



# COMET<sup>®</sup> ANTENNA

**Driven to Perform, In STYLE!**

Kenny Mackintosh's CHA-250BXII is installed on a North Sea oil platform. It has to withstand winds up to gale and hurricane force – all without guys.

*Here's what Kenny said about this tough antenna:*

'I am the Platform's Radio and Telecommunications engineer and work MM0GKB/P when on rota 2 on and 3 off, the locator being IO98UK. The performance is excellent with max VSWR on a few bands of approximately 1.5 : 1, radio is KW 570DGE @ 100W o/p and I use CW only. You will notice near the base of the antenna a slight bend. This is due to a whack from a container on a crane some time ago. Must say the antenna is one hell of a strong 'beast' taking into consideration the battering it takes from the weather'.

**CHA 250BXII Wide-Band Vertical  
Covers 80m to 6m with no ATU and no gaps**

The Comet CHA 250BXII vertical covers all bands from 80m through to 6m with a VSWR of less than 1.5:1. It's probably the easiest vertical to install, simply mounting on any pole and requiring no radials. If you are restricted for antenna installation space, the CHA 250BXII could be the perfect answer.

- Mounts at any height – needs no radials
- Transmit 80m through to 6m
- Receive 2 MHz – 90MHz
- Transmit VSWR better than 1.5:1 throughout
- Rated at 250W PEP
- Only 7.2m high, weighs a mere 3.2kg
- Great performance on all bands
- Very low visual impact & low wind resistance

CHA250BX II





US Marines M2C2 Vehicle (Photo by Pfc. Daniel Boothe)



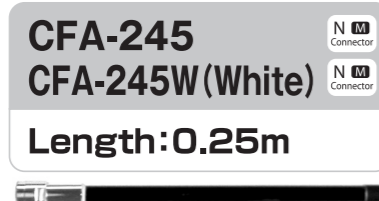
**For Mobiles 2.4GHz band** ●IEEE802.11 standard Comet Antenna's: Assisting in the development of a Wireless LAN environment

**SF-D245**  
**SF-245W**  
**SF-245SPR**  
●Weight: 70g  
●Antenna Type: 1/245-step Collinear Type  
●Usage: For 2.4GHz band data transmission  
●Frequency: 2400~2497MHz  
●Impedance: 50Ω  
●SWR: Less than 1.5 ●Gain: 5.0dBi



**SF-D245** **SF-245SPR**   
**SF-245W**   
**Length:** SF-D245/SF-245SPR **0.485m**  
SF-245W **0.450m**

**CFA-245**  
**CFA-245W(White)**  
●Weight: 70g  
●Antenna Type: 5/8λ 2-step type  
●Usage: For 2.4GHz band data transmission  
●Frequency: 2400~2497MHz  
●Impedance: 50Ω  
●SWR: Less than 1.5 ●Gain: 4.0dBi



**5GHz band**  
**SF-D53N** ●Weight: 70g ●Gain: 5.5dBi  
●Antenna Type: 1/2λ 3-step  
**SF-D52N**   
●Weight: 60g ●Gain: 4dBi  
●Antenna Type: 1/2λ 2-step

**SF-D53N** **SF-D52N**   
**Length:** SF-D53N **0.18m**  
SF-D52N **0.15m**

**2.4GHz band**

**For Non-directional Fixed Base Station**



●Weight: 1.16kg ●Antenna Type: λ/2 Coaxial Intersection Type 22-step type ●Usage: For 2.4GHz band data transmission  
●Frequency: 2400~2497MHz ●Impedance: 50Ω ●SWR: Less than 1.5 ●Survival Wind Speed: 60m/sec.  
●Max Power: 50W ●Gain: 15dBi Type

**GP-D2422**   
**GP-D2422-3(3° Tilt)**   
**Length: 1.78m**

●Weight: 750g ●Antenna Type: λ/2 Coaxial Intersection Type 13-step type ●Usage: For 2.4GHz band data transmission  
●Frequency: 2400~2497MHz ●Impedance: 50Ω ●SWR: Less than 1.5 ●Survival Wind Speed: 60m/sec.  
●Max Power: 50W ●Gain: 9dBi

**GP-D2413**   
**Length: 1.08m**

**144/430MHz Dual Band**

●Reliable Transmission: High-tech Dual Bander

●Weight: 150g  
●Frequency: 144MHz: 1/2λ 430MHz: 5/8λ  
●Wide Reception: 100~170, 350~470MHz  
●Max Power: 144/120W 430/100W  
●Foldable ●Repeater Capable  
●D-STAR Compatible



**CHL-19**   
**Length: 0.68m**  
144MHz: 2.15dBi Non-radial  
430MHz: 4.15dBi Non-radial

●Weight: 210g  
●Frequency: 144MHz: 1/2λ 430MHz: 5/8λ 2-step  
●Max Power: 200W  
●Wide Reception: 100~170, 350~470MHz  
●Foldable  
●Repeater Capable  
●Color: Silver(S), Black(B)  
●D-STAR Compatible



**CHL-25S**   
**CHL-25B**   
**Length: 0.98m**  
144MHz: 2.15dBi Non-radial  
430MHz: 5.5dBi Non-radial

●Weight: 330g  
●Frequency: 144MHz: 1/2λ 430MHz: 5/8λ 2-step  
●Wide Reception: 100~170, 350~470MHz  
●Max Power: 144/200W 430/200W  
●Foldable ●Repeater Capable  
●D-STAR Compatible



**CHL-250H**   
**Length: 0.95m**  
144MHz: 3.0dBi Non-radial  
430MHz: 5.5dBi Non-radial

●Weight: 430g  
●Frequency: 144MHz: 1/2λ 430MHz: 5/8λ 2-step  
●Max Power: 250W  
●Wide Reception: 100~170, 350~470MHz  
●Foldable ●Repeater Capable  
●D-STAR Compatible



**CHL-2510**   
**Length: 1.0m**  
144MHz: 3.0dBi Non-radial  
430MHz: 5.5dBi Non-radial

**144/430MHz Dual Band Slim Mobile Antenna**

※"SB" refers to the black model

●Weight: 95g  
●Gain: 144MHz 1.5dBi,  
430MHz 2.15dBi  
●Max Power: 60W  
●D-STAR Compatible



**SS390S**   
**SS390SB**   
**Length: 0.39m**  
144/430MHz 430MHz Non-radial

●Weight: 78g  
●Gain: 144MHz 1.5dBi,  
430MHz 2.15dBi  
●Max Power: 60W  
●D-STAR Compatible



**SS400**   
**Length: 0.40m**  
144/430MHz 430MHz Non-radial

●Weight: 93g  
●Gain: 144MHz 2.15dBi,  
430MHz 3.8dBi  
●Max Power: 60W  
●D-STAR Compatible



**SS460S**   
**SS460SB**   
**Length: 0.46m**  
144/430MHz 430MHz Non-radial

●Weight: 115g  
●Gain: 144MHz 2.15dBi,  
430MHz 4.15dBi  
●Max Power: 80W  
●D-STAR Compatible



**SS680S**   
**SS680SB**   
**Length: 0.68m**  
144/430MHz 144MHz/430MHz Non-radial

●Weight: 116g  
●Frequency: 144MHz 1/4λ 1.5dBi  
430MHz 5/8λ 3.8dBi  
●Reception Bandwidth:  
100~170MHz 350~470MHz  
●Max Power: 80W  
●D-STAR Compatible



**SS710S/AFM**   
**SS710SB/AFM**   
**Length: 0.71m**  
144/430MHz 144MHz/430MHz Non-radial

●Weight: 95g  
●Gain: 144MHz 2.15dBi,  
430MHz 5dBi  
●Max Power: 80W  
●D-STAR Compatible



**SS780S**   
**SS780SB**   
**Length: 0.78m**  
144/430MHz 144MHz/430MHz Non-radial

Wireless LAN

Mobile

Handheld

Fixed Type

Cables

Antenna Base

Accessories

## 144MHz/430MHz Non-radial

## SUPER BEAM®

- Weight: Approx. 325g
- Frequency: 144MHz: 1/2λ, 430MHz: 5/8λ 2-step
- Gain: 144MHz: 3.6dBi, 430MHz: 6.1 dBi
- Max Power: 150W
- D-STAR Compatible



**CSB7500**   
**Length: 1.06m**  
 144/430MHz Non-radial

- Weight: Approx. 345g
- Frequency: 144MHz: 5/8λ, 430MHz: 5/8λ 2-step
- Gain: 144MHz: 4.4dBi, 430MHz: 6.9dBi
- Max Power: 150W
- D-STAR Compatible



**CSB7700**   
**Length: 1.27m**  
 144/430MHz Non-radial

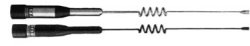
- Weight: Approx. 465g
- Frequency: 144MHz: 7/8λ, 430MHz: 5/8λ 3-step
- Gain: 144MHz: 5.1 dBi, 430MHz: 7.7dBi
- Max Power: 150W
- D-STAR Compatible





**CSB7900**   
**Length: 1.58m**  
 144/430MHz Non-radial

## 144/430MHz Dual Band



- Weight: 80g
- Frequency: 144MHz: 1/4λ, 430MHz: 1/2λ
- Max Power: 60W (FM)
- Wide Reception: 100~170, 350~470MHz
- Repeater Capable
- D-STAR Compatible



**SB0**   
**SBB0**   
**Length: 0.31m**  
 144MHz: 2.15dBi / 430MHz: 2.15dBi Non-radial



- Weight: 100g
- Frequency: 144MHz: 1/4λ, 430MHz: 1/2λ
- Max Power: 60W (FM)
- Wide Reception: 100~170, 350~470MHz
- Repeater Capable
- D-STAR Compatible



**SB1**   
**SBB1**   
**Length: 0.41m**  
 144MHz: 1.5dBi / 430MHz: 2.15dBi Non-radial



- Weight: 105g
- Frequency: 144MHz: 1/4λ, 430MHz: 5/8λ C Phase
- Max Power: 60W (FM)
- Wide Reception: 100~170, 350~470MHz
- Repeater Capable
- D-STAR Compatible



**SB2**   
**SBB2**   
**Length: 0.46m**  
 144MHz: 2.15dBi / 430MHz: 3.8dBi Non-radial



- Weight: 140g
- Frequency: 144MHz: 1/2λ, 430MHz: 5/8λ 2-step
- Max Power: 60W (FM)
- Wide Reception: 100~170, 350~470MHz
- Foldable ●Repeater Capable
- D-STAR Compatible



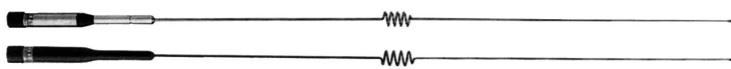
**SB3**   
**SBB3**   
**Length: 0.66m**  
 144MHz: 2.15dBi Non-radial / 430MHz: 5.0dBi Non-radial



- Weight: 135g
- Frequency: 144MHz: 1/2λ, 430MHz: 5/8λ 2-step
- Max Power: 60W (FM)
- Wide Reception: 100~170, 350~470MHz
- Foldable ●Repeater Capable
- D-STAR Compatible



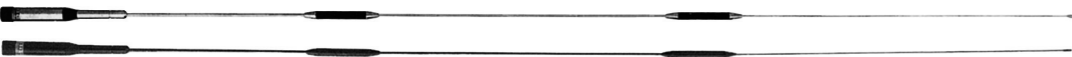
**SB4**   
**SBB4**   
**Length: 0.92m**  
 144MHz: 3.0dBi Non-radial / 430MHz: 5.5dBi Non-radial



- Weight: 170g
- Frequency: 144MHz: 1/2λ, 430MHz: 5/8λ 2-step
- Max Power: 120W (FM)
- Wide Reception: 100~170, 350~470MHz
- Foldable ●Repeater Capable
- D-STAR Compatible



**SB5**   
**SBB5**   
**Length: 0.95m**  
 144MHz: 3.0dBi Non-radial / 430MHz: 5.5dBi Non-radial

- Weight: 230g
- Frequency: 144MHz: 6/8λ C Phase, 430MHz: 5/8λ 3-step
- Max Power: 70W (FM)
- Wide Reception: 100~170, 350~470MHz
- Foldable ●Repeater Capable
- D-STAR Compatible




**SB7**   
**SBB7**   
**Length: 1.38m**  
 144MHz: 4.5dBi Non-radial / 430MHz: 7.2dBi Non-radial

## 50/144/430MHz Triple Band


- Weight: 300g
- Frequency: 50MHz: 1/4λ short, 144MHz: 1/2λ C Phase, 430MHz: 5/8λ C Phase
- Max Power: 120W (FM)
- Foldable ●Repeater Capable
- D-STAR Compatible



**SB14**   
**Length: 1.08m**  
 50MHz: 2.15dBi / 144MHz: 3.5dBi Non-radial  
 430MHz: 6.0dBi Non-radial

- Weight: 410g
- Frequency: 50MHz: 1/4λ, 144MHz: 6/8λ C Phase, 430MHz: 5/8λ 3-step
- Max Power: 120W (FM)
- Foldable ●Repeater Capable
- D-STAR Compatible




**SB15**   
**Length: 1.53m**  
 50MHz: 2.15dBi / 144MHz: 4.5dBi  
 430MHz: 7.2dBi

## 430MHz Mono Band

- Weight: 100g
- Frequency: 430MHz: 1/2λ
- Max Power: 60W (FM)
- Wide Reception: 350~470MHz
- Repeater Capable
- D-STAR Compatible



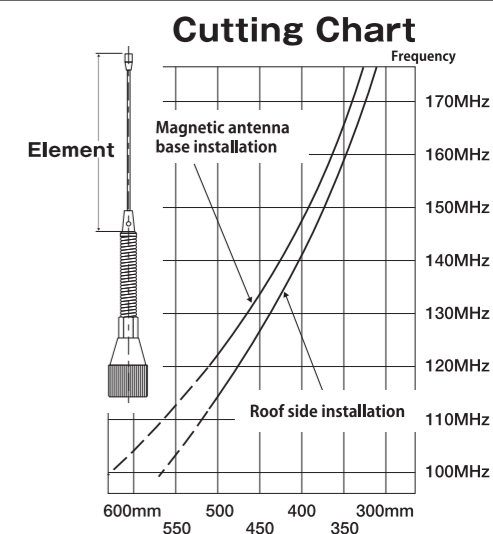
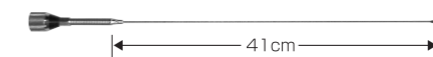
**SB41**   
**Length: 0.4m**  
 430MHz: 2.15dBi Non-radial

## 144~170MHz Mono Band

- Max Power: 140W (SSB)
- Length: 46cm
- Connector: M-P



- Length: 51cm
- Connector: M-P



Element length (Standard element length is 440m) ※Size will vary depending on the position and method of installation




**Suitable for hunting/outdoor activities**

**CA-212H**   
**Length: 1.0m** 144MHz: 2.15dBi Non-radial

## 50/144MHz Dual Band

- Weight: 270g
- Frequency: 50MHz: 1/4λ, 144MHz: 5/8λ
- Max Power: 300W
- Wide Reception: 100~170MHz
- Foldable
- D-STAR Compatible



**CA-285**   
**Length: 1.32m**  
 50MHz: 0dBi / 144MHz: 3.5dBi

Wireless LAN

Mobile

Handheld

Fixed Type

Cables

Antenna Base

Accessories

Wireless LAN

Mobile

Handheld

Fixed Type

Cables

Antenna Base

Accessories

## 144/430MHz Dual Band

- Weight: 520g
- Frequency: 144MHz: 5/8λ 2-step
- Max Power: 120W(SSB)
- Wide reception: 100~170MHz, 350~470MHz
- Foldable
- Repeater Capable
- D-STAR Compatible



**24KG**

Length: 2.06m 144MHz: 6.0dBi  
430MHz: 8.4dBi

- Weight: 215g
- Frequency: 144MHz: 1/2λ
- Max Power: 60W FM
- Wide reception: 100~170MHz, 350~470MHz
- Repeater Capable
- Survival Wind Speed: 60m/sec
- D-STAR Compatible



**Fiber Glass Rod!**  
Suitable for mobiles/verandah

**VM-1**

Length: 1.05m 144MHz: 3dBi Non-radial  
430MHz: 5.5dBi Non-radial

- Weight: 285g
- Frequency: 144MHz: 5/8λ
- Max Power: 150W
- Wide reception: 140~160MHz, 430~465MHz
- Repeater Capable
- D-STAR Compatible



**CA2x4SR**

Length: 1.02m 144MHz: 3.8dBi Non-radial  
430MHz: 6.2dBi Non-radial

## HF/50/144/430MHz Multi Band



- Weight: 630g
- Max Power: 28~29MHz 120W(SSB) 50MHz 200W(SSB)
- Foldable
- Repeater Capable
- The 28~29/50MHz band covers the entire bandwidth through the use of an independent adjustment system

**UHV-4**

Length: 1.39m  
28.50MHz 1/4λ 0dBi  
144MHz 1/2λ Non-radial 2.15dBi  
430MHz 5/8λ 2-step Non-radial 5.5dBi

## HF/50/144/430MHz Multi Band



- Weight: 540~730g
- Max Power: 7~28MHz 120W(SSB) 50/144MHz/430MHz 200W(SSB)
- Foldable
- D-STAR Compatible
- Optional 14/18MHz coils available

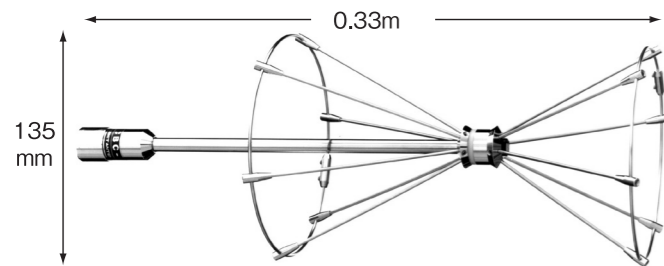
**UHV-6**

Length: 1.9m (MAX)  
(When 7MHz band coil is installed)  
7.21, 28MHz 1/4λ 0dBi  
50MHz 1/4λ 2.15dBi  
144MHz 1/2λ 2.15dBi 430MHz 5/8λ 2-step 5.5dBi

※Optional Parts  
L-14 Coil for 14MHz band  
L-18 Coil for 18MHz band

## Wide band biconical

The Biconical Antenna allows for clear transmission and reception with minimal QSB

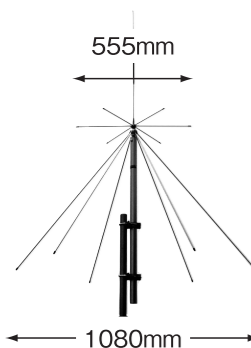


**CBC-70**

Length: 0.33m 430MHz: 6.0dBi Non-radial

- Weight: 220g
- Max Power: 300W(FM)
- Frequency: 430MHz: Biconical
- Opening diameter: 135mm
- Wide reception: 350~480MHz
- Repeater Capable
- D-STAR Compatible

Discone Antennas capable of wide band transmission and reception



**DS150S**

Length: 1.4m

Receiving frequency: 25~1500MHz  
Transmission frequency: 50&144~1300MHz

- Weight: 1.45kg
- Max Power: 100W(FM)
- Gain: 2.15dBi
- Opening diameter: 1080mm
- With RG58 A/U 20m
- Repeater Capable
- Survival Wind Speed: 40m/sec

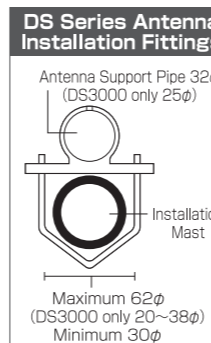


**DS3000**

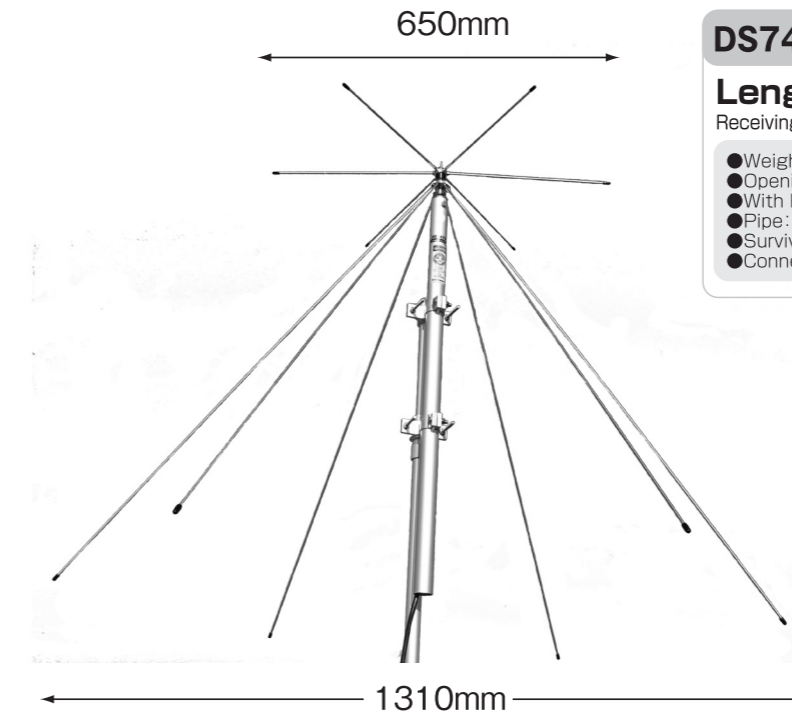
Length: 0.86m

Receiving frequency: 75MHz~3GHz  
Transmission frequency: 144MHz~1.2GHz

- Weight: 690g
- Max Power: 50W
- Gain: 144MHz 2.15dBi  
430MHz 3dBi/903MHz 3dBi  
1200MHz 3dBi
- Opening diameter: 470mm
- With RG58A/U 10m
- Repeater Capable
- Survival Wind Speed: 40m/sec



Reliably capture signals from the skies above: VHF/UHF Air Band Exclusive Dual Antennas



**DS747PRO**

Length: 0.84m

Receiving frequency: 108~900MHz

- Weight: 1.88kg
- Gain: 2.15dBi
- Opening diameter: 1310mm
- With RG58 A/U 20m
- Pipe: 0.75m
- Survival Wind Speed: 40m/sec
- Connector: M

**AB-35HS** **AB-35H**

Length: Approx. 37cm Receiving frequency VHF: 118~135MHz UHF: 230~360MHz

- Weight: 32g
- Connector: SMA/BNC

**AB-35W**

Length: Approx. 35cm Receiving frequency VHF: 118~135MHz UHF: 230~360MHz

- Weight: 56g
- Connector: BNC

**AB-35WS**

Length: Approx. 37cm Receiving frequency VHF: 118~135MHz UHF: 230~360MHz

- Weight: 53g
- Connector: SMA

**AB-50H**

Length: Approx. 51cm Receiving frequency VHF: 118~135MHz UHF: 230~360MHz

- Gain: 3.4dBi
- Weight: 42g
- Connector: BNC

**AB-1230H (Handheld)**

Length: Approx. 30cm Receiving frequency VHF: 108~140MHz UHF: 220~400MHz

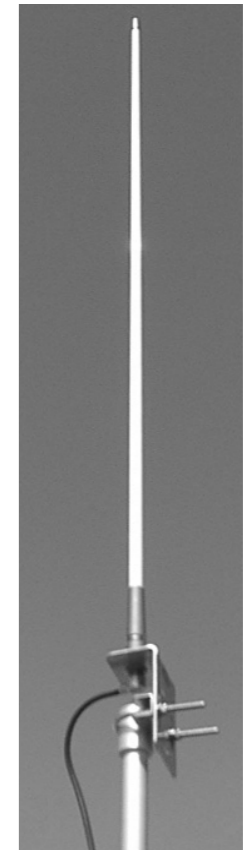
- Weight: 30g
- Impedance: 50Ω
- Connector: BNC

**AB-1230M (Mobile)**

Length: Approx. 58cm Receiving frequency VHF: 108~140MHz UHF: 220~400MHz

Gain: VHF 2.15/UHF 3.0dBi Wave: VHF 1/4/UHF 3/8λ  
Max Power: 80W TX Frequency Range: VHF 126±1.5MHz/UHF 270±5MHz

- Weight: 1.40g
- Impedance: 50Ω
- Connector: M



**AB-380 (Fixed)**








Length: 1.17m

Receiving frequency VHF: 108~140MHz  
UHF: 220~400MHz  
Gain: VHF 3.0/UHF 4.5dBi  
Wave: VHF 1/2λ/UHF 5/8λ x 2 step  
Max Power: 50W  
TX Frequency Range: VHF 128±1.5MHz/UHF 350~390MHz










- Weight: 520g
- Impedance: 50Ω
- Connector: M
- With installation antenna base (Mast pole diameter 10~50φ)
- RG58A/U 10m

## HF Mono-band

### HR Series (Center Loading Type)

<b>HR3.5</b>  <b>Length: 2.23m</b> Weight: 525g 3.5MHz 1/4λ Center Loading ● Frequency: 3.5MHz ● Foldable ● Max Power: 120W SSB/50W(FM)	<b>HR7</b>  <b>Length: 2.13m</b> Weight: 490g 7MHz 1/4λ Center Loading ● Frequency: 7MHz ● Foldable ● Max Power: 120W SSB	<b>HR14</b>  <b>Length: 2.13m</b> Weight: 500g 14MHz 1/4λ Center Loading ● Frequency: 14MHz ● Foldable ● Max Power: 200W SSB	<b>HR18</b>  <b>Length: 2.13m</b> Weight: 480g 18MHz 1/4λ Center Loading ● Frequency: 18MHz ● Foldable ● Max Power: 200W SSB/100W FM	<b>HR21</b>  <b>Length: 2.13m</b> Weight: 490g 21MHz 1/4λ Center Loading ● Frequency: 21MHz ● Max Power: 200W SSB	<b>HR28</b>  <b>Length: 2.13m</b> Weight: 480g 28MHz 1/4λ Center Loading ● Frequency: 28MHz ● Foldable ● Max Power: 200W SSB	<b>HR50</b>  <b>Length: 2.13m</b> Weight: 490g 50MHz 1/2λ 2.15dBi Non-radial ● Frequency: 50MHz ● Foldable ● Max Power: 200W SSB
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### HFB Series (Base Loading Type)

<b>HFB-80</b>  <b>Length: 1.55m</b> ● Weight: 400g ● Frequency: 3.5MHz ● Max Power: 120W pep	<b>HFB-40</b>  <b>Length: 1.6m</b> ● Weight: 340g ● Frequency: 7MHz ● Max Power: 250W pep	<b>HFB-30</b>  <b>Length: 1.06m</b> ● Weight: 250g ● Frequency: 10MHz ● Max Power: 250W pep	<b>HFB-20</b>  <b>Length: 0.96m</b> ● Weight: 220g ● Frequency: 14MHz ● Max Power: 250W pep	<b>HFB-17</b>  <b>Length: 0.96m</b> ● Weight: 210g ● Frequency: 18MHz ● Max Power: 250W pep
<b>HFB-15</b>  <b>Length: 0.96m</b> ● Weight: 210g ● Frequency: 21MHz ● Max Power: 250W pep	<b>HFB-12</b>  <b>Length: 0.96m</b> ● Weight: 210g ● Frequency: 24MHz ● Max Power: 250W pep	<b>HFB-10</b>  <b>Length: 0.96m</b> ● Weight: 200g ● Frequency: 28~29MHz ● Max Power: 250W pep	<b>HFB-6</b>  <b>Length: 0.96m</b> ● Weight: 200g ● Frequency: 50MHz ● Max Power: 250W pep	

## Handheld Antennas for Digital Convenience Radios

● Weight: 41.5g ● Frequency: 351MHz band  
 ● Max Power: 5W (FM) ● Gain: 2.15dBi (1/4λ), 3.0dBi (1/2λ) ● Connector: SMA



**PDH351W**   
**Length: 22cm (1/4λ), 41cm (1/2λ)**  
 351MHz Handheld Antenna

● Enjoy both operations through the removal and attachment of the element.  
 ● Flexibility in movement achieved by removing the cap and connecting the element when operating the 1/2λ (Length 41cm). Cap included for when operating the 1/4λ (Length 22cm).

● Weight: 28g ● Frequency: 351MHz band  
 ● Max Power: 5W  
 ● Gain: 1.5dBi (1/4λ) ● Connector: SMA  
 ● Impedance: 50Ω



**PDH351-02**   
**Length: 23cm**  
 351MHz Handheld Antenna

● Weight: 32g ● Frequency: 351MHz band  
 ● Max Power: 5W  
 ● Gain: 2.15dBi (1/2λ) ● Connector: SMA  
 ● Impedance: 50Ω



**PDH351-04**   
**Length: 40cm**  
 351MHz Handheld Antenna

## CH Series

The CH Series are the best-selling handheld antenna series of which, in addition to having superb transmission and reception performance on the ham band, has gained a strong reputation in wide band reception

### 144/430/900MHz Triple Band

● Weight: 34g (CH-300FXS) · 38g (CH-350FXB)  
 ● Frequency: 144/430/900MHz ● Max Power: 10W (FM)  
 ● Wide Reception 100~170,350~470,840~980MHz  
 ● Gain: 1.2/1.7/3.4dBi ● Repeater Capable ● D-STAR Compatible

### 144/430MHz Dual Band

● Weight: 42g (CH-600FXS) · 45g (CH-700FXB)  
 ● Frequency: 144/430MHz ● Max Power: 10W (FM)  
 ● Wide Reception 100~170,350~470,840~980MHz  
 ● Gain: 1.5/3.2dBi ● Repeater Capable ● D-STAR Compatible

### 144/430MHz Dual Band

● Weight: 43g ● Frequency: 144/430MHz ● Max Power: 20W (FM)  
 ● Wide Reception 100~170,350~470,840~980MHz  
 ● Gain: 1.44MHz: 0dBi 430MHz: 3.2dBi ● Repeater Capable  
 ● D-STAR Compatible

### Wide Band Telescopic Antennas

● Weight: 65g ● Frequency: 70MHz~1000MHz  
 ● Max Power: 10W (144/430MHz) ● Wide Reception  
 ● Gain: 2.15dBi ● Repeater Capable ● D-STAR Compatible

● Weight: 60g ● Frequency: 25MHz~1300MHz  
 ● Wide Reception ● Gain: 1.50dBi  
 ● For Reception Only

### V/UHF Railroad Radio Exclusive Antenna

● Weight: Approx. 50g  
 ● Frequency: VHF: 142~149MHz UHF: 336~400MHz

### 144/430MHz Dual Band Soft Rubber Type

CH209 ● Weight: 19g ● Frequency: 144/430MHz  
 ● Max Power: 5W (FM) ● Supports 300MHz Reception  
 SMA209 ● Weight: 20g ● Frequency: 144/430MHz  
 ● Max Power: 5W (FM) ● Supports 300MHz Reception




## Flexible element adopted

**CH-300FXS**   
**CH-350FXB**   
**Length: 25cm**  
 144/430/900MHz Wide-band Reception Handheld Antenna




**CH-600FXS**   
**CH-700FXB**   
**Length: 40cm**  
 144/430MHz Wide-band Reception Handheld Antenna

**CH-75**   
**Length: 39cm**  
 144/430MHz Wide-band Reception Handheld Antenna

**CH-99**   
**SMA-99**   
**Length: 19.5cm~1.135m** 70~1000MHz Rod Style Antenna

**BNC-W100RX**   
**SMA-W100RX**   
**Length: Approx. 20~99cm**

**CTR-34WS**   
**Length: 32cm**

**CH209**   
**SMA209**   
**SMA209J**   
**CH209/Length: 7.5cm** Soft Rubber Type  
**SMA209/Length: 7.0cm** Soft Rubber Type

## BNC Series

● Wide-band, high-gain handheld receiving antennas

### 7~50MHz HF8 Band Telescopic Antenna

● Weight: 157g ● Max Power: 120W (PEP)

### 144/430MHz Dual Band

● Weight: 8g ● Frequency: 144MHz: 2.15dBi 430MHz: 3.4dBi  
 ● Max Power: 20W ● Repeater Capable ● D-STAR Compatible

## SH Series

● Practicality and reduction in weight has been achieved through the adoption of a flexible element. Furthermore, it comes fully equipped with features such as Cu coating for greater efficiency and waterproof BNC connectors. Also capable of wide-band reception.

### 144/430MHz Wide Reception 4 Band

● Weight: 37g  
 ● Frequency: 144/430MHz (Receiving Airband 300/800MHz Band)  
 ● Max Power: 10W (FM)  
 ● Wide Reception 100~170,350~470,840~980MHz  
 ● Gain: 1.44MHz: 1.5dBi 430MHz: 3.2dBi  
 ● Repeater Capable ● D-STAR Compatible

**SH55**   
**Length: 38cm**  
 144/430MHz 4 Band High-Gain Handheld Antenna

### 144/430/900MHz Wide Reception 5 Band

● Weight: 36g  
 ● Frequency: 144/430/900MHz (Receiving Airband 300/800MHz Band)  
 ● Max Power: 10W (FM)  
 ● Wide Reception 100~170,350~470,840~980MHz  
 ● Gain: 1.44MHz: 1.2dBi 430MHz: 1.7dBi 900MHz: 3.4dBi  
 ● Repeater Capable ● D-STAR Compatible

**SH85**   
**Length: 25cm**  
 5 Band High-Gain Handheld Antenna

## SMA Series

●The SMA Series are lightweight, flexible element type compact antennas for the new model handheld devices and compact receivers. SMA connectors adopted. Capable of wideband reception. Compatible with the new model handheld devices and compact receivers.

### 144/430/900MHz Triple Band

**SMA3** SMA Connector  
**Length: 25cm** 144/430/900MHz band 3-band Handheld Antenna  
 ●Weight: 30g ●Frequency: 144/430/900MHz (Reception 118~160/250~290/360~390/420~470/820~900MHz) ●Max Power: 10W (FM) ●Repeater Capable ●D-STAR Compatible

### 144/430MHz Dual Band

**SMA501** SMA Connector  
**Length: 4.6cm** Compact Handheld Antenna for the 144/430MHz Wide-band Reception  
 ●Weight: 15g ●Frequency: 144/430MHz ●Max Power: 8W (FM) ●Repeater Capable  
 ●Wide-band Reception Frequency: 118~160, 250~290, 360~390, 420~470, 820~960, 1260~1300MHz ●D-STAR Compatible

**SMA503** SMA Connector **SMA503J** SMA Connector  
**Length: 22cm** 144/430MHz Flexible Element Handheld Antenna  
 ●Weight: 12g ●Frequency: 144/430MHz (Reception 118~160/250~290/360~390/420~470/820~960MHz) ●Max Power: 10W (FM) ●Repeater Capable ●D-STAR Compatible

**SMA24** SMA Connector **SMA24J** SMA Connector  
**Length: 41cm** 144/430MHz Super-fine Flexible Element  
 ●Weight: 8g ●Frequency: 144MHz 2.15dBi 430MHz 3.4dBi ●Max Power: 20W ●Repeater Capable ●D-STAR Compatible

### 144/430/1200MHz Triple Band

**SMA701** SMA Connector  
**Length: 4.6cm** 144/430/1200MHz Ultra-compact Handheld Antenna  
 ●Weight: 15g ●Frequency: 144/430/1200MHz (Reception 118~160/250~290/360~390/420~470/820~960/1260~1300MHz) ●Max Power: 8W (FM) ●Repeater Capable ●D-STAR Compatible

**SMA703** SMA Connector  
**Length: 17cm** 144/430/1200MHz Flexible Element Handheld Antenna  
 ●Weight: 11g ●Frequency: 144/430/1200MHz (Reception 118~160/250~290/360~390/420~470/820~960/1260~1300MHz) ●Max Power: 10W (FM) ●Gain: 3.4dBi (1200MHz) ●Repeater Capable ●D-STAR Compatible

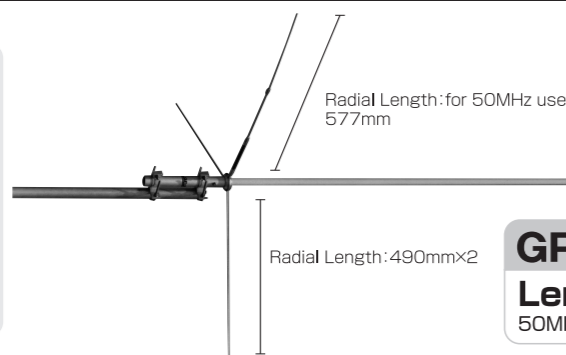
**SMA726** SMA Connector  
**Length: 51cm** Supports FM, AIR, 150MHz Reception  
 ●Weight: 64g ●Frequency: 50MHz/144MHz/430MHz ●Max Power: 10W  
 ●Wide Reception ●Gain: 2.15dBi ●Repeater Capable ●D-STAR Compatible

## TRIPLE BAND GP

### ●Triple Bander

#### 50/144/430MHz Triple Band

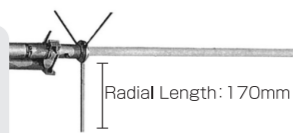
- Weight: 1.2kg
- Frequency: 50MHz: 5/8λ 144MHz: 5/8λ 2-step 430MHz: 5/8λ 4-step
- Max Power: 300W SSB
- Wide Reception: 100~170, 350~470MHz
- Repeater Capable
- Survival Wind Speed: 50m/sec
- The adjustment element is a standard feature for the 50MHz band (Adjustment Range: 1.2MHz between 50~53MHz)
- D-STAR Compatible



**GP-15** M Connector **GP-15N** N Connector  
**Length: 2.42m**  
 50MHz: 3dBi / 144MHz: 6.2dBi / 430MHz: 8.6dBi

#### 144/430/1200MHz Triple Band

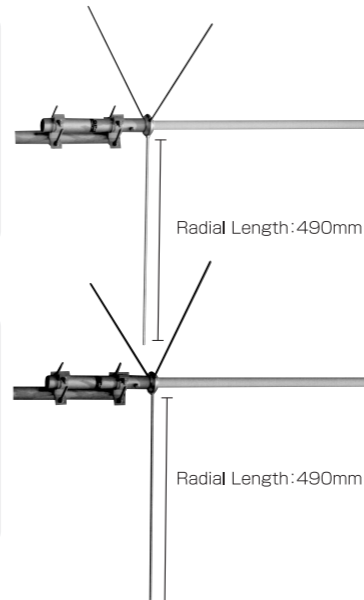
- Weight: 1.15kg
- Frequency: 144MHz: 5/8λ C Phase 430MHz: 5/8λ 3-step 1200MHz: 5/8λ 6-step
- Max Power: 300W SSB (144MHz) 200W SSB (430/1200MHz)
- Wide Reception: 100~170, 350~470, 840~1400MHz
- Repeater Capable ●Survival Wind Speed: 60m/sec
- D-STAR Compatible



**GP-93** M Connector  
**Length: 1.78m**  
 144MHz: 4.5dBi / 430MHz: 7.2dBi / 1200MHz: 10.0dBi

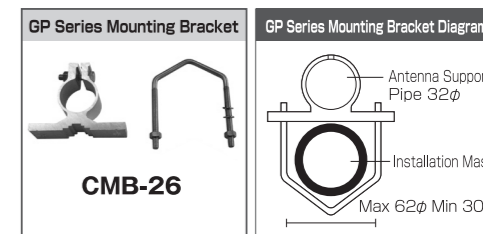
### 144/430/1200MHz Triple Band

- Weight: 1.28kg
- Frequency: 144MHz: 5/8λ 2-step 430MHz: 5/8λ 4-step 1200MHz: 5/8λ 9-step
- Max Power: 200W SSB (430/1200MHz) 300W SSB (144MHz)
- Wide Reception: 100~170, 350~470, 840~1400MHz
- Repeater Capable
- Survival Wind Speed: 50m/sec
- D-STAR Compatible



**GP-95** N Connector  
**Length: 2.42m** 144MHz: 6.0dBi / 430MHz: 8.6dBi / 1200MHz: 12.8dBi

**GP-98** N Connector  
**Length: 2.94m** 144MHz: 6.5dBi / 430MHz: 9.0dBi / 1200MHz: 13.5dBi



CMB-26 is included with all GP Series Antennas. Can also be purchased separately.

## SPECIAL MONO/DUAL BAND GP

### 50MHz Mono Band

●Non-radial Shared GP for Fixed and Marine Use in Salt-affected Areas

- Weight: 1.2kg
- Frequency: 50MHz: 1/2λ
- Max Power: 120W SSB
- With Adjustment Element
- Survival Wind Speed: 45m/sec



**GH-50** M Connector  
**Length: 2.4m**  
 50MHz: 2.15dBi / Non-radial including a Frequency Adjustment Feature

### 144/430MHz Dual Band

- Weight: 1.15kg
- Frequency: 144MHz: 6/8λ C Phase 430MHz: 5/8λ 3-step
- Max Power: 200W SSB
- Wide Reception: 100~170, 350~470MHz
- Repeater Capable
- Survival Wind Speed: 45m/sec ●D-STAR Compatible



**GH-70** M Connector  
**Length: 2.25m** 144MHz: 4.5dBi Non-radial / 430MHz: 7.2dBi Non-radial

- Weight: 1.1kg
- Frequency: 144MHz: 6/8λ C Phase 430MHz: 5/8λ 3-step
- Max Power: 200W SSB
- Impedance: 50Ω
- V.SWR: Below 1.5
- Support Installation Diameter: 25~95φ
- Survival Wind Speed: 45m/sec
- \*430MHz is Repeater Capable
- \*2-wave simultaneous transmission is possible if using the 2-wave shared device (ie. CF-416)



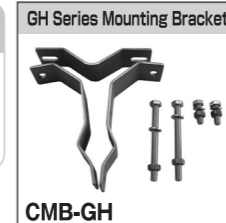
**GH-70S** M Connector  
**Length: 1.74m** 144MHz: 4.5dBi Non-radial / 430MHz: 7.2dBi Non-radial

### 430/1200MHz Dual Band

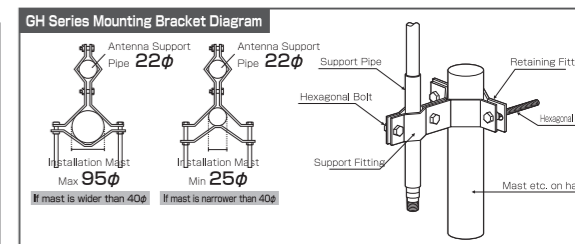
- Weight: 1.15kg
- Frequency: 430MHz: 5/8λ 4-step 1200MHz: 5/8λ 4-step
- Max Power: 200W SSB (430MHz) 100W SSB (1200MHz)
- Wide Reception: 100~170, 350~470, 840~1400MHz
- Repeater Capable
- Survival Wind Speed: 45m/sec
- D-STAR Compatible



**GH80** N Connector  
**Length: 2.25m**  
 430MHz: 8.6dBi Non-radial  
 1200MHz: 8.6dBi Non-radial



CMB-GH is included with all GH Series Antennas. Can also be purchased separately.

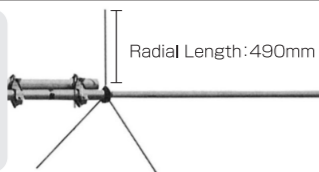


## SLC System

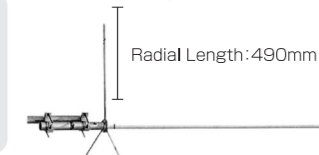
The SLC System is an advanced mechanism developed originally by Comet in order to greatly improve the gain on Dual and Triple Banders. Through the implementation of the Air-Core Type Shaping Element Phase System and the Phosphor Bronze Element, the loss during the existing Phase Shift Peak has been substantially reduced.

### 144/430MHz Dual Band

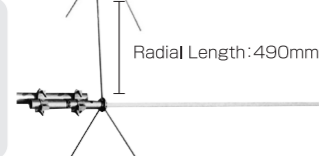
- Weight: 2.2kg
- Frequency 144MHz: 5/8λ 3-step C Phase 430MHz: 5/8λ 8-step
- Max Power: 200W SSB
- Wide Reception 100~170, 350~470MHz
- Repeater Capable
- Survival Wind Speed: 30m/sec
- D-STAR Compatible



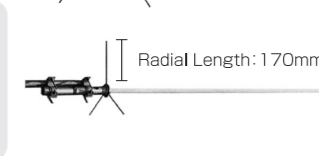
- Weight: 1.6kg
- Frequency 144MHz: 5/8λ 2-step C Phase 430MHz: 5/8λ 5-step
- Max Power: 200W SSB
- Wide Reception 100~170, 350~470MHz
- Repeater Capable
- Survival Wind Speed: 40m/sec
- D-STAR Compatible



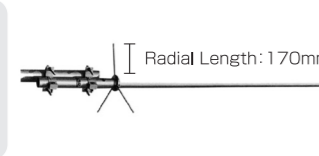
- Weight: 1.27kg
- Frequency 144MHz: 5/8λ 2-step 430MHz: 5/8λ 4-step
- Max Power: 200W SSB
- Wide Reception 100~170, 350~470MHz
- Repeater Capable
- Survival Wind Speed: 50m/sec
- D-STAR Compatible



- Weight: 1.16kg
- Frequency 144MHz: 6/8λ 2-step C Phase 430MHz: 5/8λ 3-step
- Max Power: 200W SSB
- Wide Reception 100~170, 350~470MHz
- Repeater Capable
- Survival Wind Speed: 60m/sec
- D-STAR Compatible



- Weight: 0.89kg
- Frequency 144MHz: 1/2λ 430MHz: 5/8λ 3-step
- Max Power: 200W SSB
- Wide Reception 100~170, 350~470MHz
- Repeater Capable
- Survival Wind Speed: 60m/sec
- D-STAR Compatible



- Weight: 0.78kg
- Frequency 144MHz: 1/2λ 430MHz: 5/8λ 2-step C Phase
- Max Power: 100W FM
- Wide Reception 100~170, 350~470MHz
- Repeater Capable
- Survival Wind Speed: 60m/sec
- D-STAR Compatible



### GP-9M GP-9N

Length: 5.15m  
144MHz: 8.5dBi / 430MHz: 11.9dBi

### GP-6 GP-6N

Length: 3.07m  
144MHz: 6.5dBi / 430MHz: 9.0dBi

### GP-5 GP-5N

Length: 2.42m  
144MHz: 6.0dBi / 430MHz: 8.6dBi

### GP-3 GP-3N

Length: 1.78m  
144MHz: 4.5dBi / 430MHz: 7.2dBi

### GP-1 GP-1N

Length: 1.25m  
144MHz: 3.0dBi / 430MHz: 6.0dBi

### CA-2x4CX

Length: 1.29m  
144MHz: 3.5dBi Non-radial / 430MHz: 6.0dBi Non-radial

## MONO BAND GP

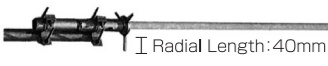
### 1200MHz Mono Band



- Weight: 1.2kg
- Frequency: 1200MHz: 21-step Air-core Type Collinear
- Max Power: 100W FM
- Repeater Capable
- Survival Wind Speed: 50m/sec
- D-STAR Compatible

GP-21  
Length: 2.42m High-gain 1200MHz: 14.9dBi

### 2400MHz Mono Band



- Weight: 1.16kg
- Frequency: 2400MHz: 22-step Air-core Type Collinear
- Max Power: 100W FM
- Repeater Capable
- Survival Wind Speed: 60m/sec

GP-24  
Length: 1.78m High-gain 2400MHz: 15.4dBi



- Weight: 750g
- Frequency: 2400MHz: 13-step Air-core Type Collinear
- Max Power: 100W FM
- Repeater Capable
- Survival Wind Speed: 60m/sec

GP-2413  
Length: 1.14m High-gain 2400MHz: 10.0dBi

## COMMERCIAL MONOBAND

C-150BX-L Frequency: 118~145MHz  
C-150BX-M Frequency: 134~160MHz  
C-150BX-H Frequency: 148~175MHz

Length: 1.70m (L), 1.52m (M), 1.28m (H)

- Weight: 890g
- Wave: 5/8λ
- Max Power: 100W FM
- Survival Wind Speed: 60m/sec
- Gain: 3.4dBi

CA-F22GFL Frequency: 120~150MHz  
CA-F22GF Frequency: 134~175MHz

Length: 2.70m Gain: 6.0dBi

- Weight: 1.3kg
- Wave: 5/8λ x 2
- Max Power: 150W FM
- Survival Wind Speed: 40m/sec
- Choice between M or N Type Connector

CA-712EF  
Length: 3.20m Gain 9.8dBi

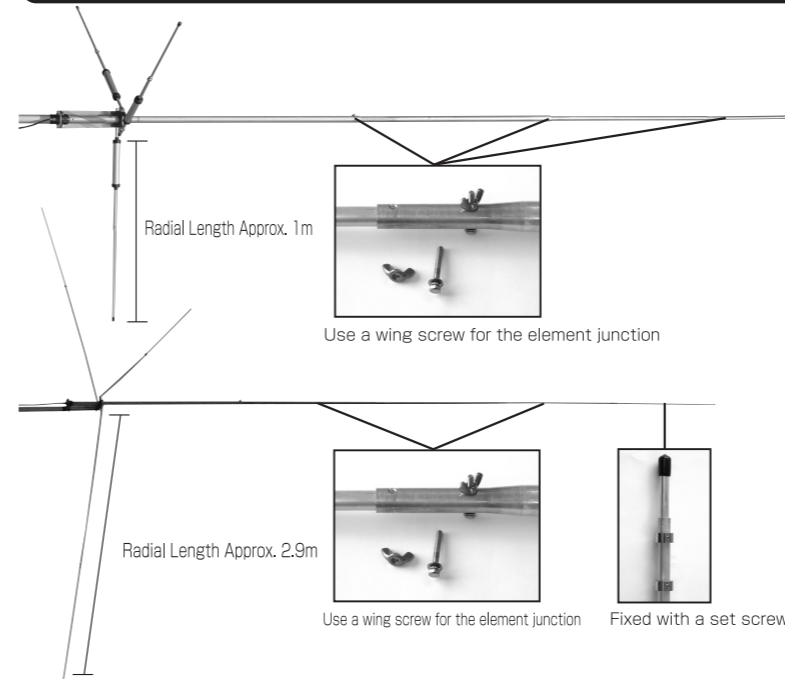
- Weight: 1.3kg
- Wave: 1/2λ
- Frequency: 440~450MHz: 1/2λ 12-step Transposed Collinear
- Max Power: 200W SSB
- Survival Wind Speed: 40m/sec

## COMMERCIAL MONOBAND

- Weight: 1kg
- Wave: 8/5λ 2-step
- Max Power: 150W FM
- Survival Wind Speed: 50m/sec

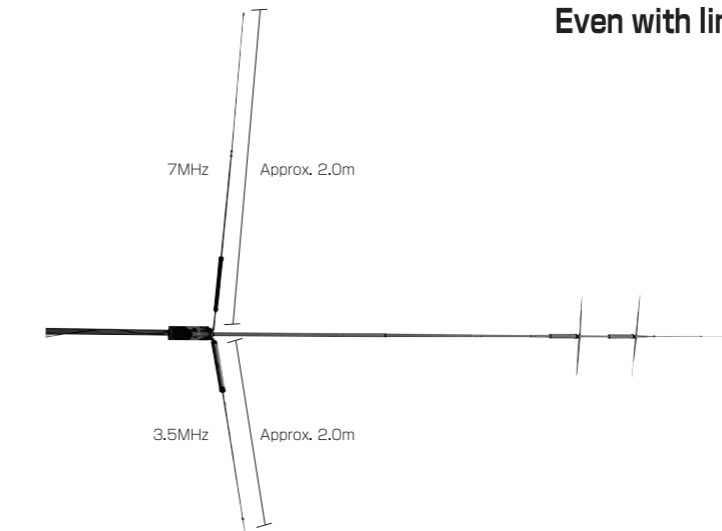
### HF Mono Band

The HFGP Series for the serious enthusiast. Excellent performance with a Max Power of 1kw.

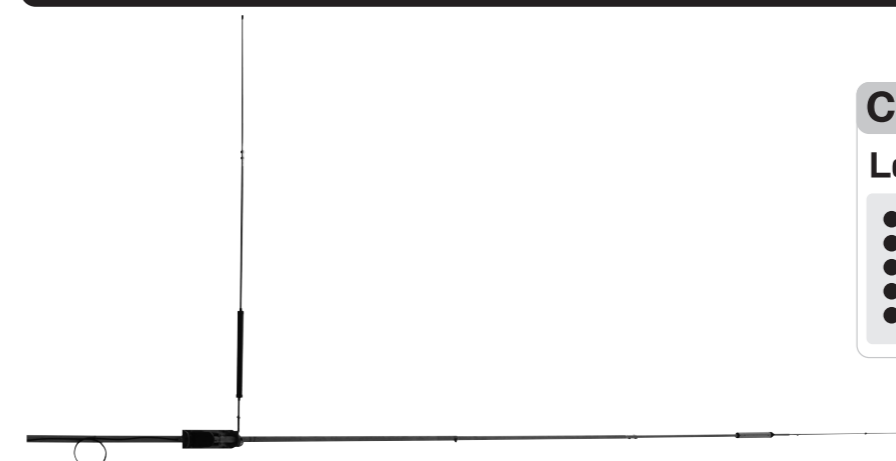


### 3.5/7MHz Dual Band GP

Even with limited space, the use of the 3.5/7MHz is easily possible.



### 7MHz(200kHz Compatible) Mono Band GP



CA-72GF Frequency: 440~480MHz  
CA-72GFL Frequency: 400~460MHz  
Length: 1.25m Gain: 5.5dBi

CHA2100  
Length: 8.4m 21MHz

- Weight: 3.7kg
- Frequency: 21MHz: 3.2dBi 5/8λ
- Max Power: 1kW (SSB)
- V.SWR: Below 1.5
- Impedance: 50Ω
- Radial Length: Approx. 1m
- Installation Support: 30~72φ
- Survival Wind Speed: 30m/sec

CHA2800  
CHA2900  
Length CHA2800: 6.72m 28/29MHz  
Length CHA2900: 6.40m 28/29MHz

- Weight: 3.5kg
- Frequency: 28/29MHz: 3.2dBi 5/8λ
- Max Power: 1kW (SSB)
- V.SWR: Below 1.5
- Impedance: 50Ω
- Radial Length: Approx. 2.9m
- Installation Support: 30~72φ
- Survival Wind Speed: 30m/sec
- Repeater Capable (CHA2900)

CHA-7350H  
Length: Approx. 6m  
Max Power: 1kW (SSB)

- Frequency: 3.5/7MHz
- V.SWR: Below 1.5
- Impedance: 50Ω
- Radial Length: Approx. 2.1m (7MHz), Approx. 2m (3.5MHz) / 2 piece radial
- Length: Approx. 6m
- Weight: Approx. 5.4kg
- Installation Support: 30~72φ

CHA7000W  
Length: Approx. 5.6m

- Frequency: 7~7.2MHz
- Max Power: 300W (SSB)
- V.SWR: Below 2.0
- Impedance: 50Ω
- Radial Length: 2.05m (1 piece radial)
- Length: Approx. 5.6m
- Weight: Approx. 3.9kg
- Installation Support: 30~72φ

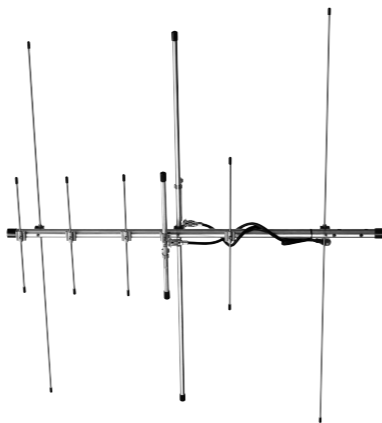
## V-UHF YAGI

### 144/430MHz Dual Band

●Lightweight Type. Perfect for Apartment Ham's and Portable Operation!

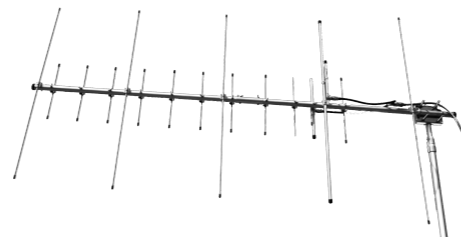
#### CYA2375 Boom Length:0.86m

- Frequency Range: 144~146MHz(144MHz Band), 430~440MHz(430MHz Band)
- Max Power: 100W(FM)
- Gain: 7.6dBi(144MHz Band), 9.5dBi(430MHz Band)
- Weight: Approx. 1.0kg(Main body only)



#### CYA25711 Boom Length: 1.9m

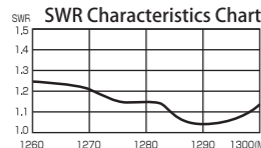
- Frequency Range: 144~146MHz(144MHz Band), 430~440MHz(430MHz)
- Max Power: 100W(FM)
- Gain: 10.8dBi(144MHz), 12.0dBi(430MHz Band)
- Max Element Length: 144/Approx. 1,020mm, 430/Approx. 330mm
- Stainless wing screws used as element installation screws
- Weight: Approx. 2.0kg(Main body only)\*Pole not included



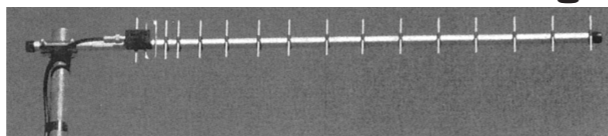
### 1200MHz Mono Band

#### CYA-1216E Boom Length: 1.36m Radius of Gyration: 1.3m

- Weight: 0.64kg ●Frequency: 1260~1300MHz ●Gain: 16.6dBi
- Max Power: 100W FM 200W SSB ●Installation Support Diameter: 25~65φ
- Swept Area: 0.04m<sup>2</sup> ●Survival Wind Speed: 45m/sec ●D-STAR Compatible



#### 1200MHz 16 Element Single



## HB9CV

### 50MHz Mono Band

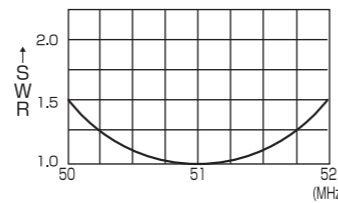
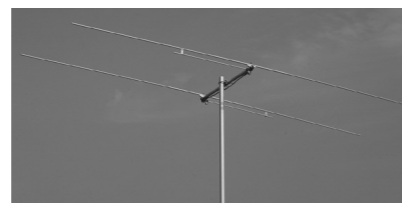
#### ●50MHz HB9CV

Thanks to the Phase Difference Feed System, the 50MHz HB9CV is more compact and lighter than a comparable Yagi Antenna, and in addition, it's DX communication is flawless!

#### CA-52HB Suitable for 50MHz beginners

Boom Length: 0.75m Radius of Gyration: 1.54m Max Element Length: 2.97m  
50MHz: 6.3dBi 2 Element HB9CV

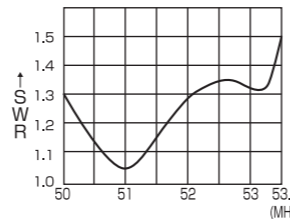
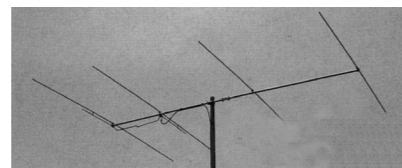
- Weight: 0.91kg ●Frequency 50~53MHz ●Max Power: 400W SSB
- Swept Area: 0.054m<sup>2</sup> ●Installation Mast: 25φ~65φ ●Survival Wind Speed: 35m/sec



#### CA-52HB4 Simple assembly and convenience in transportation owing to the wing screw specifications

Boom Length: 3.2m Radius of Gyration: 2.22m Max Element Length: 2.97m  
50MHz: 10.4dBi 4 Element HB9CV

- Weight: 2.1kg ●Frequency 50~53.5MHz ●Max Power: 400W SSB
- Swept Area: 0.19m<sup>2</sup> ●Installation Mast: 25φ~65φ ●Survival Wind Speed: 35m/sec



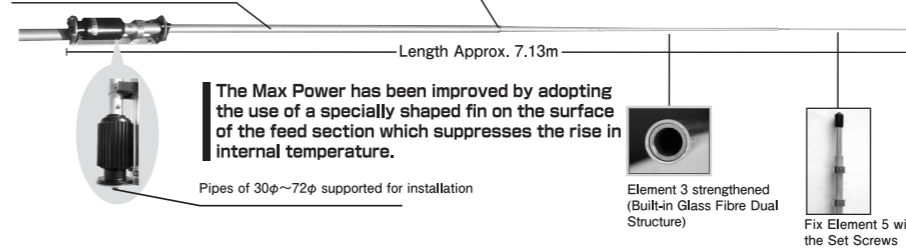
### Broad Band Antenna

●Since it's a non-radial vertical type, an earth is not required!!



Wing screws used for the element junction (2nd step and 3rd step) ※5mm/4mm

Adopted the use of the proven hose band for the element and base section



#### CHA250BXII

Length: Approx. 7.13m

- Weight: Approx. 3.2kg ●Max Power: 250W(SSB)
- Transmission Frequency: 3.5MHz~57MHz
- Receiving Frequency: 2.0MHz~90MHz
- V.SWR: Below 1.5 ●Impedance: 50Ω
- Installation Support Diameter: 30φ~72φ
- Survival Wind Speed: 30m/sec
- Form: Single Type GP ●Connector: M Type

### Features

●HF non-radial: earth not required, perfect for operating from the verandah!

- Adopted the use of a specially shaped fin on the surface of the feed section. Max Power improved through an increase in Thermal Radiation Efficiency.
- Air ducts used on the base of the feed section. Max Power strengthened by suppressing the rise in Internal Temperature.

### Long size element adopted

Transmission Frequency 7&14~56MHz Receiving Frequency 3~70MHz z

#### HA750BL Broadband Mobile Antenna Length: Approx. 2.41m

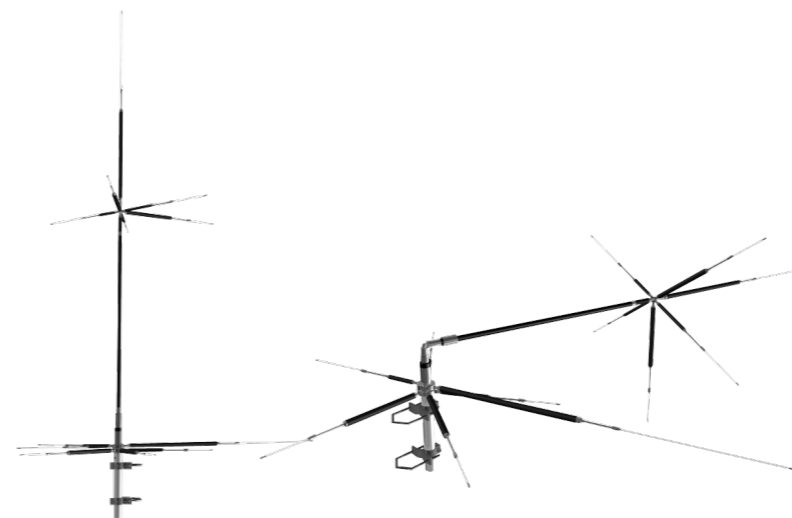
- Max Power: 120W(SSB) ●Impedance: 50Ω ●V.SWR: Below 1.5 ●Weight: Approx. 820g
- Connector: M Type

Transmission Frequency 7&18~54MHz Receiving Frequency 3~70MHz z

#### HA750B Broadband Mobile Antenna Length: Approx. 1.22m

- Max Power: 120W(SSB) ●Impedance: 50Ω ●V.SWR: Below 1.5 ●Weight: Approx. 730g
- Connector: M Type

### Multi Band GP



#### Folding Style Multi Band GP Antenna

##### Features

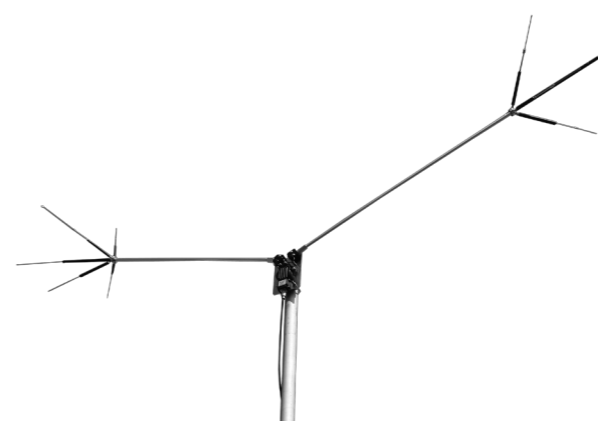
- Since the Radial Ring rotates 360°, it can be adjusted to any position that you desire.
- A Folding Mechanism has been adopted, allowing for greater convenience in the removal/installation and storage of the element when not in use.

#### CHA-88B

Length: 2.5m 3.5/7/18/21/28/50/144/430MHz

- Frequency Band: 3.5/7/18/21/28/50/144/430MHz
- Max Power: 3.5~50MHz 200W(SSB), 50~430MHz 150W(FM)
- Impedance: 50Ω ●VSWR: Below 1.5 for the central frequency of each band
- Connector: M Type ●Weight: Approx. 2.7Kg
- Adaptable Mast Diameter(mm): 25~62φ
- Length: Approx. 2.5m ●Radius of Gyration: Approx. 1.3m

### Dipole Antenna



#### HF5 Band Variable Angle Type Dipole Antenna

##### Features

- Various applications possible: Horizontal Type, V Type, GP

#### CHV-5X

Length: 4m(at horizon) 7/14/21/28/50MHz 5 Band

- Frequency Band: 7/14/21/28/50MHz 5 Band
- Balun (CBL-2500) included
- Max Power: 7/14MHz 150W(SSB), 21/28/50MHz 220W(SSB)
- Impedance: 50Ω ●VSWR: Below 1.5
- Length: Approx. 4m(at horizontal) ●Connector: M Type
- Adaptable Mast Diameter(mm): 25~62φ
- Weight: Approx. 2.7kg(One side of element Approx. 900g)

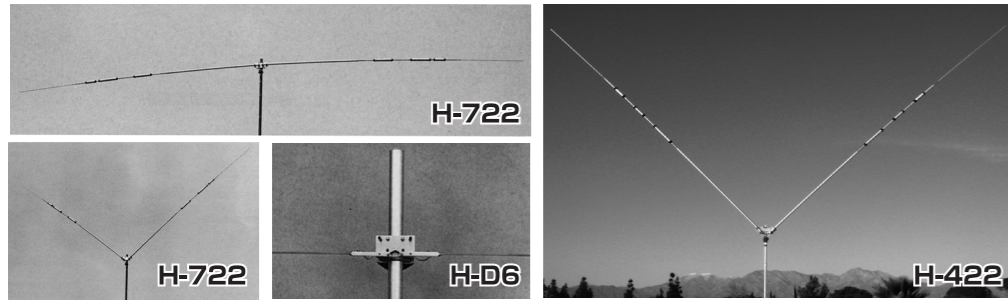
※Optional 18M Element available



# HF DIPOLE HF BROAD / Balun

## High Power Capable V Type Rotary Dipole

- V Type Dipole with a small radius of gyration. High Radiation Efficiency and low SWR achieved. Switching between Horizontal ↔ V Type is easy! Fine tuning the 7MHz band can be accomplished by simply extending or retracting the element.



### H-D6

Length: 2.82m (when Horizontal Dipole)  
2.51m (when V Type Dipole)

50MHz Band Optional Element Set for Trap Type Dipole

- Reverse V Type, Horizontal Installation possible
- 50MHz band operation possible by adding it to H-722, H-422 etc
- Weight: 250g ● Frequency: 50MHz
- Gain: 2.15dBi ● Impedance: 50Ω
- SWR: Below 1.5 ● Max Power: 200W SSB
- Suitable Pole: 25φ~62φ
- Specifications: 1/2λ Dipole Antenna
- ※ Balun sold separately. (CBL-2500 is required if using the H-D6 independently)

### H-722



Length: 9.8m (when Horizontal Dipole)  
6.9m (when V Type Dipole)

7/21/28MHz V Type Dipole (Also possible with Horizontal Type)

- Weight: 4.8kg ● Wide Band: No adjustment for 21/28MHz Band
- Frequency: 7/21/28MHz ● Max Power: 1kW SSB
- Swept Area: 0.26m<sup>2</sup> ● Balun (CBL-2500) provided ● Installation Mast: 38~62φ

### H-422



Length: 10.3m (when Horizontal Dipole)  
7.4m (when V Type Dipole)

7/14/21/28MHz V Type Dipole (Also possible with Horizontal Type)

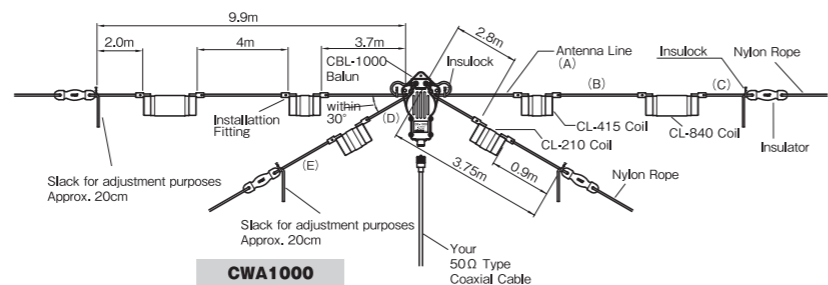
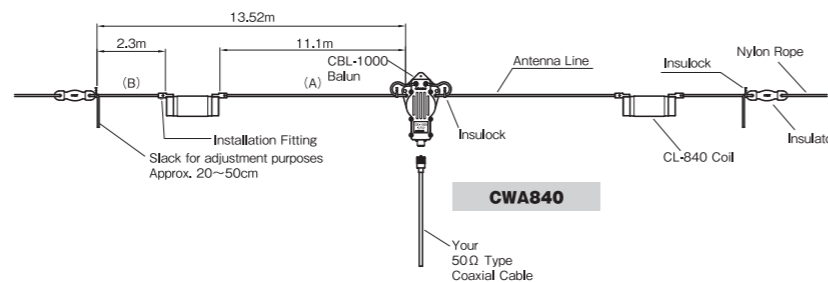
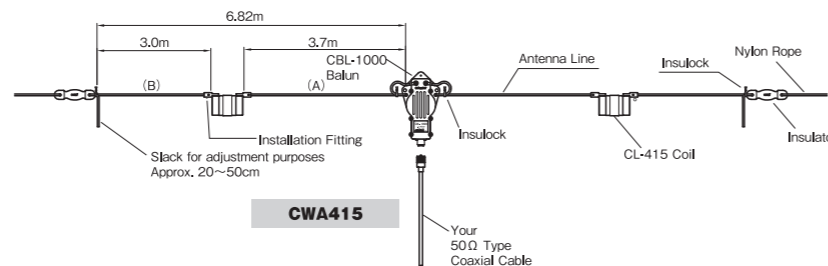
- Weight: 5.4kg ● Wide Band: No adjustment for 21/28MHz Band
- Frequency: 7/14/21/28MHz ● Max Power: 1kW SSB
- Swept Area: 0.28m<sup>2</sup> ● Balun (CBL-2500) provided
- Installation Mast: 38~62φ
- ※ Frequency can be adjusted through the assembly length of the element

## Dipole Antenna Set

The Dipole Antenna is the perfect antenna for HF Band beginners as it's easy to install and simple to adjust.

The HF Band Dipole Antenna Set includes a CBL-1000 Balun, Insulator, Rope, Antenna Wire and Loading Coil. The Mono Band Set includes a CBL-1000 Balun, Insulator, Rope and Antenna Wire.

※ The Balun uses the CBL1000



## Mono Band Dipole Antenna Set

Model	Frequency	Length
CWA-3.5	3.5MHz	44m
CWA-3.5H	3.5MHz	44m
CWA-7	7MHz	22m
CWA-7H	7MHz	22m

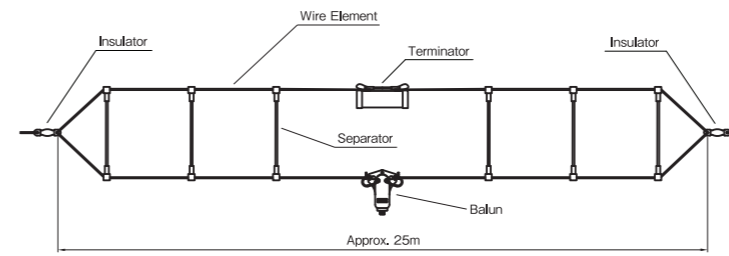
※ Can also be used with the Max Power 1.2KW (PEP) 600W (CW). Reverse V. The length will be slightly shorter in reality, as this is the size before any adjustments.  
※ The Max Power of the CWA-3.5H and CWA-7H is 2.5KW PEP.

## HF Band Dipole Antenna Set

Model	Frequency	Length
CWA-840	3.5/7MHz	27.2m
CWA-415	7/21MHz	13.8m
CWA-1000	3.5/7/14/21/28MHz	19.9m

※ Can also be used with the Max Power 1.2KW (PEP) 600W (CW). Reverse V. The length will be slightly shorter in reality, as this is the size before any adjustments.

## T2FD Antenna Set



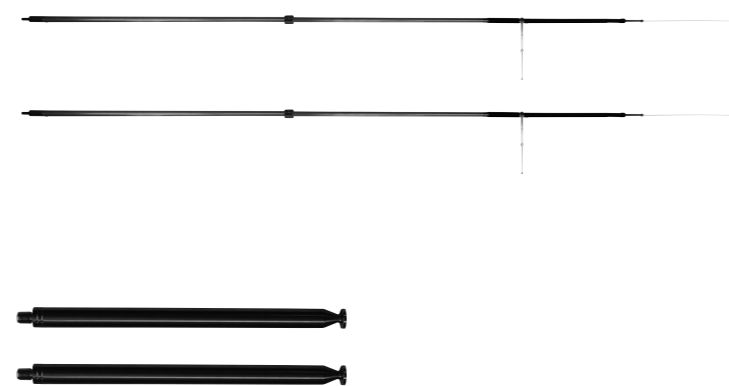
### CWD230



- Transmission Frequency: 1.8~30MHz Band
- Max Power: 500 (PEP) ● Impedance: 50Ω
- V.SWR: 1.8 or less within the above Frequency
- Connector: M-Female Type ● Length: Approx. 25m
- Weight: Approx. 3kg
- Includes a 5D-2V 30m Coaxial Cable

## UD Dipole Series

● Various uses are possible with the UDM-1 + Option (sold separately)!!



### UDE-721 (7/21MHz Aluminium Element)

- ※ Attachment to UDM-1 is required
- Transmission Frequency: 7.0~7.2MHz/21.0~21.45MHz Band
- Max Power: 120W J3E/SSB (7/21MHz) ● Impedance: 50Ω
- V.SWR: Below 1.5 (7/21MHz) Bandwidth: Approx. fo±9KHz (7MHz), Approx. fo±40KHz (21MHz)
- Length: Basic Setting Length Approx. 2.65m
- Weight: Approx. 906g (453g per piece)
- Radius of Gyration: Approx. 2.7m (when installed horizontally) ● 2 piece set

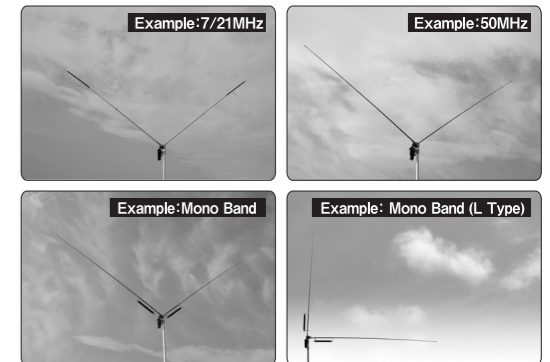
### UDE-R50 (50MHz Rod Antenna)

- ※ Attachment to UDM-1 is required ● Transmission Frequency: 50.0~54.0MHz Band
- Max Power: 130W J3E/SSB ● Impedance: 50Ω
- V.SWR: Below 1.5 Bandwidth: Approx. fo±1.3KHz
- Rod Element Length: Min 200mm~Max 1645mm (excludes screw section)
- Element Weight: Approx. 192g (Approx. 96g per piece)
- Radius of Gyration: Approx. 1.7m (when element is fully extended and installed horizontally) ● 2 piece set

## UDM-1 Dipole Basic Set



- Assembled State ※ Angle may be adjusted (360° per 22.5° interval)



## Balun

- Wide Band Balun



### CBL2500

- 2.5KW Type 1.8~56MHz
- SWR: Approx. under 1:1 2.5KW (PEP)



### CBL1000

- 1KW Type 1.7~30MHz
- SWR: Approx. under 1:1 1.2KW (PEP)

## Pole ● Mobile Aluminium Pole



### CP-45 Length:4.5m

- Assembled Length: Maximum 4.5m(4-step) 1.36m(Minimum)
- Pipe diameter: 22~34φ
- Assembly Method: Telescopic ● Weight: 1.38kg

#### Features

Connector Installation Plate. Safety feature implemented to prevent your hands from getting caught. Strengthened Fixed Screw Type.

### YS-45 Tripod for CP-45

- Pipe Catch diameter: 34.5φ ● Height when in use: 0.85m
- Dimension when folded: 1.36m
- Max Leg Radius: Approx. 0.6m ● Weight: 1.5kg
- Maximum Installation Weight: 10kg(Wwen no wind)

### CP-60L Length:6m

- Assembly Length: Maximum 6m(5-step) 1.58m(Minimum)
- Pipe diameter: 26~42φ
- Assembly Method: Telescopic ● Weight: 2.48kg

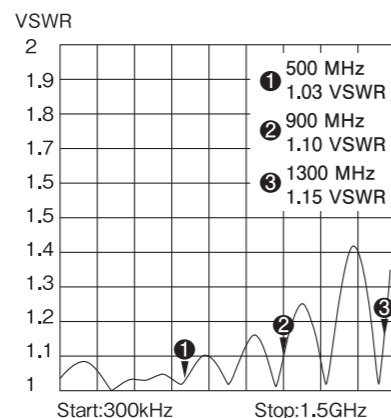
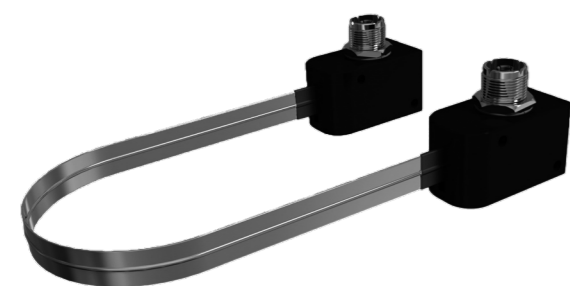
※ Lock pin implemented on each step of the CP-80 to prevent a vertical drop

### CP-80L Length:8.05m

- Assembly Length: Maximum 8.05m(6-step) 1.72m(Minimum)
- Pipe diameter: 22~42φ
- Assembly Method: Telescopic ● Weight: Approx. 3kg

※ Lock pin implemented on each step of the CP-80 to prevent a vertical drop

## ● Through Window Cable

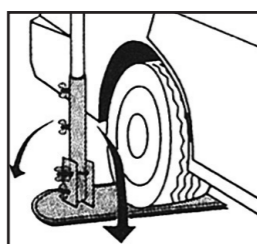
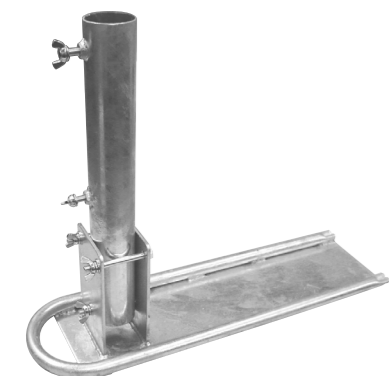


### CTC-50M

- Frequency: DC~1300MHz
- Max Power: HF~50MHz 100W(PEP)  
144MHz 60W(F3)  
430MHz 50W(F3)  
1200MHz 10W(F3)
- V SWR: Below 1.3 Below 500MHz  
Below 1.5 Above 500MHz
- Impedance: 50Ω
- Insertion Loss: Below 0.5dB(DC~500MHz)  
Below 1.3dB(500MHz~900MHz)  
Below 1.8dB(Above 900MHz)
- Connector: M-M
- Cable Length: Approx. 50cm  
(Connector to Connector)
- Weight: Approx. 132g

★ The Through Window Cable will allow you to pull cables indoors without opening any holes in your treasured home!

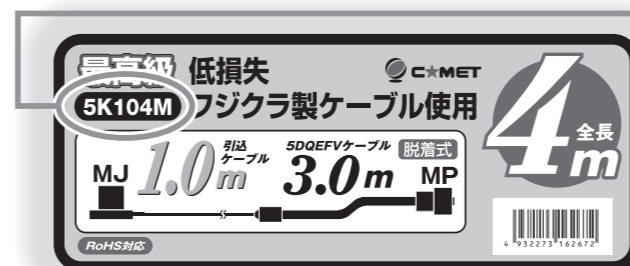
## ● Mobile Quick Pole Stand



### MCBIII

- Installable Pole Diameter: 34φ~50φ
- Installable Antenna Weight:  
Depends on the standards of the pole used(Approx. 10kg)
- Main Body Weight: Approx. 4.3kg
- Size: 156×540×416mm(Width×Length×Height)

## K Series Cable



Look for this package! Please purchase from our retail stores.

The LK/CK Series Car Coaxial Cable has been renewed and reintroduced as the K Series.

The Coaxial Cable is now on sale, with a lineup that has been further expanded in renewed packaging using the high quality, low loss FujiKura Brand as in the past.

★Model Number Example 5K104M			★Model Number Example 3K054M		
5	K	10	4	M	3
↓	Cable	Lead-in Length	Total Length	Connector	↓
5DQEFV		1m	4m	MJ-MP	3.5DQEFV
					0.5m
					4m
					MJ-MP

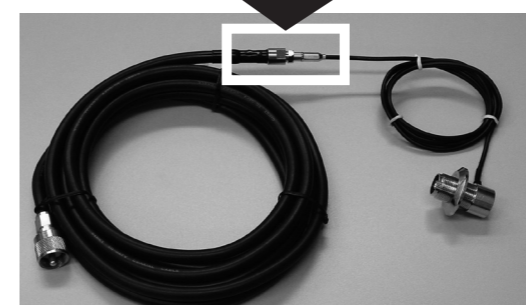
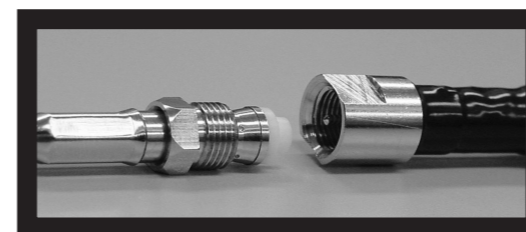
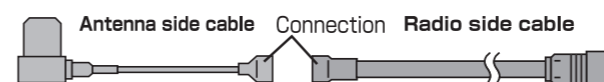
Model	1.5DQE	3.5DQEFV	5DQEFV	Length	Connector
3K153M	1.5	1.5	—	3	MJ-MP
3K155M	1.5	3.5	—	5	MJ-MP
5K104M	1	—	3	4	MJ-MP
5K105M	1	—	4	5	MJ-MP
5K155M	1.5	—	3.5	5	MJ-MP
5K204M	2	—	2	4	MJ-MP
5K205M	2	—	3	5	MJ-MP
5K206M	2	—	4	6	MJ-MP
5K207M	2	—	5	7	MJ-MP
5K105N	1	—	4	5	NJ-NP
5K105P	1	—	4	5	MJ-NP

## FS Series Car Coaxial Cable

● In the age of highly-evolved car cables, "detachability" is what is being sought after. Introducing the FS Series, now on sale from Comet. These cables will allow you to flexibly combine the specialized cable on the antenna side with the coaxial cable on the radio side in the length that you require.

### Connection Example

Antenna side (1.5m)+Radio side(3m)=Total length 4.5m



RG174A/U		
Model	Length	Connector
T0.6M	0.6m	ML-FMEJ
T1M	1.0m	ML-FMEJ
T1.5M	1.5m	ML-FMEJ
T2M	2.0m	ML-FMEJ
T3M	3.0m	ML-FMEJ
T1N	1.0m	NL-FMEJ
T2N	2.0m	NL-FMEJ

5DQEFV		
Model	Length	Connector
F510M	1.0m	FMEP-MP
F515M	1.5m	FMEP-MP
F520M	2.0m	FMEP-MP
F525M	2.5m	FMEP-MP
F530M	3.0m	FMEP-MP
F535M	3.5m	FMEP-MP
F540M	4.0m	FMEP-MP
F545M	4.5m	FMEP-MP
F555M	5.5m	FMEP-MP
F525N	2.5m	FMEP-NP
F530N	3.0m	FMEP-NP
F535N	3.5m	FMEP-NP
F540N	4.0m	FMEP-NP
F545N	4.5m	FMEP-NP
F555N	5.5m	FMEP-NP

Wireless LAN  
Mobile  
Handheld  
Fixed Type  
Cables  
Antenna Base  
Accessories

Wireless LAN  
Mobile  
Handheld  
Fixed Type  
Cables  
Antenna Base  
Accessories

## Cable Set for Fixed Stations

Detachable Connector (single-side only)

5D2V/5DFB			
Model	Compatibility	Length Variations	Connector
5D2V	HF~500MHz	10m·15m·20m·25m·30m	MP-MP
5DFB	HF~600MHz	10m·15m·20m·25m·30m	MP-MP



## Connectors

●High Performance Connectors with Superior Frequency Characteristics.

M Type	Conversion	BNC Type	Cable Diameter Reference (full scale)
<ul style="list-style-type: none"> <li>MP-3</li> <li>MP-5</li> <li>MP-8</li> <li>MP-10DFB</li> <li>MP-3X</li> <li>MP-5X</li> <li>MJ-5X</li> </ul>	<ul style="list-style-type: none"> <li>MP-5AG</li> <li>MP-7A5AG</li> <li>MP-8AG</li> <li>M-3DL-P</li> <li>M-5DL</li> <li>M-5DL-P</li> </ul>	<ul style="list-style-type: none"> <li>MP-NJ</li> <li>NP-MJ</li> <li>MP-BNCJ</li> <li>MA-JJ-16</li> <li>MA-JJ-NT</li> <li>MC</li> <li>BNCJ-MJ</li> <li>BNCJ-SMAP2</li> </ul>	<ul style="list-style-type: none"> <li>3.5DQEFV (Approx. 5.6mm)</li> <li>2D-LFB-S (4mm)</li> <li>5DQEFV (Approx. 7.6mm)</li> </ul>

## Cable Set for Mobile Antenna Bases

Coaxial Cables

2D-LFB-S		
Model	Length	Connector
2DL1S	1m	MLJ-SMAP
2DL1.5S	1.5m	MLJ-SMAP
2DL2S	2m	MLJ-SMAP
2DL3S	3m	MLJ-SMAP
2DL4S	4m	MLJ-SMAP
2DL5S	5m	MLJ-SMAP
2DL1B	1m	MLJ-BNCP
2DL1.5B	1.5m	MLJ-BNCP
2DL2B	2m	MLJ-BNCP
2DL3B	3m	MLJ-BNCP
2DL4B	4m	MLJ-BNCP
2DL5B	5m	MLJ-BNCP
2DL1.5M	1.5m	MLJ-MP
2DL2M	2m	MLJ-MP
2DL3M	3m	MLJ-MP
2DL4M	4m	MLJ-MP
2DL5M	5m	MLJ-MP
2DL6M	6m	MLJ-MP
2DL7M	7m	MLJ-MP

●Wide variation to choose from depending on use. Cables are available in Black and Transparent types.

5DQEFV			
Model		Length	Connector
Black	Transparent		
5D4MB	5D4MS	4m	MLJ-MP
5D5MB	5D5MS	5m	MLJ-MP
5D5PB	5D5PS	5m	MLJ-NP
5D5NB	5D5NS	5m	NLJ-NP
5D6MB	5D6MS	6m	MLJ-MP

\*Within the QEF Cable Set, the M type is ML-MP, the P type is ML-NP and the N type is NL-NP and each are compatible with HF~600MHz, HF~1,300MHz, HF~2,500MHz, respectively.

3.5DQEFV		
Model	Length	Connector
3D4MB	4m	MLJ-MP
3D5MB	5m	MLJ-MP

2D同軸 ケーブルセット  
高品質・低損失 車載用  
全長 1m  
Look for this package for the 2D Coaxial Cable Set!

## Conversion Cable

Used to connect to handheld transceivers.



BNCP-MJ Conversion Cable	HM-05	1.5DQEV	0.5m
	HM-10	1.5DQEV	1.0m
SMAP-MJ Conversion Cable	HS-05	1.5DQEV	0.5m
	HS-10	1.5DQEV	1.0m
BNCJ-SMAP Conversion Cable	HB-05	1.5DQEV	0.5m

## Connection Cables



Model	Cable	Length	Connector
MM-50	5D2V	50cm	MP-MP
MM-80	5D2V	80cm	MP-MP
MM-100	5D2V	100cm	MP-MP

## Flexible Installation Mobile Mounting Bracket Series

Drawing on long years of performance and experience, the products developed by Comet have always received high praise in association with recent mobile stations which allow for various antenna installation methods. And we, as a company which continues to pursue the improvement of its performance, will deliver to you a product that excels in total balance, including, antenna matching, SWR and foldability. (utility model registered)

### Magnetic Base Bracket Antenna Set

**M72S** M made Connector  
**M72SS** SMA Connector  
**M72SB** BNC Connector

Length: 0.52m  
144MHz: 1.7dB/430MHz: 3.5dB Non-radial

- Weight: 450g
- Frequency 144MHz: 1/4λ, 430MHz: 5/8λ
- Magnetic Base Bracket (Powerful magnet used)
- Repeater compatible
- Max Power: 80W(FM)
- Cable RG-58U(4m)

**M24M** M made Connector  
**M24B** BNC Connector  
**M24S** SMA Connector  
**M24SJ** SMA-J Connector

Length: 0.48m  
144MHz: 1.7dB/430MHz: 4.15dB Non-radial

- Weight: 500g
- Frequency 144MHz: 3/8λ, 430MHz: 1/4λ+5/8λ 2-step
- Magnetic Base Bracket
- Repeater compatible
- Max Power: 80W(FM)
- Cable RG-58U(4m)

### Magnetic Base Brackets

**Small Magnetic Base Bracket Set**  
**Black Type**

78mm

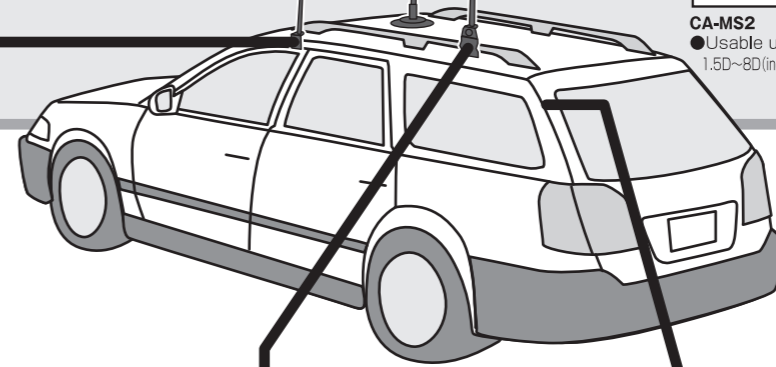
**BMG-M (ML-MP) 4.1m**  
●3.5DQEFV employed

### Large Magnetic Base Bracket Set

110mm

**MG-4M (MJ-MP) 4m**  
**MG-4N (N-MP) 4m**  
**MG-5M (MJ-MP) 5m**  
**MG-6M (MJ-MP) 6m**  
**MG-4B (MJ-BNC) 4m**

- 3.5DQEFV employed
- 110mm Large Magnet employed



### Large Magnetic Base Bracket

110mm

**CA-MS2**  
●Usable up to 1.5D~8D (includes Adapter)

### Small Powerful Magnetic Base Bracket Set

131mm

**CM5M (MJ-MP) 5m**  
●Low loss gold-plated cable core used

### Magnetic Base Bracket Set with Suction Cups

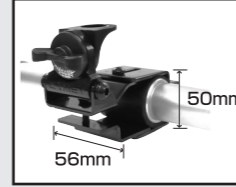
87mm

**RRM-M (ML-MP) 4m**  
●2DQEFV Cable employed  
●Powerful Magnetic Base Bracket with Suction Cups

### Roofrail Mount Brackets

**RS-660U**

- Supports roofrail widths up to 35~56
- Supports roofrails up to a maximum installation height of 50mm
- Roofrail only mount bracket with both the largest installation width and height in the market

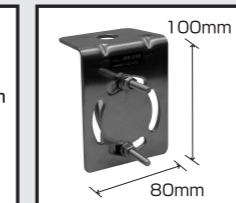
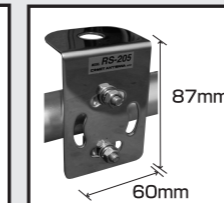
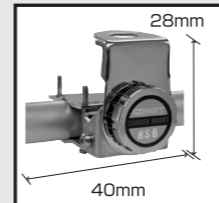


### Pipe Mount Brackets

**RS-6**  
●Includes Dial Lock Folding Mechanism  
●Maximum 32φ

**RS-205**  
●Pipe Mount Bracket  
●12φ~32φ

**RS-215**  
●Large Pipe Mount Bracket  
●10~50φ



### Trunk/Hatchback Door Mount Brackets (Ultra-Compact)

**RS020B (Black)** 44.5mm x 28.5mm

**RS020S (Silver)** 44.5mm x 28.5mm

### Trunk/Hatchback Door Mount Brackets

**RS-520**  
●Includes Dial Lock Folding and Variable Angle mechanisms in 2 places

**RS-720**  
●Includes Dial Lock Folding and Variable Angle mechanisms in 2 places

**RS-730**  
●Includes Dial Lock Folding and Variable Angle mechanisms in 3 places



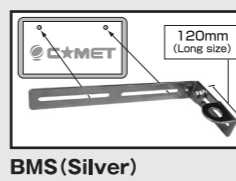
### Roofside Mount Brackets

**Roofside Only Mount Bracket**

**CA-RS1** 62mm x 50mm

**CA-RS2** 78mm x 50mm  
●Includes Dial Lock Folding Mechanism

### Mount Bracket for Motorbikes



**BMS (Silver)**

### Perfect for SS Series



**RS580**  
●Medium Size

### Large HF Antenna Mounting Bracket



**RS840**  
●For Trunk/Hatchback Door

### Trunk/Hatchback Mounting Bracket



**RS-530**  
●Includes Dial Lock Folding and Variable Angle mechanisms in 3 places

## ●Upgraded Duplexer (Also supports wideband reception)

Various uses are possible by combining Comet's 2-wave or 3-wave duplexer with an antenna. In addition, Comet's Duplexers suppress the mutual interference, not only between each band, but on all bands, by adopting an increased isolation through the high shielding effect provided by the twin cavity and reducing the coupling loop interference between each separated terminal to the extent at which it may be ignored. It is also effective as a countermeasure against radio jamming, such as TVI, through its internal filter circuit.

DUPLEXER					
Frequency	50/144MHz		28/50MHz	430/1200MHz	144/430MHz
Model	CF-530	CF-706	CF-360	CF-413	CF-416
Connector			A Type 	B Type 	A Type 
Frequency Insertion Loss	Below 1.3~90MHz 0.2dB Below 125~470MHz 0.3dB	Below 1.3~57MHz 0.4dB Below 75~550MHz 0.4dB	Below 1.3~30MHz 0.2dB Below 49~470MHz 0.25dB	Below 1.3~460MHz 0.25dB Below 840~1400MHz 0.4dB (840~950MHz, if the individual terminal is type M)	Below 1.3~170MHz 0.15dB Below 350~540MHz 0.25dB
S.W.R	Below 1.2 for each bandwidth shown above	Below 1.2 for each bandwidth shown above	Below 1.2 for each bandwidth shown above	Below 1.2 for each bandwidth shown above	Below 1.2 for each bandwidth shown above
Isolation	Over 45dB	Over 40dB	Over 45dB	Over 55dB	Over 60dB
Max Power	1.3~30MHz 600W(PEP) 50/144MHz 600W(PEP)	50MHz 350W(PEP) 144MHz 350W(PEP)	1.3~30MHz 600W(PEP) 50/144MHz 600W(PEP)	1.3~150MHz 800W(PEP) 350~500MHz 500W(PEP) 840~1400MHz 200W(PEP)	1.3~170MHz 800W(PEP) 350~540MHz 500W(PEP)

## ●Duplexer/Triplexer (Build To Order) Table

Frequency	TRIPLEXER	DUPLEXER			
	144/430/1200MHz	28/50MHz	430/1200MHz		
Model	CFX431 (Cable Type)	CF360B (Cable Type)	CF413 (Cable Type)	CF4130 (Plug Type)	
Connector	E Type 		E Type 	F Type 	E Type 
Frequency Insertion Loss	1.3~150MHz 0.2dB 350~500MHz 0.3dB 840~1400MHz 0.4dB (840~850MHz, if the individual terminal is type M)	1.3~30MHz 600W(PEP) 0.2dB 49~470MHz 600W(PEP) 0.25dB	1.3~460MHz 0.25dB 840~1400MHz 0.4dB (840~950MHz, if the individual terminal is type M)	1.3~460MHz 0.2dB 840~1400MHz 0.3dB	
S.W.R	Below 1.2 for each bandwidth shown above				

The specifications shown in the above table are limited to the amateur radio band.

## DUPLEXER



CF-530



CF-706



CF-306 (A Type)



CF-413 (B Type)



CF-416 (A Type)

## ●High Performance Coaxial Switch

### CSW-201G Gold-plated M Type Connector

- Frequency Range: DC~600MHz
- Insertion Loss: DC~600MHz Below 0.12dB
- Max Pass-thru Power: 1500W PEP(DC~30MHz)  
1000W PEP(30~150MHz)  
500W PEP(150~600MHz)

- No. of Switching Circuits: 2 Junctions per Circuit
- Input/Output Impedance: 50Ω
- S.W.R: DC~600MHz Below 1.2
- Isolation: DC~600MHz Approx. 60dB
- Connector: M ● External Dimensions: 72×78×47mm
- Weight: 430g

**Features: The CSW-201G is a manual 2 Junction Coaxial Switch in which high frequency signals are switched over the 50Ω line. Gold-plated connectors used to reduce contact resistance. Coaxial switch designed with emphasis on the high frequency characteristics for high frequency signals. The chassis forms a coaxial structure and has the following characteristics.**

- Wide Frequency Range ●Low Pass Through Loss (Insertion Loss)
- Low SWR



### CSW-201GN Gold-plated N Type Connector

- Frequency Range: DC~1,800MHz
- Insertion Loss: DC~1,800MHz Below 0.12dB
- Max Pass-thru Power: 1,500W(PEP) at DC~30MHz  
500W(PEP) at 30~600MHz  
150W(PEP) at 600~1,800MHz

- No. of Switching Circuits: 2 Junctions per Circuit
- Input/Output Impedance: 50Ω
- S.W.R: DC~600MHz Below 1.2 / 600~1,800MHz Below 1.3
- Isolation: DC~600MHz Approx. 60dB / 600~1,800MHz Approx. 45dB
- Input/Output Connector: N
- External Dimensions: 72(W)×78(L)×47(H)mm
- Weight: 430g



\* The above photos are for the CSW-201GN.

## ●Antenna Splitter/Combiner (Reception Only)

### CAS-900

- Frequency Range: 1000KHz~900MHz
- Isolation: 20dB typ.
- Insertion Loss: 0.5dB typ.
- Impedance: 50Ω
- VSWR: Below 1.5  
Below 2.0(900MHz)

- Connector: M type ×3
- Dimensions: 90×88×27mm
- Weight: 170g



## ●Compact Mobile Speaker for Communication

### CB-980

- Size: 110W×64H×55Dmm
- Weight: 278g
- Max Power: 5W
- Impedance: 4Ω

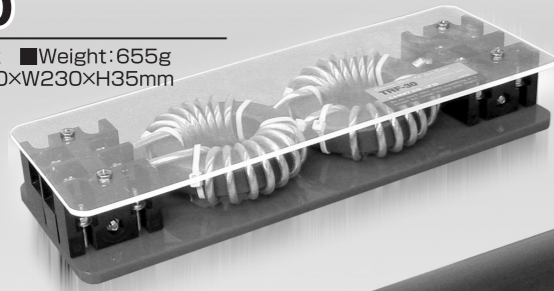


## ●Filters

Supress or prevent TVI etc. Cut off unnecessary signals!

### TRF-30

- AC/DC:30Amax
- Weight:655g
- Dimensions:D80×W230×H35mm



◀◀◀◀ An earth loop is present between a transmitter's AC line and the ground. A common mode spurious signal (harmonic wave) is emitted from a line connected over this loop. This spurious signal can be minimized by shutting out the loop.



### TF-5000

- Frequency: 1.3~500MHz
- Max Power:5KW(Below 30MHz)
- Impedance: 50Ω
- Connector: MJ
- Dimensions: Length 322mm
- Outer Diameter 54mm

### Low-pass Filters

#### CF-30S

The CF30MR/CF-50MR prevents TVI and BCI by suppressing the harmonic and subharmonic waves emitted from the radio transmitter.

- Input/Output Impedance: 50Ω
- Cut-off Frequency: 32MHz
- Insertion Loss: Below 0.4dB
- VSWR: Below 1.2
- Max Power: 150W(CW)
- Attenuation: Above 60dB at 45~250MHz
- Dimensions: 56×140×33
- Input/Output Connector: M Type



#### CF-50S

- Input/Output Impedance: 50Ω
- Cut-off Frequency: 57MHz(CF-50S)
- Insertion Loss: Below 0.4dB
- VSWR: Below 1.2
- Max Power: 150W(CW)
- Attenuation: Above 60dB at 75~250MHz
- Dimensions: 56×140×33
- Input/Output Connector: M Type

#### CF-30MR

- Passband: ~30MHz
- Insertion Loss: Within 0.4dB
- Attenuation: Above 60dB at 42~250MHz
- Input/Out Impedance: 50Ω
- VSWR: Below 1.2
- Max Power: 500W CW, 1 KW PEP
- Input/Output Connector: M Type
- Weight: 800g
- External Dimensions: W250×D66×H64(mm)



#### CF-50MR

- Passband: ~54MHz
- Insertion Loss: Within 0.4dB
- Attenuation: Above 60dB at 72MHz~250MHz
- Input/Out Impedance: 50Ω
- VSWR: Below 1.2
- Max Power: 500W CW, 1 KW PEP
- Input/Output Connector: M Type
- Weight: 800g
- External Dimensions: W250×D66×H64(mm)

### Common Mode Filters

#### TF-1800

- Frequency: 1.3~500MHz
- Max Power: 1800W(Below 30MHz)
- Impedance: 50Ω
- Connector: M
- Dimensions: Length 350mm
- Outer Diameter 40mm



#### TF-400

- Frequency: 1.3~500MHz
- Max Power: 400W(Below 30MHz)
- Impedance: 50Ω
- Connector: M
- Dimensions: Length 350mm
- Outer Diameter 40mm



### Various AC/DC Line Filters

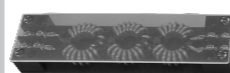
#### TRF-20

Supports Max. 20A



#### TRF-15

Supports Max. 15A



## ●Antenna Analyzer

### CAA-500

#### Supports 1.8~270/300~500MHz!

- Simultaneous measurement of Impedance/VSWR with a Cross Meter
- Wider bandwidth achieved through a newly-designed circuit
- Measurable Range(Supported Connectors):
  - M: 1.8~270MHz(A-F Range)
  - N: 300~500MHz(High Range)
- Simultaneous Detection of Impedance/SWR

#### Features

- Connect an antenna to the upper RF terminal
- Select the Target Frequency via the Frequency Range
- Easier than adjusting to the desired frequency via the Frequency Fine Tuning Dial
- Can be used with 6 x AA size batteries



\*A measuring connector is attached to the device shown in the above photo.

## ●Antenna Analyzer

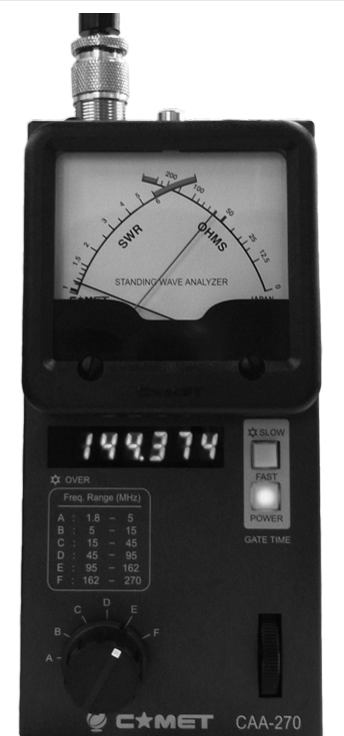
### CAA-270

#### Supports 1.8~270MHz! Introducing the long-awaited HF to VHF version

- Measuring Frequency Range: 1.8~270MHz
- Connector: M

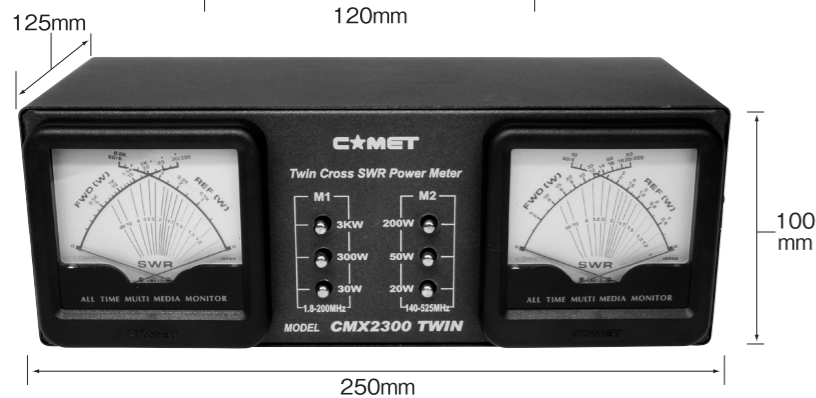
#### Features

- Connect an antenna to the upper RF terminal
- Select the Target Frequency via the Frequency Range
- Easier than adjusting to the desired frequency via the Frequency Fine Tuning Dial
- Can be used with 6 x AA size batteries



\*A measuring connector is attached to the device shown in the above photo.

## SWR & Power Meters



### CMX-200

- Frequency Range: 1.8~200MHz
- Power Measurement Range: 0~3KW(HF), 0~1KW(VHF)
- Power Display Range: 30/300/3KW
- Power Measurement Accuracy: ±10%(when full scale)
- SWR Measurement Range: 1.0~∞
- Impedance: 50Ω
- Residual SWR: Below 1.2
- Insertion Loss: Below 0.2dB
- Minimum Power at SWR Measurement: Above 6W
- Connector: M Type
- Power Supply for Lighting: DC11~15V Approx. 225mA
- Dimensions: W120×H80(85)×D105(125)mm
- ※ Number shown in parentheses includes protrusions
- Weight: Approx. 623g

### CMX-400

- Frequency Range: 140~525MHz
- Power Measurement Range: 0~200W(VHF/UHF)
- Power Display Range: 30/60/200W
- Power Measurement Accuracy: ±10%(when full scale)
- SWR Measurement Range: 1.0~∞
- Impedance: 50Ω
- Residual SWR: Below 1.2
- Insertion Loss: Below 0.2dB
- Minimum Power at SWR Measurement: Above 6W
- Connector: M Type
- Lighting Power Supply: DC11~15V Approx. 225mA
- Dimensions: W120×H80(85)×D105(125)mm
- ※ Number shown in parentheses includes protrusions
- Weight: Approx. 623g

### CMX2300

- Frequency Range: M1 (Left) 1.8~200MHz / M2 (Right) 140~525MHz
- Power Display Range: M1 (Left) 30/300/3kw / M2 (Right) 20/50/200w
- Dimensions: Approx. W250mm×H100mm×D125mm (Includes protrusions)
- Minimum Power at SWR Measurement: Above 6W
- Weight: Approx. 1.4kg
- Includes a 12V Light
- RF OUT=Output for detection purposes

### CAT-10

- Frequency Range: 3.5~50MHz (includes WARC band)
- Band: 7 Band
- Input Impedance: 50~600Ω
- Output Impedance: 50Ω
- Pass-band Power Rating: Below 10W(CW)
- Dimensions: W162×H58×D120mm
- Weight: 900g
- Additional Circuit: Tuning Indicator (LED Tuning Display)

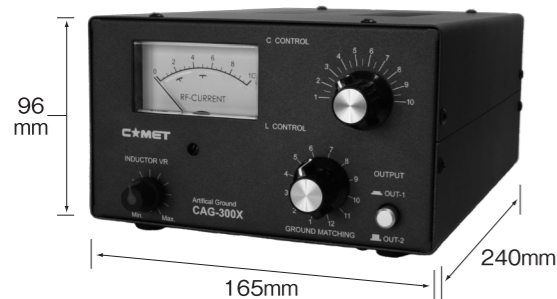
### CAG-300X

- Frequency Range: 1.8~54MHz
  - Input: 1 circuit Land Type Terminal
  - Output: 2 circuits Land Type Terminal
  - Dimensions: (W) 165×(H) 96(100)×(D) 240(280)mm
  - Weight: 1.7kg
- Features**
- Earth Capacity can be adjusted!
  - Counterpoise Method

## Antenna Couplers



## Artificial RF Ground



## Antenna Tuners



### CAT-273 144MHz/430MHz Independent Type

- Frequency Range: 144~146MHz/430~440MHz
- Input Impedance: 50Ω
- Output Impedance: 15~200Ω
- Pass-band Power Rating: Below 200W(FM)
- Minimum Power at SWR Measurement: Above 6W
- Lighting Power Supply: DC11V~15V Approx. 250mA
- Dimensions: W218mm×H93(98)mm×D120(152)mm (Number shown in parentheses includes protrusions)
- Weight: Approx. 1.4kg

### CAT-283 144MHz/430MHz Dual Type

- Frequency Range: 144~146MHz/430~440MHz
- Input Impedance: 50Ω
- Output Impedance: 15~200Ω
- Pass-band Power Rating: Below 200W(FM)
- Minimum Power at SWR Measurement: Above 6W
- Lighting Power Supply: DC11V~15V Approx. 250mA
- Dimensions: W218mm×H93(98)mm×D120(152)mm (Number shown in parentheses includes protrusions)
- Weight: Approx. 1.4kg

### CAT-300

- Frequency Range: 1.8~60MHz
- Band: 11 Band
- Input Impedance: 50Ω
- Output Impedance: 10~600Ω
- Pass-band Power Rating: Below 300W(SSB)
- Minimum Power at SWR Measurement: Above 6W
- Lighting Power Supply: DC11V~15V Approx. 250mA
- Dimensions: W250mm×H93(98)mm×D200(242)mm (Number shown in parentheses includes protrusions)
- Weight: Approx. 2.7kg

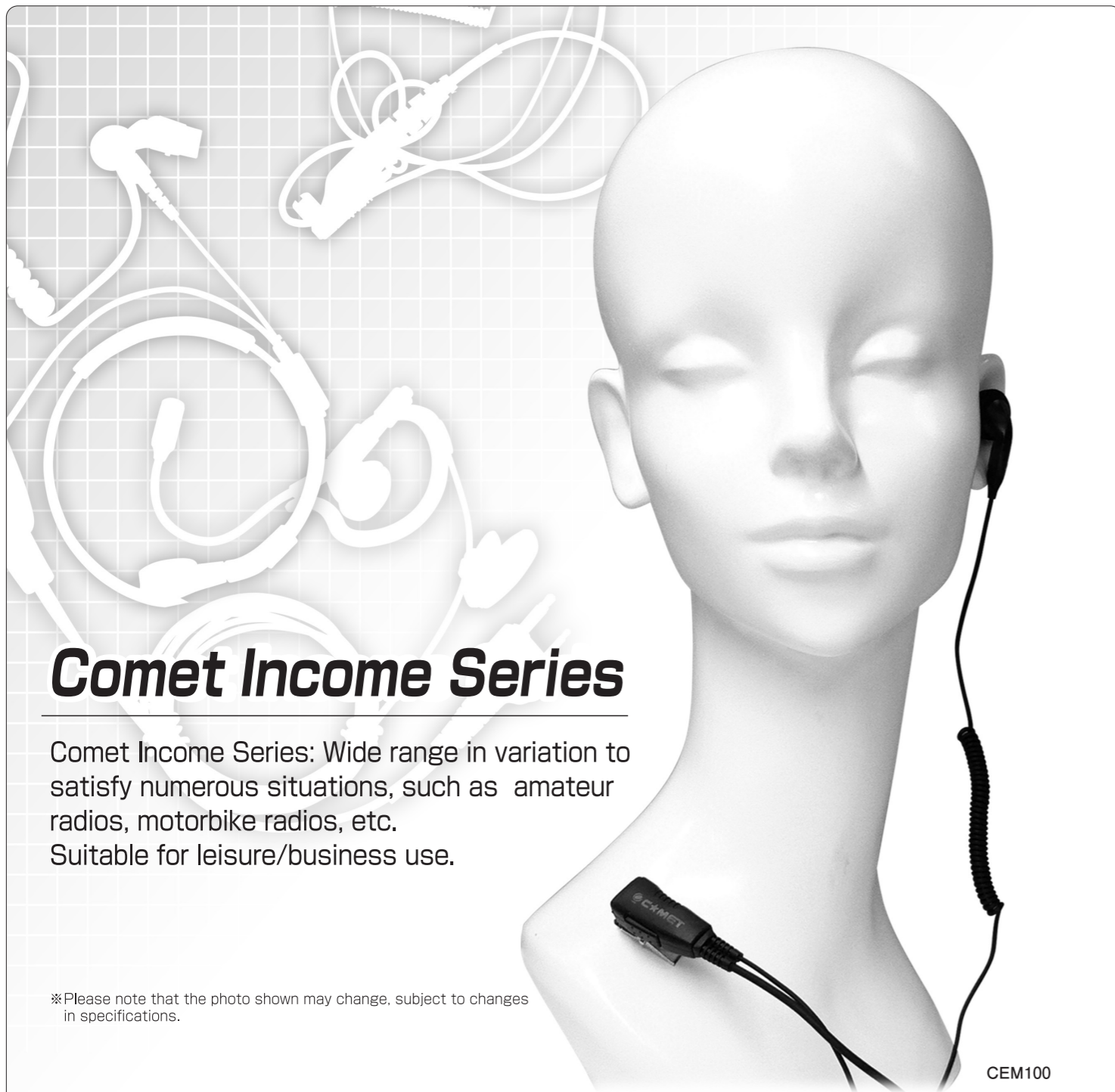
### CAT-3000

- Frequency Range: 1.8~30MHz
- Dimensions: W481 (※423)mm×H200mm×D307mm
- ※ Chassis Section without the Front Panel (Does not include the size of the protrusions)
- Weight: Approx. 11kg
- Supports 3kW(SSB) Input
- Manual Adjustment of Variable Inductor, Variable Condenser
- Coaxial Type, Wire Type Supports both antennas
- Rack Mount (JIS, 19 Inches) Dual Support Front Panel
- Input/Output Connector: N Type

※ Limited Edition. Please check availability.

Wireless LAN  
Mobile  
Handheld  
Fixed Type  
Cables  
Antenna Base  
Accessories

Wireless LAN  
Mobile  
Handheld  
Fixed Type  
Cables  
Antenna Base  
Accessories



## Comet Income Series

Comet Income Series: Wide range in variation to satisfy numerous situations, such as amateur radios, motorbike radios, etc. Suitable for leisure/business use.

※Please note that the photo shown may change, subject to changes in specifications.

CEM100

### Plug Shapes and their Corresponding Manufacturers

Comet's Income Series Plug Shapes vary based on the equipment manufacturer. Please check at the time of purchase.

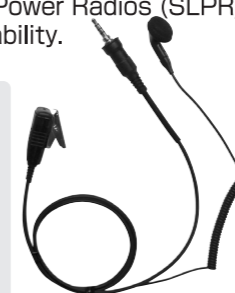


- ① Y Type.....for YAESU L Type 4P no screws
- ② YL Type .....STANDARD VX-6-VX-7, 4P with screws
- ③ YS Type .....for YAESU/STANDARD, 4P Straight
- ④ K Type.....for KENWOOD
- ⑤ F Type .....for ICOM/ALINCO
- ⑥ 9P Type .....for ICOM
- ⑦ I Type .....for ICOM

### CEM100F·K·Y·YL·YS·I

Perfect for Amateur/Specified Low Power Radios (SLPR). Thick cables adopted for added durability.

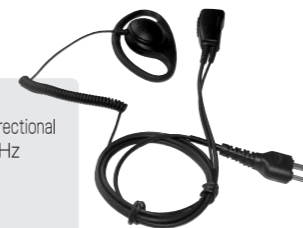
- Microphone  
Type:Condenser Directional Characteristic:Omni-directional  
Frequency Characteristic:20Hz~20KHz  
Sensitivity:-40±2dB
- Earphone  
Type:Dynamic Impedance:32Ω  
Frequency Characteristic:450Hz~20KHz  
Maximum Output:50mW



### CEM200F·K·Y·YL·I

Ear Loop  
H 20 Loop Shape Type (Hard to slip off)  
PTT Switch:Unlockable Type

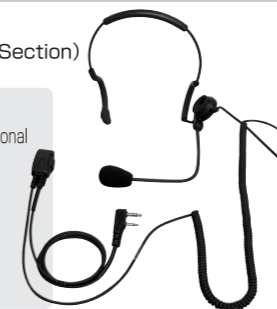
- Microphone  
Type:Condenser Directional Characteristic:Omni-directional  
Frequency Characteristic:20Hz~20KHz  
Sensitivity:-40±2dB
- Earphone  
Type:Dynamic Impedance:32Ω  
Frequency Characteristic:300~7500Hz  
Maximum Output:500mW



### CNM300F·K·Y·YL

Headset  
Neck Type(Robust, Hard-to-break Neck Section)  
PTT Switch:Slide Lock Type

- Microphone  
Type:Condenser Directional Characteristic:Omni-directional  
Frequency Characteristic:20Hz~20KHz  
Sensitivity:-40±2dB
- Earphone  
Type:Dynamic Impedance:32Ω  
Frequency Characteristic:450Hz~20KHz  
Maximum Output:30mW



### CEM-150F·K·Y·YL

Earphone & Microphone  
Canal Type

- Microphone  
Type:Condenser  
Directional Characteristic:Omni-directional  
Frequency Characteristic:20Hz~20KHz  
Sensitivity:-40±2dB
- Earphone  
Type:Dynamic Impedance:32Ω  
Frequency Characteristic:450Hz~20KHz  
Maximum Output:50mW



### CEM-295F·K·Y·YL

New Ear Loop Type

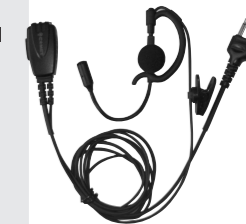
- Microphone  
Type:Condenser  
Directional Characteristic:Omni-directional  
Frequency Characteristic:20Hz~20KHz  
Sensitivity:-40±2dB
- Earphone  
Type:Dynamic Impedance:32Ω  
Frequency Characteristic:300~7500Hz  
Maximum Output:500mW
- PTT:Slide Lock



### CEM195F·K·Y·YL

Ear Hook  
Miniaturized the PTT Switch for the new line of CEM190  
PTT Switch:Slide Lock Type

- Microphone  
Type:Condenser  
Directional Characteristic:Omni-directional  
Frequency Characteristic:20Hz~20KHz  
Sensitivity:-40±2dB
- Earphone  
Type:Dynamic  
Impedance:32Ω  
Frequency Characteristic:450Hz~20KHz  
Maximum Output:30mW



### CEM450F·K·Y·YL

Perfect for Amateur/Specified Low Power Radios (SLPR). Thick cables adopted for added durability. No discomfort even after extended use.



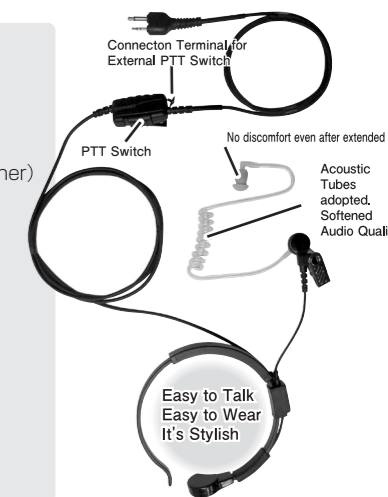
- Microphone  
Type:Condenser Directional Characteristic:Omni-directional  
Frequency Characteristic:20Hz~20KHz  
Sensitivity:-40±2dB
- Earphone  
Type:Dynamic Impedance:110Ω  
Frequency Characteristic:750~9300Hz  
Maximum Output:30mW

### CTM480F·K·Y·YL

Perfect for Survival Games, including Motorbiking and Paragliding!  
Improved Clarity.

※The clarity may differ depending on the position in which the microphone is attached.

- SP  
Type:Magnetic Oscillator  
Frequency Characteristic:  
1.2~12KHz  
Impedance:  
110Ω(KENWOOD),16Ω(Other)
- MIC  
Type:Condenser  
Directional Characteristics:  
Non-directional  
Frequency Characteristic:  
50Hz~12KHz  
Sensitivity:-45±2dB
- PTT Slide Lock Type  
2P for external PTT  
(for 2.5φ Jack included)



## CEM-EX1F·K·Y·YL

Connector and Microphone with the freedom to choose your own Earphone

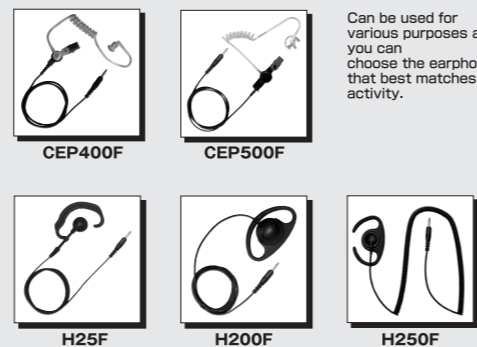
External Earphone Terminal 3.5φ



External PTT Terminal 2.5φ

- Microphone  
Type: Condenser  
Directional Characteristic: Omni-directional  
Frequency Characteristic: 20Hz~20KHz  
Sensitivity: -40±2dB
- PTT: Slide Lock

## 6 Types of Earphones to choose from!



Can be used for various purposes as you can choose the earphone that best matches the activity.

## PS8F (External PTT Switch)

External PTT Switch  
Exterior for your fingers  
"Perfect for hang-gliders"  
Unlockable Type  
External PTT Option  
Plug Diameter: 2.5φ



## PS8 (External PTT Switch)

External PTT Switch  
Round Exterior  
"for Motorbikes/Backpacks"  
Unlockable Type  
External PTT Option  
Plug Diameter: 2.5φ



## Microphone

### HM-S9F·K·Y·YL·I Speaker Microphone

Despite its compact size, emphasis on audio quality.  
More compact in comparison with our past products!

- SP  
Type: Dynamic  
Impedance: 8Ω  
Maximum Input: 200mW  
Karl Code: 0.5~1.5m  
Speaker Diameter: 28m/m
- MIC  
Type: Electret Condenser  
Directional Characteristics: Omni-directional  
Impedance: 1KΩ
- Earphone Jack included...2P(3.5φ)



### HM-M40 Pin Type Microphone



- PTT Switch & Rotary Clip included
- Cord Length: 1m
- 2.5φ Plug included

## DPR Series (for ICOM 9-pin Jack Units ONLY)

### HM-S9DPR Speaker Microphone



- The sound is great owing to the use of the 36mm speaker.
- Easy-to-use design which fits comfortably into your hand.
- Includes a 360° Rotary Clip. Very convenient when used attached to your clothing.
- Even in noisy environments, you can still enjoy clear reception through your earphones as it comes with an earphone jack.

### CEM100DPR Earphone & Microphone

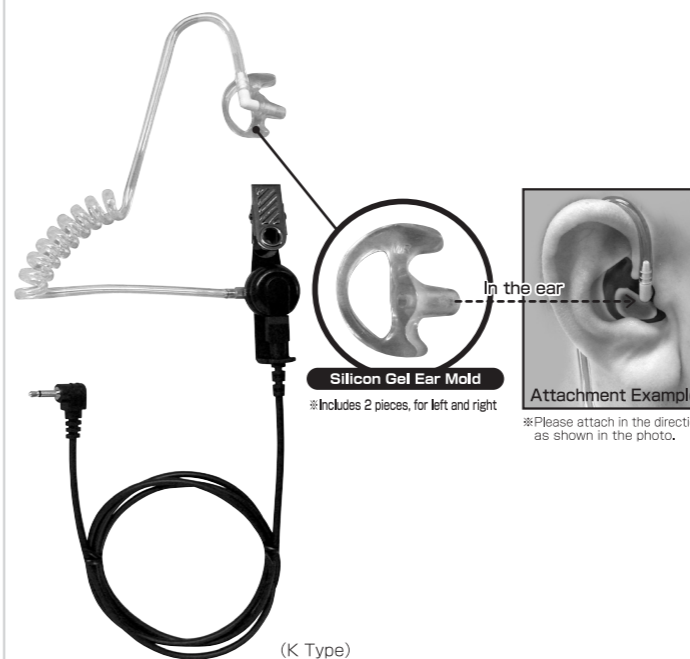


- Suitable for active use as it can be attached directly to the ear.
- Can be used in either the left or right ear.
- The PTT Switch is an Unlockable Type.

## Earphones

### CEP500F·K PAT.P

Stay actively engaged as it will not cover your ears when attached!!  
Softened audio quality through the adoption of the Acoustic Tube.  
No discomfort even after extended use!!



Silicon Gel Ear Mold  
\*Includes 2 pieces, for left and right

Attachment Example  
\*Please attach in the direction as shown in the photo.

- Type: Magnetic Type
- Frequency Characteristic: 750~9300Hz
- Maximum Output: 30mW
- Impedance: 110Ω

### H250F·K PAT.P



(F Type)

Can be used in either ear, left or right, as the cord section will rotate 360 degrees!  
Flexibly deformable hook section.  
Adjustable to the shape/size of your ear.

- Type: Dynamic
- Frequency Characteristic: 20KHz
- Maximum Output: 50mW
- Impedance: 32Ω



### H-200F·K H-200F (50cm) K (50cm)

- F Type: 3.5φ Plug
- K Type: 2.5φ Plug
- Impedance: 32Ω
- Maximum Input: 0.5W
- Cord Length: 0.9m (Standard Length)



(K Type)

### CEP400F·K

Acoustic Tube Earphone Type  
(No discomfort even after extended use)



(K Type)

- Earphone  
Type: Dynamic Impedance: 110Ω  
Frequency Characteristic: 750~9300Hz  
Maximum Output: 30mW

### H25F·K·YL·FL·KS·F (50cm)

#### Ear Hook Type Earphone

- Type: Dynamic
- Impedance: 32Ω
- Frequency Characteristic: 450Hz~20KHz
- Maximum Output: 30mW



★(K50cm Type)



## CAA-500

**Supports 1.8~270/  
300~500MHz!**

- Simultaneous measurement of Impedance/VSWR with a Cross Meter
- Wider bandwidth achieved through a newly-designed circuit
- Measurable Range (Supported Connectors):  
M: 1.8~270MHz (A-F Range)  
N: 300~500MHz (High Range)
- SWR, Simultaneous Detection of Impedance
- ※ Dummy Load no included.  
Please use your own Dummy Load.

### Features

- Connect an antenna to the upper RF terminal
- Select the Target Frequency via the Frequency Range
- Easier than adjusting to the desired frequency using the Frequency Fine Tuning Dial
- Can be used with 6 x AA size batteries



## CAA-270

**Supports 1.8~270MHz!  
Introducing the long-awaited  
HF to VHF version**

- Connect an antenna to the upper RF terminal
- Select the Target Frequency via the Frequency Range
- Easier than adjusting to the desired frequency using the Frequency Fine Tuning Dial!!

### Specifications

- Measurement Frequency Range: 1.8~270MHz



## CSC-140J

PAT.P

**The direction of the antenna is up  
to you with the Flexible Tube**

### Features

- One Touch Lever System
- Can be attached to the window of your verandah or car window.

### Specifications

- Cable Length: 3m (SMA Connector)
- Suction Cup Diameter: 70φ



## PDG351-21

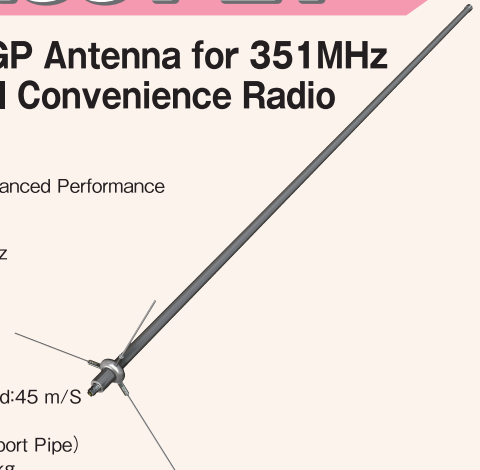
**High Gain GP Antenna for 351MHz  
Commercial Convenience Radio**

### Features

- Refined Style Enhanced Performance

### Specifications

- Frequency: 351 MHz
- Max Power: 100W
- Impedance: 50Ω
- Gain: 7.15dBi
- VSWR: Below 1.5
- Connector: M
- Survival Wind Speed: 45 m/S
- Length Approx. 2.1m (includes Support Pipe)
- Weight: Approx. 1.0kg
- Installation Mast Diameter: φ30~62 (mm)



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※The contents of this catalog are as on November 2012. Part of the specifications and prices may change for the purposes of improvement without notice.

※The contents of the diagrams of directional and SWR characteristics within the catalog may change depending on the conditions or location in which it is installed.

※Please contact our Head Office Engineering Department for Special Order Products.

JAIA



FM 518534 / ISO 9001:2008



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