

DG200 INSTALLATION INSTRUCTIONS

Transceiver installation:

1. The transceiver should be mounted to the metallic part of the vehicle to insure proper grounding.
2. Since there are no user adjustable controls on the unit it can be mounted in any location that provides easy mounting and access to power and antenna connections. In addition, it should be mounted in a location that prevents dirt and water entering the connectors on the rear of the unit (power, DB-9 and modular connectors). In general it is best to mount the unit with this end oriented down to prevent material falling into the unit. **DO NOT MOUNT THE UNIT IN THE ENGINE COMPARTMENT.**
3. Use at least three sheet metal screws to secure the unit.

Supplying power to the transceiver:

1. The power cord has two wires for powering the unit; red is for positive battery voltage and black is for ground.
2. Ground the black wire to one of the mounting screws or to a nearby metallic point which will provide a secure vehicle ground. Use the existing ring terminal on the black wire.
3. The red wire should be routed to the vehicle battery, if possible, or to some battery source which can provide steady current at 2 amps.
4. The unit is not internally fused. The red wire should be fused (3 to 5 amp), preferably near the point where it connects to the battery.

Connecting additional inputs to the transceiver:

1. If the application being supported needs to sense the status of the ignition line, the orange wire should be installed in the connector housing (next to the red wire).
2. Route the orange wire to a point that provides ignition voltage. In general this is located on the interior fuse block of the vehicle. In most cases it is NOT appropriate to substitute "accessory" voltage in place of ignition. Make sure the voltage remains on when cranking the vehicle to insure a true ignition point.
3. If the application requires additional inputs consult with the transceiver manufacturer (or see additional information supplied with the unit) to determine the appropriate connector pins and vehicle tie points.

Antenna installation:

1. **IMPORTANT:** FCC Rule 95.855 limits the ERP of mobile RTU units in this service to 4 watts. Since this transceiver has an output power of 4 watts, the maximum antenna gain allowed is 0 db (unity gain antenna). **DO NOT INSTALL A GAIN ANTENNA ON THE VEHICLE.**
2. Install the antenna according to the manufacturer's instructions. A quarter-wave antenna should be cut to approximately 13.125" for this frequency band.
3. If installing a ground plane type antenna, try to mount it in a location that provides at least 12" of ground plane around the antenna base.
4. Install the mini-UHF connector on the coax and attach it to the antenna connector on the transceiver.