# QUICKSTART "BASIC" GUIDELINES FOR 4302 SOLAR CONTROL BOX FOR 6004, 6006 AND 6400



"Optional" DKS Low

Current Draw Plug-In

Loop Detector for

Reverse Loops ONLY

P/N 9416-010

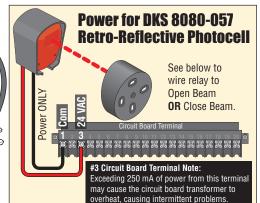
Battery Plug

1 2 3 4 SW1

ORKIN 120 S. Glasgow Avenue Inglewood, California 90301

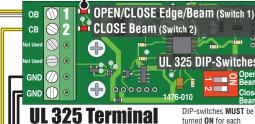
# **UL 325 Termina**

Connect DoorKing 8080-057 device. Installed on gate that opens to the **INSIDE** of property. See manual for gate that opens OUTSIDE of property.



**LED ON:** Connected device has been activated LED remains off during normal operation.

**LED Flashing:** Connected device is in fault. Wiring to device is bad.



Note: Only 1 monitored Device can be connected to each input. An **OPTIONAL** Expansion Kit (sold separately) will allow connection for additional devices.



OPEN Beam Switch 1 Must be ON for reversing edge.

**Monitored OPEN Photo Sensor** 

OPEN Beam 

Switch 1 Must be ON Closed Gate

CLOSE Beam Switch 2 Must be ON. CLOSE Beam

# **Mount Control Box Cabinet**



Position the control box on the wall, close enough to the gate operator so the primary operator cable can be easily routed inside the box. Use appropriate hardware (not supplied) in the existing 3 mounting holes to secure the cabinet to a vertical

DO NOT drill any additional holes in the cabinet. Drilling produces metal filings, which can cause shorts on the circuit board and will void the warranty.

Never run high voltage and low voltage wire insulation in the same conduit.

DoorKing offers an OPTIONAL mounting post kit (P/N 1000-045) when no vertical surface is available to mount the control box cabinet to.

Opening Devices must be far enough from the gate so that the user is prevented from coming in contact with the gate while operating the controls. Do not connect any control devices to the circuit board

terminal Note: Opening Devices MUST use a separate power source if power is required.

N.O.

**Exit Loop** 

**Low Current Draw** 

See the specific loop detector instrumore information (P/N 9402-050).

**External Loop Detectors** 

Green LED remains ON when reflector is properly aligned. Power to Circuit Board Relay to UL 325 Terminal: Terminal: To #1 Open Beam OR #2 Close Beam (depending on mounting location)

**Entrapment Protection must be provided for the gate** system where the risk of entrapment or obstruction exists. The operator will not run without one or more monitored type B1 or B2 entrapment protection devices in EACH entrapment area.

**DoorKing Photo Sensor 8080-057** 

# **Opening Devices**

Set for Low Power Mode Radio #1 Com (White) Radio #2 Relay (Green) P/N 8040-080

Radio #3 Power (Red) See manual for programming

Use 18 AWG minimum.

Switch 5 MUST b OFF.

REAL PROPERTY.

Com

Reverse loops vired in series

250 ma Maximum Power

**Reverse Loops** 

Not Use Relay N.O Relay COM 24 V NE

Solar NEG

Not Use

**Full Onen-Power** 

Termina

>24 V POS ⇒Solar POS

3) (A

DO NOT Connect a Plug-In Transformer to the **Solar Power Terminals** 

Standard Reverse input on Terminal 8 ONLY

**Primary** 

Operator

ONLY

THIS PRODUCT IS TO BE INSTALLED AND SERVICED BY A TRAINED GATE SYSTEMS TECHNICIAN ONLY.

Visit www.dkslocator.com to find a professional installing and servicing dealer in your area.

Shadow Loop Note:

A shadow loop can

NOT be wired to the

**RESET BUTTON** 

- Resets circuit board

Shuts alarm OFF

solar control box.

Control box is intended for installation only on automated gates used for vehicles.

For safety and complete installation and adjustment instructions, please refer to the Wiring/Owner's manual.

Pedestrians must be supplied with a separate access opening.

POWER 🚳

O DETECT

**DO NOT USE** 

**Exit Loop Port** 

JL 325

**(1)** 

Secondary

Operator

ONLY

"Optional" Low

Exit Loop detector

mounting position

Use existing screws

to mount detector(s)

**Current Draw External** 

functions while the gate is a at the full **open** position or during the closing cycle.

**Battery Switch** 

#### Push to Operate: Cycles operator when pressed. Will use Auto-Close timer

when turned ON

DANGER OF ELECTRIC SHOCK!!

Disconnects battery power from circuit board. Solar panels still charge batteries.

# **24 Volt Solar Panel**

**Circuit Board Settings** 

3. Open Input

Typical Settings with Reverse and Exit Loops. See reverse side.

SW1. Switch 1&2 Note: See reverse side

for your specific operator switch settings.

Direction **Primary** operator opens.

2. Direction Secondary operator opens.

4. ON - Auto-Close Timer R

. OFF - Circuit Board Relay Control

2. ON - Circuit Board Relay Control

5. OFF - Standard Reverse

7. Single/Dual Operators

6. Overlapping Gates

OFF - Not Used

OFF - Spare



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Keep sunlight **OFF** solar panel while connecting to prevent electric shock.

Safety

Opening

**Device** 

(Dry contact)

Solar Pos. (White Wire) Solar Neg. (Black Wire)

Solar panel should face true south in unobstructed sunlight.

#### **Solar Control Box Requirements:**

23

Adjust 1 to 23 sec.

- (1) One 24 Volt 10 Watt Solar Panel for 18 Amp/Hr Batteries (P/N 2000-077).
- (1) One 24 Volt 20 Watt Solar Panel for 35 Amp/Hr Batteries (P/N 2000-076).

DO NOT connect 12 Volt solar panel. Damage WILL occur!!

**DO NOT** power up and cycle the gate operator before the limit sensors and DIP-switches have been adjusted, damage could occur to gate and operator.

**Loop Detectors** 

# **Two 12 Volt Batteries**

#### **DoorKing Recommends:**

12 Volt 18 Amp/Hr batteries: Use for applications with normal usage (60 cycles per day or less).

12 Volt 35 Amp/Hr batteries: Use for applications with higher usage (60 cycles per day or more).

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DANGER of

N.O.

**Black Wire** 

Harness

**ELECTRIC SHOCK!!** 

Use **ONLY** 12 Volt batteries. Batteries are wired in series

NEG Terminal Lead

**Battery Wiring Notes:** 

**Monitored CLOSE Photo Sensor** 

4302-068-V-2-21

# QUICKSTART "BASIC" GUIDELINES FOR 4302 SOLAR CONTROL BOX DIP-SWITCHES AND OPERATOR(S) CONNECTION

### **SW 1 DIP-Switches**





120 S. Glasgow Avenue Inglewood, California 90301



Secondary Operato

# **Gate Operator(s) Connection**

#### **DO NOT** cycle the operator BEFORE setting limit sensors.

Refer to your specific operator for limit sensor adjust

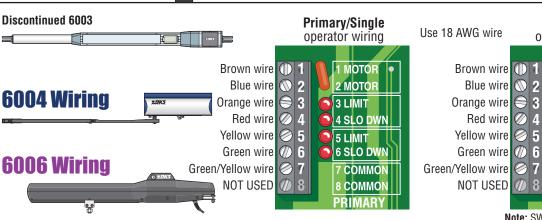
#### **Choose Your Operator Model:** Follow wiring colors for the

PRIMARY/Single or DUAL gate operators. If factory wired jumpers are installed on operator terminals, they **must** be removed or operators will **not** function.

Operator Wiring ONLY: Jumpers MUST be on operator terminals or 6005 will **NOT** Green/Yellow wire function.

Discontinued 6005 JUMPER JUMPER JUMPER 6005 7-Wire Operator Actuator Cable

Red & Green Wires are Terminated.



Brown wire

Orange wire

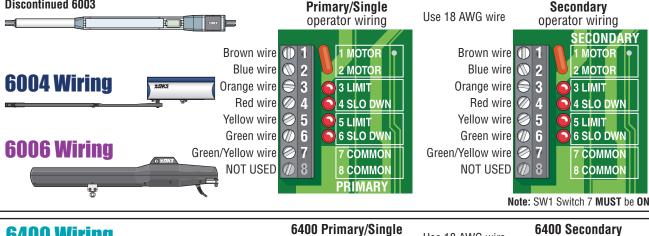
Red wire

Yellow wire

Green wire

7-Wire

Operator Cable



operator wiring

# 6400 Wiring

Note: Secondary operator MOTOR wires **MUST** be reversed from the primary operator when using DUAL gate operators.

#### Brown wire MOTOR • 2 MOTOR Orange wire 😂 🕄 3 LIMIT Red wire 0 4 4 SLO DWN S LIMIT Yellow wire 6 5 Green wire (7) 6 ⑥ 6 SLO DW Green/Yellow wire 7 COMMON NOT USED (7) 8 R COMMON

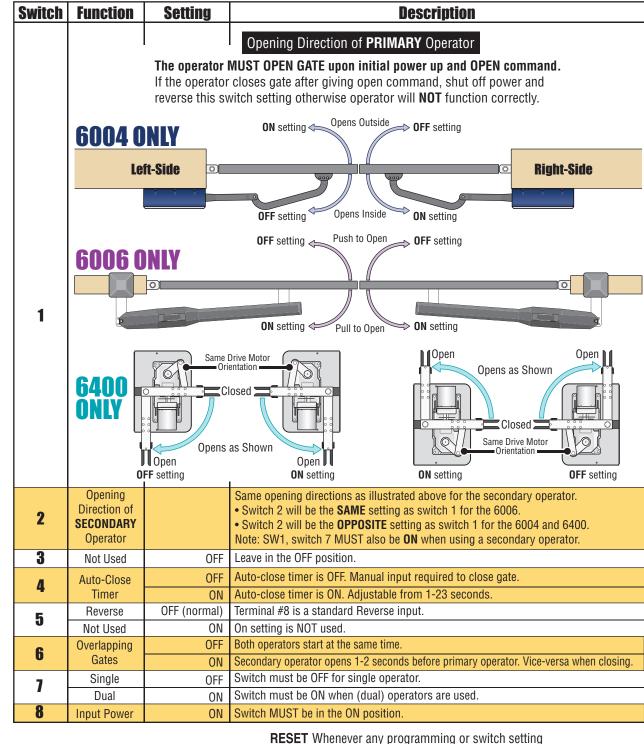
#### operator wiring SECONDARY Blue wire Brown wire 0 2 Orange wire 😂 3 Red wire Ø 4 Yellow wire 5 Green wire Green/Yellow wire NOT USED

Use 18 AWG wire

2 MOTOR 3 LIMIT 4 SLO DWN 6 SLO DWN 7 COMMON **COMMON** Note: SW1 Switch 7 MUST be ON

MOTOR





# **SW 2 DIP-Switches**



Switch	Function	Setting	Description
1 and 2	Relay Operation	1-0FF 2-0N	Circuit board relay activates when the gate is <b>NOT</b> closed.
3	Not Used	OFF	Leave in the OFF position.
4	Spare	OFF	Leave in the OFF position.

on the control board is changed, press the

reset button for new settings to take effect.