



DX-HF-PRO-2-PLUS-T

BROADBAND PORTABLE ANTENNA FOR HAM RADIO

HF / VHF

3.5 MHz ~ 144 MHz

The DX-HF-PRO-2-PLUS-T portable antenna is a broadband antenna that allows working in a wide range of amateur radio frequencies (3.5 MHz ~ 30 MHz + 50 MHz + 144 MHz)

IMPORTANT NOTES

- Antenna especially suitable for portable / portable use due to its small size.
- It should not be used with the vehicle moving as it is not prepared for the wind force.
- The use of an antenna coupler is recommended for best performance.
- Do not touch the antenna during transmission due to the risk of radio frequency emission.
- This product is manufactured under strict quality control. However, if it is damaged in transit, consult your dealer immediately.
- The design and specifications of this product are subject to change for future improvement without prior notice.
- For use in the 3.5 MHz band, you must attach the optional coil supplied.



CHARACTERISTICS

Frequencies	With 3.5 MHz coil	3.5 MHz.
	With no 3.5 MHz coil	7 ~ 30 MHz + 50 MHz + 144 MHz.
Maximum power		130 W PEP
Impedance		50 Ω
Type		HF: 1/4 λ reduced type 50 MHz: 1/4 λ 144 MHz: 5/8 λ
Connector		PL male
Length	With 3.5 MHz coil	78.5 ~ 215 cm.
	With no 3.5 MHz coil	57 ~ 188 cm.
Weight	With 3.5 MHz coil	440 gr.
	With no 3.5 MHz coil	335 gr.

ANTENNA ASSEMBLY

- Connect the upper element and the lower element and fix them by hand. (do not use tools).
- Screw the elements connected to the antenna body. (do not use tools).
- The antenna includes:
 - Optional coil for 3.5 MHz
 - 10 section stainless steel telescopic rod.
 Length of the rod collected: 18.5 cm. Extended rod length: 127 cm

INSTALLING THE ANTENNA

- In a vehicle you can install it on a magnetic base (remember that you should not carry the antenna with the vehicle in motion).
- You can also install it on a metal surface with a magnetic base and connect to ground.
- The antenna cannot be permanently installed outdoor as its design does not withstand inclement weather.
- The antenna must be installed in a vertical position for best performance.
- In case of not being able to obtain an SWR lower than 1: 1.5 use an antenna coupler.

ADJUSTING THE ANTENNA

- Depending on the frequency where you want to transmit, slide the lower body of the antenna to position X according to the following table and stretch the telescopic rod until the indicated total length is achieved:



Table 1

Band	Low band				Medium band				High band			
	Frecuency	SWR	Total antenna length*	X Adj.	Frecuency	SWR	Total Antenna length*	X Adj.	Frecuency	SWR	Total antenna length*	X Adj.
80mt	3.500MHz	1:3	213 cm	25	3.650MHz	1:3	204,5 cm	16,5	3.800MHz	1:3	198 cm	10
40mt	7.000MHz	1:2	188 cm	22	7.100MHz	1:2	187,7 cm	21,7	7.200MHz	1:1	187 cm	21
30mt	10.100MHz	1:1	177 cm	11	10.125MHz	1:1	177 cm	11	10.150MHz	1:1	177 m	11
20mt	14.000MHz	1:5	172 cm	6,5	14.175MHz	1:5	172 cm	6,5	14.350MHz	1:5	172cm	6,5
17mt	18.068MHz	1:5	171 cm	5,5	18.118MHz	1:5	171 cm	5,5	18.168MHz	1:5	171 cm	5,5
15mt	21.000MHz	1:5	170 cm	4,3	21.225MHz	1:5	170 cm	4,3	21.450MHz	1:5	170 cm	4,3
12mt	24.890MHz	1:3	169 cm	3,6	24.940MHz	1:3	169 cm	3,6	24.990MHz	1:3	169 cm	3,6
10mt	28.000MHz	1:3	168,5 cm	3,1	28.850MHz	1:3	168,5 cm	3,1	29.700MHz	1:3	168,5 cm	3,1
6mt	50.000MHz	1:5	165 cm	0	51.000MHz	1:5	165 cm	0	52.000MHz	1:5	165 cm	0
2mt	144.000MHz	1:2	165 cm	0	145.000MHz	1:2	165 cm	0	146.000MHz	1:2	165 cm	0

(*)The total length of the antenna includes the lower body adjustment and the telescopic rod extension

IMPORTANT NOTE: These measurements are indicative and may vary depending on the installation of the antenna. The measurements in this table have been made with a magnetic base in the center of the metal roof of a vehicle.

The use of a coupler is recommended for fine adjustment.

- Loosen the set screw by hand by half a turn.
- Slide the coil part to the desired frequency and fix it with the set screw by hand.
- Do not use tools such as pliers to tighten the set screw. It could damage the antenna.
- The antenna adjustment should be done with the lowest possible RF power with the antenna coupler. If the adjustment is not completed, move the coil up or down and adjust the frequency again.
- Once adjusted, increase the power (maximum power: 130 W SSB)
- If the SWR level is higher than 1:1.5 check your ground plane or change the location of your antenna.

