

# 120~500MHz Wide Band Portable Beam Antenna

# MAY1000

**DIAMOND**  
ANTENNA

## Operation Instructions

To use this antenna properly, read this instructions thoroughly before using the antenna. Keep this manual carefully at hand for later use. This antenna is designed for amateur radio communications use only. Do not transmit out of specified frequency bands.

### Note for Using The Antenna

To avoid inviting accidents, follow the following notices.

- 1) Do not touch the antenna during transmission. Touching the antenna during transmission may cause to electrify.
- 2) Adjust the antenna thoroughly on operating frequencies before using. Using unadjusted antenna may cause to be damaged radio. You may not have the desired gain during receiving if you don't adjust the frequencies.
- 3) Strong impact on elements can cause to be broken.

### Description

- 1) MAY1000, Wide Band Portable Beam Antenna, is designed to provide optimum performance over wide frequency range by adjustment element length and spaces between elements. (120~500Mhz)
- 2) Elements are made by stainless steel that is hard to break.
- 3) Since the bottom of the antenna is applied to bendable function, the antenna become compact when carrying it.

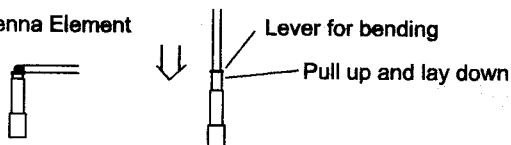
### How to use (How to adjust)

- 1) Referring to the attached Frequency Characteristics, confirm the element length and space depending on the desired frequency.
- 2) Adjust the elements following the Frequency Characteristics. Fix the R Element as two elements are parallel when looking the antenna straight.
- 3) Connect the receiver or radio with the feed line. In case of SMA connector, use the BNCJ-SMAP connector.
- 4) Adjust the directions to have a good reception for receiving by change the antenna directions. Use the elements vertically or horizontally, depending on Radio waves received (vertical polarization / horizontal polarization).  
\*\*Receiving reception will totally be changed horizontally or vertically.

### How to bend the elements

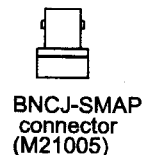
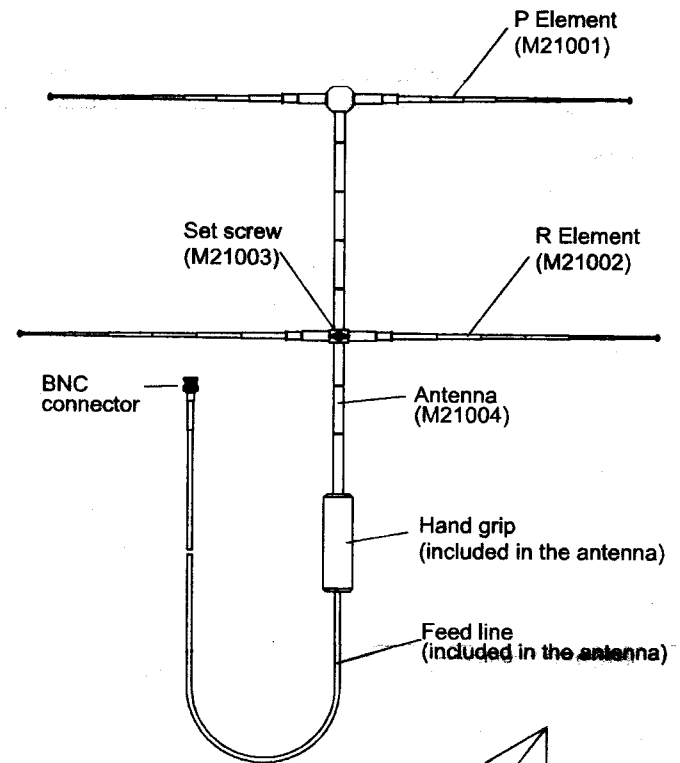
Push the lever for bending on 5mm to the arrow and hold the bottom of the element and bend it slowly. Elements could be bent omni-directionally.  
When you want to make the element straight, hold the bottom of the element and return it naturally. The element could be made straight.

#### Bending Antenna Element

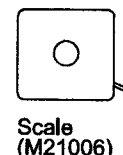


### Parts Number

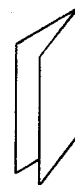
Please check all parts are included.



BNCJ-SMAP  
connector  
(M21005)



Scale  
(M21006)



Frequency  
Characteristics  
(M21007)

### Specifications

Frequency	: 120~500MHz
Gain	: 4.5~6.0dBi
Max power rating	: 10W (FM)
Impedance	: 50 Ω
V.SWR	: Less than 1.5 (at resonance point)
Length	: 0.52 m (antenna itself)
Weight	: 450 g
Connector	: BNC / SMA
Cable length	: approx. 1 m
Element Length	: 0.29 m (MIN)~1.31 m (MAX)
Space between elements	: 0.12 m (MIN)~0.35 m (MAX)
The bottoms of the elements are able to be bent vertically.	
The scale for measuring the elements is included.	
BNCJ-SMAP connector is included.	

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# MAY1000 周波数特性表

## MAY1000 Frequency Characteristics

