# 120/300MHz Receiving Antenna D777

**Operation Instructions** 

To use this antenna properly, read this instruction thoroughly before using the antenna. Keep this manual carefully at hand for later use.

#### How to Mount

- Attach three radial elements as shown in Fig. Attach 1. mast brackets to support pip by securing set screws.
- Connect a coaxial cable to the feedpoint section through support pipe. Waterproof the connector section.
- Attach support pipe to the bottom of the antenna with set 3. screw by algning the holes at the bottom of the feedpoint section and the upper part of support pipe.
- Attach the antenna to mast as shown in Fig by taking the entire balance in account.

## Specifications

Frequency

: 120/300MHz

Impedance

: 50 Ω

Gain

: 3.4dBi (120MHz), 5.5dBi (300MHz)

**VSWR** 

: Less than 1.5

Rated Wind Velocity : 60m/sec.

Mast diameter accepted:  $\phi 30 - \phi 62$ 

Length

: 1.7 m

Max Diameter

: About 34cm

Weight

: 1.0 Kgs.

Type

: 5/8 wave (120MHz), 2x5/8wave (300MHz)

Connector

: M (M-J)

Parts No. and description

M0301 ELMENT

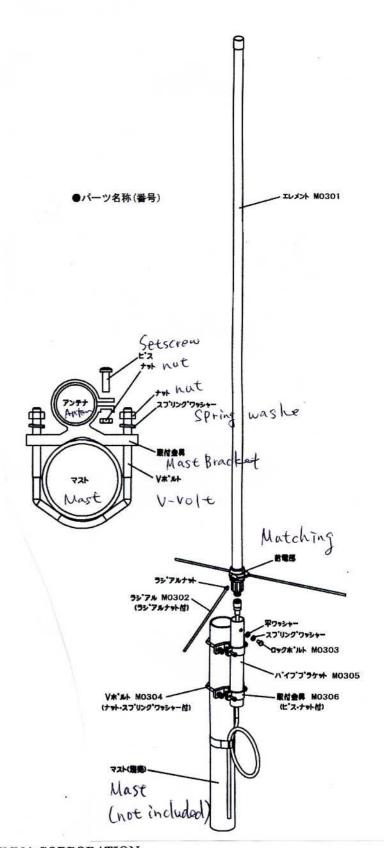
M0302 RADIAL (WITH RADIAL NUT)

M0303 ROCK BOLT (WITH WASHER)

M0304 V-BOLT (WITH NUT/S. WASHER)

M0305 PIPE BRACKET

M0306 MAST BRACKET (WITH NUT/SCREW)



DIAMOND

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#### FOR YOUR SAFETY

Read the following safety precautions before starting assembling

- 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 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