



***Single-Bay Desk-Top
Conditioning/Charger
Model # i20***

User Manual

Congratulations on your purchase of the ACT Single-Bay Desk-Top Conditioning/Charger Part # i20

Your Conditioning/Charger offers the following unique features:

- Charge and condition Nickel Cadmium (Ni-Cd), Nickel Metal Hydride (Ni-MH), 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 alone as well as while attached to the radio.

! CAUTION: To reduce the risk of injury, insert **ONLY** rechargeable-type Nickel Cadmium (Ni-Cd), Nickel Metal Hydride (Ni-MH), 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 conditioning/charger includes:

1. Charger base and battery adaptor
2. 19VDC 110V power supply with 2.5mm barrel plug

Setting up the unit

1. Insert the barrel plug at the end of the AC power supply (supplied with the unit) into the corresponding socket on the base unit.
2. Plug the AC power supply into a suitable wall outlet.

! NOTE: The barrel plug of the power supply must ALWAYS be plugged into the base unit prior to plugging the power supply into the wall power outlet

3. Once plugged into a power source, the Green (Ready), Yellow (Charge), Red (Fault) and Yellow (Reconditioning) LEDs will light in succession as the unit checks the adapter. The LEDs will then all turn off.

Operating Instructions

1. Remove the battery from the radio and confirm that the battery chemistry of the battery matches the battery chemistry marked 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 Ni-MH 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 Yellow (Charge) LED will light.
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 is placed in the specially designed adapter cup for the IMPRES™ radio, the unit will charge but not recondition the battery.

5. When the battery is fully charged, the Green (Ready) LED will light.
6. If the FAULT LED lights, refer to Troubleshooting further on in this manual.
7. To perform a reconditioning cycle on the battery, press the RECONDITION button. The Yellow (Reconditioning) LED will light indicating that the battery is being discharged.
8. When the battery has been discharged, it will start automatically begin to charge. The Yellow (Charge) LED will light.
9. If the battery is removed from the unit before the full charging and reconditioning cycle has been completed, the Yellow (Charge) LED indicator will turn off. 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.
10. It is quite safe for both the battery and the unit to leave the battery on the unit with the Green LED indicator showing. While in this maintenance mode the unit will keep the battery at peak condition without ever overcharging the battery
11. 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 Yellow (Charge) LED does not light after the battery is inserted, check that:
 - a. The plug into the charger is properly seated, and
 - b. The power supply is properly seated in the wall.
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

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

Specifications

UL and e11 approved

AC Adaptor:

- Input: 120VAC, 60Hz 15W
- Output : 19VDC 800mA

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 pre-paid) at no charge. ACT will cover the freight cost 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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