



XCPRO-80 Operator Manual

Xpress XCPRO-80 Charging

The Xpress XCPRO-80 is the ultimate battery charger with fast charge and full charge options for the professional.



Auto Meter Products Inc.

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CONGRATULATIONS!



You have purchased Auto Meter's XCPRO-80 system designed to automatically provide a fast charge or full charge when needed. The system is fully automated with LCD readout for menu instructions, charge results, and LED lights for unattended distance viewing. If you should have any questions about your charger or the charging procedures, please see the back cover for contact information.

XCPRO-80

Battery Voltages 6, 8, and 12 Volt
Charge Sequence Fast Charge and Full Charge Modes
CCA Range..... 100 – 1600
LCD Backlit 1" x 2.5" 4 line x 16 characters
Maximum Current Output 80 Amps
Cooling 5" Internal Fan
Battery Temperature Measurement Non-Contact IR Sensor
Leads..... 8 ft., 6 Ga/18 Ga 2 conductor Smart Clamp
Power Cord..... 14 AWG 9 Ft.
Size 11" W x 8.5" H x 10.5" D
Weight 35 lbs

LIMITED WARRANTY



12 MONTHS FROM DATE OF PURCHASE

The manufacturer warrants to the consumer that this product will be free from defects in material or workmanship for a period of twelve (12) months from the date of original purchase.

Products that fail within this 12 month warranty period will be repaired or replaced at the manufacturer's option to the consumer, when determined by the manufacturer that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of parts and the necessary labor by the manufacturer to effect the repair or replacement of the product. In no event shall the manufacturer be responsible for special, incidental or consequential damages or costs incurred due to the failure of this product.

Improper use, accident, water damage, abuse, unauthorized repairs or alterations voids this warranty. The manufacturer disclaims any liability or consequential damages due to breach of any written or implied warranty on its test equipment.

WARRANTY AND SERVICE INFORMATION

Warranty claims to the manufacturer's service department must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser and is non-transferable. Shipper damage incurred during return shipments is not covered under this warranty. It is the responsibility of the shipper (the customer returning the Equipment) to package the tester properly to prevent any damage during return shipment. Repair costs for such damages will be charged back to shipper (customer returning the Equipment). Protect the product By shipping in original carton or add plenty of over-pack cushioning such as crumpled up newspaper.

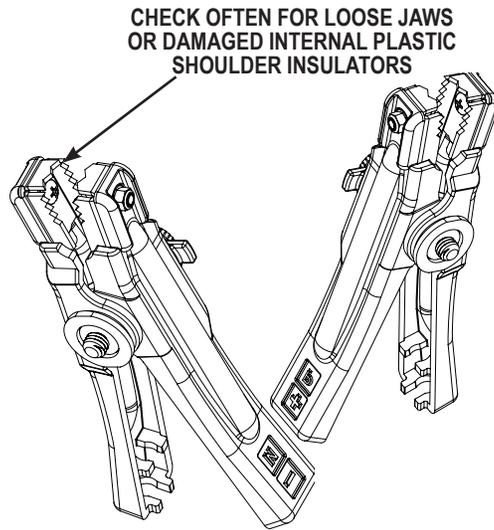
CARE AND MAINTENANCE



- Keep leads free of oil. Clean with warm, soapy water.
- Never insert an object into the fan vents. This can cause electrical and/or mechanical damage. Never cover the fan vents.
- Never attempt to open up or repair the tester. Repairs should only be done by an authorized repair center. **Note:** Doing so could void the warranty.
- Always be sure the tester is off and the smart clamps are removed from the battery before cleaning.

SMART CLAMPS™

- Both jaws of each clamp must firmly engage the battery terminal. One copper jaw connects to the smaller gauge wire that reads the voltage and the other jaw connects to the larger current conducting wire. Electrical isolation between jaws is necessary for accurate readings. For side terminal battery connection, the threaded stud connects to the smaller gauge wire that reads the voltage, and the current pad ring connects to the larger conducting wire. Damaged clamps or loose wires will affect the readings. Keep clamps clean and in good repair.



- Use the side terminal feature on the clamp to connect battery side terminals.

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SAFETY

- Carefully read all operating instructions before using the XCPRO-80.
- Wear eye protection when working around batteries.
- The XCPRO-80 is equipped with a 9ft power cord. Never use an extension cord that is more than 50ft and it must not be smaller than 12 gauge. Make sure the extension cord and receptacle are properly grounded.
- Be sure each charge is completed before removing clamps to prevent arcing and potential explosion from battery gases. Never remove load clamps while charging.
- Keep sparks flames or cigarettes away from batteries.
- Provide adequate ventilation to remove car exhaust.
- In extremely cold temperatures, check for frozen electrolytic fluid before applying charge. Do not attempt to Charge a battery under 20° F. Allow the battery to warm to room temperature before testing or charging.
- Never connect clamps to more than one 6 volt, 8 volt or 12 volt battery at a time. Connection to 24 volts will dangerously overload the circuitry. Do not charge multiple batteries or 24 volt systems using the XCPRO-80.
- **Warning!** Never attach the XCPRO-80 to a battery that is connected to any other tester or charging unit. Damage may result.

**Wear
Safety
Glasses**



WARNING!

TESTING OF HYBRID VEHICLES

- DO NOT** test the starter, alternator and/or 12 volt starting battery while it is in the vehicle.
- DO NOT** remove, service or test the hybrid battery pack under any circumstances.
- Remove** the 12 volt starting battery, starter or alternator from the vehicle prior to testing.

CAUSE OF BATTERY FAILURE

- **Incorrect Application:** Wrong size battery may have inadequate cold cranking Amp rating for original vehicle specifications.
- **Incorrect Installation:** Loose battery hold-downs cause excessive vibration, which can result in damage to the plates.
- **Improper Maintenance:** Low electrolytic fluid and corrosion on battery connections, can greatly reduce battery life and affect battery performance.
- **Age of Battery:** If the date code on the battery indicates it is fairly old, the failure may be due to natural causes.
- **Overcharging:** Overcharging caused by a high voltage regulator setting or incorrect battery charging can cause excessive gassing, heat and water loss.
- **Undercharging:** Undercharging caused by a faulty charging system or low voltage regulator setting can cause lead sulfate to gradually build up and crystallize on the plates greatly reducing the battery's capacity and ability to be recharge.

REVIEW / PRINT

From the menu select REVIEW/PRINT using the +/- keys.



```
CHARGE
>REVIEW/PRINT
SETUP
ABOUT
```

```
#290 12V BATT.
CHARGED
12.60V CHRG 100%
USE +/- . Y PRINT ↓
```

Press 'Y' to print on store printer, 'N' to return to the main menu.

ABOUT THE XCPRO-80

Select ABOUT from the main menu. The following is displayed.

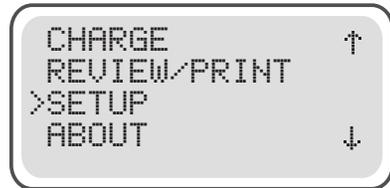
```
CHARGE
REVIEW/PRINT
SETUP
>ABOUT
```

```
XCPRO-80
VERSION 1.0
SER #: 10001
COPYRIGHT 2012
```

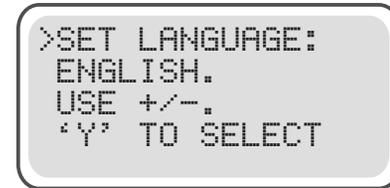
Press 'N' to return to the main menu.

SETUP

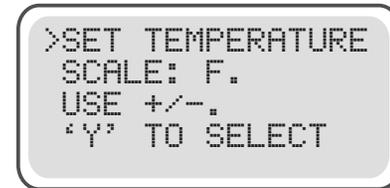
The charger factory default settings are English, F (Temp), CCA, 600 CCA. To change the settings use the setup menu's below.



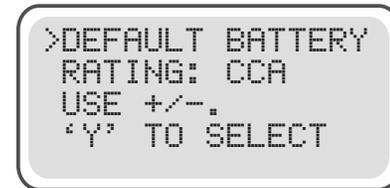
Scroll Down to Setup, Select setup by pressing Y



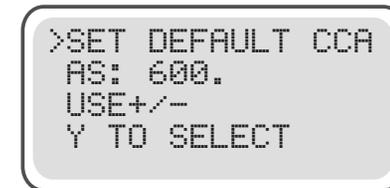
Choose between Spanish or English Language.



Select the temp in Fahrenheit or Centigrade.



Select the rating from CCA, MCA, CA, AH, EN.



You can also select the default rating to be the last entered CCA value or a particular amount such as 600 CCA.



If the XCPRO-80 is connected to a POSI-160 interface that has a printer, you may chose "PRINT TO POSI" to be prompted to print the charge results.

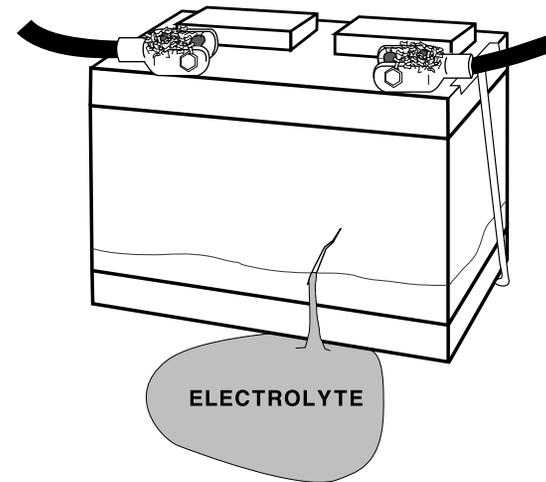
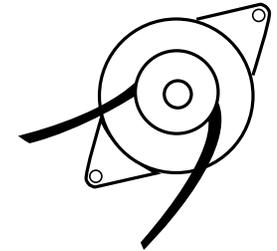
INSPECTION



Valid automotive electrical system testing depends on all the components being in good operating condition. In addition, the battery MUST have sufficient charge for testing. Carefully perform the following before attempting any electrical diagnosis.

VISUAL CHECK

■ **Inspect Belts** for cracks, glazed surface and fraying. Tighten loose belts.



■ **Inspect Battery** for terminal corrosion, loose or broken posts, cracks in the case, loose hold-downs, low electrolyte level, moisture, and dirt around the terminals.

■ **Inspect Starting System** Check starter, solenoid, and regulator for loose connections, loose mounts, and frayed or cracked wires.

■ **Important Note**

A damaged battery must be replaced before proceeding.

WHAT TO EXPECT

...from your XCPRO-80 Charger

During the charge sequence the XCPRO-80 will indicate the estimated time remaining to complete the charge. Actual charge time may vary depending on ability of the battery to accept a charge. The charge time may be extended if the charger senses the battery temperature is becoming to warm by reducing the charge current to protect the battery. The LCD screen makes it possible to view the XCPRO-80 charging status.

The LCD provides easy menu instructions and charge results for close-up operation.

The XCPRO-80 will automatically charge a 6V, 8V or 12V battery in a Fast Charge mode or Full Charge mode.

Fast Charge Mode: Quickly charges the battery up to a level that it can be put back into service, and the remaining charge will be put back into the battery by the vehicles charging system.

Full Charge Mode: Provides a full charge to the battery.



CHARGE SEQUENCE cont.

AUTOMATED CONDITIONS

If the battery temperature goes over 140°F charging will stop. The LED indicators will show the status during a fully automated Charge sequence. This makes it possible to view the status and final results at a distance.

- Red "CHARGING" in progress light indicates battery is being charged.
- Green "CHARGING COMPLETE" light indicates battery has been charged.
- Amber "SEE DISPLAY" light indicates additional information is displayed on the screen.



```
C#20 12V BATT.  
BATT. CHARGED  
12.98V CHRG 100%  
'Y' TO CONTINUE
```

Normal Charge. Press 'Y' to go back to menu.

```
C#20 12V BATT.  
FAILED TO CHARGE  
10.28V CHRG 0%  
'Y' CONT - MORE
```

Failed to Charge. The battery failed to accept a charge. Test battery with a battery tester. If battery tests bad, replace the battery. If battery tests good try charging the battery again.

```
C#20 12V BATT.  
BATT. OVERHEATED  
'Y' CONT - MORE
```

Battery Overheated. The battery got too hot to safely charge. Let the battery cool and then recharge.

```
C#20 12V BATT.  
WEAK CHARGE  
13.50V CHRG 100%  
'Y' PRINT - MORE
```

Battery may not be accepting a normal charge. Test battery with a battery tester. If battery tests bad, replace the battery. If battery tests good try charging the battery again.

CHARGE SEQUENCE cont.



ENTER RATED CCA
600
USE +/-,
'Y' TO CONTINUE.

The battery rating displayed will be either the default rating or the last entered rating will be displayed (this setting can be changed at setup). Adjust the rating using the +/- keys. Press 'Y' to continue.

CHOOSE BATT TYPE
STARTING STANDRD
USE +/-,
'Y' TO CONTINUE

Press the (+Up) or (-Down) key to cycle through the battery types. Press 'Y' when it matches the type of battery you are charging.

BATTERY TYPE
OPTIONS:
STARTING STANDRD DEEP CYCLE AGM
STARTING AGM DEEP CYCLE STD
 GELL CELL

CHOOSE CHRG TYPE
FAST CHARGE
USE +/-,
'Y' TO CONTINUE

Press the (+ Up) or (- Down) key to choose FAST CHARGE or FULL CHARGE. Press 'Y' to continue.

Summary Screen

>STARTING STANDR
TEMP. 70°F FAST
RATED CCA = 600
'N' OR 'Y'

Confirm that the inputs are correct. Press 'Y' if they are correct. The charge will start. Press 'N' to re-enter temp, battery rating, battery type, or charge type.

>WHAT IS RATED
VOLTAGE OF BATT?
USE +/-, 6V
'Y' TO SELECT

If the XCPRO-80 determines a low voltage it will ask you to select the rated battery voltage 6V, 8V, or 12V. Use + (Up) or - (Down) key to select rated battery voltage. Press 'Y' to continue.

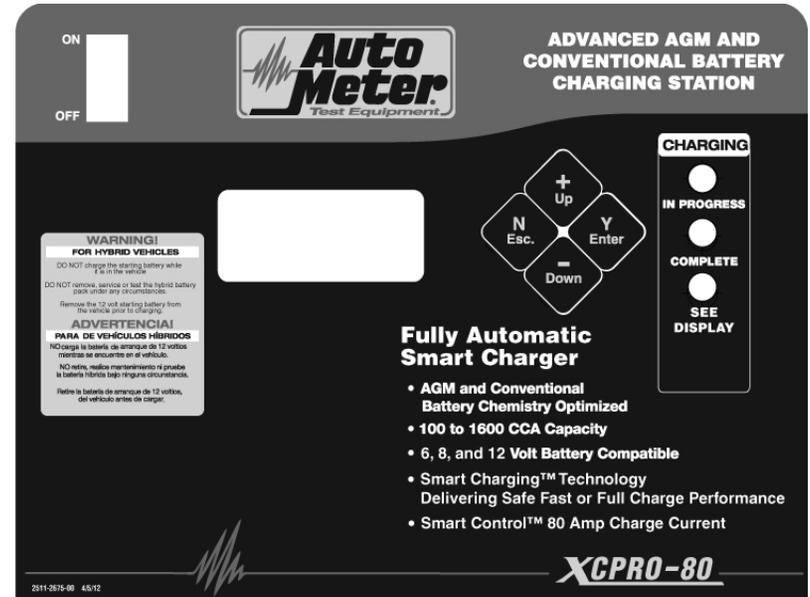
CHARGING
MAX TIME: 0:22
'N' TO STOP

After a short time, the display will indicate the maximum time to complete the charge. You can press 'N' at any time to stop the charge.

CONTROLS AND FUNCTIONS



- 1. AC On/Off Switch**
LCD turns on when AC switch is on.
- 2. LCD**
Displays menus and charge results.



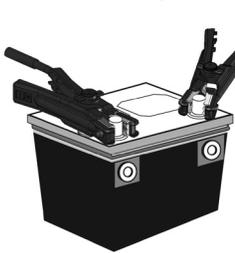
- 3. KEYS**
When each key is pressed a beep sounds to assure contact has been made.
Y Enter Key:
This key selects the main or next menu. It also selects the cursor line item and answers yes to a charge progression.
+Up Key:
This key moves the cursor up in order to select a menu line item. It also increments a value.
-Down Key:
This key moves the cursor down in order to select a menu line. It also decrements a value.
N Esc Key:
This key cancels a charge or progression. It also returns to the previous menu.
- 4. Battery Charge Sequence**
Indicating change in progress, charge complete, or see display for additional information.
USB Port on the left side.
USB B Connection - Future expansion /factory use.

HOOK UP

1. Turn on the AC switch. The LCD will indicate "XCPR0-80" if the unit is properly plugged into an AC outlet. For your safety, make sure the AC receptacle is properly grounded.

NOTE: The XCPR0-80 is equipped with a 9ft power cord. Never use an extension cord smaller than 12 gauge or longer than 50ft. Make sure the extension cord and receptacle are properly grounded.

Connect Black
Clamp to Negative
(-) Terminal



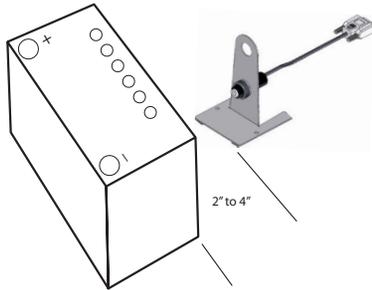
Connect Red
Clamp to Positive
(+) Terminal

Use the side terminal feature on the clamp to connect battery side terminals.

2. Connect to only one 6-volt, 8-volt, or 12-volt battery at a time.

NOTE: Due to gases and usual corrosion around the positive terminal it is important to connect the positive (+) red clamp first. Make sure the connection is certain. Then connect the negative (-) black clamp.

3. Connect the supplied temperature probe to the temperature probe port on the left side of the charger with the power switch in the off position. Install the temperature probe in the supplied bracket as shown below and place the temperature probe so that it points at side center approximately 2 to 4 inches from the battery. The temperature probe will monitor the battery temperature during the charge. If the battery temperature starts to rise quickly, the charger will automatically decrease the charge current to protect the battery.



NOTE: The charger checks for the temperature probe connection on each power up. If a probe is not detected, the charger will allow you to enter the approximate temperature of the battery manually.

4. If the XCPR0-80 displays one of the following messages check your connections.

```
REVERSED BATTERY
CONNECTIONS!

DISCONNECT NOW
```

Red = (+) Positive and Black = (-) Negative

```
CHECK BATTERY
CONNECTIONS!

'N' TO CANCEL
```

Make sure the terminals are clean and the connection is secure. If the "Check Battery Connections" remains the connections are not secure. If you are sure of a solid connection replace the battery.



CHARGE SEQUENCE

From the menu select CHARGE using the +/- keys.

```
>CHARGE
REVIEW/PRINT
SETUP
ABOUT
```

Then press 'Y' Enter to continue.



If no temperature probe is connected use the +(Up) and -(Down) keys to enter the current battery temp. The (Up) & (Down) keys increment & decrement in units of 10. Press 'Y' to begin. If a temperature probe is connected the battery temperature will be measured automatically.

```
>ENTER BATTERY
TEMP. 70F
USE +/-
'Y' TO CONTINUE
```

If the battery temperature is above 120°F the following message will appear:

```
THE BATTERY
IS TOO HOT TO
CHARGE SAFELY
'Y' TO CONTINUE
```

```
THE BATTERY
NEEDS TO COOL
BEFORE CHARGING
'Y' TO CONTINUE
```

The unit will go back to main menu.

If the battery temp is below 20°F the following message will appear

```
THE BATTERY
IS TOO COLD TO
SAFELY CHARGE
'Y' TO CONTINUE
```

```
THE BATTERY
NEEDS TO WARM
BEFORE CHARGE
'Y' TO CONTINUE
```

The unit will go back to main menu.