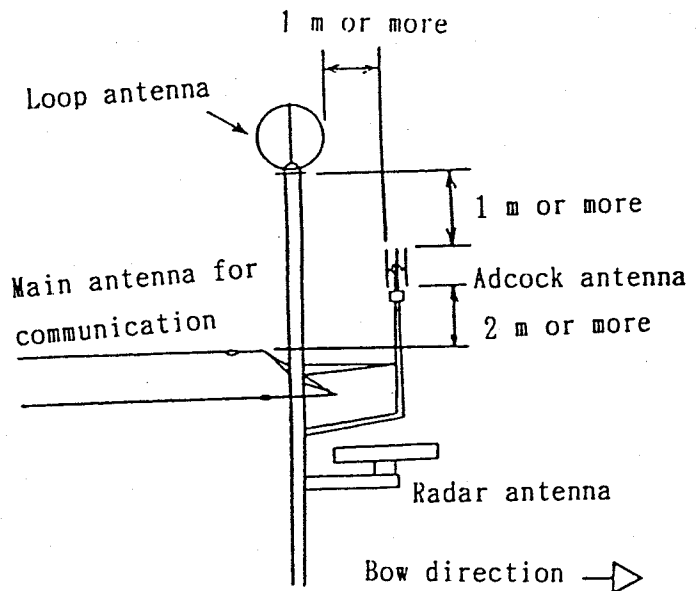
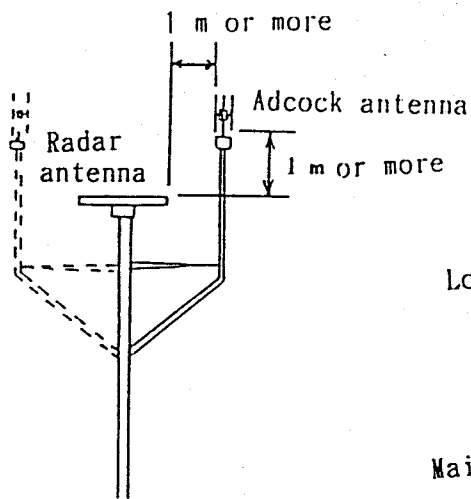
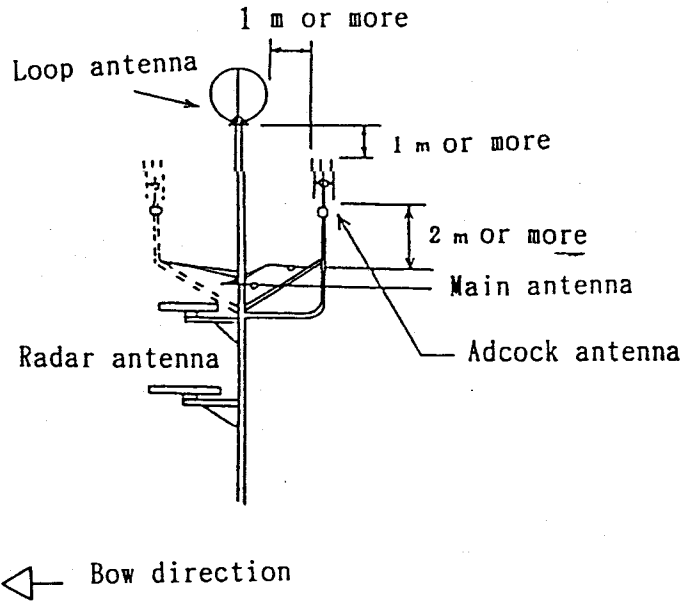


## 1.2 Examples of installation

When several antennas are installed on the same mast and 2 or more antenna may request the highest position.

The best position at the top of the mast may be given to a loop antenna for direction measurement in the HF range since it is vulnerable to resonance.

Figures on this page shows some examples. Dotted figures are alternatives.





1.4 Antenna Cable

1.4.1 Note for cable setting

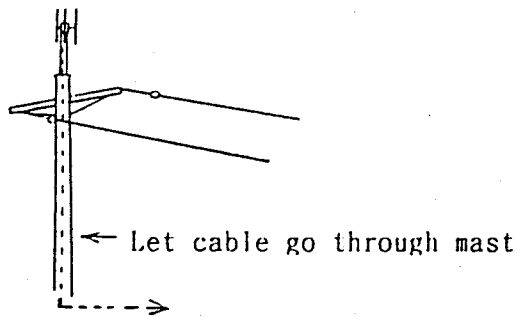
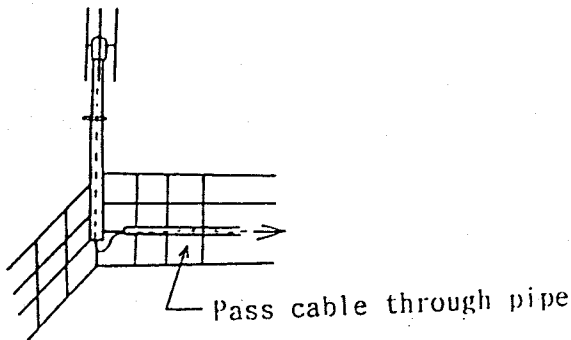
Pay following attention to install antenna cable.

- (1) Cable is processed and shipped to a specified length when ordered. Avoid to cut or extend cable. When cable length should be changed, keep the length of two lines the same, at least within 10 mm.

Cable : R G - 5 8 A / U twin cable  
(or, R G - 5 8 A / U armored twin cable)

Plug : BNC-P-55U plugs and M-203-P plug.

- (2) Protect cable from heat. Weld flange and others before setting cable. Pay special attention for welding when cable has been set.
- (3) Protect cable from mechanical damage. When mechanical damage is anticipated, protect it with steel or plastic pipe. Otherwise, use armored cable.
- (4) Keep enough separation from cables for communication antenna, radar cable or power cable. Lay cable in metallic pipe, e.g., in steel mast, whenever possible as shown in figures on this page.
- (5) Avoid to extend antenna cable in the air or along stays or wires.

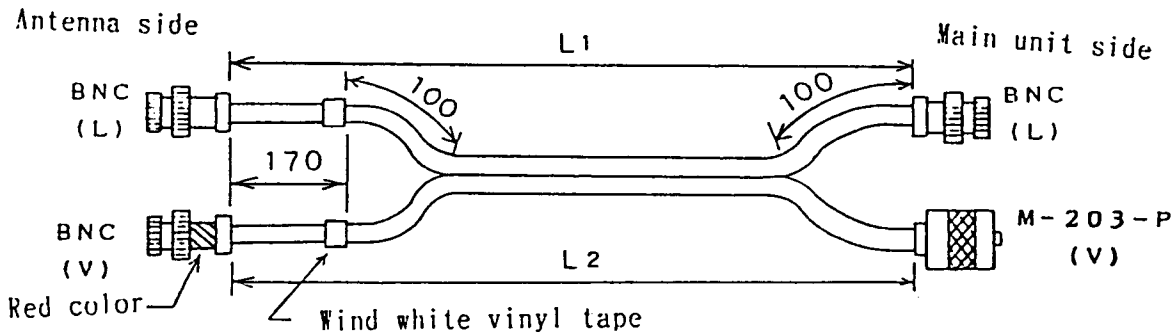


A. Antenna installed on the compass deck    B. Antenna installed to a mast

### 1.4.2 Plugs

Antenna cable is shipped with plugs. Following shows procedure to connect plugs to antenna cable for your reference when necessary.

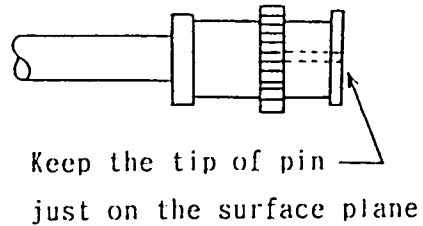
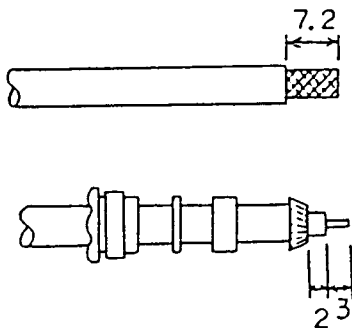
#### (1) Standard antenna cable RG-58A/U Twin cable



Note : Keep the difference of length of V-line (sense signal line) and L-line (Adcock signal line) smaller than 10mm.

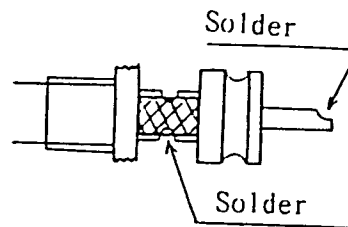
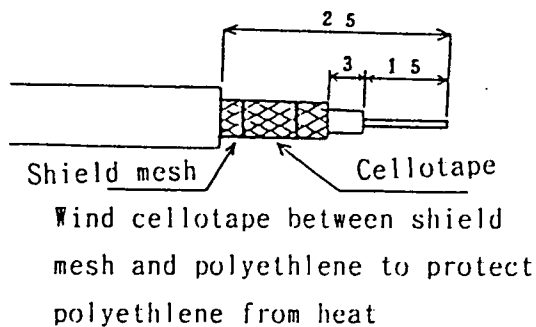
#### (2) BNC plug

Cut and remove, outer PVC layer by 7.2 mm, loosen armor shield. Remove inner insulator and solder to the pin.

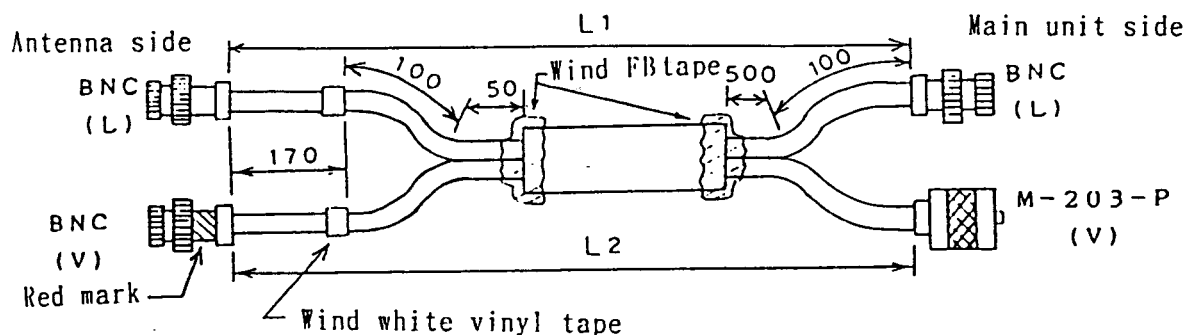


#### (3) M plug

Cut and remove, outer PVC layer by 25 mm, armor shield by 18 mm, inner polyethylene layer by 15 mm.



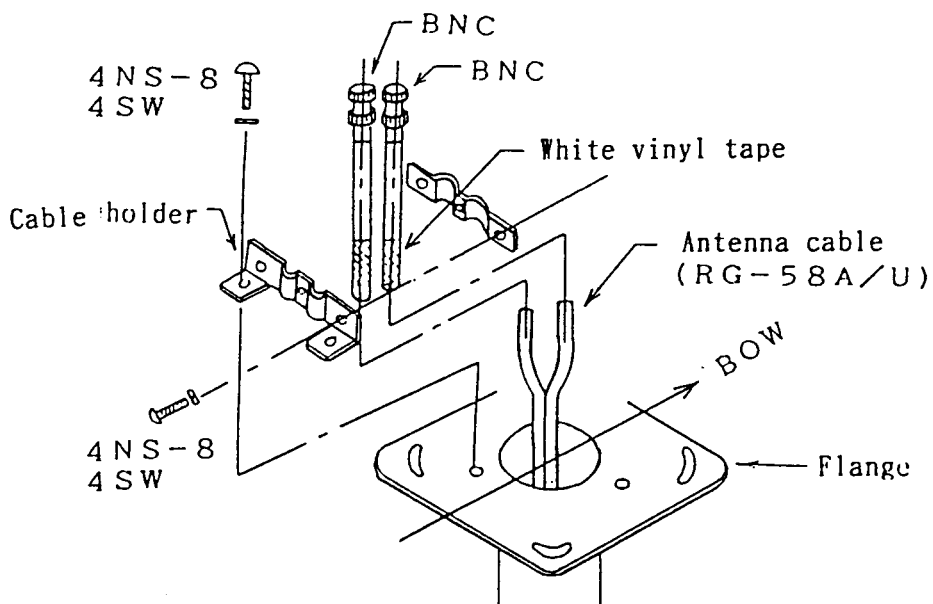
(4) Armored antenna cable RG-58A/U Armored twin cable (option)



Note : Keep the difference of length of V-line and L-line smaller than 10mm

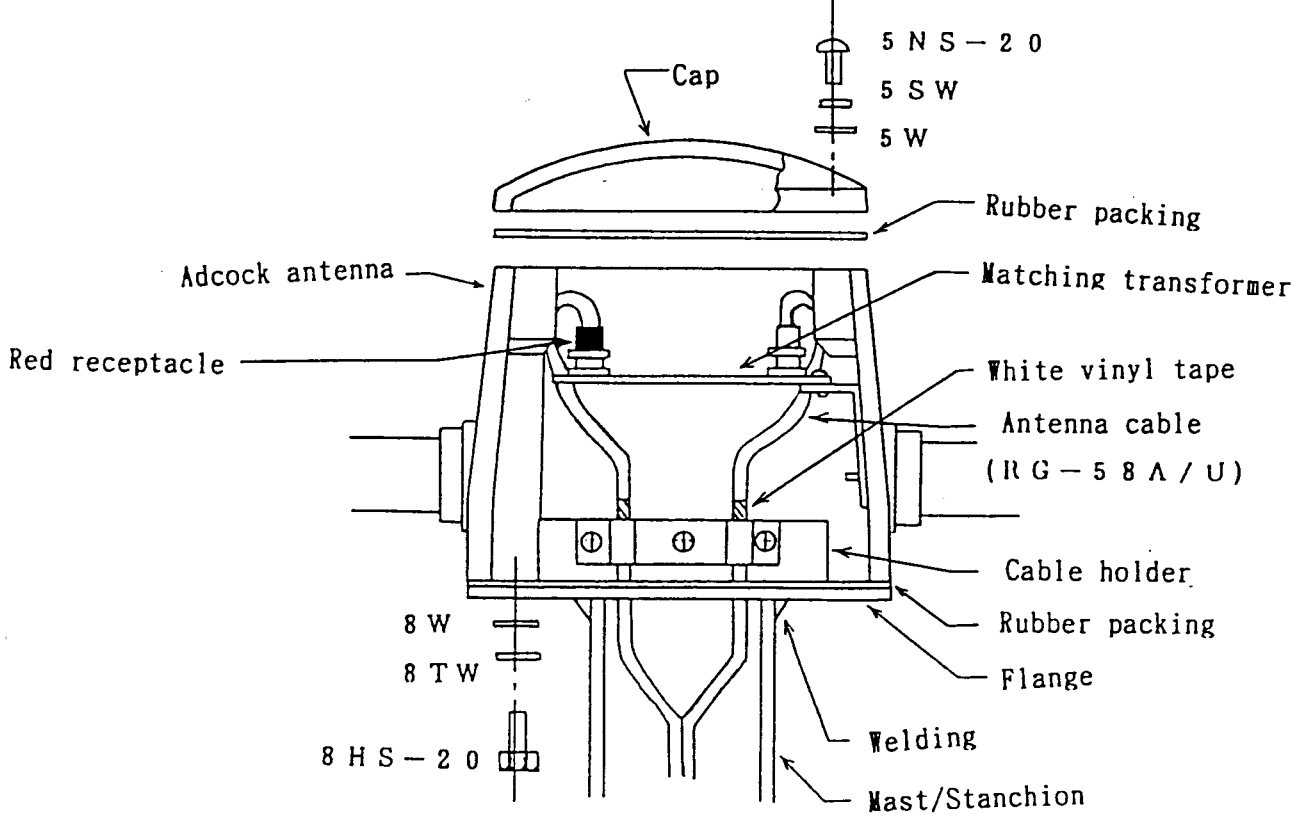
1.5 Installation of Adcock antenna

- (1) Fix antenna cable with cable holder. Then fasten the holder to the flange.

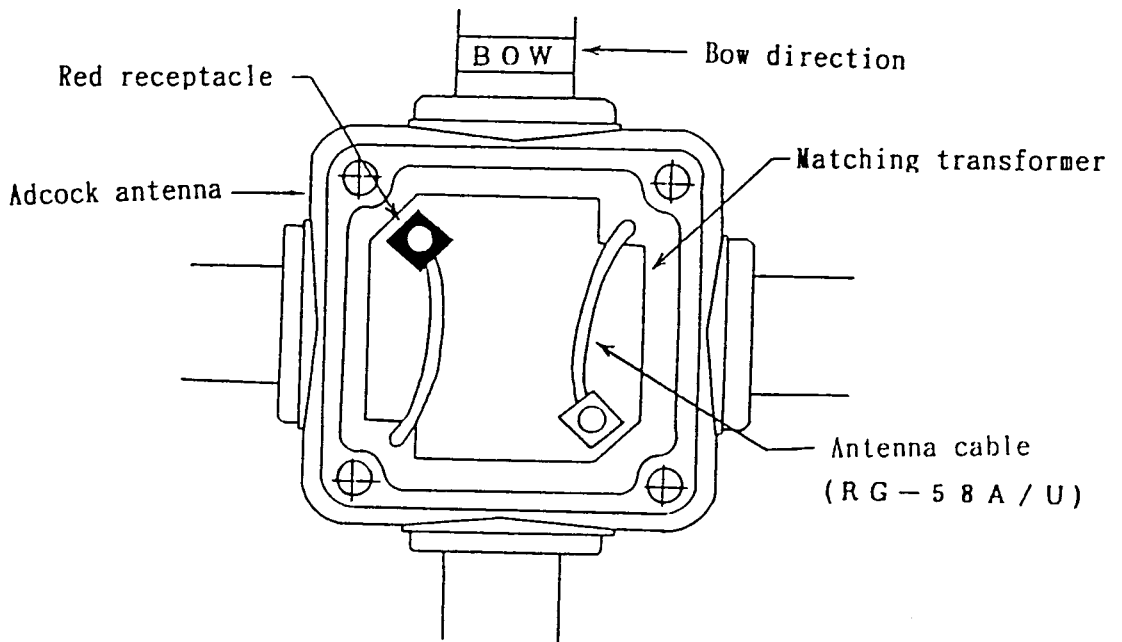


- (2) Fix antenna to the flange with bolts, nuts and washers.
- (3) Connect BNC plugs of antenna cable to receptacles. Confirm that line with red mark is connected to the red receptacle.
- (4) Confirm also the "BOW" mark direction is parallel to the keel line.

Note : Pay attention to rain or splash so as to avoid moisture or dust from entering inside.



Looking down

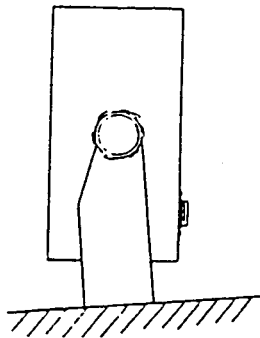
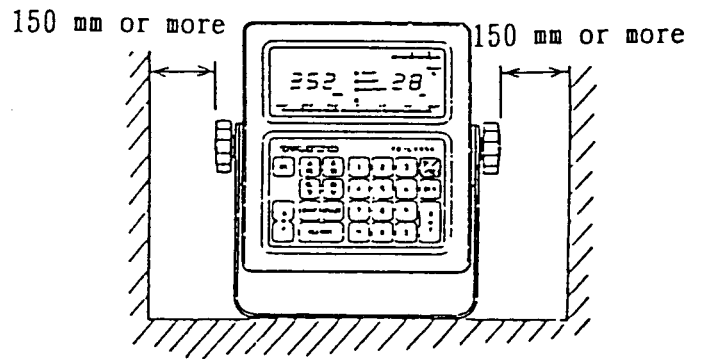
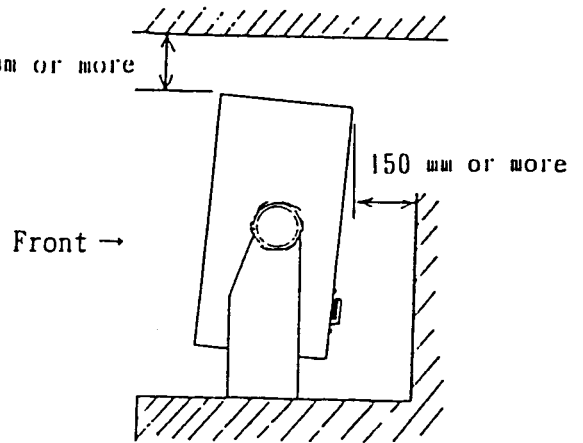


## 2 MAIN UNIT

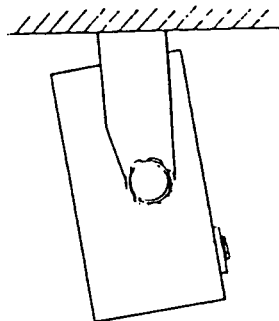
### 2.1 Position of main unit

Determine the position of main unit with attention to following conditions. 150 mm or more

- (1) Select a suitable location for the main unit to avoid direct sunshine, water splash, high temperature and strong vibration.
- (2) Ample space for operation and maintenance and good ventilation as shown on the right is recommended.
- (3) Keep good separation from noise sources such as radio transmitter, inverter, radar, etc.
- (4) Hanging installation to ceiling is also possible. Use a plate with enough strength to reinforce the ceiling so as not to drop the unit.



Installation on table



Hanging installation

## (2) Power connection

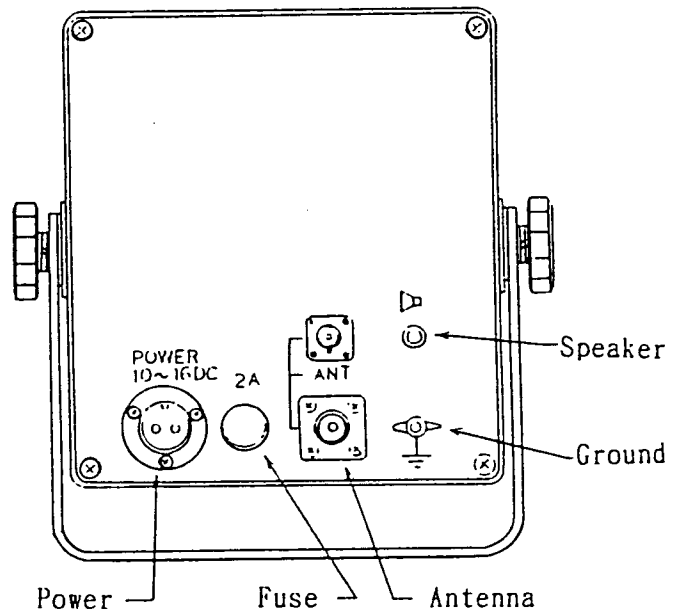
Connect to a DC source 10 V ~ 16V. Minus side is grounded inside the main unit.

Avoid higher voltage or the main unit may be damaged.

Other power source should be specified at the time of order and DC adapter or AC power source should be used (option).

### 2.3.2 Main unit connections

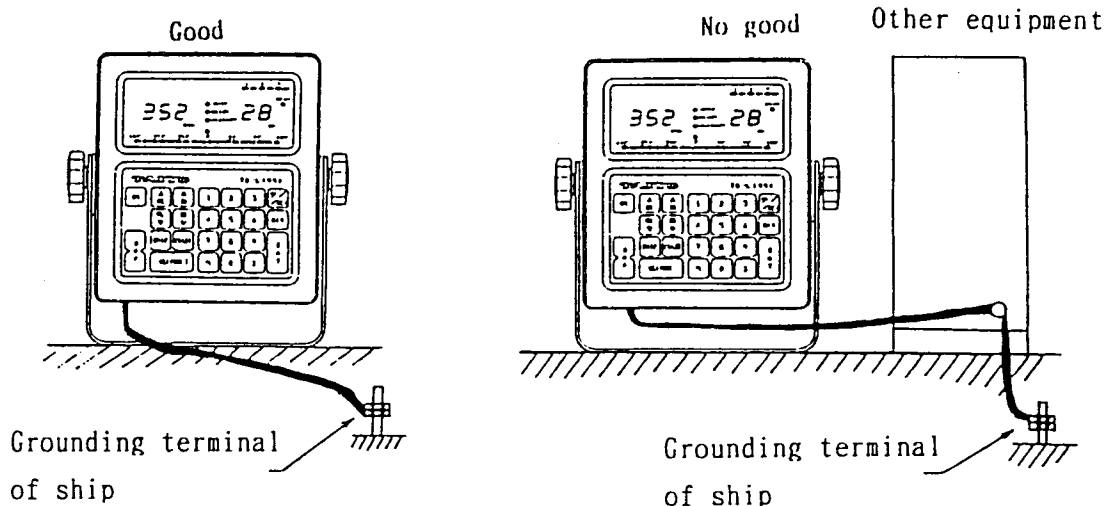
Connect antenna cable, power cable, speaker cord and ground cable to receptacles on the rear panel of the main unit.



### 2.3.3 Grounding

Grounding influences to the sensitivity and noise suppression and hence, good grounding is required to the hull for steel ship with shortest dedicated grounding line (KIV copper belt, 30mm wide and 0.5 mm thick) and ship grounding terminals are required.

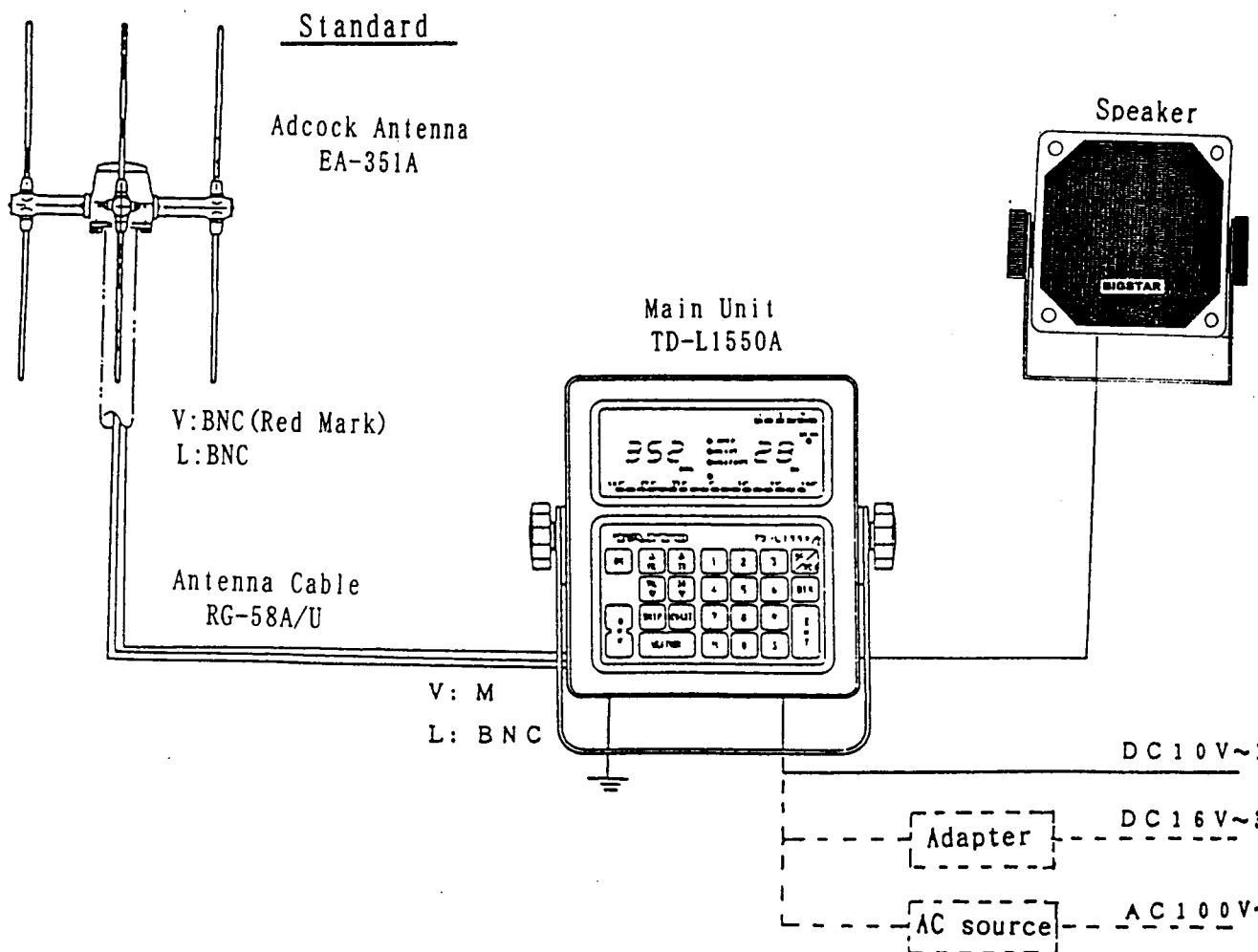
In case of non-metallic ship, FRP or wood, provide a copper plate, 300 mm × 450 mm or larger at the bottom of ship for grounding.





## 4. DIAGRAMS

### Diagram 1 Connection Diagram



Recommend to use following Antenna Cable depending on required length in order to avoid from attenuation.

Antenna Cable: Twin Coaxial Cable.

16m or shorter: RG-58A/U  
17~29m : 5D-2V  
30m or longer : 8D-2V

Remark: When using 5D-2V or 8D-2V, additional joint cables for both Cable ends are required as those have larger diameter than that of RG58A/U.

Option

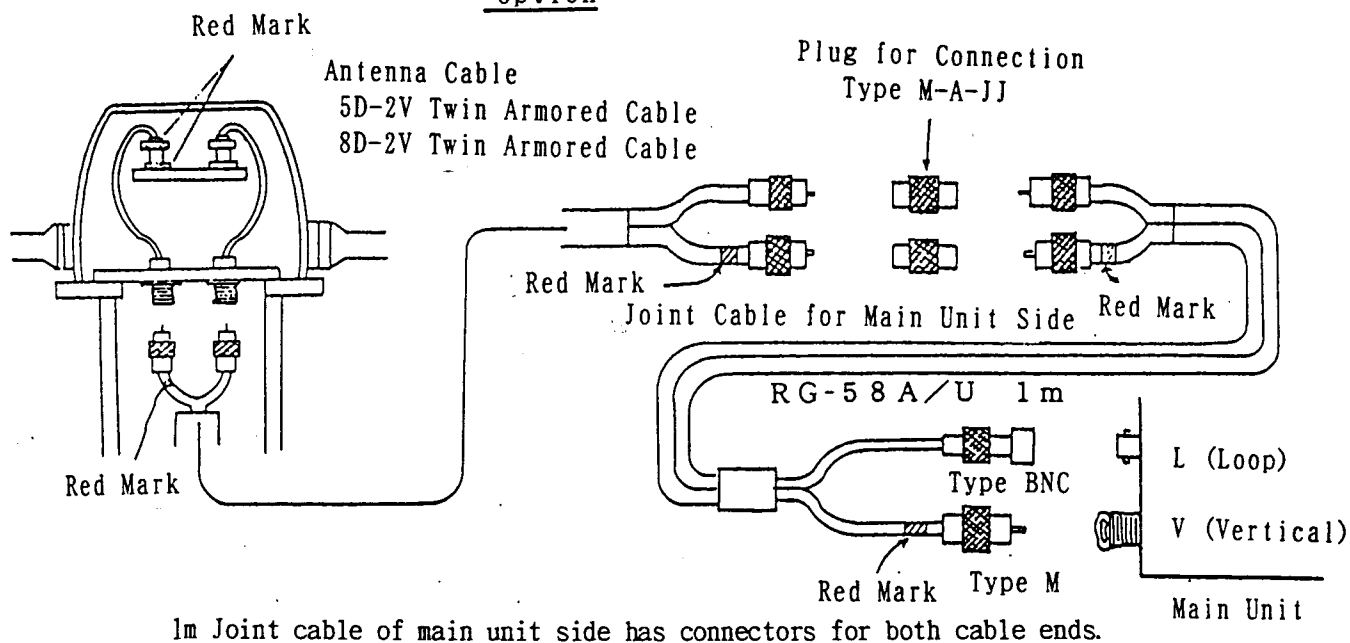


Diagram 2 Main Unit

