**QUICKSTART “BASIC” GUIDELINES FOR MODEL 9100 - FRONT INSTALLATION MOUNTED ON A CONCRETE PAD**

- Chain MUST be parallel to gate!
- Chain bracket MUST line up with idler wheels!

**Physical Stops MUST be Used to Stop Gate**

**DO NOT** power up and cycle the operator without “Physical Stops” installed to stop the gate in the open and close positions. (Chain stops are included with the operator but other physical stops can be used). Damage could occur to the gate and operator. Chain stop’s rubber bumpers face toward operator. They will make contact with the operator housing during the initial automatic open/close limits setting sequence.

**Concrete Pad and Conduit Area**

**Circuit Board Settings**

<table>
<thead>
<tr>
<th>SW 1 Switch</th>
<th>Must OPEN the gate upon initial AC power up and open command. If the open command begins to close the gate, turn AC power off and reverse this switch. (See reverse side)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 2 Switch</td>
<td>Note: SW 2, switch 1 is turned on when plug-in entry loop detector is installed.</td>
</tr>
</tbody>
</table>

**Automatic Limits**

The 9100’s open/close limits DO NOT have to be physically adjusted. Every time the 9100 is powered up, the first open command will automatically run “2 open/close gate cycles” that will locate and remember the gate’s open and close limit positions. These limit positions are determined by where the physical stops have been installed. It does not matter what position the gate is in before running this sequence. The gate will function normally after this automatic sequence has finished. Note: Auto-close timer should be on before running this sequence.

**Plug-In Loop Detectors**

Not included - Refer to the Installation/Owner’s manual and Loop Information Manual (available from www.doorking.com) for more information on loops and plug-in loop detectors.

**Radio Receiver**

Not included - Refer to a specific Radio Receiver Manual (available from www.doorking.com) for more information on radio receivers and antenna installation. (See reverse side for wiring)

**High Voltage Connection**

**GATE OPERATOR MUST BE PROPERLY GROUNDED!!**

Tip: It is recommended that a surge suppressor be installed on the high voltage power lines.

**Power safety and opening devices (that require 115 VAC power).**

**WARNING** of people and obstructions.

Pedestrians must be supplied with a separate access opening. For safety and installation instructions, please refer to the Installation/Owner’s manual.

**Model 9100 is intended for installation only on sliding gates used for vehicles.**

Concrete Pad MUST be level!

This depth of the concrete pad is determined by soil conditions and local building codes (concrete recommended). 21” Minimum

**Concrete Pad**

Two 115 VAC Convenience Outlets

Power safety and opening devices that require 115 VAC power.

**Chain Adjustment**

Adjust the chain nuts to tighten the chain. The chain should sag no more than one (1) inch per 10 feet of chain travel.

Do not over tighten the chain.

Tip: It is recommended that a surge suppressor be installed on the high voltage power lines.

**Entrapment Protection must be provided for the gate system where the risk of entanglement or entrapment exists.**

The operator will NOT run without one or more monitored type B1 or B2 external entrapment protection devices in EACH direction of gate travel (minimum of 2 external devices required). See manual for more information.

**Radio Receiver**

Not included - Refer to a specific Radio Receiver Manual (available from www.doorking.com) for more information on radio receivers and antenna installation. (See reverse side for wiring)

**Plug-In Loop Detectors**

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**Automatic Limits**

The 9100’s open/close limits DO NOT have to be physically adjusted. Every time the 9100 is powered up, the first open command will automatically run “2 open/close gate cycles” that will locate and remember the gate’s open and close position. These limit positions are determined by where the physical stops have been installed. It does not matter what position the gate is in before running this sequence. The gate will function normally after this automatic sequence has finished.

Note: Auto-close timer should be on before running this sequence.

**Chain nut and chain bolt should not protrude past gate frame.**

**Do not over tighten the chain.**

(1) inch per 10 feet of chain travel.

Adjust the chain nuts to tighten the chain.

**GATE OPERATOR MUST BE PROPERLY GROUNDED!!**

Tip: It is recommended that a surge suppressor be installed on the high voltage power lines.

**Power safety and opening devices (that require 115 VAC power).**

**WARNING** of people and obstructions.

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Note: Auto-close timer should be on before running this sequence.

**Chain nut and chain bolt should not protrude past gate frame.**

**Do not over tighten the chain.**

(1) inch per 10 feet of chain travel.

Adjust the chain nuts to tighten the chain.
## SW 1

<table>
<thead>
<tr>
<th>Switch</th>
<th>Function</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Open/Closing using ON setting</td>
<td>ON</td>
<td>Changes the direction the operator will open/close the gate on different chain configurations.</td>
</tr>
<tr>
<td>2</td>
<td>Auto-Close Timer</td>
<td>OFF</td>
<td>Auto-close timer is OFF. Manual input required to close gate.</td>
</tr>
<tr>
<td>3</td>
<td>Motor Hold</td>
<td>OFF</td>
<td>Normal setting. Voltage applied to motor always. Keeps inclined gate from coasting when stopped.</td>
</tr>
<tr>
<td>4 and 5</td>
<td>Relay Activation and LED Indicator</td>
<td>OFF</td>
<td>Relay activates and LED is ON when the gate is fully open. Relay activates and LED is ON when the gate is not closed. Relay activates and LED is ON when the gate is opening and open. Relay activates and LED is ON when the gate is opening and closing.</td>
</tr>
</tbody>
</table>

### Gate Open/Back-Off Position

- **7-Off**: Normal Setting. Gate fully opens.
- **7-Off; 8-On**: Gate stops short 1" from full open position. Used for a reversing edge device.
- **7-On**: Gate stops short 2" from full open position. Used for a reversing edge device.
- **7-On; 8-Off**: Gate stops short 3" from full open position. Used for a reversing edge device.

## SW 2

<table>
<thead>
<tr>
<th>Switch</th>
<th>Function</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Exit Loop Output</td>
<td>ON</td>
<td>A plug-in exit loop detector plugged into the EXIT Loop port will partially open single operator or fully open dual operators depending on type of loop detector used.</td>
</tr>
<tr>
<td>2</td>
<td>Full Open Input</td>
<td>ON</td>
<td>Normal Setting. Plug-in exit loop detector will fully open gate (Single operator).</td>
</tr>
<tr>
<td>3</td>
<td>Reverses Gate</td>
<td>OFF</td>
<td>Normal setting. Input to terminal #6 and/or reverse loops will reverse gate during close cycle.</td>
</tr>
<tr>
<td>4</td>
<td>Stops Gate</td>
<td>ON</td>
<td>Input to terminal #6 and/or reverse loops will stop gate during close cycle – gate will continue to close after input to terminal #6 and/or reverse loops are cleared (Helps prevent tailgating vehicles from unauthorized entry).</td>
</tr>
<tr>
<td>5</td>
<td>Partial Open (14 Ft)</td>
<td>OFF</td>
<td>Normal Setting. Switch must be OFF for terminal #5 input to open gate 14 Ft.</td>
</tr>
<tr>
<td>6</td>
<td>Built-In Security Lock</td>
<td>OFF</td>
<td>Normal Setting. Fail-safe logic. Lock engages only if attempt is made to force gate open (Factory setup).</td>
</tr>
<tr>
<td>7</td>
<td>Stand-Alone Keypad</td>
<td>ON</td>
<td>Normal Setting. Switch must be OFF for Model 9100.</td>
</tr>
</tbody>
</table>

## Operator Model Select

- **OFF**: NOT use ON setting for Model 9100. |

## Quick-Close Timer Override

- **ON**: Normal setting. Timer will function normally. |

### Gate Close/Back-Off Position

- **7-Off; 8-On**: Gate stops short 1" from full close position. Used for a reversing edge device.
- **7-On; 8-Off**: Gate stops short 2" from full close position. Used for a reversing edge device.
- **7-On; 8-On**: Gate stops short 3" from full close position. Used for a reversing edge device.

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**Note:** After a DIP-switch setting is changed, power must be turned OFF and then turned back on for the new setting to take affect.

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**External Entrapment Protection Devices**

- **Only ONE monitored Device can be connected to each input.** An **OPTIONAL Expansion Kit (sold separately)** will allow connection for additional devices.

**External Entrapment Protection Devices**

- **UL 325 Terminal:**
  - **1:** OPEN Beam STOP
  - **2:** Ground Common
  - **3:** CLOSE Beam REVERSE
  - **4:** Ground Common
  - **5:** 24 VDC 250 mamp. max
  - **6:** Ground Common
  - **7:** OPEN Edge/Beam REVERSE
  - **8:** Ground Common

**UL 325 D-Switches**

- **DIP Switch 1 (ON):** Programmable to open 14 feet from a hard stop. **DIP Switch 2 (OFF):** Programmable to open 14 feet from an end stop.

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**2-Wire DIP Switches**

- **DIP Switch 1 (ON):** Programmable to open 14 feet from a hard stop. **DIP Switch 2 (OFF):** Programmable to open 14 feet from an end stop.

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**UL 325 August 2010 Standard**

**DOOR KINGS**

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Inglewood, California 90301

**U.S.A.**