NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, LLC. For up-to-date product literature, visit horizonhobby.com and click on the support tab for this product.

MEANING OF SPECIAL LANGUAGE

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND a little or no possibility of injury.

CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

⚠ **WARNING:** Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not attempt disassembly, use with incompatible components or augment product in any way without the approval of Horizon Hobby, LLC. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

Age Recommendation: Not for children under 14 years. This is not a toy.

NOTICE: This appliance is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

⚠ **DANGER:** To reduce the risk of fire or electric shock, carefully follow these instructions.

CHARGING WARNINGS

⚠ **WARNING:** Failure to exercise caution while using this product and comply with the following warnings could result in product malfunction, electrical issues, excessive heat, FIRE, and ultimately injury and property damage.

- **NEVER LEAVE CHARGING BATTERIES UNATTENDED DURING USE.**
- **NEVER CHARGE BATTERIES OVERNIGHT.**
- Never attempt to charge dead, damaged or wet battery packs.
- Never attempt to charge a battery pack containing different types of batteries.
- Never allow children under 14 years of age to charge battery packs.
- Never charge batteries in extremely hot or cold places or place in direct sunlight.
- Never charge a battery if the cable has been pinched or shorted.
- Never connect the charger if the power cable has been pinched or shorted.
- Never connect the charger to an automobile 12V battery while the vehicle is running.
- Never attempt to dismantle the charger or use a damaged charger.
- Never attach your charger to both an AC and a DC power source at the same time.
- Never connect the input jack (DC input) to AC power.
- Always use only rechargable batteries designed for use with this type of charger in the correct programming mode.
- Always inspect the battery before charging.
- Always keep the battery away from any material that could be affected by heat.
- Always monitor the charging area and have a fire extinguisher available at all times.
- Always end the charging process if the battery becomes hot to the touch or starts to change form (swell) during the charge process.
- Always connect the charge cable to the charger first, then connect the battery to avoid short circuit between the charge leads. Reverse the sequence when disconnecting.
- Always connect the positive red leads (+) and negative black leads (–) correctly.
- Always disconnect the battery after charging, and let the charger cool between charges.
- Always charge in a well-ventilated area.
- Always terminate all processes and contact Horizon Hobby if the product malfunctions.
- Charge only rechargeable batteries. Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.

⚠ **WARNING:** Never leave charger unattended, exceed maximum charge rate, charge with non-approved batteries or charge batteries in the wrong mode. Failure to comply may result in excessive heat, fire and serious injury.

⚠ **CAUTION:** Always ensure the battery you are charging meets the specifications of this charger and that the charger settings are correct. Not doing so can result in excessive heat and other related product malfunctions, which can lead to user injury or property damage. Please contact Horizon Hobby or an authorized retailer with compatibility questions.

✓ Included Items

JST_XH balance adapter (DYN5032)
Banana plug to EC3™ battery connector (DYNC0066)
AC power cord (one region—US, EU, AU or UK)
DC power cord (DYNC1101)

Optional Items

Banana to Deans insulated charge adapter: male (DYNC0053)
Banana to Traxxas® insulated charge adapter: male (DYNC0054)
Temperature Sensor (DYN5033)

Specifications

Input Voltage	100–240V AC (50–60Hz); 11–18V DC
Charging Capability	1–6S Li-Po/Li-Ion/Li-Fe; 1–15C Ni-Cd/Ni-MH; 2–20V Pb
Battery Capacities	50–10000 mAh
Charge Current	0.1A–6A (in 0.1A increments/80W max)
Discharge Current	0.10A–2.0A (in 0.1A increments/10W max)
Balance Current	300mA max
Balance tolerance	+/- 0.01V
Operating Temperature	0°C to + 40°C
Charging Mode	Ni-Cd/Ni-MH: Peak; Li-Po/Li-Ion/Li-Fe/Pb: CC/CV
Protection	Short-circuit, over-current, reverse polarity, low input voltage, over-temperature

GETTING STARTED

⚠ **CAUTION:** Before charging, always ensure you have chosen the correct battery chemistry type for the battery you are charging.

⚠ **CAUTION:** Never connect the AC and DC input cords to an active power source at the same time. This will void the warranty, cause product damage and possibly injure the user.

When Using an External DC Power Source:
1. Connect the DC power cord to the charger **DC Power Input Port (D)**.
2. Connect the DC alligator clips to the DC power source.
3. When the charger is powered ON, a message will appear on the **LCD Screen (G)**.

NOTICE: Always connect cable polarities correctly.

NOTICE: Always consult 12V battery collateral materials or Horizon Hobby before using with sources other than a standard AC wall outlet.

WHEN Using an External AC Power Source:
1. Connect the AC power cord to the charger **AC Power Input Port (F)**.
2. Connect the AC power cord to the AC power source.
3. When the charger is powered ON, a message will appear on the **LCD Screen (G)**.

CONNECTING THE BATTERY TO THE CHARGER:

⚠ **CAUTION:** Always power ON the charger before connecting a battery, or damage to the charger and the battery can result.

1. Connect the charger to the power source.
2. Select the charging settings.
3. Connect the battery to the charger.
4. Start battery charging.

VOLTAGE MUST BE SET TO THE CORRECT VALUE BEFORE THE CHARGER IS POWERED ON.

⚠ **CAUTION:** If at any time during the charge process the battery pack becomes hot or begins to puff, disconnect the battery immediately and discontinue the charge process as batteries can cause fire, collateral damage and injuries.

⚠ **CAUTION:** Using a charge rate that is not compatible with the battery capacity may result in damage or malfunction of the charger or battery.

⚠ **CAUTION:** The Lithium charge program menus are to be used ONLY for the charging and discharging of Lithium battery packs. Charging other battery types using the Lithium charge programs will damage the battery or the charger.

A. Power Output Black (–)
B. Power Output Red (+)
C. Balance Circuit Adapter Board Connector
D. DC Power Input Port
E. Temperature Sensor Port
F. AC Power Input Port
G. LCD Screen
H. ESC / MODE
I. <DEC
J. >INC
K. START / ENTER

Not to scale.
Not all wiring shown.
Not all connectors shown.

PROGRAMMING QUICK GUIDE

1. Press the **Esc/Mode** Button to scroll through the main menu screens.
2. Press **Start/Enter**.
3. Press the **< Dec** or **Inc >** Button to scroll through the program options.
4. Press **Start/Enter** to select a program option.
5. Press the **<Dec** or **Inc>** Button to change the parameter. Press the **Start/Enter** Button again to move to the next parameter.
6. Once the parameters are at the desired settings, press and hold the **Start/Enter** Button.

LITHIUM BATTERIES (Li-Po / Li-Fe / Li-Ion)

```
PROGRAM SELECT
Li** Battery
```

```
Li** CHARGE   6S
C= 5000mAh  5.0A
```
```
Li** BAL-CHG  6S
C= 5000mAh  5.0A
```
```
Li** STORAGE   6S
C= 5000mAh  5.0A
```
```
Li**  DCHG   3.0
1.0A    18.0V(6S)
```

Ni-MH BATTERIES

```
PROGRAM SELECT
NiMH Battery
```

```
NiMH CHARGE  Man
CURRENT      1.0A
```
```
NiMH CHARGE  Aut
CUR LIMIT    1.0A
```
```
NiMH DISCHARGE
1.0A         12.0V
```
```
NiMH CYCLE    C→D
C=1.0A D=1.0A   1
```

Ni-Cd BATTERIES

```
PROGRAM SELECT
NiCd Battery
```

```
NiCd CHARGE  Man
CURRENT      1.0A
```
```
NiCd CHARGE  Aut
CUR LIMIT    1.0A
```
```
NiCd DISCHARGE
1.0A         12.0V
```
```
NiCd CYCLE    C→D
C=1.0A D=1.0A   1
```

Pb BATTERIES

```
PROGRAM SELECT
Pb Battery
```

```
Pb CHARGE
0.1A     4.9V (2P)
```
```
Pb DISCHARGE
1.0A     4.9V (2P)
```

DIGITAL POWER

```
PROGRAM SELECT
Digital Power
```
```
POWER MODE
2.0A         12.0V
```

SAVE DATA

```
PROGRAM SELECT
   Memory Save
```
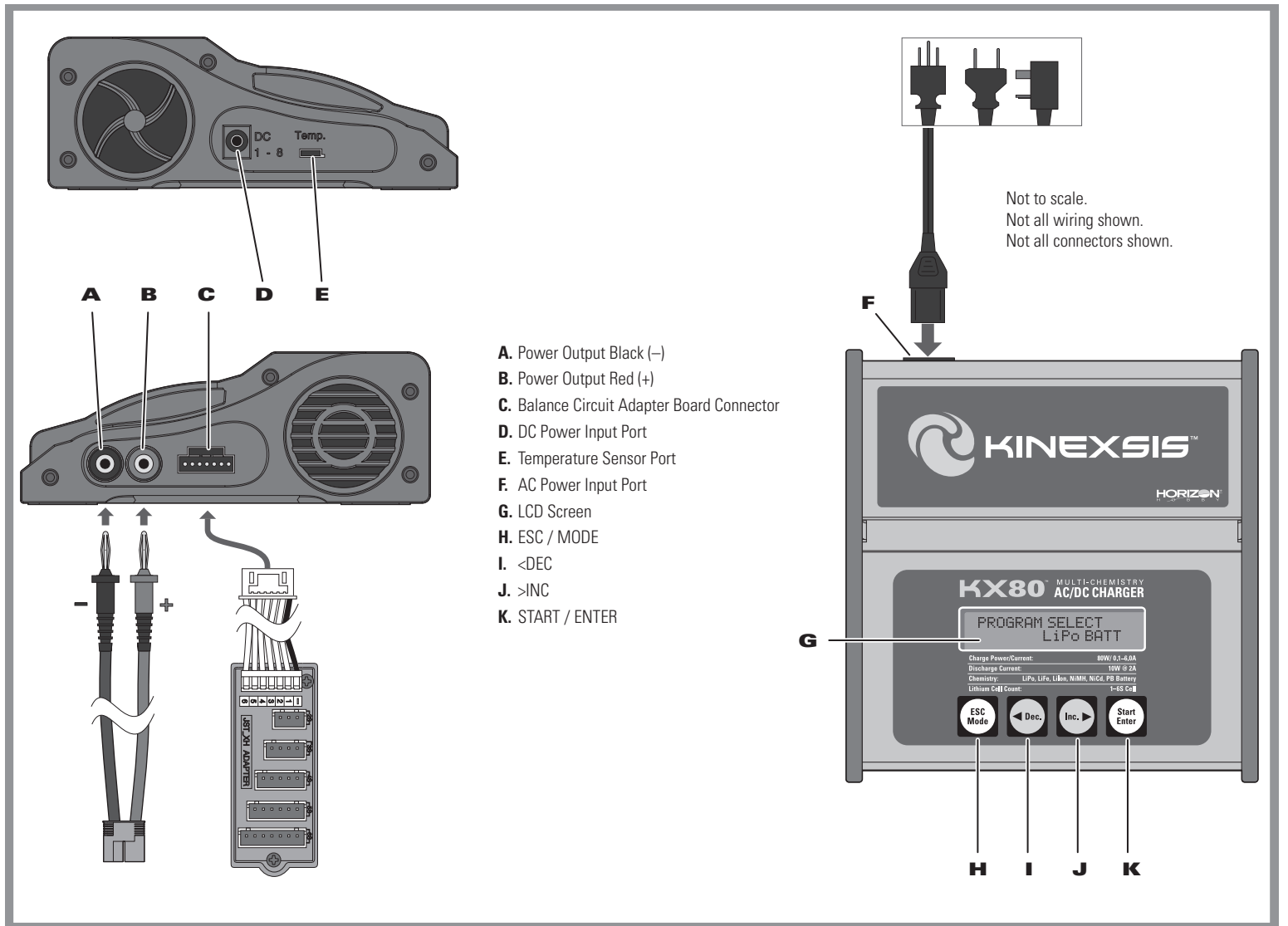```
MEMORY NiMH   [1]
AUTO   1.5A
```

**LOAD DATA**

```
PROGRAM SELECT
   Memory Load
```
```
MEMORY NiMH   [1]
AUTO   1.5A
```

## OPERATING YOUR CHARGER

### 1 - SELF TEST AND PROGRAM SELECT SCREENS

When the charger is powered ON, there is a series of self tests and the screen will show the charger brand name and model number.

```
KINEXSIS
KXSC1002
```

ⓘ **ONLY LI-PO IS SHOWN IN THE FOLLOWING THREE SECTIONS. LI-ION/LI-FE MENUS DIFFER ONLY IN CELL AND PACK VOLTAGE VALUES.**

2 - LITHIUM (LI-PO/LI-FE/LI-ION) CHARGING

1. Connect the banana plugs of the battery adapter cable to the **Power Output Black (–) (A) and Power Output Red (+) (B)**, making sure that the positive and negative connectors are not reversed.
2. Connect the JST_XH balance adapter to the **Balance Circuit Adapter Board Connector (C)**.
3. Connect the battery connector to the battery adapter cable.
4. Connect the balance connector of the battery to the JST_XH balance adapter.
5. Press the **Esc/Mode** Button to scroll through the main menu screens until you reach Program Select=Li-Po/Li-Ion/Li-Fe.

```
PROGRAM SELECT
Li** Battery
```

6. Press **Start/Enter**.
7. Press the **< Dec** or **Inc >** Button to scroll through the program options (Charge, Balance Charge, Storage, Discharge).

```
Li** BAL-CHG  6S
C= 5000mAh  5.0A
```

8. Press **Start/Enter** to select a program option.
9. Press the **<Dec** or **Inc>** Button to change the parameter. Press the **Start/Enter** Button again to move to the next parameter.
10. Once the parameters are at the desired settings, press and hold the **Start/Enter** Button.
11. The charger will check the battery and charger settings and charging will begin. The charger will beep and display the following screen:

```
Li3S 2.0A 12.59V
BAL 022:43 01082
```

12. Press the **< Dec** Button to see the rest of the Charging information.
13. Press the **Inc >** Button to see the voltages for each cell. Press **<Dec** to return to the charging screen.

```
4.20  4.20  4.20
0.00  0.00  0.00
```

14. Press the **Esc / Mode** Button at any time to stop charging.
15. When charging is complete, the charger will sound a series of beeps.
16. Disconnect the battery from the charger.

3 - LITHIUM DISCHARGING

1. Connect the banana plugs of the battery adapter cable to the **Power Output Black (–)** and **Power Output Red (+)**, making sure that the positive and negative connectors are not reversed.
2. Connect the JST_XH balance adapter to the **Balance Circuit Adapter Board Connector**.
3. Connect the battery connector to the battery adapter cable.
4. Connect the balance connector of the battery to the JST_XH balance adapter.
5. Press the **Esc / Mode** button to scroll through the main menu screens until you reach Program Select=Li-Po/Li-Ion/Li-Fe.
6. Press **the Start / Enter** Button.
7. the **< Dec** or **Inc >** Button until Li-Po/Li-Ion/Li-Fe DCHG appears.

```
Li**  DCHG   3.0
1.0A    18.0V(6S)
```

8. Press the **Start / Enter** Button to edit the parameter.
9. Once the parameters are at the desired settings, press and hold **the Start / Enter** Button for 3 seconds.
10. The charger will check the battery and charger settings and discharging will begin.
11. Press the **< Dec** or **Inc >** Button to see the rest of the Discharging information.
12. Press **Esc / Mode** at any time to stop discharging.
13. When discharging is complete, the charger will sound a series of beeps.
14. Disconnect the battery from the charger.

4 - LITHIUM STORAGE CHARGING

1. Connect the banana plugs of the battery adapter cable to the **Power Output Black (–) and Power Output Red (+)**, making sure that the positive and negative connectors are not reversed.
2. Connect the JST_XH balance adapter to the **Balance Circuit Adapter Board Connector**.
3. Connect the battery connector to the battery adapter cable.
4. Connect the balance connector of the battery to the JST_XH balance adapter.
5. Press the **Esc/Mode** Button to scroll through the main menu screens until you reach Program Select=Li-Po/Li-Ion/Li-Fe.
6. Press the **Start / Enter** Button.
7. the **< Dec** or **Inc >** Button until Li-Po/Li-Ion/Li-Fe STORAGE appears.

```
LiPo STORAGE   6S
C= 5000mAh   5.0A
```

8. Press the **Start / Enter** Button to edit the parameter.
9. Once the parameters are at the desired settings, press and hold the **Start / Enter** Button for 3 seconds.
10. The charger will check the battery and charger settings and storage charging will begin.
11. Press the **< Dec** or **Inc >** Button to see the rest of the storage Charging information.
12. Press **Esc / Mode** at any time to stop charging.
13. When charging is complete, the charger will sound a series of beeps.
14. Disconnect the battery from the charger.

5 - NICKEL (NI-MH/NI-CD) CHARGING

1. Connect the banana plugs of the battery adapter cable to the **Power Output Black (–)** and **Power Output Red (+)**, making sure that the positive and negative connectors are not reversed.
2. Connect the battery connector to the battery adapter cable.
3. Press the **Esc/Mode** Button to scroll through the main menu screens until you reach Program Select=Ni-MH/Ni-Cd.

```
PROGRAM SELECT
NiMH Battery
```

4. Press the **Start/Enter** button.
5. Press the **< Dec** or **Inc >** Button until Ni-MH/Ni-Cd CHARGE appears.

```
NiMH CHARGE  Man
CURRENT      1.0A
```

6. Press the **Start / Enter** Button to edit the parameter.
7. Once the parameters are at the desired settings, press and hold the **Start/Enter** button for 3 seconds.
8. The charger will check the battery and charger settings and charging will begin.
9. Press the **< Dec** or **Inc >** Button to see the rest of the Discharging information.
10. Press **Esc / Mode** at any time to stop discharging.
11. When discharging is complete, the charger will sound a series of beeps.
12. Disconnect the battery from the charger.

6 - NICKEL DISCHARGING

1. Connect the banana plugs of the battery adapter cable to the **Power Output Black (–)** and **Power Output Red (+)**, making sure that the positive and negative connectors are not reversed.
2. Connect the battery connector to the battery adapter cable.
3. Press the **Esc/Mode** Button to scroll through the main menu screens until you reach Program Select=Ni-MH/Ni-Cd.

```
NiMH DISCHARGE
1.0A        12.0V
```

4. Press the **Start/Enter** button.
5. Press the **< Dec** or **Inc >** Button until Ni-MH/Ni-Cd DISCHARGE appears.
6. Press the **Start / Enter** Button to edit the parameter.
7. Once the parameters are at the desired settings, press and hold the **Start/Enter** button for 3 seconds.
8. The charger will check the battery and charger settings and charging will begin.
9. Press the **< Dec** or **Inc >** Button to see the rest of the Discharging information.
10. Press **Esc / Mode** at any time to stop discharging.
11. When discharging is complete, the charger will sound a series of beeps.
12. Disconnect the battery from the charger.

7 - NICKEL CYCLE CHARGING

1. Connect the banana plugs of the battery adapter cable to the **Power Output Black (–)** and **Power Output Red (+)**, making sure that the positive and negative connectors are not reversed.
2. Connect the battery connector to the battery adapter cable.
3. Press the **Esc/Mode** Button to scroll through the main menu screens until you reach Program Select=Ni-MH/Ni-Cd.
4. Press the **Start/Enter** button.
5. Press the **< Dec** or **Inc >** Button until Ni-MH/Ni-Cd DCHG>CHG appears.

```
NiMH CYCLE   C→D
C=1.0A D=1.0A   1
```

6. Press the **Start / Enter** Button to edit the parameter.
7. Once the parameters are at the desired settings, press and hold the **Start/Enter** button for 3 seconds.
8. The charger will check the battery and charger settings and charging will begin.
9. Press the **< Dec** or **Inc >** Button to see the rest of the Cycle information.
10. Press **Esc / Mode** at any time to stop discharging.
11. When discharging is complete, the charger will sound a series of beeps.
12. Disconnect the battery from the charger.

⚠ **CAUTION:** The Pb charge program menus are to be used ONLY for the charging and discharging of Pb battery packs. Charging other battery types using the Pb charge programs will damage the battery or the charger.

8 - PB CHARGING

1. Connect the banana plugs of the battery adapter cable to the **Power Output Black (–)** and **Power Output Red (+)**, making sure that the positive and negative connectors are not reversed.
2. Connect the battery connector to the battery adapter cable.
3. Press the **Esc/Mode** Button to scroll through the main menu screens until you reach Program Select=Pb BATT.

```
PROGRAM SELECT
Pb Battery
```

4. Press the **Start/Enter** button.
5. Press the **< Dec** or **Inc >** Button until Pb CHARGE appears.

```
Pb CHARGE
0.1A     4.9V (2P)
```

6. Press the **Start / Enter** Button to edit the parameter.
7. Once the parameters are at the desired settings, press and hold the **Start/Enter** button for 3 seconds.
8. The charger will check the battery and charger settings and charging will begin.
9. Press the **< Dec** or **Inc >** Button to see the rest of the charging information.
10. Press **Esc / Mode** at any time to stop discharging.
11. When charging is complete, the charger will sound a series of beeps.
12. Disconnect the battery from the charger.

9 - PB DISCHARGING

1. Connect the banana plugs of the battery adapter cable to the **Power Output Black (–)** and **Power Output Red (+)**, making sure that the positive and negative connectors are not reversed.
2. Connect the battery connector to the battery adapter cable.
3. Press the **Esc/Mode** Button to scroll through the main menu screens until you reach Program Select=Pb BATT.
4. Press the **Start/Enter** button.
5. Press the **< Dec** or **Inc >** Button until Pb DISCHARGE appears.

```
Pb DISCHARGE
1.0A     4.9V (2P)
```

6. Press the **Start / Enter** Button to edit the parameter.
7. Once the parameters are at the desired settings, press and hold the **Start/Enter** button for 3 seconds.
8. The charger will check the battery and charger settings and discharging will begin.
9. Press the **< Dec** or **Inc >** Button to see the rest of the Discharging information.
10. Press **Esc / Mode** at any time to stop discharging.
11. When discharging is complete, the charger will sound a series of beeps.
12. Disconnect the battery from the charger.

10 - DIGITAL POWER

The Digital Power menu enables you to use the Kinexsis KX80 charger as a power supply for external devices. The maximum Digital Power output is 6A / 24V.
1. Connect the banana plugs of the external device to the **Power Output Black (–)** and **Power Output Red (+)**, making sure that the positive and negative connectors are not reversed.
2. Press the **Esc / Mode** Button to scroll through the main menu screens until you reach Digital Power.

```
PROGRAM SELECT
Digital Power
```

3. Press the **Start / Enter** Button to edit the parameter.
4. Once the parameters are at the desired settings, press and hold the **Start / Enter** Button for 3 seconds.
5. Press the **Esc / Mode** Button at any time to stop supplying power to the external device.
6. Disconnect the external device from the charger.

11 - MEMORY SAVE

The Memory Save menu option enables you to save 5 battery charging profiles that you use often.
1. Press the **Esc / Mode** Button to scroll through the main menu screens until you reach Program Select - Memory Save.

```
PROGRAM SELECT
Memory Save
```

2. Press the **Start / Enter** Button to enter the Memory Save menu. The first time you enter the menu, the "0" model memory location flashes.
3. Press the **< Dec** or **Inc >** Button to select a memory location (0-9), then press and hold the **Start / Enter** Button to save the selection. The BATT TYPE screen appears.
4. Press the **< Dec** or **Inc >** Button to select the desired battery type, then press the **Start / Enter** Button.
5. Adjust the battery parameters as you normally would for charging the battery.
6. Press the **Inc >** Button to adjust the parameters for Balance Charge, Cycle, Storage, etc.
7. Press and hold the **Start / Enter** Button for 3 seconds to save your selections. The charger screen displays "Saving..", then returns to the Memory Save screen.

```
MEMORY NiMH    [1]
AUTO    1.5A
```

12 - LOAD DATA

The Load Data menu option enables you to access the 5 battery charging profiles that you stored in the Save Data menu.
1. Press the **Esc / Mode** Button to scroll through the main menu screens until you reach Program Select - Load Data.

```
PROGRAM SELECT
Memory Load
```

2. Press the **Start / Enter** Button to enter the Load Data menu. The first time you enter the menu, the "0" model memory location flashes.
3. Press the **< Dec** or **Inc >** Button to select a memory location (0-9).
4. Press the **Start / Enter** Button for 3 seconds until the Charge screen appears
5. Press the < Inc or Dec > Button to scroll through Charge, Balance Charge, Cycle, Discharge, Storage, etc.
6. Press and hold the **Start / Enter** Button for 3 seconds to load the desired function.

```
MEMORY NiMH    [1]
AUTO    1.5A
```

13 - PROGRAM SELECT – USER SET

1. Press the **Esc / Mode** Button to scroll through the main menu screens until you reach Program Select = User set.

```
PROGRAM SELECT
     User Set   =>
```

2. Press the **Start / Enter** button to enter the User Set menu.
3. Press the **< Dec** or **Inc >** Button to scroll through the menu.
4. Press the **Start / Enter** Button to edit the parameter.
5. Press the **< Dec** or **Inc >** Button to increase or decrease the value.
6. Press the **Start / Enter** Button again to save the selection.
7. Press the **Esc / Mode** Button to return to the main menu.

A -PRE CHARGE TIME (NI-MH/NI-CD BATTERIES ONLY)

If a Ni-MH or Ni-Cd battery is fully discharged, the battery charger may not detect the battery. The Pre-Charge Time enables you to apply a low charge rate, increasing the battery voltage to the point where the charger detects the battery.

```
PreCharge Time
ON/Off         1min
```

⚠ **WARNING:** Never use the Pre-Charge Time with Li-Po batteries. Doing so may cause the battery to catch fire.

B -WAIT TIME CHG>DCHG DEFAULT IS 1 MINUTE

When you cycle a Ni-MH or Ni-Cd battery (charging, discharging and then charging again), the battery will get very warm. The Wait Time interval between each step of the process allows the battery to cool before starting the next step. Default time is 1 minute, but this can be set between 0 and 60 minutes. Always allow the battery to cool to room temperature before charging or discharging.

```
Wait Time
CHG>DCHG       5min
```

C -NIMH SENSITIVITY D. PEAK – DEFAULT

The D.Peak (Delta Peak) value is adjustable between 5mV/Cell and 20mV/Cell. 8mV/Cell is a good starting point for Ni-MH batteries. If the Delta Peak value is too high, you risk overcharging the battery; if the value is too low, charging will stop before the battery reaches full capacity.

```
NiMH Sensitivity
D. Peak    Default
```

D -NICD SENSITIVITY D. PEAK – DEFAULT

The D.Peak (Delta Peak) value is adjustable between 5mV/Cell and 20mV/Cell. 10mV/Cell is a good starting point for Ni-Cd batteries. If the Delta Peak value is too high, you risk overcharging the battery; if the value is too low, charging will stop before the battery reaches full capacity.

```
NiCd Sensitivity
D. Peak    Default
```

E -TEMP. CUT-OFF DEFAULT IS 80C/176F

The charger can be used in conjunction with a battery mounted temperature sensor (sold separately, DYN5033) connected to the Temperature Sensor Port to monitor the temperature of the battery during the charging process. If the battery temperature reaches the cut-off limit, the charger will stop the charging process. Temperature values can be adjusted between 20–80° C (68–176° F).

```
Temp. Cut-off
ON      80C(176F)
```

F -SAFETY TIMER DEFAULT IS ON, 240MIN

Use the Safety Timer menu to set a time limit for charging a battery. When a charge cycle is started, a clock inside the charger will begin recording the elapsed charge time. If the safety timer function has been turned ON, the charger will stop the charging process once this time limit has been reached to avoid damage caused by overcharging the battery. This time value can be set between 10 and 720 minutes, in 10 minute increments.

```
Saftey Timer
ON/OFF      120min
```

G -CAPACITY CUT-OFF DEFAULT IS ON, 5000MAH

Use the Capacity Cut-Off menu to set a capacity limit on when the charger stops charging a battery. When a charge cycle starts, the charger records the battery capacity. When the capacity cutoff function is set at ON, the charger will stop charging at the capacity limit to prevent battery damage. Capacity can be adjusted between 10 and 50,000mAh in 100mAh increments.

```
Capacity Cut-Off
ON/OFF    5000mAh
```

H -INPUT POWER LOW CUT-OFF DEFAULT IS 11.0V

Use the Input Power Low Cut-Off menu to set the input voltage limit. An alarm will sound if the input voltage falls below the cut-off value. The voltage alarm value can be set between 10.0 and 11.0V.

```
Input Power Low
Cut-Off     10.0V
```

I -KEY BEEP (DEFAULT ON) / BUZZER (DEFAULT ON)

Use the Key Beep/Buzzer menu to set the key beep and charger alarm buzzer at ON or OFF as needed. We recommend that you leave the alarm ON to alert you when charging is complete or if there is cause for alarm during charging.

```
Key Beep   ON/OFF
Buzzer     ON/OFF
```

J -SCREEN SAVER (DEFAULT ALWAYS OFF)

Use the Screen Saver menu to adjust the amount of time that the backlight stays on. The default setting is "Always OFF", meaning the backlight stays on as long as the charger is powered on. If you change the value to 1 min, the backlight will turn off after 1 minute of idle time.

```
Screen saver
      Alway OFF
```

K -FACTORY RESET PRESS ENTER > 2S

Press the Start/Enter button for more than 2 seconds to reset all charger values to the default values.

```
Factory reset
Press Enter  > 2S
```

LIMITED WARRANTY

What this Warranty Covers - Horizon Hobby, LLC (Horizon) warrants to the original purchaser that the product purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase.

What is Not Covered - This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, or (vi) Product not compliant with applicable technical regulations.

OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

Purchaser's Remedy - Horizon's sole obligation and purchaser's sole and exclusive remedy shall be that Horizon will, at its option, either (i) service, or (ii) replace, any Product determined by Horizon to be defective. Horizon reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

Limitation of Liability - HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF HORIZON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the purchaser or user are not prepared to accept the liability associated with the use of the Product, purchaser is advised to return the Product immediately in new and unused condition to the place of purchase.

Law - These terms are governed by Illinois law (without regard to conflict of law principals). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Horizon reserves the right to change or modify this warranty at any time without notice.

WARRANTY SERVICES

Questions, Assistance, and Services - Your local hobby store and/or place of purchase cannot provide warranty support or service. Once assembly, setup or use of the Product has been started, you must contact your local distributor or Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please visit our website at www.horizonhobby.com, submit a Product Support Inquiry at https://horizonhobby.quickbase.com/db/bghj7ey8c?a=GenNewRecord, or call the toll free telephone number referenced in the Warranty and Service Contact Information section to speak with a Product Support representative.

Inspection or Services - If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. An Online Service Request is available at http://www.horizonhobby.com/content/_service-center_render-service-center. If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

NOTICE: Do not ship Li-Po batteries to Horizon. If you have any issue with a Li-Po battery, please contact the appropriate Horizon Product Support office

Warranty Requirements - **For Warranty consideration, you must include your original sales receipt verifying the proof-of-purchase date.** Provided warranty conditions have been met, your Product will be serviced or replaced free of charge. Service or replacement decisions are at the sole discretion of Horizon.

Non-Warranty Service - Should your service not be covered by warranty, service will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for service you are agreeing to payment of the service without notification. Service estimates are available upon request. You must include this request with your item submitted for service. Non-warranty service estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashier's checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for service, you are agreeing to Horizon's Terms and Conditions found on our website http://www.horizonhobby.com/content/_service-center_render-service-center.

⚠ **ATTENTION: Horizon service is limited to Product compliant in the country of use and ownership. If received, a non-compliant Product will not be serviced. Further, the sender will be responsible for arranging return shipment of the un-serviced Product, through a carrier of the sender's choice and at the sender's expense. Horizon will hold non-compliant Product for a period of 60 days from notification, after which it will be discarded.**

TROUBLESHOOTING

During charger operation, circuits monitor battery and charger functions. If the following messages show on the charger's LCD screen, make the recommended responses. If the message continues after you respond as recommended, contact your nearest Horizon Hobby customer service center for assistance.

REVERSE POLARITY	Make sure each connection polarity is correct between the power source and the charger, then between the charger and the battery.
PROCESS INTERRUPTED	Make sure the power connections are correct for charging.
OUTPUT SHORT CIRCUIT	Make sure there are no short circuits between the poles of the battery or the battery and the charger. Replace damaged wires.
INPUT VOLTAGE ERROR	Input voltage to the charger fell below the default or adjusted input voltage setting. Make sure the power source for the charger provides correct input voltage.
CHARGER FAILURE	Charger electronics require repair.
BATTERY LOW VOLTAGE	Battery voltage is lower than the value setting in the charger. Adjust settings, then make sure the battery is not damaged or replace the battery.
BATTERY HIGH VOLTAGE	Battery voltage is higher than the value setting in the charger. Adjust settings, then make sure the battery is not damaged or replace the battery.
CELL LOW VOLTAGE	Cell voltage is lower than the value setting in the charger. Adjust settings, then make sure the battery is not damaged or replace the battery.
CELL HIGH VOLTAGE	Cell voltage is higher than the value setting in the charger. Adjust settings, then make sure the battery is not damaged or replace the battery.
CELL CONNECT ERROR	Make sure the balance connection is correct for charging.
CHARGER OVERHEATING	Charger temperature is too high. Power OFF the charger and let it cool.
OVER POWER	Input voltage to the charger exceeded the default or adjusted input voltage setting. Make sure the power source for the charger provides the correct input voltage.
MAX CURRENT	Current is higher than the value setting in the charger. Adjust settings, then make sure the battery is not damaged or replace the battery.
SAFETY TIMER	Maximum safe time limit has been reached.
MAX CAPACITY	Maximum capacity limit has been reached.
MAX EXT. TEMP	External temperature is too high. Let charger and battery cool.
CONNECTION BREAK	Make sure the battery pack is connected to the charger.

WARRANTY AND SERVICE CONTACT INFORMATION

Country of Purchase	Horizon Hobby	Contact Information	Address
United States of America	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/RequestForm/	4105 Fieldstone Rd Champaign, Illinois, 61822 USA
	Horizon Product Support (Product Technical Assistance)	www.quickbase.com/db/bghj7ey8c?a=GenNewRecord 888-959-2306	
	Sales	sales@horizonhobby.com 888-959-2306	

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.