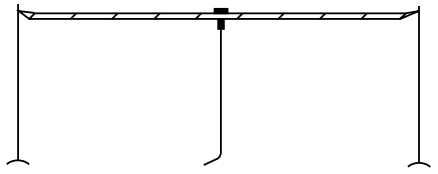
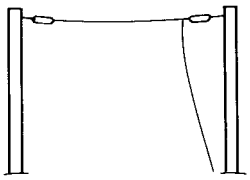
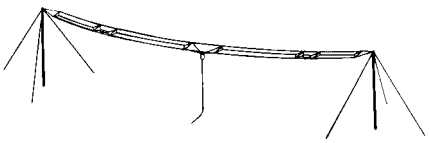
HF-SSB BASE STATION and MOBILE STATION ANTENNAS



Broadband Folded Dipole
FAA5501



Long Wire Antenna
*TAA6030_*



Broadband Dipole Antenna
FAA5509 FAA5511
FAA5510 FAA5512



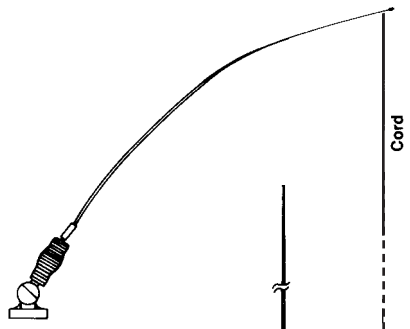
7 Meter (23')
Vertical Whip
*TDA6000_*



9.8 Meter (32')
Sectional Whip
*TDA6010_*



10.7 Meter (35')
Vertical Whip
*TDA6020_*



Mobile Whip
FAD1400



Mobile Whip
FAA1000

Motorola offers a wide range of HS-SSB antennas and accessories. All of these antennas are designed to operate under adverse weather conditions.

Dipole Antenna

The dipole is a simple 2 element device for single frequency operation. The antenna is designed to be cut to the correct frequency in the field at the time of installation. Sufficient wire is supplied to accommodate any frequency from 2-30 MHz, as well as 30 meters of coaxial cable.

The dipole antenna is available in 150 watt (TAA6020) or 1000 watt (TAA6040) models. Antenna masts are not included.

Dual Dipole Antenna

Dual dipoles are the same as dipole antennas with the addition of a dual dipole conversion kit (TAA6030). This kit provides a second pair of elements and insulators. The conversion kit may be added to any dipole at any time to add another frequency. Sufficient wire is provided to accommodate a second frequency from 2-30 MHz.

Longwire Antenna

The longwire antenna, TAA6030, is a single element device for multiple frequency operation. It can also be used with an automatic antenna tuner, and may be configured in a variety of forms to overcome almost any installation restriction; this includes: inverted "L", horizontal, vertical, or sloping longwire antenna. The longwire antenna can also be used as a dual dipole conversion kit with the TAA6020/6040 dipole antennas.

MOTOROLA

HF-SSB Antennas

SPECIFICATIONS

BROADBAND ANTENNAS						
Type	**Folded Dipole**	**Inverted V**	**Compact Broadband Dipole**			
Model:	FAA5501	FAA5508	FAA5509	FAA5510	FAA5511	FAA5512
Frequency Range:	1.8-30 MHz	2.5-30 MHz	3-30 MHz	2-30 MHz	3-30 MHz	2-30 MHz
Power Rating ***Voice:** ***Data (Continuous duty):**	 1 KW 250 Watts	 1 KW 400 Watts	 2 KW 1 KW	 300 Watts 150 Watts	 100 Watts 150 Watts	 2 KW 1 KW
VSWR:	1.4:1 to 2.0:1	2.0:1 2.5:1	2.0:1 to 2.3:1			
Input Impedance:	50 Ohms	50 Ohms	50 Ohms			
Polarization:	Horizontal	Horizontal	Horizontal			
Gain:	N/A	Up to 3dBi	8.5 dBi Nominal			
Distance Between Masts:	27.5 m	48 m surface area	32 m	47 m	32 m	47 m
Net Weight:	6.5 Kg	30 Kg	25 Kg	20 Kg	25 Kg	
Tuner:	Not Required	Not Required	Not Required			
Supports/Masts Height:	Two Required 8-12 m	One Required 16 m	Two x 10 m	Two x 15 m	Two x 10 m	Two x 15 m
Feeder Cable:	Order Separately	20 m included	Order Separately			
Input Connector:	UHF Female	UHF Female	UHF Female			
Ground Kit–TRN6295:	Not Required	Not Required	Not Required			
Installation Kit–TRN6296:	Recommended	Not Required	Recommended			
Wind Speed Survival:	160 Km/Hr	200 Km/Hr	160 Km/Hr			

BASE STATION AND MOBILE ANTENNAS							
Type	**Single Frequency Dipole**		**Base Station Vertical Whip**			**Mobile Vertical Whip**	
Model:	TAA6020	TAA6040	TDA6000	TDA6010	TDA6020	TAA1000	FAD1400
Frequency Range:	2-30 MHz	2-30 MHz	1.6-30 MHz	1.6-30 MHz	1.6-30 MHz	1.6-30 MHz	1.6-30 MHz
Power Rating **Voice*:** **Data*:**	 150 Watts 150 Watts	 1 KW 1 KW	 150 Watts 150 Watts	 150W/1 KW** 150W/1 KW**	 1 KW 1 KW	 150 Watts N/A	 150 Watts N/A
VSWR:	2.0: 1		Frequency Dependent			Frequency Dependent	
Input Impedance:	50 Ohms		Frequency Dependent			Frequency Dependent	
Polarization:	Horizontal		Vertical			Vertical	
Gain:	Typical: –5 to +5 dBi		N/A			N/A	
Distance Between Masts:	Frequency Dependent		N/A			N/A	
Net Weight:	2.7 Kg	6.4 Kg					
Length:	N/A		7 m	9.8 m	107 m	2.4 m	3.6 m
Tuner:	Not Required		Required			Required	
Supports/Masts:	Two Required		Self-supporting			Self-supporting	
Feeder Cable:	30 m included		Supplied with Tuner			Supplied with Tuner	
Input Connector:	UHF Female		Single Wire Connection			Single Wire Connection	
Ground Kit–TRN6295:	Not Required		Required			Required	
Installation Kit–TRN6296:	Required		Not Required			Not Required	
Wind Speed Survival:	160 Km/Hr		160 Km/Hr	200 Km/Hr	200 Km/Hr	N/A	

* TAA6020 & 6040 are single frequency dipole antennas to be cut to the correct frequency during field installation.
** TDA6010 power rating is: 150 Watts 2-30 MHz, 1KW 2.7-30 MHz.

Specifications subject to change without notice.

CUSTOMER MOTOROLA Communications SERVICE

SUPPORT SERVICES
Wherever Motorola sells, our product is backed by service. Our products are serviced throughout the world by a wide network of company or authorized independent distributor service organizations.

Atlanta 1996
Centennial Olympic Games Partner

MOTOROLA

Motorola U.S.A.
1301 E. Algonquin Road
Schaumburg, Illinois 60196
In the U.S. call: 1-800-247-2346

Motorola Canada Limited
3900 Victoria Park Avenue
North York, Ontario M2H 3H7
In Canada call: 1-800-268-5758

Outside the U.S. and Canada call: (847) 538-6602

Ⓜ, and Motorola are trademarks of Motorola. ■ ©1989 by Motorola Inc. ■ Printed in U.S.A. ■ (9704) Merit ■ Produced by Customer Communications.

Motorola is an Equal Employment Opportunity/ Affirmative Action Employer

American Communication Systems
Discover the Power of Communications ™

TO ORDER – VISIT http://www.ameradio.com

Broadband Compact Dipole Antenna

The broadband compact dipole antennas supplied by Motorola (FAA5509/10/11/12) are designed for multiple frequency operation without the need of Antenna Tuners. These antennas are intended for omni-directional HF communications and provide high gain which exceeds most other compact HF broadband antennas. The antenna should be installed horizontally between two masts. Antenna masts are not included. RF cable must be ordered separately.

Broadband Folded Dipole Antenna

The broadband folded dipole antenna (FAA5501) is also designed for multiple frequency operation without the need of Antenna Tuners. It is intended for omni-directional HF communication and has lower radiation efficiency compared to the compact broadband dipole. The antenna can be installed horizontally between two masts, as an inverted V or "Sloppy" using one mast only. Antenna masts are not included. RF cable must be ordered separately. This antenna is not recommended for extreme environmental conditions.

Broadband Inverted V Antenna

This antenna (FAA5508) is also designed for multiple frequency operation without the need of Antenna Tuners. It is intended for omni-directional HF communications and provides a good gain performance. The antenna should be installed on a single mast. Twenty meters of coaxial cable with connectors is included with connectors. The antenna mast is not included.

Mobile and Base Station Whip Antennas

The whip antenna is a vertical radiating device for multiple frequency operation. It must be used with an Antenna Tuner and a ground plane. The mobile whip antennas are designed for vehicle installation, are rated for 150 Watts of RF power and are available in 2.4m (TAA1000) or 3.6m (FAD1400) lengths. The mobile antennas include all necessary mounting accessories. The base station fiberglass antennas are self-supporting, to permit installation in very limited spaces. They are available in 7m (TDA6000), 9.8m (TDA6010) and 10.7m (TDA6020) lengths, and are rated for either 150 watts or 1000 Watts of RF power.

NOTE: Whip antennas create a communication gap called a "Skip Zone". This gap, approximately 20-100 Km, is caused by the low radiation angle of the antenna and it is common to all HS-SSB stations using whip antennas.

ACCESSORIES

Installation Kit

The installation kit, TAA6030, provides the necessary hardware to install a dipole or longwire antenna between 2 support structures. No support structures are supplied with this kit. The kit consists of 30 meters (100 feet) of nylon line, 2 pulleys, 2 cleats and associated hardware.

Ground Plane Kit

This kit provides the necessary wire to construct a proper ground plane for the base station whip and longwire antennas. The kit consists of 135 meters (450 feet) of wire, a ground rod and associated hardware.

Two Antenna Switch

The FLN5604 antenna switch is designed to select one of two separate dipole or dual dipole antennas. This configuration provides up to 4 channel operation. The FLN 5604 antenna switch includes a 3 foot control and coax cable.