

**Ham Radio Install in my 2006 Goldwing
W4EZR Olen Persons
 Mooresville NC
 April 8 , 2006**

After many emails with manufacturers of radios and headsets and even the maker of the Honda radios I found Ray Davis KD6FHN and MARC - (Motorcycle Amateur Radio Club). Ray was a blessing of information that lead me right to what I needed to get my radio installed and working . Here is a description and photographs of my install, which may help anyone new to the game. Don't hesitate to call me (Cell 843-458-1085) if you need more information from me. Ray is the expert but I enjoyed the install and it works GREAT so here goes.

W4EZR-7 Motorcycle Mobile



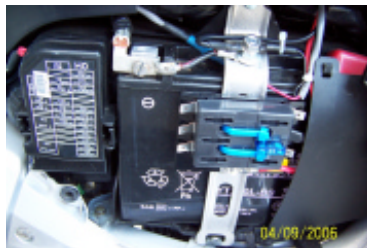
The Dash



Materials

MARC Membership	\$12
Fuse box came from local Auto Zone.	\$6
Antenna Bracket for 1/2" Tubular Trunk Rack came from Ray	\$20
Push to talk button and bracket came from Ray	\$13
Antenna Comet CA2x4SSB and coax	\$75
Kenwood TM-D700A from HRO	\$490
FRSet 4 from Kennedy Technology Group. Inc.316-776-1111	\$77
Wiring harness for bike from Kennedy	\$35
Wiring Harness for KW D700A	\$35
Miscellaneous fuses wire and freight	<u>\$50</u>
	\$813

Fuse Block



Power is easy. Be sure to power your FRSet 4 from the bike auxiliary circuit so it will turn off with the bike power. I wired it to my new fuse block and found I had no way to turn it off. It was an easy fix to move it over to the bikes accessory

connection. The fuse block I added is tie wrapped onto the bar that holds the battery in. Notice the 1/4x20 x 3/4" long grounding bolt at the top of the battery. I took one ground wire from the (-) side of the battery to the bolt and put a nut on tight. Then I landed the other ground wires on the bolt and put the second nut on which is easily removed later if I want to add another wire. I tend to overkill so I clamp and solder all my lugs. That way they never corrode and do not work loose.

Kenwood TM-D700A in trunk



The radio is mounted on the right side of the trunk. I used a 2" wide strip of Velcro fastened at the top and bottom to hold my radio in. I already had a piece of 1/2" thick foam that I cushioned the radio with (be careful to allow for ventilation).

FROM SEAT



FROM TRUNK



A 3/4" hole was drilled in the left side of the trunk for the wires. I added a rubber grommet to help protect the wires. Be sure to remove the seat first and drill from the seat side so you wont puncture the seat.

FRSet 4 under the seat



I found all the connection points per the instructions and located the FRSet 4 under the seat as you see it in the picture. Due to all the fixed lengths on the cables that is where it wanted to be mounted. Be sure to set the dipswitches according to the instructions and test the audio volume before you remount the seat.

Antenna and Mount Bracket

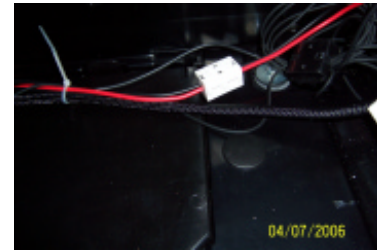


The antenna was mounted in the back and center of the trunk rack, which required modifying the mounting bracket to allow the center rack bar to come out of the center of the bracket. I put it in my vice and drilled a 1/2" hole in the bracket with the bracket closed tight. After drilling the hole I still had to grind a bevel on the edge of the hole to allow for welds on the rack.

ANTENNA CABLE



POWER CABLE



I was advised to roll the excess antenna cable up in a figure 8 which I did. You can see the split ferrite bead I used for a center clamp allowing as many wraps of the antenna cable to pass through it as would go and still allow it to snap closed.

You can see there is a split ferrite bead on the data cable from the GPS , the speaker cable and the power cable. I believe in them. This may be overkill but I do not have any noise or bleed over in my FM radio or my Ham Radio.

I cheated a little bit and ran the GPS cable and the cable to the face of the radio down the top left side of the bike (inside the frame) into the pocket area and then to the devices. I think running the cables along the frame also dampens unwanted noise from being induced onto the wires. This seemed to be easier than taking off the Dash. I may wind up changing this if there is a problem. There is space there for all the cables and it was quick and easy.

I mounted the radio face with the furnished bracket by form fitting the bracket to the area around the Goldwing logo just below the key. I used the double-sided tape supplied with the mount. If this gives out I will use silicone caulk in its place. Silicone holds forever is waterproof and does not mar the plastic surface if removed.

GPS on left handlebar**GPS with Margie's Rain Cover**

The GPS bracket is mounted on top of the clutch reservoir with wire ties. It is simple and very easy to remove with one bolt in the bracket on the back. My wife Margie KE4YWO made clear vinyl covers for the GPS and radio face. We have black ones for less conspicuous coverage.

D700A Face**Face with Margie's rain cover****W4EZR-7 Aeronautical Mobile**

My last install was in my CGS Hawk Ultra-lite. It has a Lowrance Airmap GPS , Airplane Radio, Kenwood D7 -2meter / 440 Ham Radio with APRS. We were able to make a switch that would allow me to receive aircraft and ham radio at the same time and switch the transmit between the aircraft radio and ham radio. The interesting thing in this install was the noise canceling headset and mike made it a little more complicated to switch. With the help of Mike Bryan WA6KWW we added a diode in line with the ham radio to prevent both from transmitting at the same time. Noise cancellation in an ultra-lite is imperative since the prop produces 120db 3' from your head. Flying the ultra-lite is like riding your bike around a nice curve with the ability to jump over the car ahead of you and then land back on the road. It's a hoot.

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