

OPERATING MANUAL

D-130 Super Discone Antenna for Wideband Reception

DIAMOND
ANTENNA

The D-130 Super Discone Antenna is the first ultra-wideband antenna in the market which can cover amateur radio, air traffic control and other various utility frequency bands and, in addition, even some amateur radio frequency bands within the covering frequency range can be transmitted with this antenna alone. The D-130 is designed to be able to assemble very easily and can be built in a couple of hours by beginners. Rust free stainless steel is employed in major component parts to have the antenna rust resistant and durable. And its very compact and lightweight design enables it to be installed at any convenient place.

Description

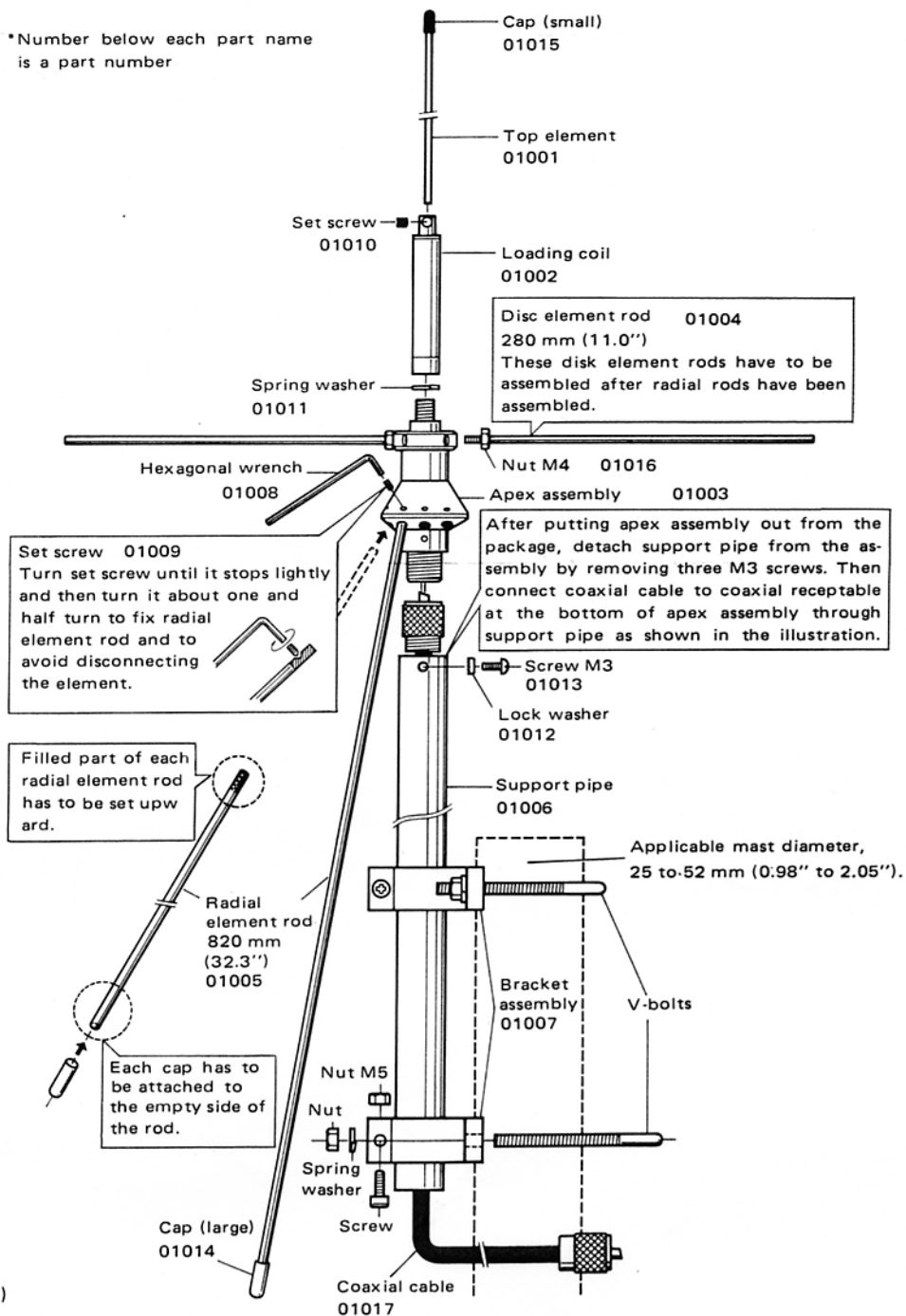
1. Ultra-wideband design to be able to cover 25 to 1300 MHz.
2. Very compact and lightweight design enables the antenna to be installed on balcony railing at an apartment or condominium.
3. Coaxial cable, about 15 m (49.2') with UHF connectors at both ends, is included.
4. Rust resistant structure employing stainless steel in major component parts allows the antenna to be used at seaside environment.
5. 6 m, 2 m, 70 cm and 23 cm amateur frequency bands and 33 cm band (900 MHz) can be transmitted.
6. Very cost effective compared with similar antennas.
7. Since all radial rods are designed to have the same length, the D-130 is perfectly omnidirectional as original discone antenna and can receive radio propagation from any direction evenly.
8. The D-130 can be made further compact and lightweight by removing the top element assembly, if it doesn't require to receive lower end frequency range.

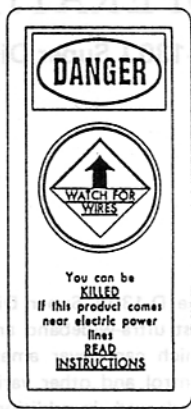
Specifications

| | |
|-----------------|---|
| Frequency range | 25 to 1300 MHz for receiving (Amateur frequency bands and personal radio frequency band for transmitting) |
| Length | 1.7 m (66.9") |
| Weight | 1 kg (2.2 lbs.) |
| Max. diameter | 0.41 m (16.1") |
| Mast diameter | 25 to 52 mm (0.98" to 2.05") |
| Max. power | 200 W at transmittable frequency bands |
| Coaxial cable | RG58A/U 15 m (49.2') with UHF connectors |
| Type | Wideband omnidirectional discone antenna |

Assembling the D-130 Super Discone Antenna

*Number below each part name is a part number





FOR YOUR SAFETY

Read the following safety precautions before start assembling the antenna.

- Assemble the antenna on the ground or wide and flat place such as on balcony before installation.
- Do not assemble or install the antenna on a place where you can not have enough distance from any electric power lines.
- Do not install the antenna on a rainy or windy day.
- Do not attempt to install the antenna only by yourself. Installing the antenna alone on the roof may lead you dangerous accident. Always ask your friends for help installing the antenna.
- Do not use iron or aluminum ladder at a reachable distance from any electric power lines.
- Do not install the antenna on a mast which is not grounded properly.
- Do not have your family members or friends touch or come close to the antenna, unless they have realized its potential danger.

TO AVOID FATAL ACCIDENT

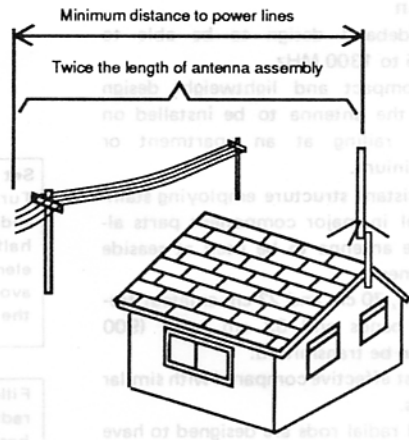
- Do not attempt to sustain the antenna, or any part of support structure if it begins to fall down. Let it fall by itself.
- Do not attempt to remove or restore the antenna or any part of support structure if it touches a electric power line by chance. Let it be as it is, do not touch it, and call your local electric power company immediately.

IN CASE OF AN ACCIDENT

- Do not touch a person or an animal who is or seems to be in contact with the antenna or any support structure which is fallen on a live electric power line. Touching one may lead you to be electrocuted.
- Do not attempt to separate a person or an animal who is or seems to be in contact with the antenna or any support structure which is fallen on a live electric power line by yourself. Call or have someone call a police officer, ambulance, doctor immediately.

ANTENNA INSTALLATION PRECAUTIONS

To determine antenna installation location, there are several factors to be taken into account. First thing is antenna propagation direction to specific target stations. As to whether there is any obstacles such as tall buildings on the line of sight. Next is specific installation location. As to whether specific location is adequate in terms of antenna support and surrounding safety.



- Do not attempt to install the antenna by yourself if you do not have any experience in installing base station antenna. Ask your experienced friends or professional for help.
- Do not attempt to install the antenna at a location where does not have enough distance from nearby electric power lines. It is advised to install the antenna at least twice of total antenna height from nearby electric power lines.
- Do not install the antenna on any type of tower, pole or telescopic mast which exceeds 30 feet high, if you do not have enough experience in installing the antenna on that kind of location. Ask your experienced friends or professional for help.
- Do not use more than 1/10' section if you install the antenna on iron plumber's pipe. Attach guy wire if multiple pipes are used to install the antenna.

DIAMOND ANTENNA CORPORATION

15-1, I-chome, Sugamo Toshima-ku, Tokyo 170, Japan Phone:(03)947-1411 Telex:272 2420 DIATNA J Cable Adress:DIANTNA