5000 SERIES
POWER SUPPLY/CHARGERS
INSTALLATION GUIDE

MODEL# 5025 (1 AMP @ 12VDC OR 24VDC)

MODEL# 5500 (3 AMP @ 12VDC OR 2 AMPS @ 24VDC)

MODEL# 5600-12 (10 AMPS @ 12VDC)

MODEL# 5600-24 (5 AMPS @ 24VDC)

IMPORTANT SAFETY INSTRUCTIONS

THIS MANUAL CONTAINS IMPORTANT SAFETY INSTRUCTIONS FOR POWER SUPPLY/BATTERY CHARGER MODELS:
5025, 5500, 5600-12, 5600-24

BEFORE USING THE BATTERY CHARGER, READ ALL INSTRUCTIONS AND CAUTIONARY MARKINGS ON THE BATTERY CHARGER, BATTERY/BATTERIES AND PRODUCTS USING BATTERIES

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REV. 8/30/2010
OVERVIEW

These access control power supply/chargers are specifically designed for use with access control systems and accessories. These units convert a 115VAC/50-60Hz input into two outputs (see options). Outputs will route power to a variety of access control hardware devices including Mag Locks, Electric Strikes, Magnetic Door Holders, etc. These outputs will operate in both Fail-Safe and Fail-Secure modes.

5000 SERIES POWER SUPPLY CONFIGURATION REFERENCE CHART

<table>
<thead>
<tr>
<th>DYNALOCK MODEL NUMBER</th>
<th>12VDC CURRENT OUTPUT</th>
<th>24VDC CURRENT OUTPUT</th>
<th>OUTPUTS</th>
<th>115VAC/60HZ INPUT CURRENT DRAW</th>
<th>INPUT FUSE RATING</th>
<th>AGENCY LISTINGS</th>
<th>UL LISTINGS &amp; FILE NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5025 (12/24VDC FIELD SELECTABLE)</td>
<td>1 AMP</td>
<td>1 AMP</td>
<td>2</td>
<td>.45 AMPS</td>
<td>RESETTABLE</td>
<td>MEA Approved</td>
<td>3584 File# E183665</td>
</tr>
<tr>
<td>5500 (12/24VDC FIELD SELECTABLE)</td>
<td>3 AMPS</td>
<td>2 AMPS</td>
<td>2</td>
<td>1 AMP</td>
<td>1 AMP</td>
<td>NYCC Dept. Of Buildings</td>
<td></td>
</tr>
<tr>
<td>5600 (12 OR 24VDC FIXED)</td>
<td>10 AMPS</td>
<td>5 AMPS</td>
<td>2</td>
<td>2 AMPS</td>
<td>4 AMPS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INSTALLATION INSTRUCTIONS

Wiring methods shall be in accordance with the National Electric Code/NFPA 72/ANSI, and with all local codes and authorities having jurisdiction. Product is intended for indoor use only.

1) Mount unit in desired location. mark and pre-drill holes to line up with the top two keyholes in the enclosure. Install two upper fasteners and screws with screw heads protruding. Place the enclosures upper keyholes over the two upper screws, level and secure. Mark the position of the lower two holes. Remove the enclosure and drill the lower two holes. Place the enclosures upper keyholes back over the two upper screws. Install the two lower screws and make sure to tighten all screws (Enclosure Dimensions, pg 12). Secure the enclosure to earth ground.

2) Set the output voltage: 5025, 5500 set the desired output voltage by setting the voltage selector to the appropriate position on the power supply main board.

Note: The 5600 is not field selectable and the output voltage must be specified when ordering.

3) Secure green/yellow stripe lead to earth ground. Connect AC power (115VAC 60Hz) to terminals marked (H or L, G, N) on the power supply board. Use 18AWG wire or larger for all power connections (Battery, DC output, AC input).

4) Measure output voltage before connecting any devices. This will help prevent damage from occurring. Keep power limited wiring separate from non-power limited wiring (115VAC/60Hz Input, Battery Wires). Minimum .25” spacing must be provided.

5) Connect Fail-Safe or Fail-Secure type locking hardware (e.g. Door strikes, Mag Locks and Electric Deadbolts) positive leads to the terminals marked (+) DC OUTPUT and the negative leads to the terminals marked (-) DC OUTPUT.
6) For access control applications, batteries are optional. When batteries are not used, a loss of AC voltage will result in the loss of output voltage. Batteries must be sealed lead acid rechargeable types if used. Connect one 12VDC battery to terminals marked (Battery) on the power supply board for 12VDC operations. Use two 12VDC batteries connected in series for 24VDC operations. Battery leads are included when batteries are ordered with the power supply.

7) Please insure enclosure cover is secured closed with the provided screw or the key lock option.

Units should be tested at least once a year for proper operation as follows:

Output Voltage Test: Under a normal load condition, the DC output voltage should be checked for a proper voltage level.

Battery Test: Under normal load conditions, check that the battery is fully charged, check specified voltage at the battery terminals and the board terminals to insure that there is no break in the battery connection wires.

Expected battery life is 5 years, however, it is recommended to change the batteries within two years or less if necessary.
### MODELS 5600-12 / 5600-24
#### POWER SUPPLY/CHARGERS

<table>
<thead>
<tr>
<th>MODEL 5600-12</th>
<th>MODEL 5600-24</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INPUT POWER:</strong></td>
<td><strong>OUTPUT POWER:</strong></td>
</tr>
<tr>
<td>115 VAC 50-60Hz, 2.0 Amp</td>
<td>115 VAC 50-60Hz, 2.0 Amp</td>
</tr>
<tr>
<td><strong>OUTPUT POWER:</strong></td>
<td><strong>PRIMARY FUSE:</strong></td>
</tr>
<tr>
<td>12 VDC Nominal (13.8 VDC) @ 10 Amp</td>
<td>4A, 250V Slow-Blow</td>
</tr>
<tr>
<td><strong>OUTPUT FUSE:</strong></td>
<td><strong>OUTPUT FUSE:</strong></td>
</tr>
<tr>
<td>4A, 250V Slow Blow</td>
<td>(2) 6A, 250V Slow Blow</td>
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</tbody>
</table>

**Note:** Refer to 5000 Series Power Supply Installation Manual

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**CAUTION:** Risk of electric shock. Hazardous live parts inside this power supply are energized from the battery supply even when the input power is disconnected.

**CAUTION:** This cabinet (compartment) contains vented wet cell batteries. Ventilation of the room in accordance with the rules of the Canadian Electrical Code, Part I, is required.

**CAUTION:** Charge only sealed lead-acid type rechargeable batteries. Other types of batteries may burst causing personal injury and damage.

**CAUTION:** De-energize unit prior to servicing. For continued protection against electric shock and fire hazard, replace fuses with same type and rating (See chart above). Do not expose to rain or moisture.

**CAUTION:** KEEP POWER LIMITED WIRING SEPARATE FROM NON-POWER LIMITED. USE MINIMUM 0.25” SPACING.

**NOTE:** THIS PRODUCT IS INTENDED TO BE USED IN A GENERAL ENVIRONMENT.
UL Listed General Purpose Power Supply

DynaLock Corp. is not responsible for any typographical errors.
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**5500/5600 OPTIONS**

**FAC Option (Remote Control)**
Kills all voltage outputs when interfaced with remote dry contact.

**DB-5 & DB-10 Option** (Distribution Board)
Two size distribution (5 or 10 position) are available to provide individually fused output terminals for each lock zone.
**CM Option** (Control Module)
Accepts access/egress control
dry contact input. Provides
SPDT relay output.

**CMTD Option** (Control Module with Time Delay)
same as CM Option with Relock Time Delay

**ATS Option** (Anti-Tamper switch)

NOTE: ATS switch contacts rated .25A @ 24V
ILB Option (Interlock Logic Board)
Provides Four DPDT Relay Outputs

Note: Separate ILB User Manual shows typical wiring diagrams.
## INSTALLATION INFORMATION

### 5600 LOCK CAPACITY

<table>
<thead>
<tr>
<th>VOLTAGE</th>
<th>SINGLE (FULL SIZE)</th>
<th>DOUBLE (FULL SIZE)</th>
<th>SINGLE</th>
<th>DOUBLE</th>
<th>SINGLE DELAY EGRESS</th>
<th>DEADBOLT</th>
</tr>
</thead>
<tbody>
<tr>
<td>12VDC</td>
<td>18</td>
<td>9</td>
<td>18</td>
<td>9</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>24VDC</td>
<td>18</td>
<td>9</td>
<td>18</td>
<td>9</td>
<td>8</td>
<td>9</td>
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### CURRENT DRAW UP TO ½ AMP

<table>
<thead>
<tr>
<th>VOLTAGE</th>
<th>20 AWG</th>
<th>18AWG</th>
<th>16AWG</th>
<th>14AWG</th>
<th>12AWG</th>
<th>10AWG</th>
</tr>
</thead>
<tbody>
<tr>
<td>12VDC</td>
<td>50FT</td>
<td>100FT</td>
<td>150FT</td>
<td>250FT</td>
<td>400FT</td>
<td>625FT</td>
</tr>
<tr>
<td>24VDC</td>
<td>150FT</td>
<td>225FT</td>
<td>350FT</td>
<td>550FT</td>
<td>900FT</td>
<td>1375FT</td>
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### 5500 LOCK CAPACITY

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<tbody>
<tr>
<td>12VDC</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>24VDC</td>
<td>8</td>
<td>4</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>4</td>
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</tr>
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<tbody>
<tr>
<td>12VDC</td>
<td>50FT</td>
<td>100FT</td>
<td>150FT</td>
<td>250FT</td>
<td>400FT</td>
<td>750FT</td>
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<tr>
<td>24VDC</td>
<td>100FT</td>
<td>200FT</td>
<td>300FT</td>
<td>500FT</td>
<td>750FT</td>
<td>1500FT</td>
</tr>
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These charts indicates the minimum recommended wire size, local codes prevail.
TYPICAL 5500/5600 APPLICATION

120 VAC 50/60 HZ INPUT

A NORMALLY CLOSED DRY CONTACT FROM THE FIRE ALARM CONTROL PANEL (FROM OTHERS)
B FAIL SAFE LOCKING DEVICE
C FAIL SECURE LOCKING DEVICE
D NORMALLY CLOSED ACCESS/EGRESS CONTROLS
E NORMALLY OPEN ACCESS/EGRESS CONTROLS
5600 TROUBLESHOOTING

1. CHECK INPUT LINE FUSE
2. CHECK LINE FUSE
3. CHECK FOR 12 OR 24VDC FROM SWITCHER
4. CHECK FOR 12 OR 24VDC FROM SWITCHER
5a. CHECK F2 AND F3 OUTPUT FUSES
5b. CHECK THAT FAC MODULE IS SEATED PROPERLY (IF APPLICABLE)
5c. TERMINALS 1 AND 2 MUST BE JUMPED TOGETHER IF UNIT HAS FAC MODULE
6. CHECK JUMPER SETTING AT CM/CMTD MODULE (IF APPLICABLE)
7. CHECK JUMPER SETTING AT DB-5/DB-10 CARD
8. CHECK FOR PROPER ACCESS SWITCH CONTACT STATUS
9. CHECK LOAD AND EXTERNAL WIRING FOR SHORT CONDITION
10. RESET POWER SUPPLY (WITH NO LOAD) BY DISCONNECTING INPUT POWER AT AC LINE IN FOR 2 MINUTES

NO OUTPUT POWER AT A
NO OUTPUT POWER AT B
5500 TROUBLESHOOTING

NO OUTPUT POWER AT A

1. CHECK INPUT LINE POWER
2. CHECK LINE FUSE
3. CHECK F2 & F3 OUTPUT FUSES
4. CHECK FAC (IF APPLICABLE) TERMINALS, 1 AND 2 MUST BE WIRED TO N/C CONTACT

5025 TROUBLESHOOTING

NO OUTPUT POWER AT A

1. CHECK INPUT LINE POWER
2. RESET POWER SUPPLY (WITH NO LOAD) BY DISCONNECTING POWER AT LEAST FOR 2 MINUTES
3. MAKE SURE YOU HAVE A CLOSURE BETWEEN THE 2 SHUT DOWN TERMINALS
5000 SERIES PART LIST

5600 12VDC
P/N 500333

5600 24VDC
P/N 500334

5500 P/N 500221

5025 P/N 500280

PRIMARY CIRCUIT BOARD PART NUMBERS

DB-10 DISTRIBUTION BOARD
P/N 500229

DB-5 DISTRIBUTION BOARD
P/N 500228

ILB BOARD
P/N 500259

5600 REMOTE FIRE MODULE
(FAC) PLUG IN RELAY
24VDC P/N 500303
12VDC P/N 500302

5500 REMOTE FIRE MODULE
(FAC) PLUG IN RELAY
P/N 500232

FUSES
1AMP P/N 500149
4AMP P/N 500332
5AMP P/N 500056
6AMP P/N 500203
12AMP P/N 500227
PLEASE DELIVER THIS MANUAL TO THE END USER UPON COMPLETION OF THE POWER SUPPLY INSTALLATION

FOR PRODUCT SUPPORT AND PARTS ORDERING INFORMATION CONTACT:

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QQFU/QQFU7  Power Supplies, General Purpose