

# ApexRadio 700DTA Desk Top Antenna

**Medium-Wave, Short Wave high performance  
Desk-Top active Antenna, usable range 500kHz - 30MHz**

The 700DTA is a compact active antenna specifically designed to provide good reception when large external antennas are not practical or when away from the main monitoring location. Compact, but achieving high performance, featuring an internal band selector, Hi-Q manual tuning circuit, and high gain amplifier (20dB for 500kHz-30MHz). And also excellent overall strong signal handling. The 700DTA is completely battery drive equipment separated from noisy AC power line. Then, 700DTA can be used as a portable receiving antenna. Upon unpacking, take time to locate and familiarize yourself with items described in the following table.

Contents product	Qty.
Main unit of 700DTA (aluminum die-casting case)	1
Whip antenna element (telescopic approx. 15 – 60 cm)	1
Battery for built-in power supply (9V : 6F22, MN1604, J)	1
BNC-BNC coaxial cable 3m	1

## Preparations and setting

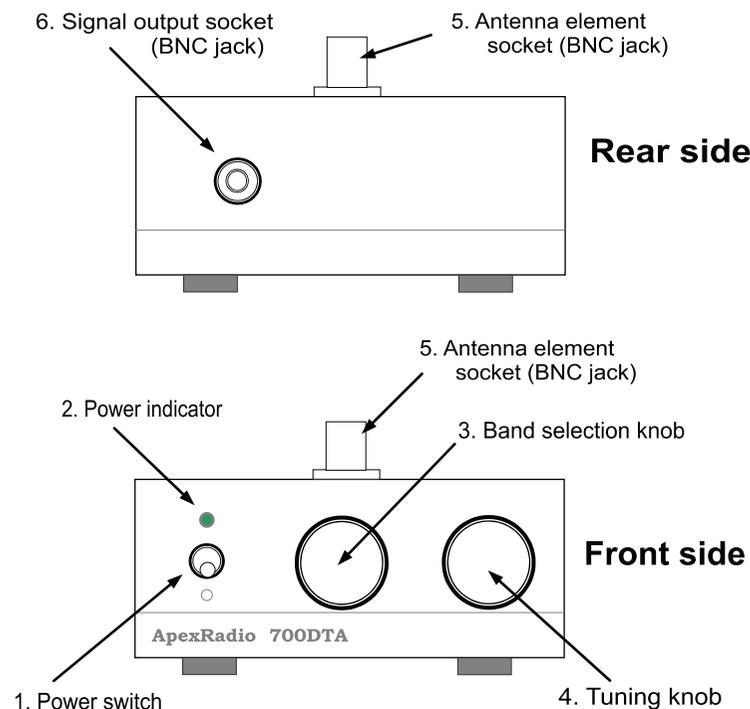
The power of 700DTA is supplied by a built-in battery. A built-in battery is installed before using 700DTA. Refer to "BATTERY EXCHANGE" written on the back side of this instruction sheet for the mounting a battery. Be careful to injuries with the tools.

Settle the 700DTA on the stable place. It's desirable to set up this antenna at the window side. Particularly, 700DTA performance cannot be shown enough in the building of the steel reinforced concrete. 700DTA is indoor use only, and it is not water resistance. The water wet and the dew condensation cause trouble and the damage.

Do not leave the 700DTA in direct sunlight. It is best to avoid locations where excessive heat, humidity, dust and vibration are expected. Always keep the 700DTA free from dust and moisture. Use a soft, dry cloth to gently wipe the set clean, never use abrasive cleaners or organic solvents which may damage certain parts.

## Controls & functions

Controls are located on the front with connection sockets on the rear and top of the 700DTA, a brief identification is given here:



No.	Name	Description
1.	Power switch	Toggle-type switch. To turn on this antenna, throw the lever to upper position.
2.	Power indicator	Light on when power switch is ON position
3.	Band selection knob	Select band for desired frequency range
4.	Tuning knob	Tuning knob for peak signal strength
5.	Antenna element socket	Socket for telescopic antenna element (High-impedance, BNC jack)
6.	Signal output socket	Output socket to radio receiver (50 ohms, BNC jack)

## Connect the whip antenna element

For reception on the Medium Wave / Short Wave bands, connect the supplied whip antenna element to the BNC jack (5. Antenna element socket) on the top panel of 700DTA. This is a bayonet connector, line up the slots, press down firmly and twist clockwise. This antenna element is a vertical type. Generally, extend the antenna element to maximum length (approx. 64cm). Depending on the receiving situation and noise from nearby electronic devices, adjust length of element for more good reception.

## Using the 700DTA Desk Top Antenna

### 1. Power switch

To turn on the 700DTA, throw the lever of power switch to upper position. Power indicator (green LED) will illuminate to confirm that power is supplied from internal battery. To turn off the 700DTA, throw the lever to lower position. Always turn off by lever when not in use.

### 2. Band selection (MHz)

Turn on the radio receiver and tune to the desired frequency. Select the correct frequency range with Band selection knob on front of 700DTA. 5 positions for 5 bands as follows:

Frequency band (MHz)	comments
0.5 – 1.6	Medium Wave band
1.6 – 4	SW bands 160 to 75 meters
4 – 10	SW bands 75 to 30 meters
7 – 20	SW bands 43 to 15 meters
12 – 30	SW bands 25 to 10 meters

### 3. Tuning

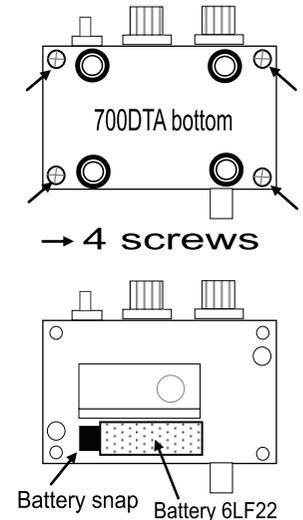
Rotate the Tuning knob on the front side of 700DTA (clockwise and counterclockwise) until the signal strength meter (S-meter) of receiver deflects to maximum and the incoming signal sounds clearest. If your receiver does not have an S-meter, simply adjust for maximum received signal. Whenever receiving frequency is changed, should select band and tuning again.

## PRECAUTIONS

The 700DTA is NOT intended for transmit purposes.  
The 700DTA is intended for indoor use only, do not use it outdoors.  
We are not responsible for any damages to the antenna or your radio equipment due to improper use.

## BATTERY EXCHANGE (Fitting Battery)

The battery compartment is located in the main unit of 700DTA. Bottom case needs to be removed when exchanging (or fitting) battery. Switch the main unit off and unplug the whip antenna element. In order to lift the bottom case, **carefully** (with the right size screwdriver) unscrew the 4 screws from the bottom cabinet. Then, the bottom cabinet can be detachable.



Insert a dry-cell battery 6LF22 (or alternative MN1604 sized dry-cell battery) with battery snap observing the correct polarity. Refit the bottom cabinet using 4 screws to main unit. A buffering sponge is sticking to Bottom cabinet. Care must be taken for correct direction of bottom cabinet.

Dry-cell battery should be removed when it is exhausted or if 700DTA is not going to be used for a long time. This will avoid leakage which could seriously damage the main unit.

## 700DTA Specifications

Frequency range	500 kHz - 30 MHz
Impedance	Hi-Z input / 50 ohms output
Element	Telescopic(15-60cm)
Power / consumption	Internal Battery 9V / 2mA (approx.)
Dimension	130 x 90 x 50 mm (approx. excluding projections)
Weight	approx. 440 g. (w/ battery, element)
Supplied accessories	Battery : 6LF22 (1604A) x1 BNC-BNC coaxial cable 3m

Specifications subject to change without notice due to continuous development. E&OE.