**PLEASE READ BEFORE ATTEMPTING INSTALLATIONS**

**3000/ 3000LC/ 2000 SERIES CIRCUIT BOARD DESCRIPTION**

Refer to Page 2 & 3 for wiring and voltage instructions

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**COIL CONNECTOR PLUG**
The Coil Connector is not polarized and may go on in either direction.

**COIL PLUG RECEPTACLE**

**POWER INPUT FOR ATS OPTION**

**ATS OPTION - WIRING**
Indicator device, by others, illuminates / sounds when access cover is removed. Contact Rating: SPDT @ 0.5A

**ATS SWITCH**

**TIME DELAY ADJ.**
CW to increase. Range 1-80 seconds see fig. "E"

**DYNASTAT CONNECTOR**

**ATS OPTION**

**ATS SWITCH**

**VOLTAGE SELECTION JUMPERS - See page 2**

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**L2 OPTION - FUNCTION**
Requires Dynastat option to work. Red = secure / Green = unsecure Reversing plug direction changes light indication.

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**3000/2000 series mag lock accepts 12/24 VAC/DC**

**Circuit board shown fully loaded, with every option**

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DynaLock Corp. ● 705 Emmett Street ● P.O. Box 2728 ● Bristol, CT 06011-2728 ● 1-877-DYNALOCK ● www.dynalock.com
HOW TO SET VOLTAGE
Voltage is set by proper placement of the blue jumper caps on 4 exposed pins

Removable Jumpers
Voltage Selection

Set for 12 Volts
2 jumpers

Set for 24 Volts
1 jumper

FACTORY SET FOR 24 VOLTS

WIRING INSTRUCTIONS

FIG. A
3000/2000
12/24 VDC INPUT

NORMALLY CLOSED STATION CONTROL(S), I.E. PUSHBUTTONS, KEYSWITCHES, ETC.
WIRE MULTIPLE CONTROLS IN SERIES AS SHOWN.

FIG. B
3000/2000
12/24 VAC INPUT

NORMALLY CLOSED STATION CONTROL(S), I.E. PUSHBUTTONS, KEYSWITCHES, ETC.
WIRE MULTIPLE CONTROLS IN SERIES AS SHOWN.

FIG. C
3000/2000 DYNASTAT OPTION

LOCK POWER INPUT
USE FIGURES A OR B

NOTES: 1. DYNASTAT CONTACTS RATED 1A MAXIMUM
2. INDICATORS NOT INCLUDED

FIG. D
3000/2000 DSM OPTION

LOCK POWER INPUT
USE FIGURES A OR B

INPUT FROM INDICATOR POWER SOURCE

NOTES: 1. DSM CONTACTS RATED 0.25A MAXIMUM
2. INDICATORS NOT INCLUDED

DOOR CLOSED
DOOR OPEN
DOOR SECURE
DOOR UNSECURE

DOOR CLOSED
DOOR OPEN

FIG. A

FIG. B

FIG. C

FIG. D
**COIL RESISTANCE CHECK**

REMOVE THE MAGNET COIL CONNECTOR FROM THE CIRCUIT BOARD TO PERFORM THE COIL TEST

PROPER COIL RESISTANCE SHOULD BE FROM POINTS 1 TO 3, ~ 53 OHMS
FROM POINTS 2 TO 4, ~ 53 OHMS

**ELECTRICAL SPECIFICATIONS**

**OPERATING VOLTAGES**

- 12 OR 24 VAC / VDC

**CURRENT CONSUMPTION, ALL MODELS**

- 12 VAC / VDC - 0.44 A
- 24 VAC / VDC - 0.22 A

**TIME DELAY OPERATION**

1. PUT A JUMPER ACROSS TERMINALS 3 & 4.
2. MOMENTARILY OPENING THE CONTACT(S) AND INTERRUPTING THE POWER ON 1 & 2 UNLOCKS THE DOOR. THE DOOR WILL RELOCK AFTER THE DURATION OF THE TD.
3. SEE PAGE ONE FOR THE LOCATION OF THE TIMER ADJUSTMENT CONTROL.
4. TIME ADJUSTMENT RANGE IS ONE (1) TO EIGHTY (80) SECONDS.

**NOTES:**

1. This lock may accept any one of 4 different input voltages and be furnished with a combination of options. Refer to page 1 for option location and pages 2 and 3, figure A thru E, for wiring instructions that apply to your specific installation.
2. For additional system wiring information, refer to the installation documentation furnished with the external hardware and / or peripheral devices (I.E. power supply, station controls, keypad, card readers, etc.) supplied by DynaLock and / or others.
## TROUBLESHOOTING TIPS

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>POSSIBLE CAUSE</th>
<th>CHECK FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOOR WILL NOT LOCK OR NO MAGNETIC HOLDING FORCE</td>
<td>• NO INPUT POWER</td>
<td>□ CHECK ALL CONNECTIONS. CHECK FOR VOLTAGE AT POWER SOURCE AND LOCK TERMINAL STRIP.</td>
</tr>
<tr>
<td></td>
<td>• REVERSED POLARITY</td>
<td>□ IF A LOCK IS OPERATING ON DC VOLTAGE CHECK FOR REVERSED POLARITY. REFER TO FIG &quot;A&quot; PAGE 2.</td>
</tr>
<tr>
<td></td>
<td>• AN OPEN CIRCUIT IN THE COIL</td>
<td>□ PERFORM THE COIL RESISTANCE CHECK. REFER TO BOTTOM OF THE PAGE 3.</td>
</tr>
<tr>
<td>LOW HOLDING FORCE</td>
<td>• WRONG INPUT VOLTAGE</td>
<td>□ VERIFY INPUT VOLTAGE MATCHES JUMPER SETTING. SEE TOP OF PAGE 2.</td>
</tr>
<tr>
<td></td>
<td>• VOLTAGE SELECT JUMPERS SET WRONG</td>
<td>□ VERIFY THAT JUMPERS MATCH INPUT VOLTAGE. SEE TOP OF PAGE 2.</td>
</tr>
<tr>
<td></td>
<td>• ARMATURE MOUNTING TOO RIGID</td>
<td>□ CHECK ARMATURE MOUNTING FOR FREE PIVOTING AND FULL CONTACT BETWEEN THE MATING SURFACE OF THE LOCK AND ARMATURE.</td>
</tr>
<tr>
<td>MAGNET OVERHEATS AND / OR DRAWS EXCESS CURRENT</td>
<td>• LOCK SET FOR 12V WITH 24V APPLIED</td>
<td>□ VERIFY THAT JUMPERS MATCH INPUT VOLTAGE. SEE TOP OF PAGE 2.</td>
</tr>
<tr>
<td></td>
<td>• POSSIBLE SHORTED COIL</td>
<td>□ PERFORM THE COIL RESISTANCE CHECK. REFER TO BOTTOM OF PAGE 3.</td>
</tr>
<tr>
<td>DYNASTAT BOND SENSOR NOT INDICATING DOOR SECURE WHEN CLOSED AND LOCKED (WHEN APPLICABLE)</td>
<td>• INSUFFICIENT SUPPLY VOLTAGE</td>
<td>□ CHECK SUPPLY FOR PROPER INPUT VOLTAGE, SHOULD BE WITHIN 10%</td>
</tr>
<tr>
<td></td>
<td>• MAGNET AND / OR ARMATURE FACE DIRTY OR BURRED</td>
<td>□ CLEAN BOTH SURFACES WITH SCOTCH BRITE TYPE CLOTH AND APPLY WD-40. CHECK FOR BURRS.</td>
</tr>
<tr>
<td></td>
<td>• POOR LOCK / ARMATURE ALIGNMENT</td>
<td>□ CORRECT AS NECESSARY</td>
</tr>
<tr>
<td>DSM (DOOR STATUS MONITOR) NOT INDICATING DOOR CLOSED / OPEN STATUS (WHEN APPLICABLE)</td>
<td>• DSM MAGNETS NOT INSTALLED IN ARMATURE HOUSING</td>
<td>□ REPLACE / INSTALL AS NECESSARY</td>
</tr>
<tr>
<td></td>
<td>• POOR LOCK / ARMATURE ALIGNMENT</td>
<td>□ CORRECT AS NECESSARY</td>
</tr>
</tbody>
</table>
DynaLock 3000 and 2000 Series electromagnetic locks equipped with the LP - Low Power Option are configured to operate exclusively on 12V AC/DC input voltage. Current draw is 0.16 Amps for single models and 0.32 Amps for double models. Damage may occur if input voltage exceeds 16V AC/DC. Do not attempt operation at higher voltages.

**GENERAL INFORMATION**

**BASIC INPUT POWER WIRING**

**FIG. A 3000/2000 x LP BASIC 12 VDC INPUT**

![Diagram of 3000/2000 x LP BASIC 12 VDC INPUT](image)

**FIG. B 3000/2000 x LP BASIC 12 VAC INPUT**

![Diagram of 3000/2000 x LP BASIC 12 VAC INPUT](image)
12 VOLT DC OPERATION

![Diagram of 12 VOLT DC OPERATION]

NOTE: TO PROTECT OTHER ELECTRONIC DEVICES IN SYSTEM CONNECT THE SUPPLIED MOV ACROSS THE LEADS AS SHOWN ABOVE.

24 VOLT DC OPERATION

![Diagram of 24 VOLT DC OPERATION]

NOTE: TO PROTECT OTHER ELECTRONIC DEVICES IN SYSTEM CONNECT THE SUPPLIED MOV ACROSS THE LEADS AS SHOWN ABOVE.

FOR UNITS USING THE CIRCUIT BOARD DISCARD THE MOV AND THIS PAGE.