Smart Chock™
Models SC0650 thru SC0654

A Product of

Smart Chock™
The Safest, Most Cost Effective Restraint Package

340 Gateway Park Drive
North Syracuse, NY 13212
Phone: 315-463-7348
Toll Free: 866-235-7468
Fax: 315-463-8559
Email: sales@dlmanufacturing.com
www.dlmanufacturing.com
**INTRODUCTION**

This manual is used for models SC650 through SC654 Series Smart Chock™ model types. Be sure to check your smart chock model type before consulting or servicing. The control board is programmed for each model's function. The description explains the differences between model types. Each model is programmed and configured specifically for desired functionality.

<table>
<thead>
<tr>
<th>Model #</th>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| 650     | CS650  | Standard Smart Chock™  
No options: No outlets or interlocks |
| 651     | SC0651 | Powers & controls one outlet for dock light  
*Dock light turns off when door is closed* |
| 652     | SC0652 | Powers & controls two outlets  
*Dock light & fan turn off when door is close* |
| 653     | SC0653 | Powers & controls two outlets & interlocks  
Electric/Hydraulic leveler  
*Dock light and fan turn off when door is closed*  
*Leveler will not run when door is closed* |
| 654     | SC0654 | Powers & controls two outlets & interlocks  
Pneumatic leveler  
*Dock light and fan turn off when door is closed*  
*Leveler will not run when door is closed*  
*Fan turns off when leveler runs* |

**ELECTRICAL RATINGS:**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPUT VOLTAGE</td>
<td>120 VAC to 240VAC</td>
</tr>
<tr>
<td>INPUT FREQUENCY</td>
<td>60 HZ /50HZ</td>
</tr>
<tr>
<td>MAXIMUM INPUT CURRENT</td>
<td>12 A</td>
</tr>
<tr>
<td>INPUT CURRENT WITH NO OUTLET(S) OR LEVELER LOAD</td>
<td>&lt;.5 A (MODEL 650)</td>
</tr>
<tr>
<td>MAXIMUM OUTLET(S) CURRENT</td>
<td>12 A</td>
</tr>
<tr>
<td>MAXIMUM LEVELER LOAD CURRENT (J7 OR J8)</td>
<td>12 A</td>
</tr>
<tr>
<td>OUTSIDE LIGHT BOX VOLTAGE</td>
<td>12 VDC</td>
</tr>
<tr>
<td>MAXIMUM OUTSIDE LIGHT BOX LOAD CURRENT</td>
<td>1.25 A (12 V POWER SUPPLY CURRENT LIMIT)</td>
</tr>
<tr>
<td>SENSOR VOLTAGE (J2, J3, J4 &amp; J16)</td>
<td>12 VDC</td>
</tr>
<tr>
<td>MAXIMUM SENSOR CURRENT (J2, J3, J4 &amp; J16)</td>
<td>.2 A (J2, J3 &amp; J4 PROTECTED BY PTC THERMISTOR)</td>
</tr>
</tbody>
</table>
**POWER ON** – Smart Chock enters a startup routine that turns the LED’s and Relays on and off a few times. The startup routine runs for approximately 20 Seconds.

Loading Dock Door is Closed, Wheel is Unchocked

- Inside Red Light is on
- Outside Green Light is flashing

Wheel gets Chocked and after a 0 to 5 Second Delay

- Outside Red Chock Icon turns on
- Inside light changes from red to green “CHOCKED”
- Outside Green Light turns off

Door Open

- Outside top Red Light starts flashing
- Interlocks turn on – the outlets for a fan and dock light are enabled

(1) See note for Optional Sensor information

Door closes and after a (2) 5 to 15 Second Delay

- Outside flashing Red Light turns off
- Interlocks turn off – the outlets for a fan and dock light are disabled

Driver Removes Chock

- Outside Red Chock Icon turns off
- After a 5 to 15 second delay, Outside Green flashing light turns on
- Inside light changes from green “CHOCKED” light to Red Light

Safety Situations

### Chock Pulled Prematurely with Door Open (After a (2) 3 to 15 Second Delay)***

- Inside light changes from green “CHOCKED” light to Red Flashing Light
- Versa Light® Dock Light flashes and Inside Audible Alarm Sounds for 5 minutes, fan outlet is disabled
- Interlocks are disabled
- Outside Red Chock Icon turns off, outside red stay on
- Outside Alarm turns on for 10 minutes

### Door opens without a truck wheel chocked***

- Versa Light® Dock Light flashes and Inside Audible Alarm Sounds for 5 minutes, fan outlet is disabled
- Interlocks are disabled
- Outside Red Chock Icon turns off, outside red stay on and Outside Alarm comes on for 10 Minutes

### Chock Cable gets Cut or Disconnected from Chock***

- Inside lights alternately flash from green to red, on board yellow system LED comes on
- Outside Red comes on and if wheel was chocked, Chock Icon turns off and Outside Alarm comes on for 10 Minutes
- Interlocks are disabled
- Inside Alarm turns on and does not turn off until power is turned off or cable is plugged back in

(1) An Optional Second Sensor can be connected to the Control Board at J3 or OPT2 (See page 12 for connection information). The Optional Second Sensor negates the actions caused by the Door Sensor when the Door is Open. The Outside Red Light, Interlocks and Outlets are turned off.

(2) At the core of the Smart Chock Control Board is an embedded microcontroller. Under preprogrammed control, the Smart Chock Time delays, Light Outputs and Relay Outputs can be modified to suit any Customers individual needs. For example, the Time Delays could be preprogrammed anywhere from 3 to 15 seconds.
WARNING!!!!
Do not use in hazardous or corrosive environments!

REQUIRED TOOLS

- Drill bits, masonry bit for tap-con / wood bits 3/16” for pilot hole in dock seal
- Tape measure
- Wire strippers
- Hammer
- Felt tip marker
- 9/16” Wrenches for Chock Handle Assy.
- Hammer Drill
- Drill screw gun
- Precision flat blade screwdriver 1/8” wide
- Wire labels

INDEX

Description

COVER - INTRODUCTION / ELECTRICAL RATINGS 2
SEQUENCE OF OPERATIONS 3
GENERAL INFO / INDEX / REQUIRED TOOLS 4
INSTALLER SUPPLIED HARDWARE & FASTENERS 5
CHOCK HANDLE ASSEMBLY INSTRUCTIONS 6
VECTOR CHOCK ASSEMBLY INSTRUCTIONS 7
INSIDE LIGHT BOX MOUNTING 8
INSIDE LIGHT BOX MOUNTING CONTINUED 9
BOLLARD MOUNTING BRACKET (OPTIONAL) 10
PHOTO EYE INSTALL – TYPICAL & MxV DOOR 11
PHOTO EYE INSTALL – ROLLING STEEL DOOR 12
EXTERNAL BOX INSTALLATION 13
CONTROL BOARD WIRING OVERVIEW / INDEX 14
WIRING DIAGRAM J1 & J2 15
WIRING DIAGRAM J6, J7 & J8 16
INSIDE TO OUTSIDE BOX WIRING DIAGRAM J15 & J16 17
MODEL 650 SYSTEM WIRING DIAGRAM 18
651 SYSTEM WIRING DIAGRAM 19
652 SYSTEM WIRING DIAGRAM 20
653 SYSTEM WIRING DIAGRAM 21
654 SYSTEM WIRING DIAGRAM 22
OUTSIDE LIGHT BOX / CHOCK WIRING DIAGRAM 23
DL MANUFACTURING TERMS/CONDITIONS/WARRANTY 24

YEARLY MAINTENANCE

- Inspect inside connections for any damage
- Inspect mounting bolts for tightness
- Clean unit with compressed air
- Clean Photo Sensor Lenses
- Inspect chock cable for damage or wear
- Check chock handle for damage
- Clean chock & ensure of debris
- Check chock for corrosion of plug connections
- For chocks with yellow cords, be sure connection is tight with channel-locks
# Smart Chock™ Installation Guide

## Installer-supplied hardware & fasteners

<table>
<thead>
<tr>
<th>Mounting Surface</th>
<th>Inside Light Box</th>
<th>Outside Light Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement Block</td>
<td>(4) ¼” x 1¼” Tapcon</td>
<td>(4) #10 x 1” Tapcon</td>
</tr>
<tr>
<td>Tip up concrete panel</td>
<td>(4) ¼” x 1¼” Tapcon</td>
<td>(4) #10 x 1” Tapcon</td>
</tr>
<tr>
<td>Sheet Metal</td>
<td>Sheet metal walls are not thick enough to hold inside box</td>
<td>Sheet metal walls are not thick enough to hold outside box</td>
</tr>
<tr>
<td>Steel</td>
<td>(4) ¼” x ¾” self-drilling screws</td>
<td>4) ¼” x ¾” self-drilling screws</td>
</tr>
<tr>
<td>Bollard</td>
<td>Use DL Manufacturing supplied kit</td>
<td></td>
</tr>
<tr>
<td>Pole Bracket / Chock Hanger</td>
<td></td>
<td>(4) 3/8 Dia. Concrete Anchors</td>
</tr>
</tbody>
</table>

## Also needed:

<table>
<thead>
<tr>
<th></th>
<th>Inside Box</th>
<th>Outside Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wiring – Outside Box to Inside Box</td>
<td>7 conductor 18 gauge wire</td>
<td>½” flexible conduit with connector for 7/8 knockout</td>
</tr>
</tbody>
</table>

## Field Notes:

FOR SERVICE ASSISTANCE CALL DL MANUFACTURING TOLL FREE 866-235-7468

Smart Chock Model #:  
Smart Chock Serial #:  
(LOCATED LOWER PORTION OF CONTROL BOARD)

Door Location:  
Customer:
OPTION 1: STANDARD CHOCK HANDLE MOUNTING INSTRUCTIONS

1. Remove the Nuts and Bolts from the Handle Assembly.

2. Attach the Handle Assembly to the Chock as shown below using the Hardware from Step 1.

FOR CHOCKS WITH YELLOW CABLES- BE SURE CONNECTION IS TIGHT! TIGHTEN CONNECTION WITH CHANNEL LOCKS!
OPTION 2: VECTOR CHOCK HANDLE MOUNTING INSTRUCTIONS

1) Remove the Nuts and Bolts from the Extractor Assembly and Insert Extractor into Chock (Figure A.)

2) Slide Handle over Extractor. Place Washer, Lock Nut, & Bolt in that Order as Shown (Figure A.). Tighten Bolt with Torque Wrench to 96 lb-ft.
NOTE:
Install internal Smart Chock™ measuring 66” from the dock floor to the top of the yellow box. Use (4) ¼” x 1¼” Tapcons.
Smart Chock™ Installation Guide

Smart Chock- Mounting
(on concrete wall or block wall)

SECTIOB B-B
SCALE 1:12

CENTER OF TOP RED LIGHT SHOULD BE 90" ABOVE GROUND LEVEL

Ø7/8" [22.25] Thru hole. Drill thru to outside box for conduit

DETAIL A
SCALE 1:12

Inside Floor Level

Outside Floor Level

Wall

Inside Floor Level

HOLE REF 26.0" [1066.8]

HOLE FOR CONDUIT 74" [1880.15]

66.0" [1675.73]

CONDUIT

SEE PAGE 4 FOR FASTENER USAGE

INSIDE LIGHT BOX MOUNTING CON’T.
BOLLARD BRACKET
PART # MK5027

BOLLARD BRACKET
Used on bollards 4 to 10 inch diameter.
(2) Hose clamps & 12 ¼-20 mounting
Bolts are included.

BOLLARD BRACKET
(mounting hardware included)

VERSA LIGHT™

Hsc ¼-20X1/2
12 Places
(provided)

SMART CHOCK™

Floor Line

66”
[1675.73]
From
The floor
Or
Contact
Factory

Hose Clamps
PHOTO EYE MOUNTING KIT
(FOR TYPICAL LOCATIONS & MxV DOOR)
SEE PAGE 9 FOR MOUNTING BRACKET LOCATION ON A ROLLING STEEL DOOR

STEP 1
MEASURE 18” ABOVE THE DOOR (START AT THE TOP OF DOOR JAMB) TO INSTALL PHOTO SENSOR

STEP 2
DRILL 2 HOLES IN ROLLER TRACK. USE 17/64” DRILL BIT REFER TO PAGE 12 FOR WIRING INSTRUCTIONS

NOTE:
PHOTO SENSOR HAS A RANGE OF 1/2” TO 3-1/2”. 2” TO 3” IS RECOMMENDED.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART #</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>CP5016</td>
<td>MOUNTING BRACKET KIT</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>CP3268</td>
<td>PHOTO SENSOR NUT KIT</td>
</tr>
</tbody>
</table>

PHOTO EYE INSTALL – TYPICAL SECTIONAL DOORS
PHOTO EYE INSTALL – TYPICAL SECTIONAL DOORS
PHOTO EYE MOUNTING KIT
(FOR ROLLING STEEL DOOR)
SEE PAGE 9 FOR MOUNTING BRACKET LOCATION ON A SECTIONAL DOOR

STEP 1
TO LOCATE THE MOUNTING BRACKET POSITION, OPEN THE DOOR ALL THE WAY.

STEP 2
POSITION THE TOP OF THE BRACKET SO THAT IT LINES UP JUST BELOW THE BOTTOM SECTION OF THE DOOR AND MARK HOLES.

STEP 3
DRILL 2 HOLES IN ROLLER TRACK. USE 17/64” DRILL BIT.

STEP 4
LOCATE THE PHOTO SENSOR OPERATING ADJUSTMENT (SEE FIGURE BELOW). SET THE PHOTO SENSOR FOR LIGHT OPERATE.

STEP 5
ATTACH THE PHOTO SENSOR TO THE MOUNTING BRACKET USING THE NUTS AND WASHERS SUPPLIED WITH SENSOR.

STEP 6
ATTACH THE MOUNTING BRACKET TO THE TRACK RAIL USING HARDWARE SUPPLIED WITH MOUNTING KIT.

REFER TO PAGE 12 FOR WIRING INSTRUCTIONS

Setting the Photo Sensor Operating Mode

PHOTO EYE INSTALL – ROLLING STEEL DOORS
**Pole Attachment**

1. Attach Pole Mounting Bracket to wall using 3/8” anchors. Top of bracket should be 46” off the ground.
2. Attach Pole sections together and tighten set screw in the Coupling.
3. Slide bottom of Pole (with black tubing) into Mounting Bracket until it bottoms out. Pole is held in place by black rubber tubing.

**Use appropriate fastening methods to fasten to building wall**
Smart Chock™ Installation Guide

11/27/2017

- REMOVE POWER BEFORE SERVICING. MUST BE INSTALLED BY QUALIFIED ELECTRICIAN

**MODEL 654 LEVELER BUTTON**

- **DO NOT APPLY VOLTAGE TO J6 TERMINALS, FOR SWITCH ONLY**
  - J6-1, 8.2 VDC, 3 mA MAX
  - J6-2, COMMON GND

**OUTSIDE LIGHT BOX**

- **J15-1, +12 VDC, 1.25 A MAX**
- **J15-2, RED LIGHT**
- **J15-3, CHOCK ICON**
- **J15-4, GREEN LIGHT**

**CHOCK**

- **J16-1, 8.2 VDC, 3mA max**
- **J16-2, COMMON GND**
- **J16-3, CHOCK SIGNAL**

**1 AMP SLO-BLO 250V FUSE UNDER FUSE COVER**

REPLACE WITH ONLY SAME TYPE AND RATING

FOR BEST RESULTS WHEN REPLACING FUSE, PLACE FUSE IN COVER, THEN PLACE COVER OVER CLIPS AND THEN SNAP FUSE INTO CLIPS

**12 AMP BREAKER FOR SWITCHED VERSA LIGHT AND FAN OUTLETS ONLY. MANUAL PRESS TO RESTART.**

**120 VAC INPUT**

- **120 VAC, 12 A MAX**
- **60 HZ**

- **J1-1, 120 VAC LINE**
- **J1-2, 120 VAC NEUTRAL**
- **J1-3, GROUND**

**OPTIONAL TERMINAL BLOCK JUMPERS FOR OPT2 & OPT 3**

Refer to Instructions that come with Replacement PC Boards

- **J3-3 or J4-3, COMMON GND**
- **J3-2 or J4-2, INPUT SIGNAL**
- **J3-1 or J4-1, +12 VDC, .2A MAX**

**OPTIONAL SENSOR**

SEE INSTRUCTIONS THAT OPTIONAL SENSOR COMES WITH SAFETY STRAP

- **J3-3, COMMON GND**
- **J3-2, SENSOR SIGNAL**
- **J3-1, +12 VDC, .2A MAX**

**PHOTO EYE DOOR SENSOR**

- **J2-3, COMMON GND**
- **J2-2, SENSOR SIGNAL**
- **J2-1, +12 VDC, .2A MAX**

**12 AMP BREAKER FOR SWITCHED VERSA LIGHT AND FAN OUTLETS ONLY. MANUAL PRESS TO RESTART.**

**ASSEMBLY NUMBER & REV. LABEL**

**MODEL 653 & 654 LEVELER INTERLOCK**

- **J7-1 & 2 CONNECTED TO K3 ISOLATED RELAY CONTACTS**
- **277 VAC, 30AC**

**OPTIONAL ALTERNATE CONTACTS**

**WIRING OVERVIEW / INDEX**

- **RS485 CONNECTION**
  - **5 VDC, 60 mA MAX**
  - **9100 bps**
  - **J10-3, COMMON GND**
  - **J10-2, CHANNEL A**
  - **J10-1, CHANNEL B**

**Switching Relays for J7, J8, Versa Light Outlet and Fan Outlet are Rated 120 VAC, 12 A .75 Power Factor**
SMART CHOCK™ FIELD WIRING DIAGRAM
INCOMING POWER
INTERNAL (YELLOW BOX)

BLACK (120 VAC, 12 A MAX, 60Hz)
WHITE (120 VAC NEUTRAL)
GREEN (GND) - ALL MODELS EXCEPT 653 & 654
GREEN (GND) - MODELS 653 & 654 ONLY
ON MODELS 653 & 654
USE CHASSIS GND CONNECTION
(NOT USED ON OTHER MODELS)

GND WIRE FROM CHASSIS GND IS PRE-INSTALLED ON MODELS 653 & 654

MUST BE INSTALLED BY QUALIFIED ELECTRICIAN

DOOR PHOTO SENSOR
PHOTO SENSOR IS 12 VDC. DO NOT RUN IN SAME CONDUIT WITH HIGHER VOLTAGE WIRING. TRANSIENTS CAN DAMAGE CONTROL BOARD OR AFFECT OPERATION.

J2
3 BLUE - COM
2 BLACK - SIGNAL
1 BROWN +12 VDC, .2A MAX

SENSING REVERSAL
CAREFULLY ROTATE ADJUSTMENT 3/4 TURN TO CHANGE OPERATION BETWEEN N/O OR N/C. NORMALLY SET FOR DARK OPERATE OR N/C WHEN LOCATED ABOVE PANELED DOOR OPENING

WIRING DIAGRAM J1 & J2
ON MODEL 654 SMART CHOcks – WHEN THE LEVELER BUTTON IS PRESSED, THE FAN WILL POWER DOWN. AFTER A 2 SECOND DELAY, THE LEVELER (J7) WILL RUN. ONCE THE LEVELER BUTTON IS RELEASED, THE FAN WILL TURN BACK ON.

MODEL 654 & 653 LEVELER INTERLOCK / OPT1

J8 (OPT1) CONTACTS CLOSE WHEN J7 (LEVELER) CLOSE. CONTACTS CONNECTED TO J7 & J8 ARE RATED 120 VAC 12 A, .75 POWER FACTOR.

CONTACTS CONNECTED TO J7 & J8 ARE DRY CONTACTS (ISOLATED FROM INTERNAL CONTROL BOARD CIRCUITRY).

INPUT POWER

TO LEVELER MOTOR

WIRING DIAGRAM J6, J7 & J8
SMART CHOCK™ FIELD WIRING DIAGRAM
OUTSIDE LIGHTS

OUTSIDE (BLACK BOX) CONNECTIONS TO J2 OF PCB ASSEMBLY SC8863 (CHOCK ICON)

- BLUE
- BLACK
- WHITE
- ORANGE
- YELLOW
- RED
- BROWN

J2
1 +12VDC
2 RED
3 CHK'D
4 LPBK
5 ORANGE – CHOCK ICON
6 GREEN
7 COM

INSIDE (YELLOW BOX) CONTROL BOARD CONNECTIONS

- BROWN – +12VDC
- RED – TOP RED LEDS
- ORANGE – CHOCK ICON
- YELLOW – GREEN LEDS
- WHITE – LOOP BACK
- BLUE – CIRCUIT COMMON
- BLACK – SENSOR SIGNAL

J15 OUTSIDE LIGHTS
1 J15 OUTSIDE LIGHTS TERMINAL BLOCK (INSIDE LIGHT BOX)
2 J16 CHOCK TERMINAL BLOCK (INSIDE LIGHT BOX)
3 J16 CHOCK
4 J2

IMPORTANT!!!

OUTSIDE ICON BOARD TERMINAL BLOCK CONFIGURATIONS FOR CONNECTOR J2 ARE DIFFERENT FOR RED VS AMBER ICON BOARDS:

SC8863 RED ICON BOARD

J2 CHOCK ICON PC BOARD TERMINAL BLOCK (OUTSIDE LIGHT BOX)

SC8078 AMBER ICON BOARD

J2 CHOCK ICON PC BOARD TERMINAL BLOCK (OUTSIDE LIGHT BOX)

WIRING DIAGRAM – INSIDE TO OUTSIDE BOX
MODEL 650 WIRING DIAGRAM
MODEL 651 WIRING DIAGRAM
MODEL 653 WIRING DIAGRAM
MODEL 654 WIRING DIAGRAM
OUTSIDE LIGHT BOX / CHOCK WIRING DIAGRAM

FOR YELLOW TURK ELECTRICAL CORD

LOOKING INTO SOCKET

LOOKING AT END OF PLUG

FOR BLACK ELECTRICAL CORD

FEMALE END VIEW

POLLACK END VIEW

1 = BLACK
2 = WHITE
3 = RED
4 = GREEN

WHEEL CHOCK ASSEMBLY

OUTSIDE LIGHT BOX / CHOCK WIRING DIAGRAM
Shipping Times

~ Orders for stock items received by 3:00pm EST will be processed for shipment the next day. Orders requesting 2nd Day Air or Overnight Air received by 1:00pm will be processed for same day shipment.

Shipments / Freight

~ All DL Manufacturing orders will ship directly from our facility in North Syracuse, NY.
~ All parts will be shipped via UPS Ground unless you authorize a different service. UPS shipments are prepaid and the charges are added to your invoices.
~ For orders shipping by common carrier, the freight will be FOB, North Syracuse, NY. When “best way” is the preferred shipping method on your order, DL Manufacturing will choose the carrier, unless otherwise stated, for the orders shipping from this facility. No adjustments will be made after the order has shipped.

Returns

~ DL Manufacturing will issue a Returned Material Authorization (RMA) number for any product, parts and accessories. Products should not be returned without an RMA number.
~ Replacement parts will be invoiced at the time of shipping. Invoices will be credited upon receipt and inspection of Returned Material Authorization (RMA).
~ Freight for returns is paid for by the shipper unless otherwise specified by DL Manufacturing.
~ A restocking fee of 35% of net price is charged for returns.
~ All replacement parts are warranted for a period of 90 days from shipment.

Cancellation Fees

~ Cancellation charges may be incurred on orders cancelled with DL Manufacturing. Please contact DL Manufacturing to discuss each situation.

Warranty Policy

~ All Products (excluding bulbs) manufactured by DL Manufacturing are warranted to be free from defects for a period of 12 months from the date of shipment, excluding doors, which have a warranty period of 12 months from date of installation or 18 months from shipment, whenever occurs first.
This warranty does not cover unreasonable/improper use or use beyond rated conditions, improper storage, negligence or accident; damage because of incorporated use of equipment with Goods, after Customer has or reasonably should have, knowledge of any defect; or improperly installed by any other Person that is unauthorized by DL Manufacturing. This warranty is subject to customer covenants to inform all subsequent buyers of the Goods of the limitation on and exclusive of warranties provided for herein. Customer hereby indemnifies and agrees to hold DL Manufacturing harmless from and against all losses, costs and expenses, including reasonable attorney’s fees incurred by DL Manufacturing as a result of any third party claim relating to the purchase, sale or use of, or otherwise relating to, the Goods covered by this Agreement.
In no event shall DL Manufacturing be required to repair, replace or reimburse Customer for more than the part or material that is found to be defective and DL Manufacturing’s liability shall in such event be no greater than the invoiced price of the item and shall not include labor, shipping or other costs incurred in connection with the reshipment of defective Goods to DL Manufacturing or the reinstallation of such Goods after any repair or replacement. The remedy set forth in this paragraph is expressly agreed to be the sole and exclusive remedy for any breach of warranty. This warranty is exclusive and in lieu of all other warranties expressed or implied, including but not limited to any warranty of merchantability or of fitness for a particular purpose.
Limitation of Liability - In no event as a result of breach of contract, warranty or negligence shall DL Manufacturing be liable for special, or consequential damages including but not limited to loss of profits or revenues, loss of any equipment, cost of capital, cost of substitute equipment, facilities or services, downtime costs or claims of purchasers of the Customer for such damages. Additionally, DL Manufacturing will not be liable for any delay in the performance of contracts and orders, or in the shipment and delivery of goods, or for any damage suffered by the Customer by reason of delay, when such delay is, directly or indirectly, caused by force majeure, including war, Government interference, strikes, embargoes, shortage of labor, fuel, fires, floods, or any other cause or cause whether or not similar in nature to any of those herein before specified beyond DL Manufacturing’s control.