



In-Vehicle Conditioning Charger **Model # i25 01 & i25 02** **User Manual**

Congratulations on your purchase of the ACT Single-Bay In-Vehicle Conditioning/Charger Part # i25 01 & i25 02.

Your Conditioning/Charger offers the following unique features:

- Charge and condition Nickel Cadmium (Ni-Cd), Nickel Metal Hydride (NiMH), Lithium Ion (Li-ION) and Lithium Polymer (Li-Poly) chemistry batteries in a single process using ACT's patented DEW™ algorithm process.
- Charge and condition IS and FM rated batteries.
- Compatible for use with the ACT iGUAGE™ analyzer to provide accurate information on the battery.
- Accommodate battery adapter cups that will condition and charge the battery alone as well as adapter cups designed for Motorola® IMPRES™ radios that will condition and charge the battery while attached to the radio.

! CAUTION: To reduce the risk of injury, insert **ONLY** rechargeable-type Nickel Cadmium (Ni-Cd), Nickel Metal Hydride (NiMH), Lithium Ion (Li-ION) or Lithium Polymer (Li-Poly) chemistry batteries. *This unit is NOT to be used with Lead Acid, Carbon, Zinc, Alkaline, Mercury or Silver batteries which may burst, causing personal injury and damage.*

The in-vehicle conditioning charger includes:

- Charger base and battery adaptor
- Mounting bracket plate with 2 - Mounting bracket wings
- 4 - 3/4" self-tapping screws
- Rubber strap

EITHER:

- i25 01 includes Hardwire DC cable
- i25 02 includes cigarette lighter DC cable

Mounting bracket set up

- 1) Attach the Mounting Bracket Plate to the vehicle in the desired position using the 4 self-tapping screws supplied.
! Note: If a mounting post, spacer, or other mounting device is to be used between the Mounting Bracket Plate and the vehicle, it will be necessary to source such a post or mounting device prior to commencing the installation. Various types and sizes of mounting posts and mounting devices are available from your local LMR, two-way radio, or cellular distributor. Choose one that best suits your needs.
- 2) Once the Mounting Bracket Plate has been attached to the vehicle, loosen the four screws and remove the two Mounting Bracket Wings. Position the Charger on the Mounting Bracket Plate.
- 3) Reinstall the two Mounting Bracket Wings making sure their tabs are inserted into the slots on each side of the charger. Reinstall the four screws that secure the Mounting Bracket Wings.

Setting up the unit

If the battery adapter is not already installed, install it on the charger using the two mounting screws supplied.

i25 01 (Long Power cable)

- 1) Place the metal barrel plug of the DC cord supplied into the receptacle on the conditioning charger.
- 2) Route the cord out of harms way, to the vehicle's ignition, battery, or appropriate 12v source, whichever is preferred.
- 3) Cut the negative (-) lead of the DC cord to the desired length and attach it to the negative (-) side of the ignition/battery/power source.
- 4) Cut in half the red wire loop attached to the fuse housing supplied
- 5) Cut the positive (+) lead of the DC cord lead to the desired length and connect (crimp) it to the one end of the wire to the fuse housing
- 6) Connect the other end of the wire from the fuse housing to the positive (+) side of the ignition/battery/power source.
- 7) Secure all wiring. The fuse housing can be secured in place by using a screw, through the hole in the fuse's plastic housing.

i25 02 (Cigarette Lighter Power cable)

- 1) Place the metal barrel plug of the DC cord supplied into the receptacle on the conditioning charger.
- 2) Plug the Cigarette Lighter plug on the other end of the DC cord into the Vehicle's Cigarette lighter / Power point receptacle.
- 3) Once plugged into a power source, the STAND-BY LED will light.

Operating Instructions

- 1) Remove the battery from the radio and confirm that the battery chemistry of the battery matches the battery chemistry on the adapter.
- 2) The unit is designed with interchangeable adapters. Identify the correct adapter for your radio battery as well as the battery chemistry type. Ni-Cd and NiMH batteries can be accommodated on the same battery adapter and Li-Ion and Li-Poly can be accommodated on the same adapter.
- 3) Place the battery onto the adapter matching the inside battery contacts (the ones that would make contact with the radio) with the contacts of the adapter in the same way as you place the battery on the radio. The CHARGE / MAINT LED will light and flash.
- 4) If you are using a Motorola® IMPRES™ radio, the battery can be conditioned and charged through the outside battery contacts without removing the battery from the radio using a specially designed adapter cup. Ask your ACT sales representative for details.

! NOTE: If the battery on the IMPRES radio is not an IMPRES™ battery, and you are using a specially designed IMPRES™ adapter, the unit will charge but will not recharge the battery.

- 5) When the battery is fully charged, the CHARGE / MAINT LED will light solid.
- 6) If the STAND-BY LED lights, refer to Troubleshooting further on in this manual.
- 7) If the battery is removed from the unit before the full charging and reconditioning cycle has been completed, the STAND-BY LED will turn on. To recommence the charging and reconditioning cycles, replace the battery on the unit. It is quite safe to remove the battery from the unit prior to completing the full charging cycle.
- 8) It is quite safe for both the battery and the unit to leave the battery on the unit with the CHARGE / MAINT. LED indicator showing. While in this maintenance mode the unit will keep the battery at peak condition without ever overcharging the battery
- 9) During the reconditioning and charging cycle the unit and the battery may become warm. This is quite normal and is not harmful to either the battery or the radio.

Trouble Shooting

- 1) If the blinking CHARGE / MAINT. LED does not light after the battery is inserted, check that:

- The plug into the charger is properly seated, and
 - The power supply is properly seated in the cigarette lighter/power point or correctly attached to the ignition or car battery as described above.
 - The fuse in the cigarette lighter plug or the fuse in the fuse holder is intact and has not blown. To check the fuse in the cigarette lighter adapter unscrew the end tip of the cigarette lighter plug. Replace the fuse only with a two (2) Amp fuse.
- 2) If the Red (Fault) LED lights with the battery in place, remove the battery and replace it, ensuring that the battery is properly seated.

! Warning

- Do not use a Power Supply other than those supplied with the unit or obtained from your ACT authorized supplier.
- Do not short circuit the output on any of the units.
- The unit is a highly sophisticated electronic device, which may be damaged if handled roughly or dropped.

Specifications

UL and e11 approved

Charger input: 12VDC 2.5Ah

Operating Temperature 10C to 40C

Limited Warranty

Advanced Charger Technology warrants this product against defects in material or workmanship for (1) one year from date of purchase. If this product is determined to be defective during the warranty period, ACT will repair or replace (at its option) the product returned to ACT freight prepaid. Act will cover the freight charge back to the customer. ACT will not be liable for any incidental or consequential damages for breach of any express or implied warranty on this product. To obtain warranty service, please contact ACT at 1-770-263-6337 in the USA



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