



MN-100(L)

ANTENNA MATCHER
for 1.5MHz ~ 30MHz

INSTRUCTION MANUAL

This antenna matcher has been designed for ICOM HF transceivers.

Please read all instructions carefully before installation to get maximum performance and full value from the radio.

PROFILE

To put a full size antenna on a yacht or boat is very difficult. However, this antenna matcher has been designed to put an antenna in such restrictions of space, and gives low VSWR with short antenna elements on wide frequency range of 1.5MHz to 30MHz. So, you can obtain the best performance from the transceiver.

INSTALLATION

DIPOLE ANTENNA INSTALLATION (only MN-100 can be used)

1. First, decide the place where you attempt to put the antenna.
2. Attach the antenna wires supplied to the terminals on the both side of MN-100 as shown in the figure.
3. If the antenna wires are too long for the place, cut the antenna wires to desired length. At this time, each wire should be the same length.
4. Attach coaxial cable to the connector of MN-100 with a PL-259 connector. Refer to the connector assembly instructions below.
5. Attach the MN-100 onto the antenna mast with the supplied mounting hardware. The mounting hardware is adjusted for 25mm - 63mm (1 inch - 2-1/2 inches) tubing. If your antenna mast differs from this size, please make a mounting attachment suitable for it.
6. Stretch the antenna wires to both side so that the wires are in line, and hold each end to a mast or other suitable construction with a wire or rope.

SPECIFICATIONS

MN-100: For dipole or whip antenna
 MN-100L: For whip antenna only
 Maximum input power: SSB 200 watts pep
 CW 100 watts
 Frequency range: 1.5MHz ~ 30MHz
 Input impedance: 50 ohms unbalanced
 Insertion loss: Approx. 6dB
 VSWR: Less than 2.0
 with supplied elements
 Operating temperature: -30°C ~ +80°C

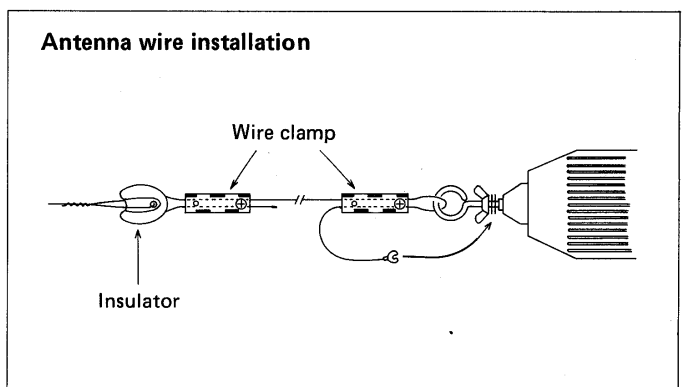
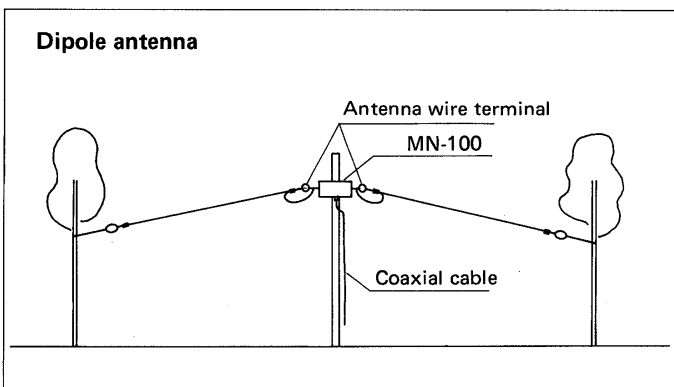
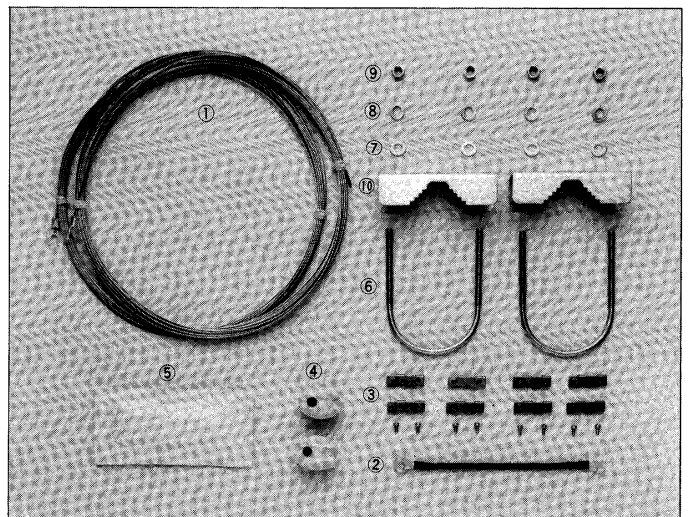
Dimensions:

MN100: 180(310)mmW x 65(100)mmH x 55(58)mmD
 MN100L: 180(245)mmW x 65(100)mmH x 55(58)mmD
 () including projections

Weight: MN-100 1.27kg
 (MN-100L 1.23kg)

Accessories:

① Antenna wire:	MN-100	8m	.....	2
	(MN-100L)	15m	.....	1
② Grounding wire:	..... 1			
③ Wire clamp:	MN-100	.....	4	
	(MN-100L)	.....	2	
④ Insulator	MN-100	.....	2	
	(MN-100L)	.....	1	
⑤ Waterproof jacket:	..... 1			
⑥ U bolt:	..... 2			
⑦ Flat washer:	..... 4			
⑧ Spring washer:	..... 4			
⑨ Nut:	..... 4			
⑩ Mast mounting bracket:	..... 2			



WHIP ANTENNA INSTALLATION (both MN-100 and MN-100L can be used)

1. When the MN-100 is used, connect the right side antenna wire terminal to the body of the MN-100 with supplied grounding wire.
2. When using the MN-100, join two supplied antenna wires, and connect one end to the left side antenna wire terminal as shown in the figure.
3. When using the MN-100L, connect one end of the supplied antenna wire to the antenna wire terminal.
4. Attach the MN-100 or MN-100L to a balustrade of the deck or other suitable portion of the yacht or boat, where is an adequate ground connection, with the supplied mounting hardware. If the attached portion is not grounded or on wooden or fiberglass boat, use a copper ground plate as the ground portion of the keel and connect between the ground terminal and there with another wire.
5. Attach the other end of the antenna wire to the mast or other suitable portion as high as possible so that the antenna wire is stretched in line.
6. If the antenna wire is too long, cut the wire so that the antenna wire is a stretch line when installed.

CONNECTOR ASSEMBLY INSTRUCTIONS

1. PL-259 connector is not supplied with the MN-100(L), so please prepare suitable connector for the coaxial cable you desired to use.
2. The supplied waterproof jacket will selfshrink within 30 minutes after the sealed bag has been opened. The MN-100(L) should be installed within 30 minutes.
3. Open the sealed bag, and cut the narrow end of the jacket so that the jacket fits into the coaxial cable you wish to use. Slide the jacket over the coaxial cable.
4. Cut end of the cable evenly. Remove vinyl jacket 29mm (1-1/8"). Please do not nick the braid.
5. Bare 15mm (5/8") of the center conductor without nicking the conductor. Trim braided shield 14mm (9/16") and tin it. Slide the coupling ring on the cable.
6. Screw the plug assembly on the cable. Solder plug assembly to the braid through solder hles. Solder the conductor to the contact sleeve. Screw the coupling ring on the assembly.
7. Attach it to the connector of the MN-100(L), and slide the waterproof jacket over the connector.

