

6-40M HF Mobile EmComm antenna

No adjustments to change bands on this rugged and versatile 6-40M HF Mobile, which only requires an external tuner.

Specifications

Supported Bands: 6m, 10m, 12m, 15m, 17m, 20m, 30m, & 40m

Max Power (Watts): 100 PEP SSB, 50 CW, or 10 watts digital, FM, or AM modes

Weight: 32 ounces

Length deployed: 5' 5"

This Mobile HF antenna requires:

- No changing of whips
- Zero physical adjustments to change bands
- No external power or control interface box
- An external tuner

Included

- 5' stainless steel whip and Ferrule
- Black AutoMatch with 3/8 24 mounting bolt and SO239 connector
 - The new match is a watertight polyvinyl chloride housing.

All Videos



Analysis

Native SWRs are handed off to an external tuner, which is required. A recommended feedline 18 to 25 feet is recommended.



Band	Native SWR	SWR Once Tuned
6M	1.8	1.2
10M	4	1.4
12M	5.8	1.6
15M	6.1	1.8
17M	5.1	1.5
20M	4.1	1.4
30M	5.2	1.5
40M	4.4	1.4

Read More Here about [Optimizing the HF Alpha MOTO Antenna](#)

Mounts

Because there are hundreds of car variations throughout the years, we created the following URL so you can select and work with those who sell mounts for many types of vehicles:

[Mount for sale | eBay](#)

Just remember, it's not so much the Mount, but it is instead the location that matters for best performance. To that end and ignoring those who say to 'drill a hole in the middle of your roof', the best 'practical' place to install this antenna is the passenger side front wheel well or the passenger side rear bed rail.

NOTE - Please choose a mount that has a Female 3/8-24 Nut for mounting the 3/8-24 Male Molt that is used to install the MOTO. Just leave enough clearance for your coax at the bottom of the MOTO or purchase the optional [UHF Elbow Adapter](#) and/ or [Riser Kit](#).

Warning

Never Remove or Loosen any of the Bolts, Washers, Nuts, or Caps on the AutoMatch

Options

For even more Effective Radiated Power when parked, either the optional 9'4" element for 10-40M or 60' element for 10-80M can be deployed without removing the MOTO from your vehicle. Just remove the 5' whip and replace it with either of the optional elements.

Additionally, **tuner-free operations** and **increased power handling** to 250 PEP SSB, 125 CW, or 25 watts for digital modes is enabled when the 60' element for 10-80M is installed.

Installation

1. Ensure there is as much metal directly under the mount & antenna as possible. Searching for a [Fender Mount](#) that fits your vehicle is a good place to start. You may also need our [Riser Kit for various mounts](#) for what you select.
2. Ensure the mount is placed as high as possible and that it connects to the metal on your vehicle.
3. Don't run the whip/element parallel to the frame of your vehicle, which is the ground.
4. Attach your tuner to the mobile HF antenna with 18 to 25 feet of coax.

[READ: Riser Kit for various mounts \(alphaantenna.com\)](#)

More Information

[FAQs: Mobile HF antenna – Alpha Antenna](#)

Never Remove or Loosen any of the Bolts, Washers, Nuts, or Caps on the Alpha Match.

MOUNTS – We do not recommend using a lip or magnetic mount, because losses on 40M become too great when a direct surface mounting hardware is not used. If you do end up using a magnetic mount, then the widely available Tri-Magnetic Mount should be used to increase the safety and capacitive grounding of such a mount. Just note that you will need to cut the coax off and short the braid to the

6-40M HF Mobile EmComm antenna

center conductor of the coax for magnetic mounts in order to complete the path to ground.

Performance guarantee from the Founder of Alpha Antenna. "This antenna works very well with an external tuner on 6, 10, 12, 15, 17, & 20 meters. On 30 it works well, and you'll make decent regional contacts on 40 meters. On 60 & 80 meters, it's a receive only antenna, although contacts have been logged."

We listen!

We are dedicated to improving all of our [Mobile HF VHF UHF Antennas](#). Specifications and descriptions are subject to change without notice.

Conversion Services

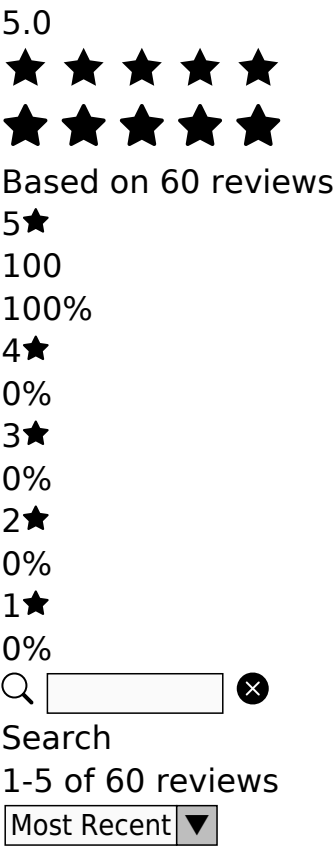
Ask about us converting your VHF AS3900/VRC systems to the 6-80M HF MOTO MilComm antenna.

6-40M HF Mobile EmComm antenna



6-40M HF Mobile EmComm antenna

HF MOTO MilCom



1. 

Protected_User_c53070d1

Reviewer

Featured Review

July 23, 2026

★★★★★

★★★★★

6-40M HF Mobile EmComm antenna



[6-40M HF Mobile EmComm antenna](#)

 Verified review - [view original](#) 

Excellent antenna....!!! Works great...Tunes nicely 20m thru 6m with good ground. Works flawlessly with the Z100a tuner.

PB

2.

Protected_User_cc59039d

Verified owner

Featured Review

May 24, 2026



[6-40M HF Mobile EmComm antenna](#)

 Verified review - [view original](#) 

The Alpha MOTO so far has been awesome. I'm running it mobile with my FTX-1 Optima with only the tuner in the radio and it tunes 40m-6m I am very impressed. I've done a couple parks on the air (pota) activations and it did really well. Once I get parked, I use your 9ft 4inch Mil whip and it really preforms. Thank you so much for your help. Awesome products, God Bless and 73 KI5OLV

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DE

3.

Protected_User_8d9069fd

Verified owner

Featured Review

August 1, 2024



ALPHA®



[6-40M HF Mobile EmComm antenna](#)

Verified review - [view original](#)

This 6-40 Meter Mobile HF Antenna works great. Top quality and workmanship. My first contact was a station in France on CW, 40 meters. I use an Icom IC-706 MKIIG with a LDG remote tuner. I have the antenna mounted on a 2015 Silverado truck. I have purchased several antennas from Alpha Antennas and I am very satisfied with everything!

Sincerely

David E Phillips W8DEP

K

4.

Protected_User_14a75e06

Reviewer

Featured Review

November 27, 2011



6-40M HF Mobile EmComm antenna



[6-40M HF Mobile EmComm antenna](#)

I've been hesitant to get into HF mobile for a quite a while due to the can-o-worms that it can be – plus a big obnoxious screwdriver antenna just wasn't my cup of tea on my truck. A friend recommended the Alpha Moto and I'm real glad he did. It was quite an easy install and it performs great paired with my FT-857 and LDG tuner. Bottom line -> its a fair priced multi-band mobile HF antenna that performs very well and keeps you from looking like a mad scientist rolling down the road.



5.

Protected_User_6cba2e5a

Verified owner

September 6, 2026



[6-40M HF Mobile EmComm antenna](#)

 Verified review - [view original](#) 

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