:	EN 50082-1, 55024-2, 55024-4
Operation temp. range:	-40 - +70°C
Weight:	3 kg
Material:	ABS white
Approval:	DNV's Standard for Certification No 2.4, chapter 3.6.2, Sweep Sine Test, vibration strain class C



Since 1971, the objective of Naval Electronics has been to offer the best possible products for TV and Radio reception at sea. Naval began with omnidirectional antennas and is the world leader in this field of technology today. Now, with an expanded product range, the name Naval means much more than antennas. Naval operates in more than 40 countries and has installations on thousands of vessels all over the world.

All specifications stated are subject to change without notice.



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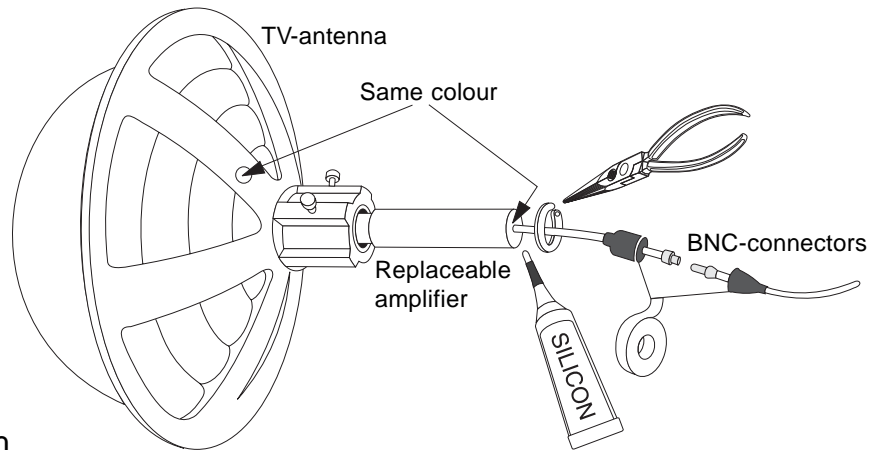
E-mail: sales@naval.se www.naval.se



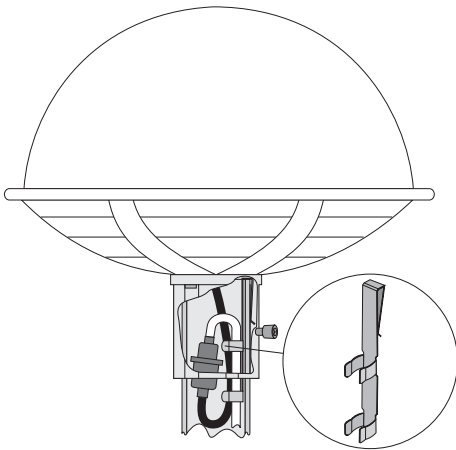
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## Changing the amplifier

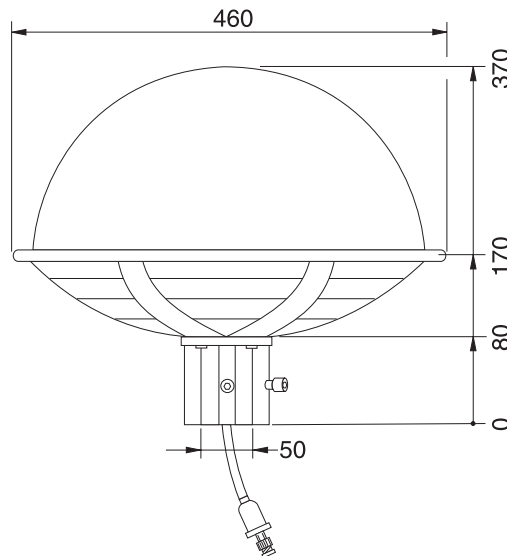
Antennas are as standard delivered with the amplifier mounted and sealed with silicon compound. The coaxial cable is supplied with a female connector which must be carefully sealed after connecting the replaceable amplifier. Compress the rubber covers and secure with vulcanizing silicon rubber tape.



## Mounting of cable holder



## Mechanical measurements *All measures in mm.*



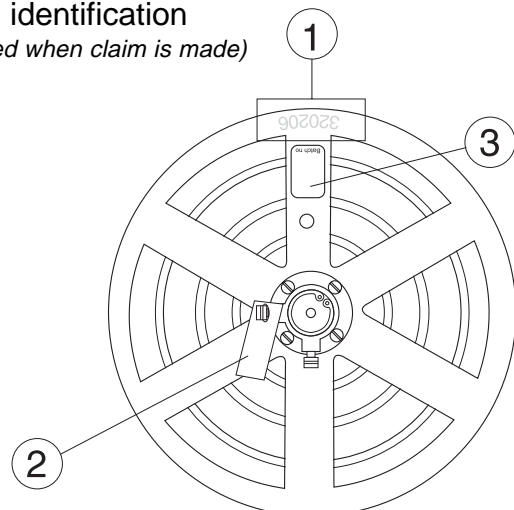
## Trouble shooting

If the system is not working satisfactory, please check the following:

1. Proper supply voltage to powersupply
2. Connections
3. Output voltage from powersupply to antenna (should be +15 V DC)
4. Antenna current (approx. 130-150 mA)

## Antenna identification

*(to be stated when claim is made)*



1. Serial no.
2. Inspection tag
3. Type label