

SYNERGY TELECOM P. LTD



AT-271/PRC Fishing Pole Antenna

PART NO: 1118-2089-11/11420/AT-271C

The construction is the same as is used for sectional fishing poles. Each of the 7 hollow tubular metal sections has a plug on one end and a socket on the other end. All the sections are connected by a string made of either a cloth or metal cord. At the bottom of the base element there's a spring inside the tube to tension the cord. This way all the elements are kept in order when they are disconnected from each other and are held together when assembled into a 113.5" (2.88 meter) meter long antenna. When an 8" long base is added the overall length is 121.5" (3.09 meters). When disassembled the package is only 17 inches long. 7 sections times 17 inches is 119 inches, but the plug ends go into the socket ends so the overall length is shorter than 119". There are some web pages that erroneously give the length as 7.5 Feet.

The AB-591 Antenna Base has a male 3/8-24 thread which is the same as is used on most ham radio and CB antennas. The base also has a center pin that actuates the antenna switch in the PRC-25 or PRC-77 radio to switch from the BNC 50 Ohm output to the whip antenna.

BASES

1. AB – 129 / PR



This is the 8" long base used with the PRC-8, PRC-9, PRC-10 and [PRC-104](#). It has a female 3/8-24 thread to accept the AT-271 and a male 3/8-24 thread to go into the radio. This is a spring base, not a gooseneck base. It is straight, but will bend when force is applied to it. If I try to bend it and use strong force it bends maybe 20 degrees.

2. AB -591 / PRC - 25



The PRC-25 was designed to use two different antennas.
The AT-892 is a 1 meter long tape measure type antenna that's used with the "Part/Of AT-892" (p/o AT-892) gooseneck base. This is for shorter range communications.

HOW TO USE

Since the spring is at the bottom of the lowest antenna element you want to avoid jamming it's operation. This means that when assembling the antenna you start with the lowest section and when taking down the antenna you start with the top section. This way the spring is not trying to pull the string around joints the are open.

By opening a joint and folding the top sections of the AT-271 down beside the lower sections and tying them together you can make a number of different lengths of whip antenna. Using this method you can easily match the AT-271 to the frequency of operation.

# Sections connected	Len in.	Freq. Mhz
7	120	25
6	104	28
5	88	33
4	72	41
3	56	53
2	40	74
1	24	123

Experimentation is needed here using the 4395A network analyzer to see what bandwidths are possible for each of the above configurations. Then a range of frequencies could be given for each one.

WZ-47 BUDHELLA VILLAGE, VIKASPURI, NEW DELHI – 110018

PHONE: 011-28533349, MOB: 9810138894/9212558066, FAX: 011-28533349

EMAIL: info@rfconnector.in, WEBSITE: <http://rfconnector.in/>