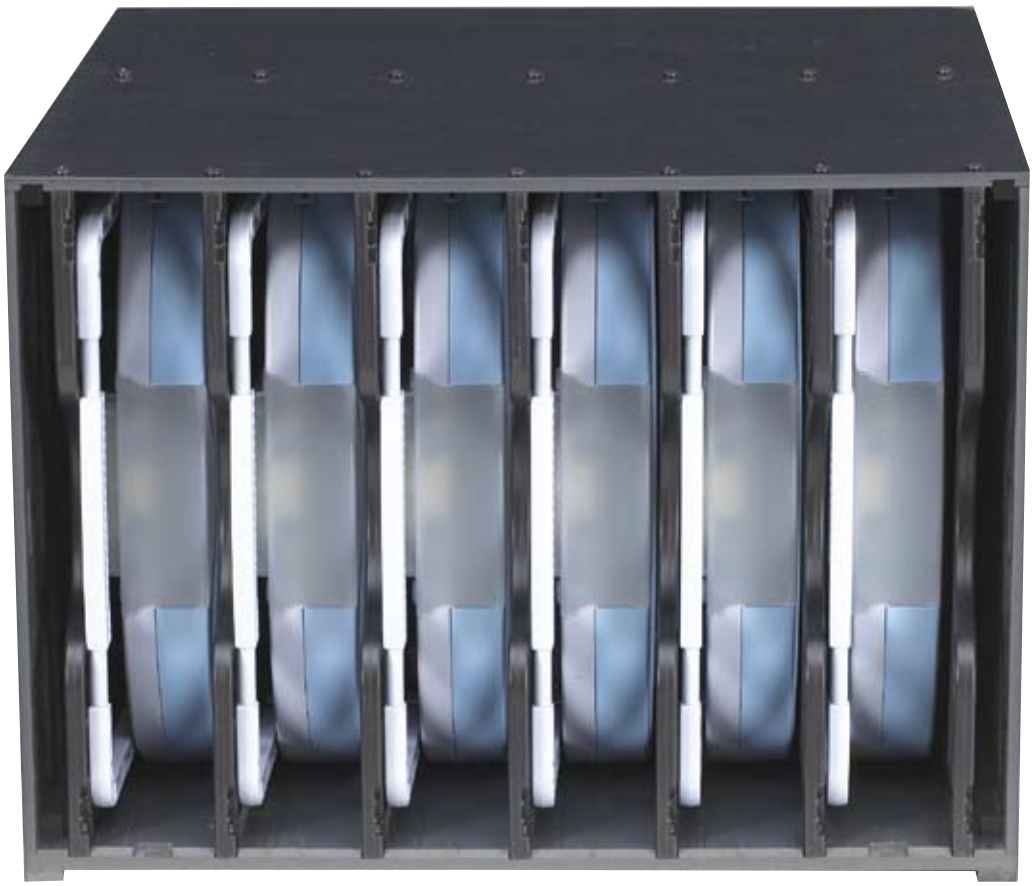
E-max® Encore™ ChargingStation



OPERATORS MANUAL

innovative gaming solutions

HH951

Table of Contents

Contacting Service

This manual contains the information you will need to install, operate and maintain your E-Max Charging system. Inside you will find procedures, tool lists, diagrams, and maintenance tables. Should you encounter any problems with your charger unit please contact the EGC Technical Assistance Center at: 1-800-277-6214

INTRODUCTION

EGC designed your E-max Charging system to provide maximum flexibility to meet your E-max gaming needs. The Charger Cabinet is designed for easy installation and use. The charging system is comprised of two products.

1. A standalone Charger Module that can charge up to 6 E-max units
2. A charging cabinet that holds 6 charger modules and can charge up to 36 E-max units

Each of these products can be purchased separately to meet the needs of your gaming operations.

Key Features:

- Modular
  - Order a 6 unit Module or a fully assembled 36 unit cabinet
- Each E-max is independently charged
  - A failure of a single slot does not necessarily prevent other slots in the Module from charging
- Intelligent charging
  - Will not overcharge batteries
    - Leave E-max indefinitely in the charger
    - No "Memory" effect on the batteries
    - Senses fully charged pack and automatically stops charging
  - Fault detection and automatic charge termination
  - Temperature sensor prevents charging when too cold or too hot
  - Automatic restart of the charge cycle after an AC power failure
- Digital, real time clock with battery backup
  - Can power entire cabinet on/off at specific hours of the day
  - Programmable up to a week.
- E-max dome light provides a very bright red or green indication of charging state
- Field serviceable Power Module
- Heavy duty casters on the cabinet

1

Installation

1.1 Cabinet Unpacking

- ✓ Inspect the shipping containers for possible signs of damage. If damage is detected, refer to the Damage Action Process section (1.2) for procedures.

- ✓ Use scissors or box cutter to cut the straps from the skid only, taking care not to cut the straps protecting the charger cabinet. With the help of at least one assistant, carefully slide the charger cabinet from the skid and place it on solid flooring. Cut the remaining four straps from the cabinet and remove the cardboard top.

✓ **CAUTION: The E-max™ Charger Cabinet weighs approximately 300 lbs. Use proper lifting/moving equipment and sufficient personnel when lifting to prevent injury or damage!**

- ✓ Remove the foam packing inserts from inside the top and slide the cardboard tube up and off the cabinet. A minimum of three people are required to safely unpack the cabinet (***lift only by the cabinet bottom***). With one person lifting from each end of the cabinet, raise the cabinet up and out from the carton and foam inserts. Set the unpacked charger cabinet on solid flooring. Check that all casters are in place. Do not destroy or discard carton or packing material until after final inspection and testing.

- ✓ At this point, you should inspect the cabinet for any obvious shipping damage. If any problems are found, immediately contact your distributor for advice and refer to the Damage Action Process section (1.2) for procedures.

1.2 Damage Action Process

Your E-max™ charger cabinet contains electronic equipment. It is imperative that you thoroughly inspect the contents of each package before accepting product delivery from the carrier.

In case of severe damage, refuse the equipment from the carrier. Contact your distributor or EGC for immediate replacement.

In case of damage, make a note on the bill of lading before accepting, take a photo of the damage, and keep the packaging to aid in recovering the amount of claim against the carrier.

If the product is damaged but acceptable, take a photo before and after unpacking as a record of the damage and contact the carrier's agent immediately for inspection. Be sure to obtain a copy of the inspection report for your records.

If these precautions are not taken, we cannot assist you in recovering the amount of the claim against the carrier.

1.3 Power Requirements

Charger Cabinet

To install the Charger Cabinet it is best to use a dedicated wall outlet (an outlet that has no other devices plugged into it). Each Cabinet holds 6 charger Modules. The cabinet draws 9 amps of current. To install simply locate the unit in a suitable location and plug it in.

Caution: A dedicated 20 amp outlet can support only two cabinets. Each cabinet produces over 1000 watts of heat. Cabinets can be pushed up against a wall, but do not block airflow on the top or bottom of the charging system cabinet. Do not use long, small gauge extensions cords on the cabinets.

Caution: The E-max™ charging system cabinets weigh 500 lbs when fully loaded. You must ensure that the floor where you place this equipment is capable of bearing this load.

Charger Module

Each E-max™ charger module holds 6 E-max™ units and requires a standard 115 VAC outlet. Each charger module draws 1.5 amps of current.

Make sure the building wiring and circuit breakers are adequate to service multiple charger modules. **When powering multiple charger modules from a single AC feed, do not use AC extension cords or outlet strips that have inadequate wire gauge or are more than six feet in length.**

Never install more than 3 charger modules in a vertical stack up.

The power module on the back of the charger module can be pushed up against a wall, but do not otherwise block air flow around the power module.

Do not build one or more modules into a closed cabinet or wall that has no free or forced air circulation. Each charger module can generate 150 watts of heat when charging six E-max units.

2

Set Up and Charging

The following section will take you step by step through the timer setup; programming and use of your E-max™ Charging cabinet as well as the Charger Modules.

2.1 Timer Module

LCD Display

UL Listed and CSA Approved

Single Push Button Control

Simple On/Off or Easy to Program

Battery Backup

2.1.1 Power-Up Sequence

1. Lift up the bottom of the door using a small slotted screwdriver.
2. Position the slide switch to **TIMER**.
3. Press the "**RESET**" button using a paper clip.
4. The display should flash 12:00AM on Monday.

If there is nothing on the screen, check the following:

a) The Off/Timer switch located at the bottom of the unit may be in the OFF position, slide it to the TIMER position using a small screwdriver.

b) Check the 120VAC power source.

c) Call the EGC Technical Assistance Center 1-800-277-6214

2.1.2 Setting Time and Day

The Time and Day must be set prior to programming the timer

1. Press and **HOLD** the "**CLOCK**" key during this entire procedure.
2. Press the "**HOUR**" key to advance the hours.
3. Press the "**MIN**" key to advance the minutes.
4. Press the "**DAY**" key to advance the day.
5. If any keys are pressed for a prolong period, the display will advance rapidly.
6. Release the "**CLOCK**" key once the time and day have been entered. Now the timer is in operation and ready to be programmed. (The colon ":" after the hours will continuously flash indicating that the time is advancing.)
7. Close door when complete and return to normal operation.

2.1.3 Operating Modes

The timer has two operating modes- **MANUAL** on/off and **AUTOMATIC**. Only use **AUTOMATIC** if you want the charger cabinets enabled or disabled for charging during particular hours of the day.

In **MANUAL** mode the timer reacts just like a regular toggle wall switch. Pressing on the timer door causes the charger cabinet to turn ON or OFF. The timer will indicate **MAN** on the display while in **MANUAL** mode.

In **AUTOMATIC** Mode, the timer executes in sequence the programs that have been entered. To place the timer in **AUTOMATIC** mode, simply slide the **OFF-TIMER** switch to the **TIMER** position and the unit will come on at the next programmed ON cycle.

While in **AUTOMATIC** mode it is possible to override the timer program by simply pressing on the door switch to turn the unit on or off.

2.1.4 Programming the Timer

The timer memory can hold up to 7 programs. Each program consists of two events (ON time and OFF time). The events can be set up to execute on a daily basis or a weekly basis (Monday-Sunday).

2.1.4.1 ON/OFF Events

Note: It is necessary to program both the ON and OFF events for each program.

1. Open the timer door using a small screwdriver.
2. Press the "**PROG**" key once.
   TIMER 1 ON --:-- appears.
3. Using the "**HOUR**" and "**MIN**" keys, enter the desired ON time. It is necessary to press "**MIN**" at least once to display "00" for minutes (ex. 9:00 AM). By default, all days are indicated. When complete, press the "**PROG**" key once.
4. Timer OFF --:-- will be displayed. Using the "**HOUR**" and "**MIN**" keys, enter the desired OFF time. It is necessary to press "**MIN**" at least once to display "00" for minutes (ex. 5:00 PM). By default, all days are indicated. When complete, press the "**PROG**" key once.
5. If complete, press the "**CLOCK**" key to return to the current time and day.
6. NOTE: A total of 7-ON and 7-OFF events can be programmed.

2.1.4.2 Block Programming

1. When programming ON/OFF events, all days are indicated by default. To change the day selection, simply keep pressing the "**DAY**" key and the display will change as follows:
    a. Individual day (MON, TUE, etc.)
    b. MON ~ FRI ; SAT ~ SUN ; MON ~ SAT ; MON ~ SUN
    c. MON –WED – FRI ; TUE – THU – SAT
    d. MON ~ WED; THU ~ SAT
2. Follow the steps above to complete programming until all ON/OFF events are programmed.

2.1.4.3 Reviewing Programs

1. To review the programs that have been entered, simply press and release the "**PROG**" key. Each time you do this you will be able to scroll through the programs.
2. Any program can be edited simply by pressing the "**HOUR**", "**MIN**", and "**DAY**" keys. Then press the "**PROG**" key in order to accepts the changes.
3. When complete, press the "**CLOCK**" key to return to the current time and day.

2.1.4.4 Deleting Programs

To delete a particular program, simply press the "**PROG**" key until the desired program is displayed. Then press the "**HOUR**" and "**MIN**" keys until --:-- is displayed. Then press the "**PROG**" key in order to delete this particular program. When complete, press the "**CLOCK**" key to return to the current time and day.

2.1.4.5 Initial Startup

When you initially program the unit it may be necessary to press the manual override key as the unit will not look back to determine if it should be ON. For example, if the current time is 2:00 PM and you just programmed the unit to turn on at 1:00 PM, you will need to press the manual override key to turn it ON. Thereafter, the unit will resume normal operation. (Automatic)

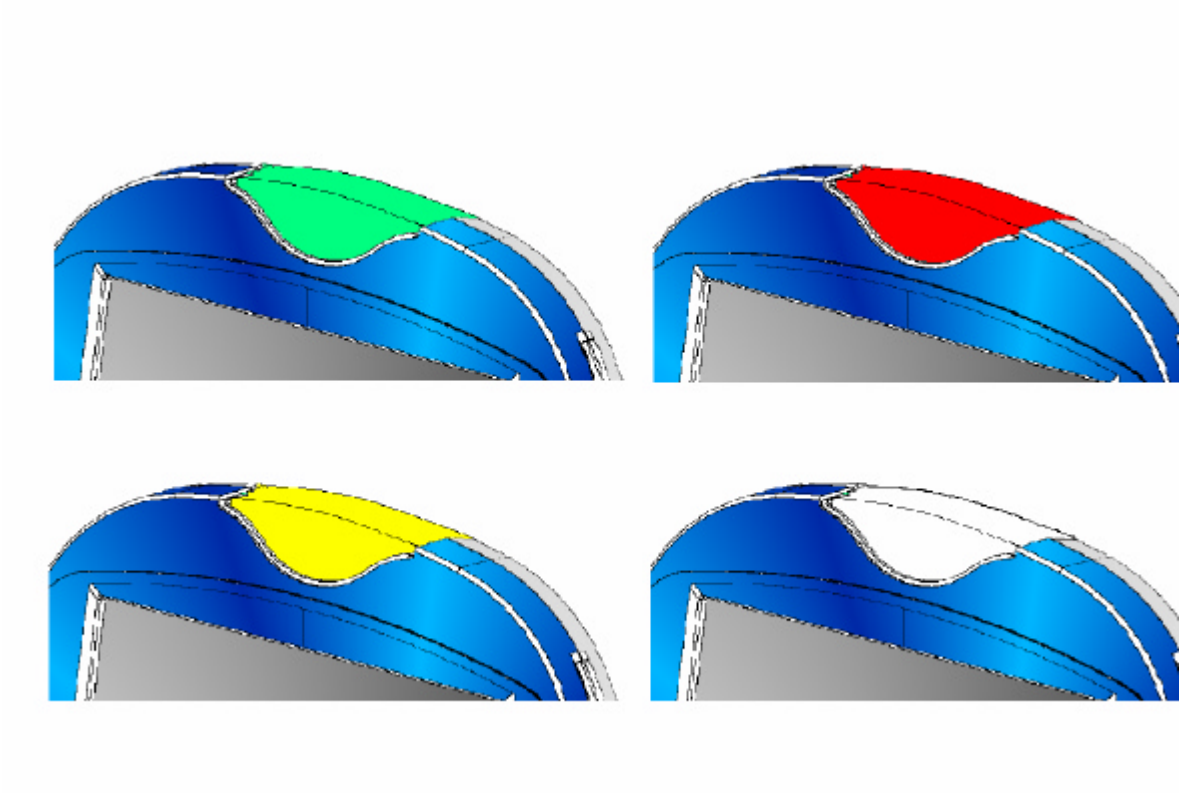
2.1.5 Memory Backup

The E-max charger cabinet timer switch is equipped with a rechargeable Ni-Mh battery which will protect your programs during power failure for up to 30 days. There is no need to replace the battery.

2.2 Lights and Indicators

The E-max dome light indicates the state of the charge process. There are four normal states of the dome light when the E-max is in the charger module:

1. **Off** – no AC power on the charger or a possible fault condition
2. **Red** - charging (a quick flash every few seconds)
3. **Green** - charge complete (a quick flash every few seconds)
4. **Yellow –** charge has been completed and a schedule is active (a quick flash every few seconds)



2.3 Charging

When the E-max is in the charger, it charges the battery at roughly twice the rate that the E-max consumes while playing bingo. If the battery was fully charged and the E-max unit played bingo for 4 hours, then it will take on the order of 2-3 hours to re-charge to a full state. This is only an approximate rule of thumb. Some batteries and E-max combinations may take shorter or longer times to charge and are perfectly normal.

A fully discharged battery may take on the order of 5 hours or more to charge.

If a fully charged E-max is inserted into the charger, it will not overcharge the battery, cause it to get hot, or damage the battery. Upon insertion, the red LED will begin to blink and after a few minutes of charging, the charger recognizes the battery is fully charged, stops the charge, and blinks the green LED.

Leaving the E-max unit in the charger for long periods of time while it is blinking green (fully charged) does not deteriorate the batteries. There is no "Memory effect" with the E-max battery pack. It is always best to place the E-max unit in the charger whenever possible to keep it fully charged and ready for gaming.

If there is an AC power failure during charging, the E-max and charger will automatically resume the charge cycle when power returns. The E-max dome LEDs will be off when the AC power is off on the charger module.

3

Maintenance

The following Chapter covers the maintenance procedures of your E-max Charger Unit. Following these guidelines will ensure many years of service from your EGC equipment.

Caution: Failure of a cooling fan can cause high temperatures and possible equipment damage.

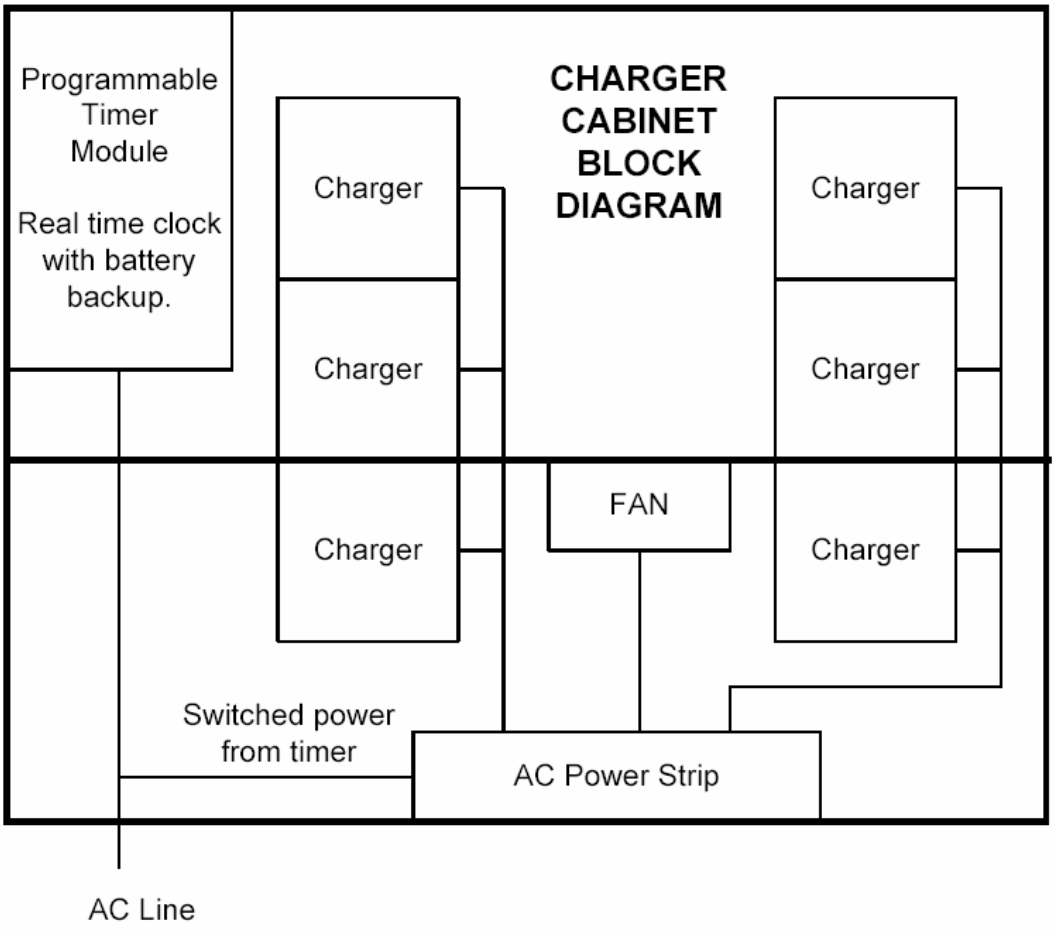
Quarterly
Once every 90 days (3 months) perform a visual inspection of the cabinet fan and the Power Module cooling fan to ensure they are operating correctly. If necessary, use a can of compressed air or anti static duster to clean the fan blades.

Perform the Functional Test procedure described in section 3.3 to verify the Power Module and H rails are performing properly.

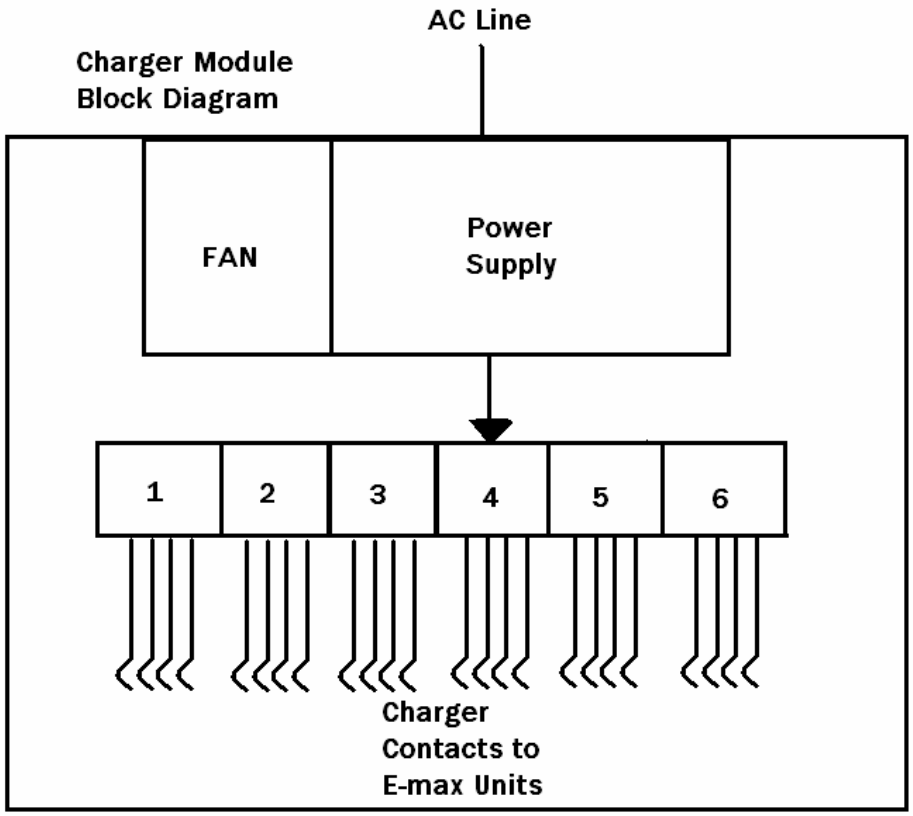
Replace fans, H rails, or Charger Power Modules as needed.

Annually
Replace the backup battery in the E-max™ Charging System Timer Module.

3.1 Charger Cabinet Block Diagram



3.2 Charger Module Block Diagram



3.3 Charger Module Functional Test

This test can be done periodically or whenever a charger's operation is suspect. This test requires at least six, known good, E-max™ units that are fully charged and at normal room temperature. Start with no E-max™ units in the charger.

1. Plug the AC cord into the power input connector on the charger power module.
2. Plug the other end of the cord into a 115 VAC wall outlet.
3. Toggle the charger power module switch to the ON position.
4. Plug a single E-max unit into the first slot.
5. The E-max dome light will start blinking red.
6. Remove the E-max unit.
7. Repeat steps 5 through 7 above until all 6 individual charger slots have been tested.
8. Now insert all six E-max units into the charger.
9. All 6 dome lights should be blinking red.
10. Verify airflow out of each side vent of the air duct on the Power Module.
11. Wait approximately 2-5 minutes and each dome light should independently start blinking green as each charger circuit determines that each E-max battery is fully charged.
12. When each dome light goes from red to green, the E-max LCD display will light up and the E-max will reset it self then turn the display back off. This process takes about 1 minute for each E-max. The green light will then continue to blink.

Note: A defective E-max™ or E-max battery pack can cause the charger module to appear defective. Refer to the E-max™ Maintenance Manual for troubleshooting procedures.

3.4 Charger Module Troubleshooting

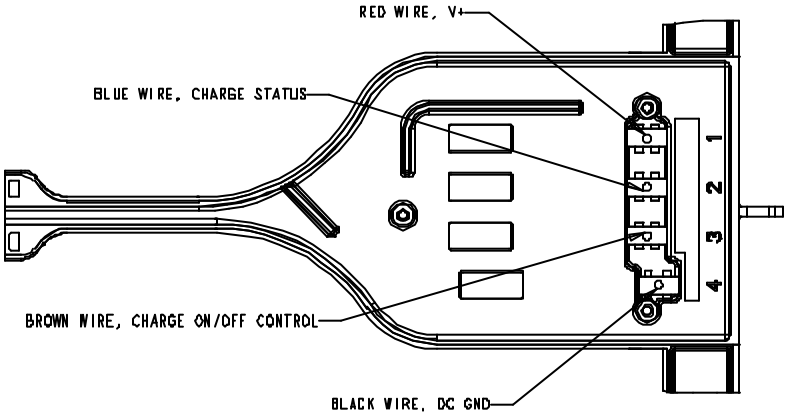
Troubleshooting:
The assumption is made that the six E-max™ units are pre-determined as being good units. Troubleshooting steps reference the test step number in the above Functional Test procedure.

1. Step 5 failure:
    a. The light does not blink red, check:
        1. AC power connections, or for broken AC power cord
        2. Tripped Circuit breaker in the power module AC input
        3. Bad ON/OFF switch
        4. Broken or damaged contacts on the H rail
        5. Defective charge slot – try another slot
            a. If another slot is also bad, replace power module

    The order of repair most likely to fix a problem in Step 5 is:
    Replace power module
    Replace H rail

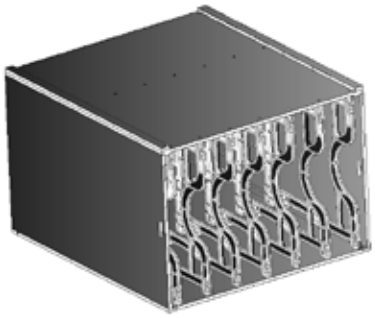
2. Steps 9, 10, 11, or 12 failure:
    a. Replace the power module

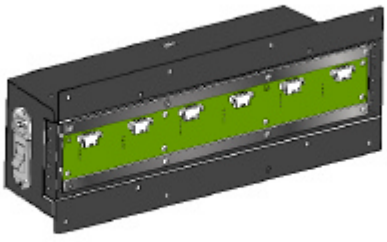
3.5 Field Replaceable Items



HH896 H Rail

HH909 Charger Module Assembly





HH920 Power Module

3.6 Replacing the Power Module

This procedure will guide you step by step through replacing the Power Module on the E-max charging unit. Follow the procedures listed below and refer to figure 3.1

NOTE: Ensure that the Charging unit is powered down before performing any maintenance procedure.

To replace the Power Module you will need a #2 Philips tip screwdriver. Refer to the instructions below and figure 3.1

1. **Remove all E-max units from the charging module.**
2. **Remove the 8 #2 8-32 Phillips screws securing the power module to the charging unit.**
3. **Remove all six (6) Molex® connectors from the power module backplane.**
4. **Attach the replacement power module to the charging unit and tighten the 8 #2 8-32 Phillips screws.**
5. **Reconnect the 6 molex® connectors to the power module backplane**
6. **Perform the charging unit Functional Test outlined in section 3.4**

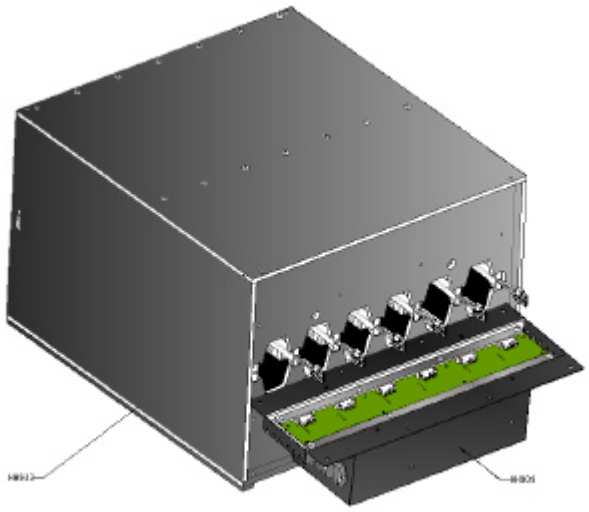


Figure 3.1

3.7 Replacing the H rail

This procedure will guide you step by step through replacing the H rail on the E-max charging unit. Follow the procedures listed below and refer to figure 3.2

NOTE: Ensure that the charging Unit is powered down before performing any maintenance procedure.

To replace the H rail you will need a#2 Philips tip screwdriver. Refer to the instructions below and figure 3.2

1. **Remove all E-max units from the charger.**
2. **Remove the Power Module as described in the 3.7 above.**
3. **Disconnect the Molex plug(s) from the backplane.**
4. **Remove the two top and two bottom #2 8-32 Philips screws from the H rail. Slide the H rail out of the charger unit.**
5. **Carefully insert the replacement H rail into the charging unit. Ensure the H rail tabs are aligned with the slots in the charger unit and the contacts are facing the correct direction.**
6. **Attach the replacement H rail with the #2 8-32 screws and reconnect the Molex plug to the backplane, and reinstall the Power Module.**
7. **Perform the charging unit Functional Test outlined in section 3.4**

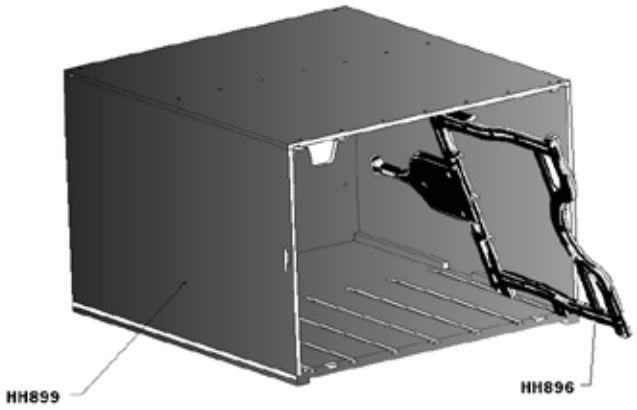


Figure 3.2

3.8 Replacing the Charger Module

This procedure will guide you step by step through replacing the Charging module in the E-max charging cabinet. Follow the procedures listed below and refer to figure 3.3

NOTE: Ensure Charging Cabinet is powered down before performing any maintenance procedure.

To replace the Charger module you will nee a #2 Philips tip screwdriver and a 7/32 wrench. Refer to the instructions below and figure 3.3

1. **Using the screwdriver and the wrench Remove the four (4) #2 Philips screws that secure the unit in the cabinet**
2. **In the back of the cabinet, cut the tie wraps that secure the power cords to the cabinet**
3. **Unplug the power cord from the outlet strip and remove charger unit from cabinet.**
4. **To install a replacement unit, reverse the procedure and conduct a charger module Functional Test outlined in section 3.4**

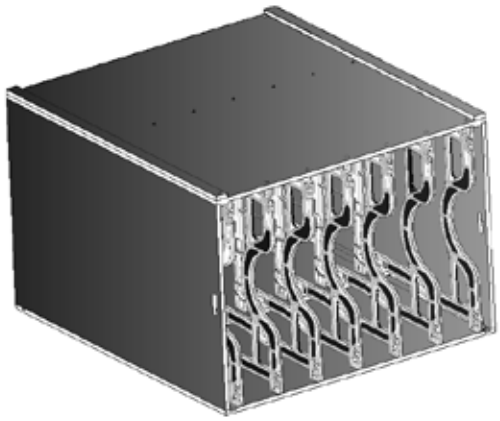


Figure 3.3

A

Spares

E-max Charger

Part Number	Description
HH909	Power Module Assembled
HH933	Plastic Enclosure with H Rail slot dividers
HH896	H Rail slot divider
HH936	Front Transport Cover
HH952	AC Line Cord
HH951	Operators Manual

E-max Charger Cabinet

Part Number	Description
HH920	Charger Module Assembly
HH925	Timer Module
HH926	Cooling Fan
HH956	Casters, Set of 4
HH951	Operators Manual

Specifications

E-max Charger

HH920

Line powered, 115VAC@1.5A

Thermal circuit breaker built into the ON/OFF switch

Modular design with integrated power supply and cooling fan

Intelligent charging system

Stackable up to 3 high. (Can be bolted together)

Weight: 30 Lbs empty, 65 Lbs with 6 E-max

Height: 12.5”

Width: 17.3”

Depth: 23.2”

HH922

Line Powered, 115VAC@9A

Holds 6 Charger modules or 36 E-max

Two cabinets can be located on one 20A duplex outlet

Real time digital clock

Fully programmable Digital Timer

Battery Backup

Heavy duty casters

Weight: 284 Lbs empty, 525 Lbs with 36 E-max

Height: 49”

Width: 37”

Depth: 23.8”

WWW.EMAXGAMING.COM

9900 Clinton Rd. Cleveland, Ohio 44144
Phone 216.961.3500 • Toll Free 800.321.0757

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