

Stanley Access Technologies  
**Quick-Reference Guide**



**StanVision Sensor**  
**Installation and Operating Instructions**  
**Quick-Reference Guide**

**203975**

**Rev. F, 12/18/03**

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**Quick-Reference Guide**

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## 1. PURPOSE

### 1.1 **Discussion**

This manual provides system description, installation instructions, and operating instructions for the Stanley StanVision sensor system. The StanVision sensor system uses a video sensing device that provides approach and safety detection functionality on sliding doors with traffic flow in one or both directions. The system also provides a live composite video image of the viewing area.

### 1.2 **Applicability**

This manual is applicable to the Stanley StanVision sensor.

## 2. PREREQUISITES

2.1 Electrical work has been completed.

2.2 Finished floors and walls are installed. (These affect sensor detection zones and sensitivity.)

2.3 Protective barrier (caution/warning tape) has been set up to prevent unauthorized access to work area.

2.4 On retrofit applications, existing sensors and the wiring for those sensors have been removed. (Stanguard and doorway holding beams may remain installed and active.)

2.5 Attachment 1 has been reviewed for the listing of the documents, definitions, tools, equipment, materials, and consumables used in this procedure.

2.6 Palm Pilot owner's manual has been read and is understood.

## 3. PRECAUTIONS

3.1 The StanVision sensor must be adjusted in accordance with ANSI Standard A156.10, "American National Standard for Power Operated Doors." Adjustments must be performed by Stanley-authorized personnel.

3.2 The Palm Pilot must be handled with care.

- The display screen is glass. Do not put the unit in your pocket.
- The unit is heat sensitive. Do not store it in your toolbox or leave it in a hot truck.

- 3.3 The Palm Pilot software is stored in volatile memory. If the batteries go dead or are removed from the unit for more than 1 minute, the M40 Express application software required to program the VSC will be deleted from the Palm Pilot. If this occurs, refer to Attachment 2 for instructions to load/recover the Palm Pilot software.
- 3.4 If any equipment in the vicinity of the door appears to create a safety hazard, notify the Construction Superintendent or Building Manager.
- 3.5 When running power cords, make certain there are no trip hazards.
- 3.6 Block off work area to protect unauthorized personnel from hazards during work.
- 3.7 Before performing work, make certain door power is turned off.

## 4. SYSTEM DESCRIPTION

### 4.1 **General**

On a typical sliding door package, the StanVision sensor system consists of the following major components:

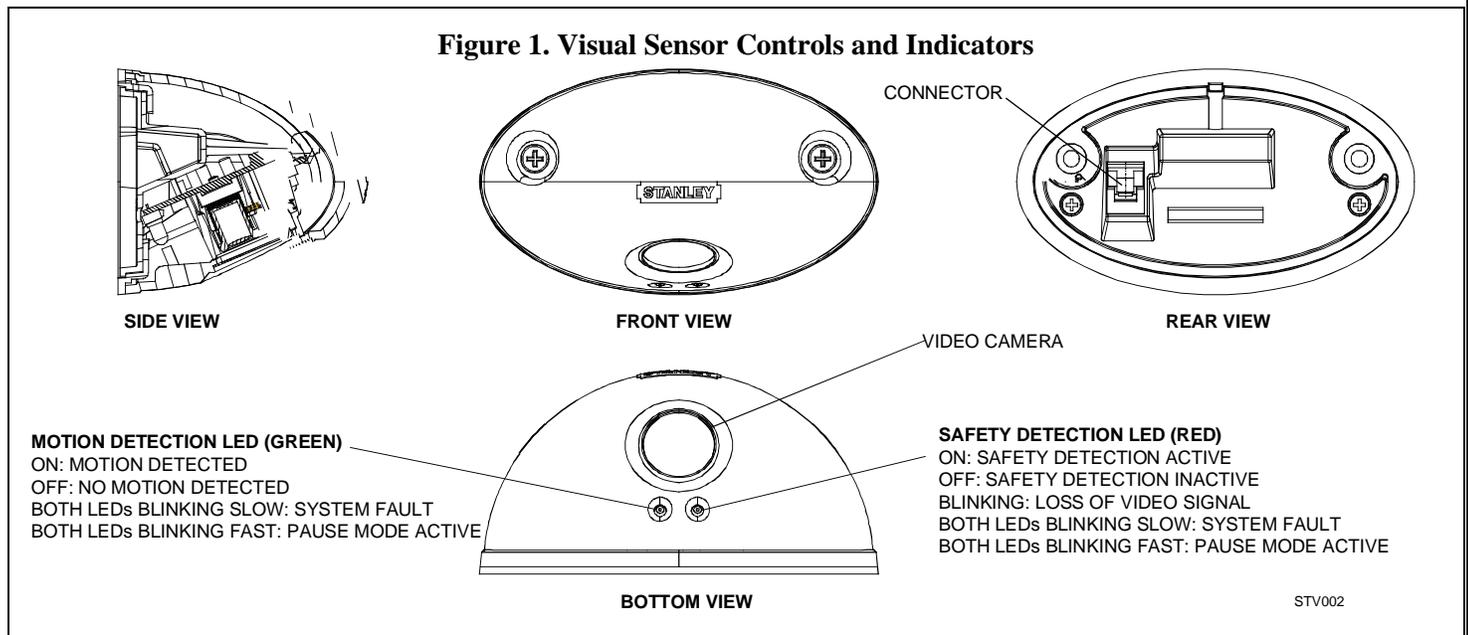
- Two CCD visual sensors with mounting templates
- One visual sensor controller
- A four-channel encoder
- Two RJ-45 cables for connecting the visual sensors to the visual sensor controller

(On a Double Diamond sliding door package, three sets of the above major components are required.)

A security option is available for all Dura-Glide doors with StanVision. The security option requires a 12-VAC transformer mounted in the header. The transformer bypasses the Dura-Glide power switch and supplies power to the StanVision.

The system interfaces with the Stanley interface board, the motor encoder assembly, and the Stanley Dura-Glide microprocessor control box. The paragraphs that follow describe the major system components and interfaces.

- 4.1.1 Visual Sensor: The visual sensor (VS) (Figure 1) consists of a small plastic housing containing a video camera and two indicator LEDs. The VS is enclosed in a tamper-resistant weatherseal cover.



- 4.1.2 Visual Sensor Controller: The visual sensor controller (VSC) (Figure 2) is a printed circuit assembly enclosed in an aluminum housing and mounted inside the header. The VSC receives 12 VAC power from the interface board and supplies 12 VDC power to the visual sensors. The VSC has two sensor inputs: J15 and J16. Each VSC provides two live composite video outputs in standard format. These signals represent the views from the interior and exterior visual sensors. As an option, the customer can route these

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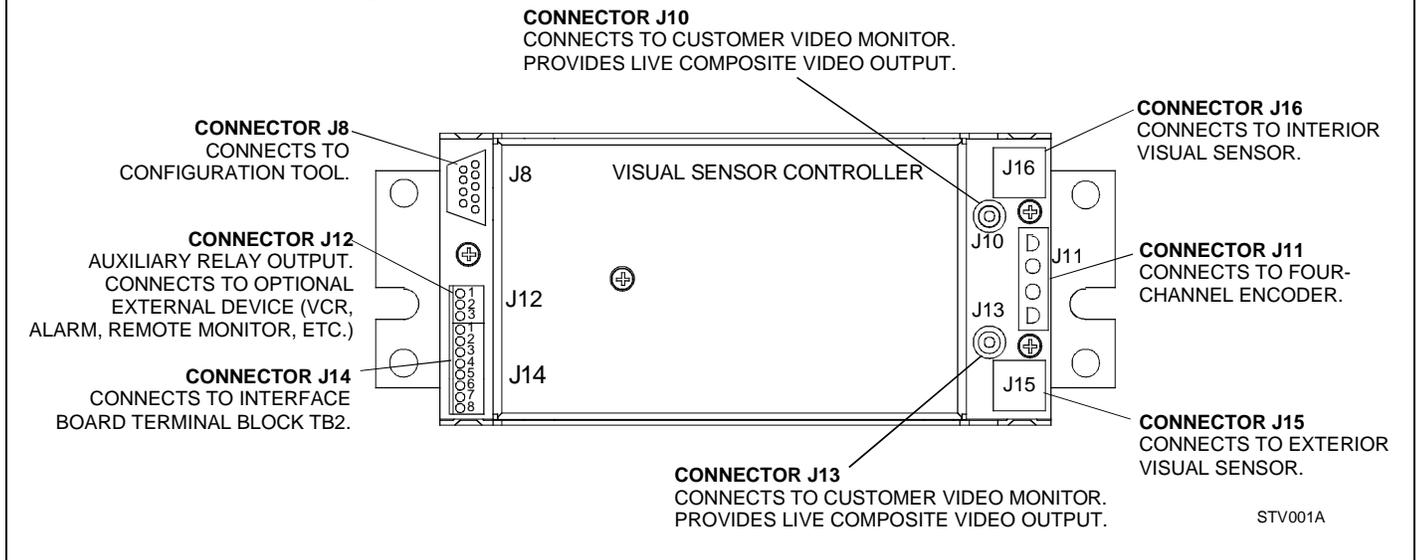
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signals to remote monitors and video recorders for security and liability-protection purposes.

The VSC also receives the door position information from the four-channel encoder. Additionally, VSC connector J12 outputs auxiliary relay contact signals that can be used by the customer to activate optional external devices such as a VCR, alarm, indicator light, remote monitor, etc.

**Figure 2. Visual Sensor Controller Controls and Indicators**



- 4.1.3 **Four-Channel Encoder:** The four-channel encoder supplies door position signals to the VSC and to the Dura-Glide microprocessor control box. These signals indicate the position of the door at any given time.
- 4.1.4 **Configuration Tool (CTOOL):** The CTOOL is a hand-held Palm Pilot. The CTOOL controls the system setup and configuration. The CTOOL stores and retrieves preset default parameters and provides the ability to read and set all the VSC operating parameters. It also provides the ability to check the software version of the VSC, download software upgrades to the VSC, initiate VSC system diagnostics, and report diagnostics results. The CTOOL interfaces with the VSC via serial port connector J8 on the VSC.
- 4.1.5 **Dura-Glide Interface Board:** The Stanley Dura-Glide interface board terminal block TB2 receives the control signals from VSC connector J14 and supplies 12 VAC to VSC connector J14.
- 4.1.6 **Dura-Glide Microprocessor Control Box:** The Stanley Dura-Glide microprocessor control box accepts the door-position signals from the four-channel encoder.

## 4.2 Features and Functions

- 4.2.1 **Viewing Area:** The visual sensor used for approach detection has a viewing area of 11' wide by 10' deep for all sensor mounting heights.
- 4.2.2 **Sensor Zones:** Each visual sensor has three separate zones: a safety zone, motion zone, and ignore zone.

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- **Safety Zone:** The safety zone is presence-based. The system detects the presence of objects within the zone. Presence is detected by comparing the current view of the area with a stored view of the area before the object entered the zone. The system automatically “relearns” the background view of the safety area and readjusts to the objects in the detection zone. If an object such as a store display or literature rack has been placed in the safety zone, the sensor will detect its presence but recognize it as a permanent object and not cause the door to remain open. Based on system parameters set using the CTOOL, the sensor determines how quickly and under what circumstances small and large objects are assimilated or incorporated into a stored view. The shape of the safety zone is configurable from the CTOOL.
- **Motion Zone:** The motion zone is motion-based. The system detects the *movement* of objects within this zone rather than the *presence* of objects in the zone. System operating parameters that control movement sensitivity, edge-selection criteria, and motion direction affect the system operation in the motion zone. The shape of the motion zone is configurable from the CTOOL.
- **Ignore Zone:** The ignore zone is the area within the camera view that falls outside of the defined safety and motion zones. The shape of the ignore zone is configurable from the CTOOL.

4.2.3 **Sensor Zone Configuration:** The system is capable of defining the shape of the safety, motion, and ignore zones as long as the zones do not exceed the viewing area of the sensor.

4.2.4 **Detection Patterns:** Bidirectional, unidirectional, or smart mode is selected using the CTOOL.

- In **bidirectional operation**, any motion or presence detected in the motion or safety zone while the door is closed will cause the door to open. Any detection in the zone defined as motion or safety while the door is open, opening, or closing will cause the door to open or remain open.
- In **unidirectional operation**, the door will open only if the pedestrian is moving *toward* the sensor—the door will not open if the pedestrian is walking *parallel to* or *away* from the sensor. Any detection while the door is open, opening, or closing will cause the door to open, but only if the object is moving *toward* the sensor. (It will ignore an object moving *away* from the sensor.)
- In **smart mode operation**, the door will open only if the pedestrian is *approaching* the sensor (as in unidirectional operation). However, once the door is open, opening, or closing any detection will cause the door to open or remain open.

4.2.5 **Built-In Diagnostics:** The system performs a diagnostic routine during startup and, when possible, during normal operations. A fault is indicated when both the red and green LEDs are blinking slowly. (The diagnostic routine does not take the place of the daily safety checks of the system.)

4.2.6 **Relay Hold Time:** The VSC has a configurable relay hold time. The relay hold time is the amount of time that the relay contact will remain energized after the loss of detection from the sensor. The CTOOL is used to set the relay hold time for 0.5, 1.5, 3, 5, 7, 9, 10, 15, 20, or 30 seconds.

- 4.2.7 Safety Retune: The system self-adjusts to changes in the operating environment such as the presence of snow, leaves, or objects such as a store display or literature rack placed in the safety zone. Objects must be stationary for the retune time selected. The system will self-adjust to its environment based on two parameters:
- The retune time for small objects in the sensor zones (typically items smaller than an 8<sup>1</sup>/<sub>2</sub>" X 11" sheet of paper) can be 5 seconds to 5 minutes.
  - The retune time for large objects in the sensor zones (typically items larger than an 8<sup>1</sup>/<sub>2</sub>" X 11" sheet of paper) can be set of 20 seconds to 5 minutes.

Each of these parameters is adjustable using the CTOOL.

- 4.2.8 Power-Up Learn Mode: During power-up, the VSC fully opens the doors, waits 4 seconds, and performs a four-cycle learning operation during door closing. During the learning operation, the VSC remains motion and safety sensitive. Once the power-up learn operation is completed, the system reverts to normal operation.
- 4.2.9 Fail-Safe Operation: Any VS or system failure results in the output relays cycling to the fail-safe state. Additionally, detection of a single VS failure will cause the red LED on the respective VS to blink. Detection of a StanVision system failure will cause both the red and green LEDs to blink slowly simultaneously.
- 4.2.10 Motion Sensitivity Adjustment: Using the CTOOL, each sensor can be made more or less sensitive to motion.
- 4.2.11 Cross-Talk Immunity: The VS is immune to cross talk or other interference from like sensors mounted within the vicinity.
- 4.2.12 Operation Under Minimum Lighting Conditions: The VS is capable of operating under lighting conditions as low as 0.5 lux.
- 4.2.13 Auxiliary Relay Mode: The system provides an auxiliary relay that can be used to activate an external device such as a VCR, alarm, indicator light, remote monitor, etc. Using the CTOOL, the auxiliary relay can be configured to actuate when the interior or exterior sensor relay actuates, or when the system detects a fault. The auxiliary relay incorporates an adjustable relay hold time. Using the CTOOL, the relay hold time can be set for 0.5, 1.5, 3, 5, 7, 9, 10, 15, 20, or 30 seconds.

## 5. INSTALLATION INSTRUCTIONS

### 5.1 **Installing the Visual Sensors (Dura-Glide Door Systems--New and Retrofit Applications)**

#### **NOTE**

If the door system is a Double Diamond package, go to Section 7 and perform visual sensor system programming instructions.

- 5.1.1 Using the supplied mounting template, **MARK** the visual sensor (VS) mounting location as follows:
  - At the center of the clear door opening.
  - 2 <sup>7</sup>/<sub>8</sub>" from the bottom of the header/header cover to the bottom of the sensor.
- 5.1.2 **MARK** the location of the RJ-45 cable access hole and two sensor mounting holes.
- 5.1.3 **DRILL** the <sup>3</sup>/<sub>4</sub>" RJ-45 cable access hole through the header/header cover at the marked location.
- 5.1.4 **REMOVE** the mounting template.
- 5.1.5 **ROUTE** the RJ-45 cable through the VS cable access hole.
- 5.1.6 **CONNECT** the RJ-45 cable to the VS.
- 5.1.7 Using the two self-tapping 10-16 x <sup>3</sup>/<sub>4</sub>" screws provided, **FASTEN** the VS to the header/header cover.
- 5.1.8 **REPEAT** Section 5.1 for the opposite VS.

### 5.2 **Installing the Visual Sensor Controller (Retrofit Applications Only)**

#### **NOTE**

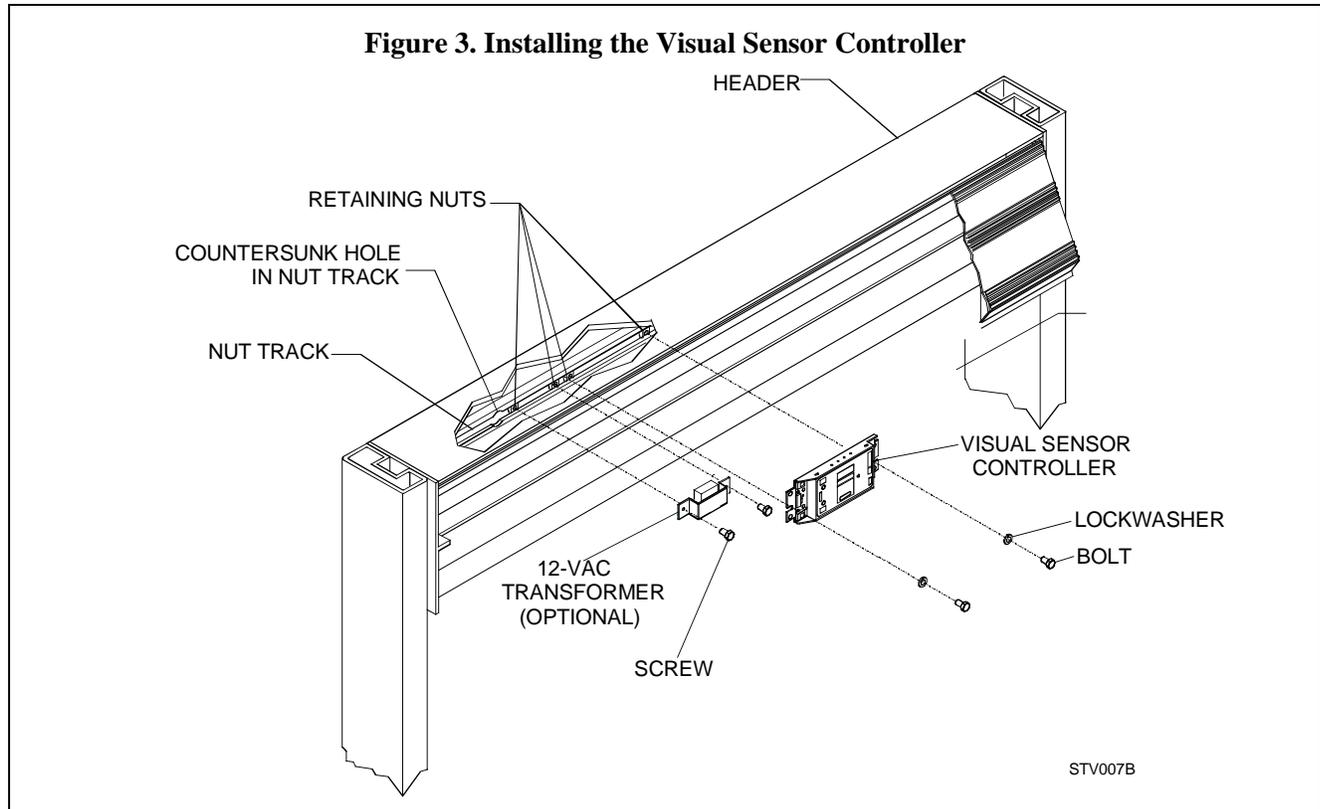
On a new door installation, the VSC is preinstalled and wired. However, the wiring harness from the VSs to the VSC must be connected. If the package is a new door installation, go to Section 5.3 and perform wiring instructions.

- 5.2.1 Inside the header, **SLIDE** the interface board and control box away from the motor/encoder assembly to allow room for the VSC.
- 5.2.2 **REMOVE** the two screws securing the two-channel encoder to the motor.
- 5.2.3 **DISCONNECT** the encoder cable from the Dura-Glide microprocessor control box, and **REMOVE** the encoder.
- 5.2.4 **FASTEN** the four-channel encoder to the motor using the two screws removed previously.

### NOTE

A countersink-cutting tool (P/N CK-3/4-45 Manufactured by Severance Tools or equivalent) permits installation of the VSC retaining nuts in the nut track without removing the header end caps.

- 5.2.5 Refer to Figure 3, and, using a countersink-cutting tool, CUT access hole into nut track to permit installation of VSC and optional 12-VAC transformer retaining nuts.



- 5.2.6 **INSTALL** two VSC retaining nuts into the header nut track near the motor encoder.
- 5.2.7 **IF** the security option is required, install two 12-VAC transformer retaining nuts into the header nut track near the VSC.
- 5.2.8 **POSITION** the VSC in the header between the motor and the controller, and **ENSURE** the VSC is close enough to reach the encoder cable.
- 5.2.9 Using the bolts and lockwashers provided, **FASTEN** the VSC to the retaining nuts in the header nut track.

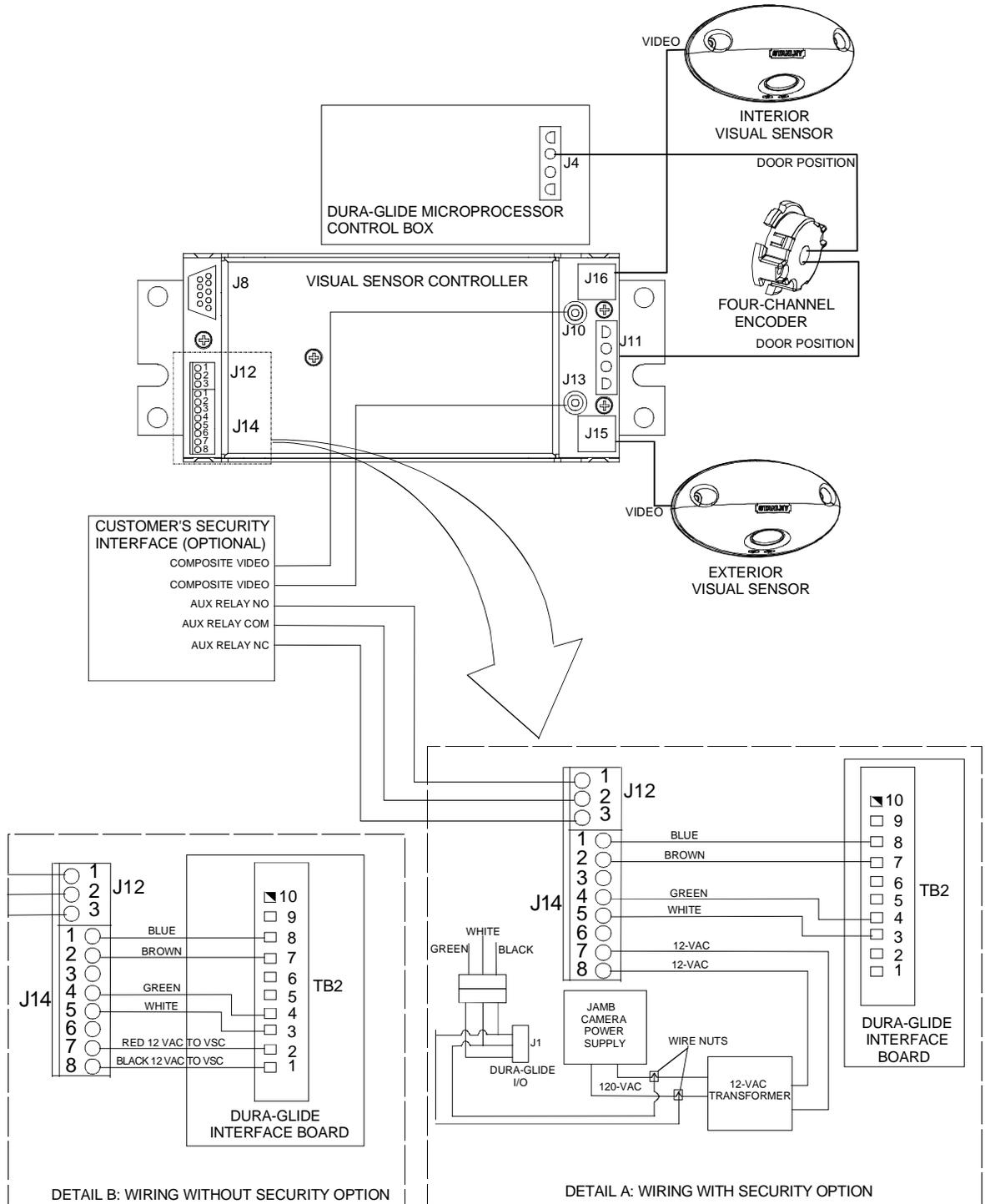
### 5.3 Installing the 12-VAC Transformer (Security Option Applications Only)

- 5.3.1 **POSITION** the 12-VAC transformer in the header next to the VSC.
- 5.3.2 Using the screws provided, **FASTEN** the 12-VAC transformer to the retaining nuts in the header nut track.

## 5.4 Wiring the StanVision Assembly

5.4.1 Refer to Figure 4, and CONNECT the first encoder cable to Dura-Glide microprocessor control box connector J4.

**Figure 4. StanVision Sensor Assembly Wiring Diagram**



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- 5.4.2 CONNECT the second encoder cable to VSC connector J11.
- 5.4.3 CONNECT the cable from the interior VS to VSC connector J16.
- 5.4.4 CONNECT the cable from the exterior VS to VSC connector J15.

**NOTE**

The StanVision security option provides a 12-VAC transformer that supplies power to the StanVision. This transformer accepts the incoming power to the header and bypasses the Dura Glide power switch.

- 5.4.5 IF the StanVision security option is installed, CONNECT the 12-VAC transformer as follows:
  - CONNECT one wire of the 12-VAC transformer to VSC connector J14 terminal 8.
  - CONNECT the second wire of the 12-VAC transformer to VSC connector J14 terminal 7.
- 5.4.6 CONNECT the 12 VAC from the Dura-Glide interface board as follows:
  - CONNECT terminal block TB2 terminal 1 to VSC connector J14 terminal 8.
  - CONNECT terminal block TB2 terminal 2 to VSC connector J14 terminal 7.
- 5.4.7 CONNECT the interior sensor signals as follows:
  - Terminal block TB2 terminal 3 to VSC connector J14 terminal 5
  - Terminal block TB2 terminal 4 to VSC connector J14 terminal 4
- 5.4.8 CONNECT exterior sensor signals as follows:
  - Terminal block TB2 terminal 7 to VSC connector J14 terminal 2
  - Terminal block TB2 terminal 8 to VSC connector J14 terminal 1
- 5.4.9 IF applicable, CONNECT customer video monitors to VSC as follows:
  - CONNECT No. 1 video monitor to VSC connector J10.
  - CONNECT No. 2 video monitor to VSC connector J13.
- 5.4.10 ENSURE all cables are secured to the header and header cover, and they do *not* interfere with the belt or other moving parts.

## 6. PROGRAMMING THE VIDEO SENSING SYSTEM (ALL DURA-GLIDE APPLICATIONS EXCEPT DOUBLE DIAMOND)

### 6.1 **Preparing the Door for Programming**

- 6.1.1 REMOVE connector J14 from all VSCs.
- 6.1.2 SET the door function switch to "CLOSE."
- 6.1.3 SET the door "POWER" switch to "ON."

### **WARNING**

Ensure pedestrians and objects are not in the door path when performing the following checks. Failure to do so can result in injury.

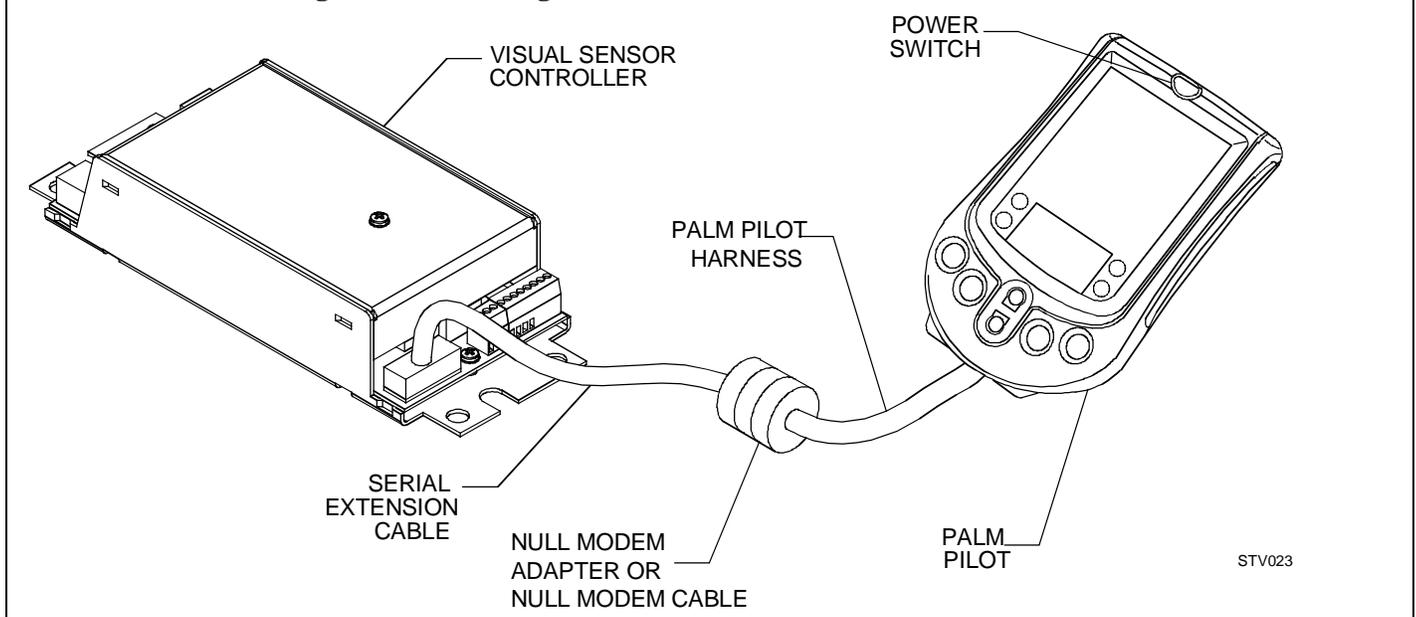
- 6.1.4 Refer to Stanley Access Technologies Document No. 203728, "Dura-Glide 2000-, 3000-, and 5000-Series; Dura-Guard 2000- and 3000-Series; Dura-Storm 3000-Series; and Diamond Series 2000-and 3000-Series Microprocessor Control Box Quick Reference Guide" and PERFORM the following:
  - ADJUST the open speed, close speed, check speed and check size. To open and close the doors, use the door function switch "HOLD OPEN" and "CLOSE" settings.

- 6.1.5 SET the door function switch to "HOLD OPEN."
- 6.1.6 INSTALL connector J14 onto all VSCs.

### 6.2 **Connecting the Palm Pilot to the VSC**

- 6.2.1 ENSURE the Palm Pilot power is off.
- 6.2.2 Refer to Figure 5, and CONNECT the serial extension cable to VSC connector J8.
- 6.2.3 CONNECT the other side of the serial extension cable to the null modem adapter/cable.

**Figure 5. Connecting the Palm Pilot to the Visual Sensor Controller**

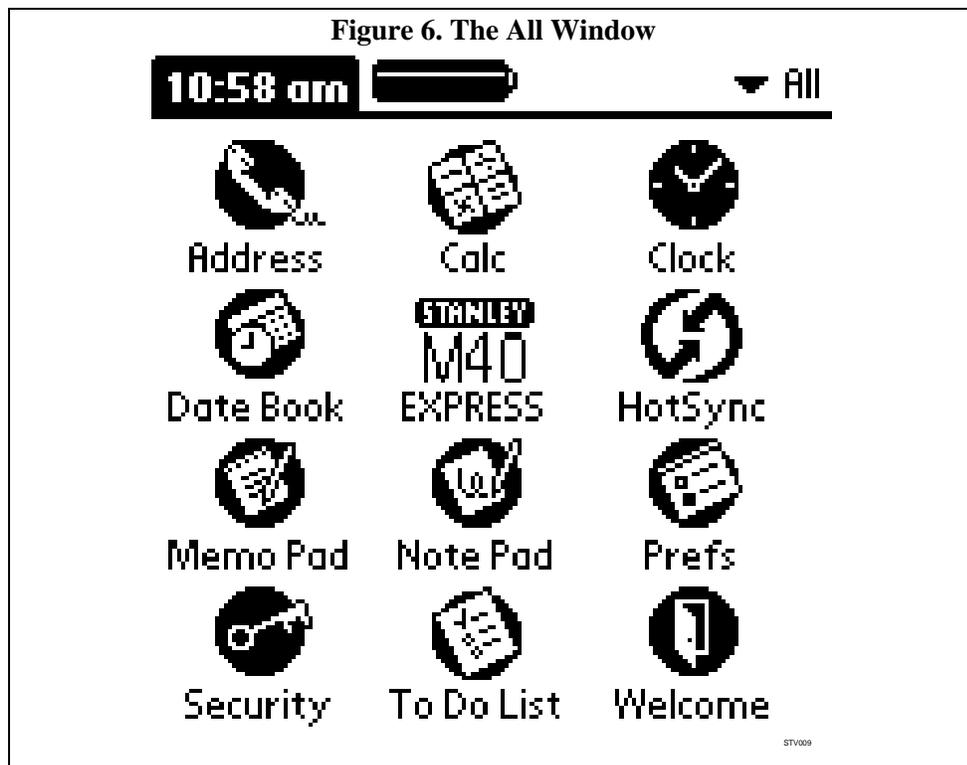


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- 6.2.4 CONNECT the null modem adapter/cable to the Palm Pilot Hot Synch cable.
- 6.2.5 CONNECT the Palm Pilot to the Hot Synch cable.
- 6.2.6 ENSURE all connectors are secure.
- 6.2.7 ENSURE cables are clear of door panels, motor/gearboxes, belts, and all moving parts.
- 6.2.8 CLOSE header access cover.
- 6.2.9 SET the door function switch to “AUTO.”

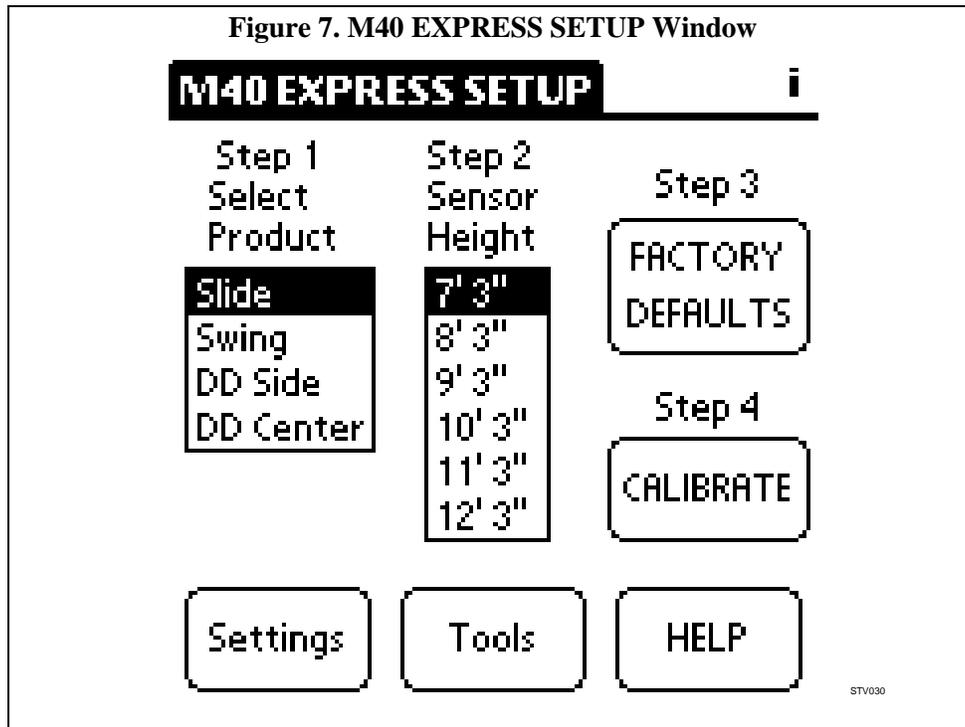
### 6.3 Launching M40 EXPRESS Icon

- 6.3.1 PRESS the Palm Pilot power switch to turn power on.
- 6.3.2 TAP the Palm Pilot stylus on the **Home** icon.
- 6.3.3 TAP the applications launcher button (▼) and CHOOSE All. The All window (Figure 6) shall be displayed. If the M40 EXPRESS icon is not displayed on the All window, refer to Attachment 2 and LOAD the Palm Pilot software.



- 6.3.4 TAP the **STANLEY M40 EXPRESS** icon. The M40 EXPRESS SETUP window (Figure 7) shall be displayed.

Figure 7. M40 EXPRESS SETUP Window



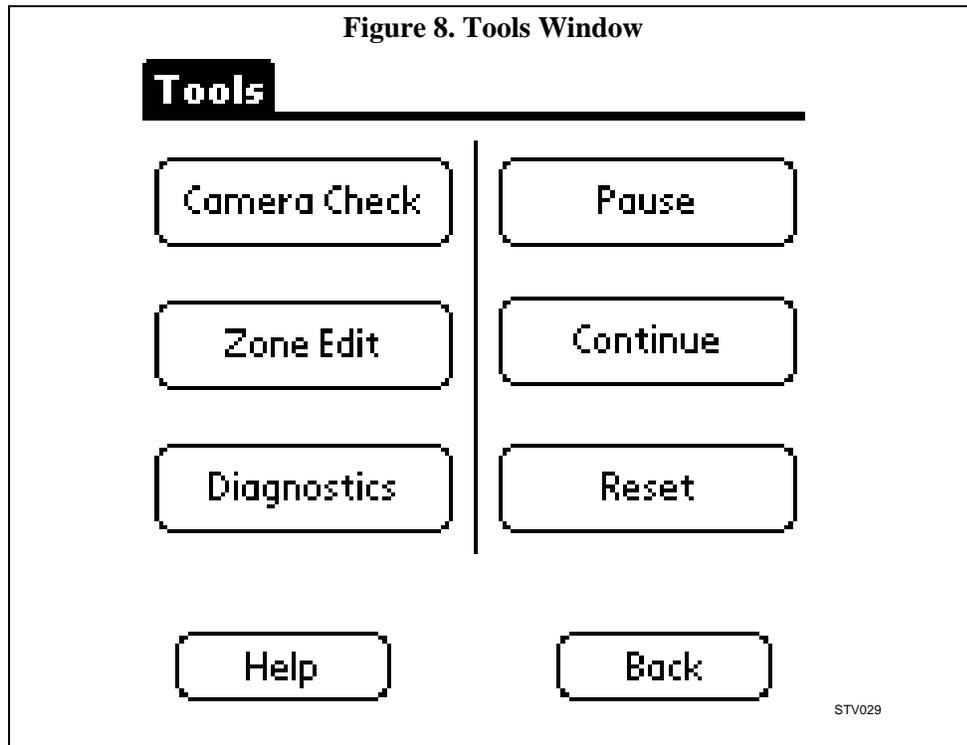
#### 6.4 Programming the StanVision

##### NOTE

For Dura-Glide packages requiring two StanVision systems, one VSC must be placed in "pause" while tuning the other system.

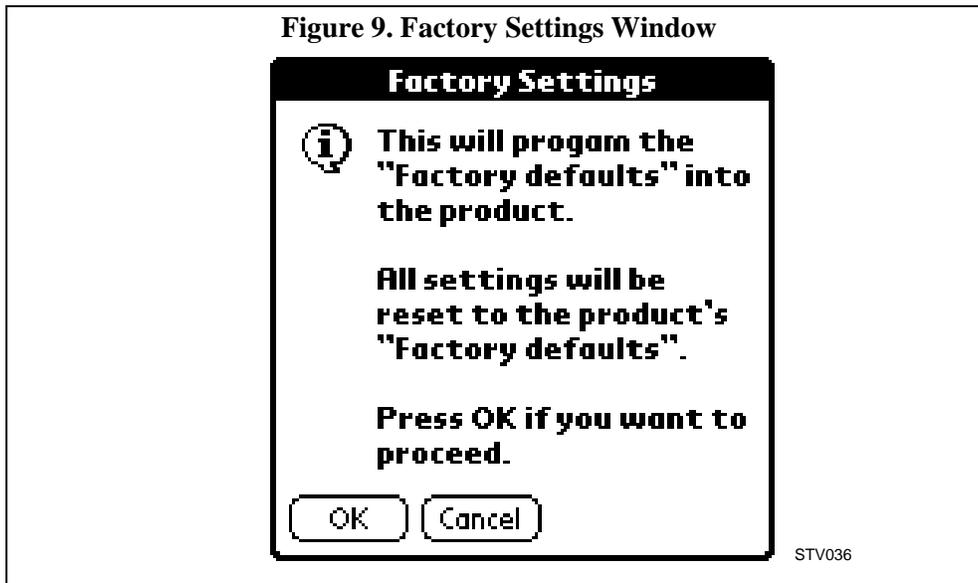
- 6.4.1 **I**F the application is a Dura-Glide package with more than one StanVision system, **PERFORM** the following:
- On the M40 EXPRESS SETUP window (Figure 7), TAP the **Tools** button. The Tools window (Figure 8) shall be displayed.

Figure 8. Tools Window



- b. TAP the **Pause** button. The door pause window shall appear momentarily and then revert to the Tools window. Both LEDs on the paused VSs shall blink quickly.
- 6.4.2 DISCONNECT the serial cable from the VSC and CONNECT it to the other VSC in the system
- 6.4.3 Below the **Select Product** display cue, SELECT the desired product as follows:
- IF the application is a Dura-Glide package, TAP the **Slide** button, and PROCEED with the instructions in this section.
  - IF the application is a Besam swing door package, TAP the **Swing** button and go to applicable Besam instruction manual.
  - IF the application is a Double Diamond package with pedestrian detection (side sensor), TAP the **DD Side** button and go to Section 7.
  - IF the application is a Double Diamond package with size recognition (center sensor), TAP the **DD Center** button and go to Section 7.
- 6.4.4 Below the **Sensor Height** display cue, TAP the button for the sensor height closest to your application.
- 6.4.5 TAP the **FACTORY DEFAULTS** button. The Factory Settings window (Figure 9) shall be displayed.

Figure 9. Factory Settings Window



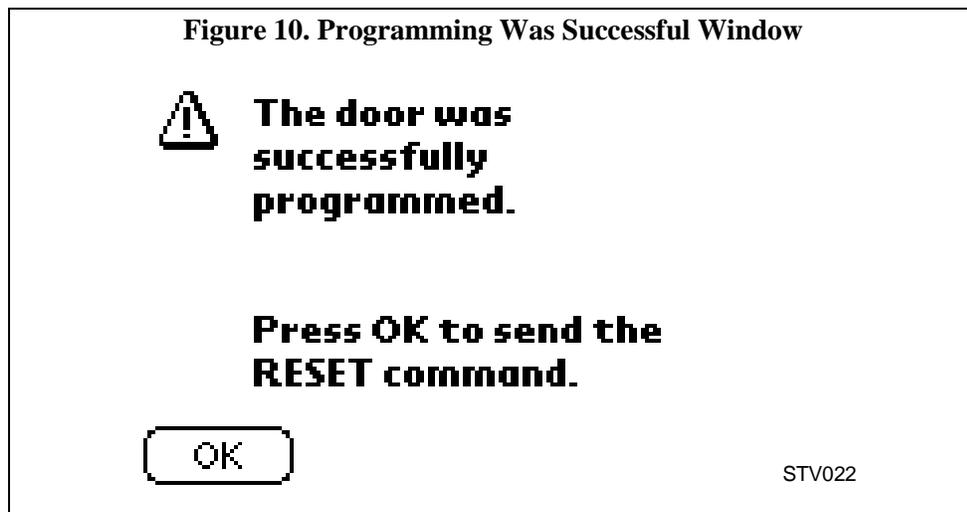
**NOTE**

Throughout sensor programming the system checks to see if the CTOOL cable is connected to the VSC. Whenever the system senses that the cable is not connected, the "CONNECT CABLE" message shall be displayed.

6.4.6 TAP the **OK** button. The following shall occur:

- The factory default settings shall be programmed into the VSC.
- The Door Programming window shall appear momentarily.
- The system shall automatically program the sensor. The "CONNECT CABLE" message shall appear momentarily as the system verifies the connection.
- IF the Palm Pilot cable assembly is *not* connected to the VSC, the "CONNECT CABLE" message shall remain on the screen.
- When programming has completed, the system shall display the Programming Was Successful window (Figure 10).

Figure 10. Programming Was Successful Window

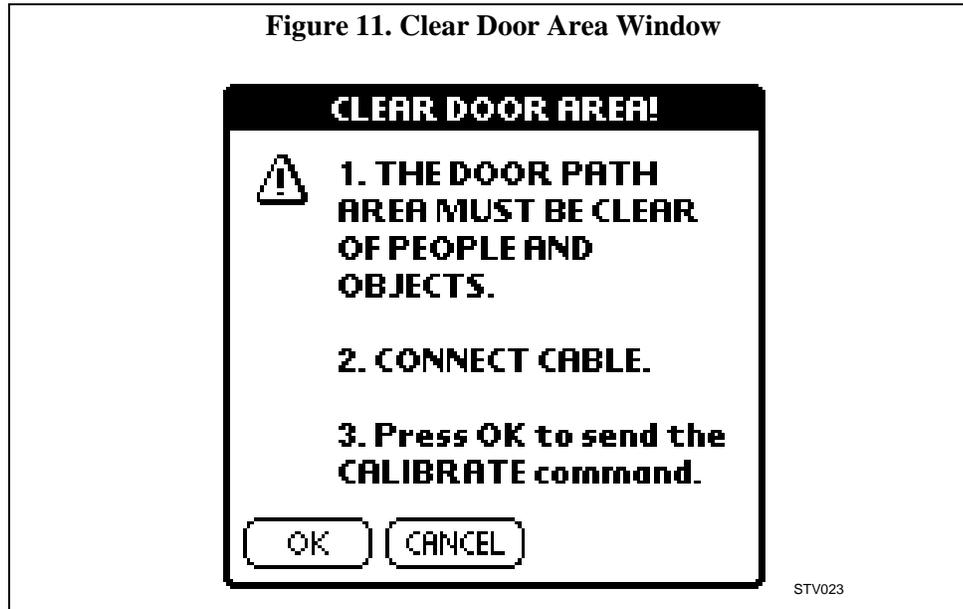


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- 6.4.7 TAP the **OK** button. The following shall occur:
- The reset command shall be sent, and the M40 EXPRESS SETUP window (Figure 7) shall be displayed.
  - The door shall fully open, stay open for 4 seconds, and then “step” closed. The doors may continue to cycle until the calibration is complete.

## 6.5 Calibrating the StanVision System

- 6.5.1 On the M40 EXPRESS SETUP window (Figure 7), TAP the **CALIBRATE** button. The Clear Door Area window (Figure 11) shall be displayed.



### **WARNING**

During sensor calibration, the door will close and ignore any person or object in the door path. To prevent injury to personnel, ensure the door area is clear of all persons and objects before calibrating the sensor.

- 6.5.2 ENSURE that the door area is clear of all persons and objects and that the Palm Pilot is properly connected to the VSC.
- 6.5.3 TAP the **OK** button. The following shall occur:
- The system shall automatically calibrate the sensor, and the Calibration window shall appear momentarily.
  - The door shall go from closed to open and back to close.
  - When calibration is complete the M40 EXPRESS SETUP window (Figure 7) shall be displayed.
- 6.5.4 ALLOW the door to complete its cycle before continuing to the next step.
- 6.5.5 IF the application is a Dura-Glide package with more than one StanVision system, PERFORM the following:
- a. On the M40 EXPRESS SETUP window (Figure 7) TAP the **Tools** button. The Tools window (Figure 8) shall be displayed.

- b. TAP the **Pause** button. The door pause window shall appear momentarily and then revert to the Tools window. Both LEDs on the paused VSs shall blink quickly.
- c. DISCONNECT the serial cable from the VSC.
- d. CONNECT the serial cable to the other VSC.
- e. On the M40 EXPRESS SETUP window (Figure 7) TAP the **Tools** button. The Tools window (Figure 8) shall be displayed.
- f. TAP the **Continue** button. The system pause mode shall be deactivated.
- g. REPEAT Sections 6.4 and 6.5 for the second VSC.
- h. ENSURE all VSCs are out of pause mode before testing the system.

6.5.6 IF necessary, go to Section 8 and VERIFY or CHANGE VS or VSC settings.

## 7. PROGRAMMING THE VIDEO SENSING SYSTEM (DOUBLE DIAMOND APPLICATIONS ONLY)

### NOTE

1. These calibration instructions apply to Double Diamond door packages only. The instructions assume that calibration is performed from the interior side of the door package. References to the VSCs assume that VSC No. 1 is on the left, VSC No. 2 is in the center, and VSC No. 3 is on the right.
2. When calibrating each VSC, the other two VSCs must be placed in pause mode so they will not be active. Make sure that power remains applied to the VSCs during the entire calibration process. If power goes off, pause mode is cancelled and the VSC becomes active.

### 7.1 **Preparing the Door for Programming**

- 7.1.1 REMOVE the J14 connector from each VSC.
- 7.1.2 REMOVE the J12 connector from VSC No. 2 (center forklift VSC).
- 7.1.3 SET the door function switch to "CLOSED."
- 7.1.4 SET the "POWER" switch to "ON."
- 7.1.5 SET the door function switch to "AUTO."

### WARNING

To prevent injury to personnel, ensure the door area is clear of all persons and objects before proceeding.

- 7.1.6 Refer to Stanley Access Technologies Document No. 203728, "Dura-Glide 2000-, 3000-, and 5000-Series; Dura-Guard 2000- and 3000-Series; Dura-Storm 3000-Series; and Diamond Series 2000-and 3000-Series Microprocessor Control Box Quick Reference Guide" and PERFORM the following:
  - ADJUST the open speed, close speed, check speed and check size. To open and close the doors, use the door function switch "HOLD OPEN" and "CLOSE" settings.
- 7.1.7 SET the "POWER" switch to "OFF."
- 7.1.8 INSTALL connector J14 into all VSCs. ALLOW connector J12 on VSC No. 2 to remain removed.
- 7.1.9 For rear door application only, CONNECT the red rotary switch wire to TB1 terminal 7.
- 7.1.10 CLOSE and SECURE header cover.

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## 7.2 Connecting the Palm Pilot to the VSC

- 7.2.1 ENSURE the Palm Pilot power is off.
- 7.2.2 CONNECT the Palm Pilot serial extension cable and null modem adapter/cable to the **VSC No. 1** port on the rotary switch box.
- 7.2.3 CONNECT the Palm Hot Synch cable to the null modem adapter/cable.
- 7.2.4 ENSURE the door function switch is set to "AUTO."
- 7.2.5 SET the door "POWER" switch to "ON."

## 7.3 Programming the StanVision

- 7.3.1 IF this is *not* the initial setup go to Section 8, and VERIFY or CHANGE VS or VSC settings as necessary.
- 7.3.2 PRESS the Palm Pilot power switch to turn power on.

### NOTE

Throughout sensor programming the system checks to see if the CTOOL cable is connected to the VSC. Whenever the system senses that the cable is not connected, the "CONNECT CABLE" message shall be displayed.

- 7.3.3 TAP the Palm Pilot stylus on the **Home** icon.
- 7.3.4 TAP the applications launcher button (▼) and CHOOSE **All**. The All window (Figure 6) shall be displayed. If the M40 EXPRESS icon is not displayed on the All window, refer to Attachment 2 and LOAD the Palm Pilot software.
- 7.3.5 SET VSC No. 1 and VSC No. 2 to pause mode (to program VSC No. 3) as follows:
  - a. TAP the Stanley M40 EXPRESS icon. The M40 EXPRESS SETUP window (Figure 7) shall be displayed.
  - b. TAP the Tools button. The Tools window (Figure 8) shall be displayed.
  - c. TAP the **Pause** button. The following shall occur:
    - The Door Pause window shall appear momentarily and then revert to the Tools window (Figure 8).
    - Both LEDs on the VSs connected to VSC No. 1 shall blink quickly.
  - d. DISCONNECT the Palm Pilot serial extension cable from the **VSC No. 1** port on the rotary switch box.
  - e. CONNECT the Palm Pilot serial extension cable to the **VSC No. 2** port on the rotary switch box.
  - f. TAP the **Pause** button. The following shall occur:
    - The Door Pause window shall appear momentarily and then revert to the Tools window.
    - Both LEDs on the VSs connected to VSC No. 2 shall blink fast.
- 7.3.6 PROGRAM VSC No. 3 as follows:
  - a. DISCONNECT the Palm Pilot serial extension cable from the **VSC No. 2** port on the rotary switch box.

- b. CONNECT the Palm Pilot serial extension cable to the **VSC No. 3** port on the rotary switch box.
- c. TAP the **Back** button. The M40 EXPRESS SETUP window (Figure 7) shall be displayed.
- d. Below the **Select Product** display cue, TAP the **DD Side** button.
- e. Below the **Sensor Height** display cue, TAP the button for the sensor height closest to your application.
- f. TAP the **FACTORY DEFAULTS** button. The Factory Settings window (Figure 9) shall be displayed.
- g. TAP the **OK** button. The following shall occur:
  - The factory default settings shall be programmed into VSC No. 3.
  - The Door Programming window shall appear momentarily.
  - The system shall automatically program the sensor. You will see the “CONNECT CABLE” message for a brief moment as the system verifies the connection.
  - IF the Palm Pilot cable assembly is not connected to the VSC, the “CONNECT CABLE” message shall flash.
  - When programming has completed, the system shall display the Programming Was Successful window (Figure 10).
- h. TAP the **OK** button. The following shall occur:
  - The reset command shall automatically be sent, and the M40 EXPRESS SETUP window (Figure 7) shall be displayed.
  - The door shall fully open, stay open for 4 seconds, and then “step” closed several times. When a door “steps” closed, it begins to close and reopen prior to reaching the full closed position.
- i. TAP the **Calibrate** button. The Clear Door Area window (Figure 11) shall be displayed.

#### **WARNING**

During sensor calibration, the door will close and ignore any person or object in the door path. To prevent injury to personnel, ensure the door area is clear of all persons and objects before calibrating the sensor.

- j. ENSURE that the door area is clear of all persons and objects and that the Palm Pilot is properly connected to the VSC via the port in the rotary switch box.
  - k. TAP the **OK** button. The following shall occur:
    - The system shall automatically calibrate the sensor, and the Calibration window shall appear momentarily.
    - The door shall go from closed to open and back to closed. It will then open a second time and remain open for 4 seconds until it begins to again “step” closed.
    - When calibration is complete the M40 EXPRESS SETUP window (Figure 7) shall be displayed.
- 7.3.7 SET VSC No. 3 to pause mode (to program VSC No. 1) as follows:
- a. TAP the **Tools** button. The Tools window (Figure 8) shall be displayed.

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- b. TAP the **Pause** button. The following shall occur:
  - The Door Pause window shall appear momentarily and then revert to the Tools window.
  - Both LEDs on the VSs connected to VSC No. 3 shall blink quickly.
- c. DISCONNECT the Palm Pilot serial extension cable from the **VSC No. 3** port on the rotary switch box.

7.3.8 PROGRAM VSC No 1 as follows:

- a. CONNECT the Palm Pilot serial extension cable to the **VSC No. 1** port on the rotary switch box.
- b. TAP the **Continue** button. The following shall occur:
  - The Door Continue window shall appear momentarily and then revert to the Tools window.
  - Both LEDs on the VSs connected to VSC No. 1 shall stop blinking.
- c. TAP the **Back** button. The M40 EXPRESS SETUP window (Figure 7) shall be displayed.
- d. Below the **Select Product** display cue, TAP the **DD Side** button.
- e. Below the **Sensor Height** display cue, TAP the button for the sensor height closest to your application.
- f. TAP the **FACTORY DEFAULTS** button. The Factory Settings window (Figure 9) shall be displayed.
- g. TAP the **OK** button. The following shall occur:
  - The factory default settings shall be programmed into VSC No. 1.
  - The Door Programming window shall appear momentarily.
  - The system shall automatically program the sensor.
  - IF the Palm Pilot cable assembly is not connected to the VSC, the “CONNECT CABLE” message shall flash.
  - When programming has completed, the system shall display the Programming Was Successful window (Figure 10).
- h. TAP the **OK** button. The following shall occur:
  - The reset command shall be sent, and the M40 EXPRESS SETUP window (Figure 7) shall be displayed.
  - The door shall fully open, stay open for 4 seconds, and then “step” closed.
- i. TAP the **Calibrate** button. The Clear Door Area window (Figure 11) shall be displayed.
- j. ENSURE that the door area is clear of all persons and objects and that the Palm Pilot is properly connected to the VSC via the port in the rotary switch box.
- k. TAP the **OK** button. The following shall occur:
  - The system shall automatically calibrate the sensor, and the Calibration window shall appear momentarily.
  - The door shall go from closed to open and back to closed.

- When calibration is complete the M40 EXPRESS SETUP window (Figure 7) shall be displayed.
- 7.3.9 SET VSC No. 1 to pause mode (to program VSC No. 2) as follows:
- a. TAP the **Tools** button. The Tools window (Figure 8) shall be displayed.
  - b. TAP the **Pause** button. The following shall occur:
    - The Door Pause window shall appear momentarily and then revert to the Tools window.
    - Both LEDs on the VSs connected to VSC No. 1 shall blink fast.
  - c. DISCONNECT the Palm Pilot serial extension cable from the **VSC No. 1** port on the rotary switch box.
- 7.3.10 PROGRAM VSC No 2 as follows:
- a. CONNECT the Palm Pilot serial extension cable to the **VSC No. 2** port on the rotary switch box.
  - b. TAP the **Continue** button. The following shall occur:
    - The Door Continue window shall appear momentarily and then revert to the Tools window.
    - Both LEDs on the VSs connected to VSC No. 2 shall stop blinking.
  - c. TAP the **Back** button. The M40 EXPRESS SETUP window (Figure 7) shall be displayed.
  - d. Below the **Select Product** display cue, TAP the **DD Center** button.
  - e. Below the **Sensor Height** display cue, TAP the button for the sensor height closest to your application.
  - f. TAP the **FACTORY DEFAULTS** button. The Factory Settings window (Figure 9) shall be displayed.
  - g. TAP the **OK** button. The following shall occur:
    - The factory default settings shall be programmed into VSC No. 2.
    - The Door Programming window shall appear momentarily.
    - The system shall automatically program the sensor.
    - IF the Palm Pilot cable assembly is not connected to the VSC, the “CONNECT CABLE” message shall flash.
    - When programming has completed, the system shall display the Programming Was Successful window (Figure 10).
  - h. TAP the **OK** button. The following shall occur:
    - The reset command shall be sent, and the M40 EXPRESS SETUP window (Figure 7) shall be displayed.
  - i. The door shall fully open, stay open for 4 seconds, and then “step” closed.
  - j. TAP the **Calibrate** button. The Clear Door Area window (Figure 11) shall be displayed.
  - k. ENSURE that the door area is clear of all persons and objects and that the Palm Pilot is properly connected to the VSC.

- l. TAP the **OK** button. The following shall occur:
  - The system shall automatically calibrate the sensor, and the Calibration window shall appear momentarily.
  - The door shall go from closed to open and back to closed.
  - When calibration is complete the M40 EXPRESS SETUP window (Figure 7) shall be displayed.
- m. VERIFY the operation of VSC No. 2 as follows:
  - 1) PERFORM a walk test on the door, and ENSURE that a person walking in the sensor zone does *not* cause the doors to open.
  - 2) PERFORM a forklift drive-by test on the door, and ENSURE that the forklift motion causes the doors to open.
  - 3) IF operation is *not* as specified, refer to Section 8 and ADJUST sensors as necessary.

7.3.11 ACTIVATE all sensors as follows:

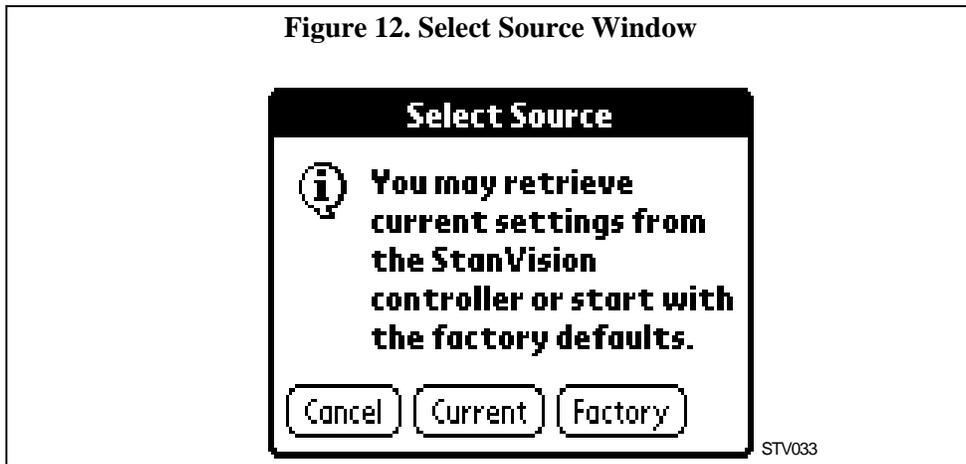
- a. DISCONNECT the Palm Pilot serial extension cable from the **VSC No. 2** port on the rotary switch box.
- b. CONNECT the Palm Pilot serial extension cable to the **VSC No. 1** port on the rotary switch box.
- c. On the M40 EXPRESS SETUP window (Figure 7), TAP the **Tools** button. The Tools window (Figure 8) shall be displayed.
- d. TAP the **Continue** button. The following shall occur:
  - The Door Continue window shall appear momentarily and then revert to the Tools window.
  - Both LEDs on the VSs connected to VSC No. 1 shall stop blinking.
- e. DISCONNECT the Palm Pilot serial extension cable from the **VSC No. 1** port on the rotary switch box.
- f. CONNECT the Palm Pilot serial extension cable to the **VSC No. 3** port on the rotary switch box.
- g. On the M40 EXPRESS SETUP window (Figure 7), TAP the **Tools** button. The Tools window (Figure 8) shall be displayed.
- h. TAP the **Continue** button. The following shall occur:
  - The Door Continue window shall appear momentarily and then revert to the Tools window.
  - Both LEDs on the VSs connected to VSC No. 3 shall stop blinking.

8. VERIFYING OR CHANGING VS OR VSC SETTINGS (ALL DURA-GLIDE AND DOUBLE DIAMOND APPLICATIONS)

8.1 **Verifying VS or VSC Settings**

- 8.1.1 On the M40 EXPRESS SETUP window (Figure 7), TAP the **Settings** button. The Select Source window (Figure 12) shall be displayed.

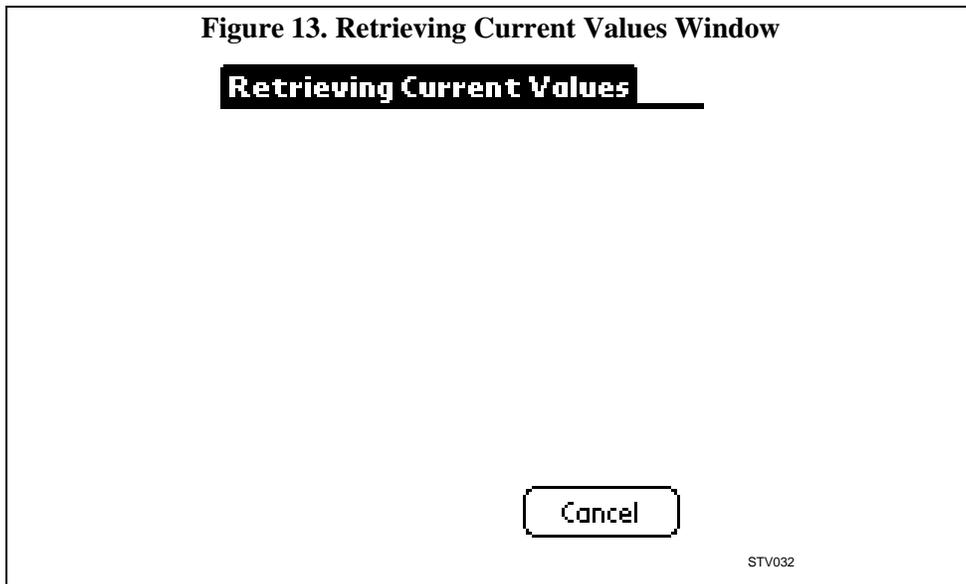
Figure 12. Select Source Window



8.1.2 IF you wish to see the current VSC values, TAP the **Current** button. The following shall occur:

- The Retrieving Current Values window (Figure 13) shall be displayed.

Figure 13. Retrieving Current Values Window



- When the system has retrieved the current values, the Advanced Settings window (Figure 14) shall be displayed.

8.1.3 IF you wish to access the factory default values, TAP the **Factory** button on the Select Source window. The following shall occur:

- If the VSC controls swing or slide sensors except Double Diamond center sensors, the Advanced Settings window (Figure 14) shall be displayed.
- If the VSC controls Double Diamond center sensors, the Advanced Settings window (Figure 15) shall be displayed.

**Figure 14. Advanced Settings Window (Applicable On All Swing and Slide Sensors Except Double Diamond Center Sensors)**

**Advanced Settings**

Relay Hold Time ?

Aux Relay Mode ?

Directional Motion Sensor ?

Safety Retune Time ?

Motion Sensitivity Adjust ?

Cancel Program Door

STV025\_1

**Figure 15. Advanced Settings Window (Applicable On Double Diamond Center Sensors Only)**

**Advanced Settings**

Relay Hold Time ?

Aux Relay Mode ?

Directional Motion Sensor ?

Safety Retune Time ?

Object Size Adjust ?

Cancel Program Door

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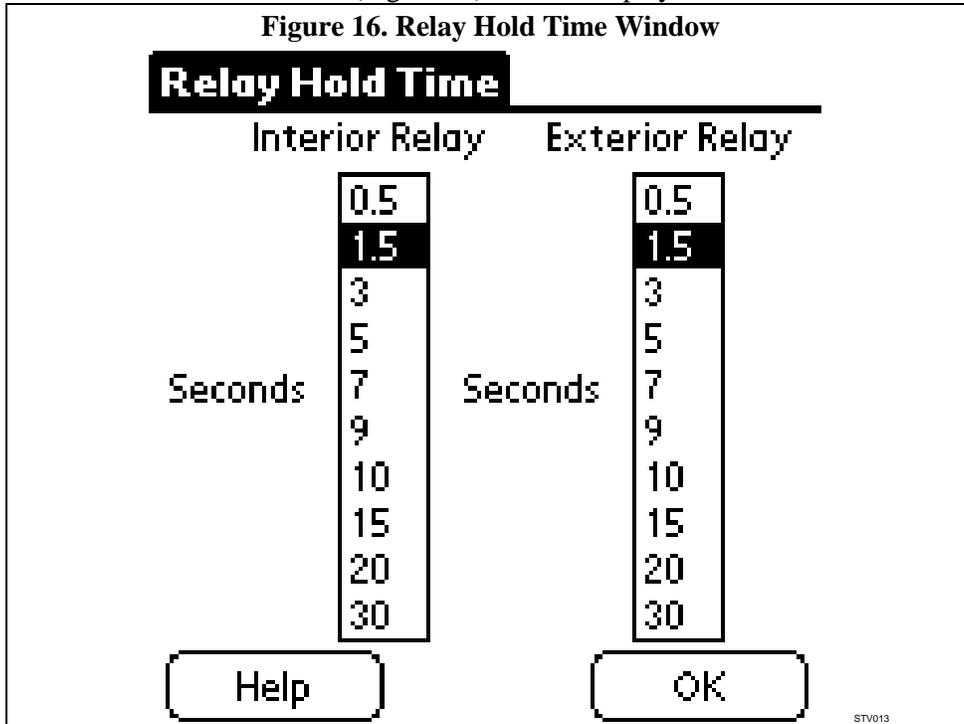
### NOTE

The complete set of factory default values can be accepted by pressing the **Program Door** button on the Advanced Settings window. Or, each individual value can be verified and changed before pressing the **Program Door** button. The following steps describe how to access and change each of the factory default values.

## 8.2 Changing Individual Settings

8.2.1 To change the relay hold time, PERFORM the following:

- a. TAP the **Relay Hold Time** button in the Advance Settings Window. The Relay Hold Time window (Figure 16) shall be displayed.

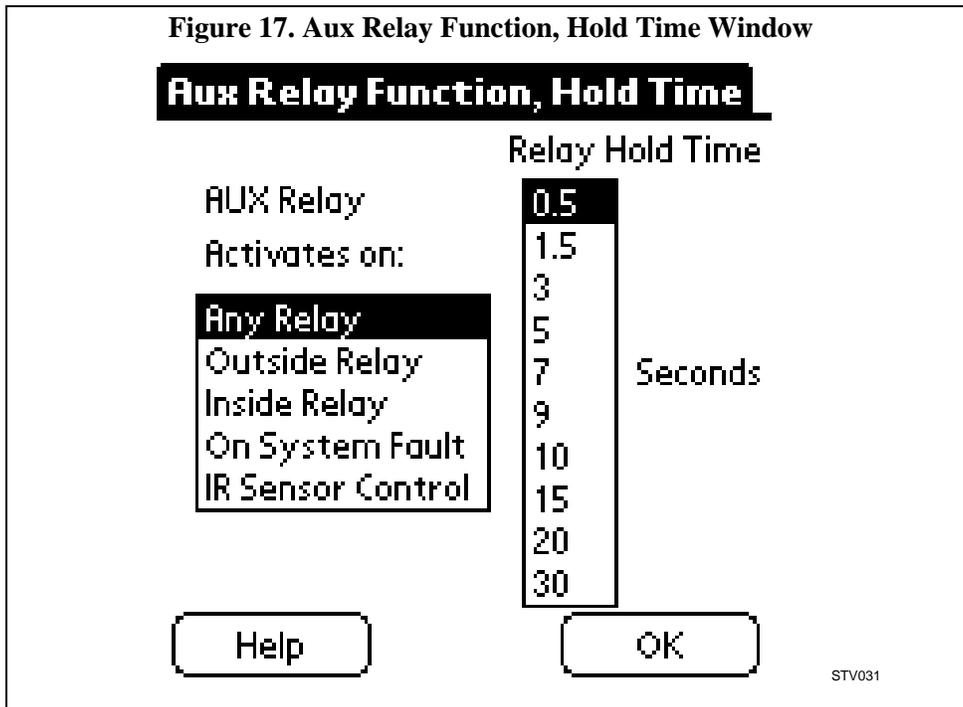


- b. TAP the desired relay hold time for the interior and exterior sensor relays.
- c. TAP the **OK** button. The Advanced Settings window (Figure 14 or 15) shall be displayed.

8.2.2 To change the auxiliary relay mode, PERFORM the following:

- a. TAP the **Aux Relay Mode** button in the Advance Settings Window. The Aux Relay Function, Hold Time window (Figure 17) shall be displayed.

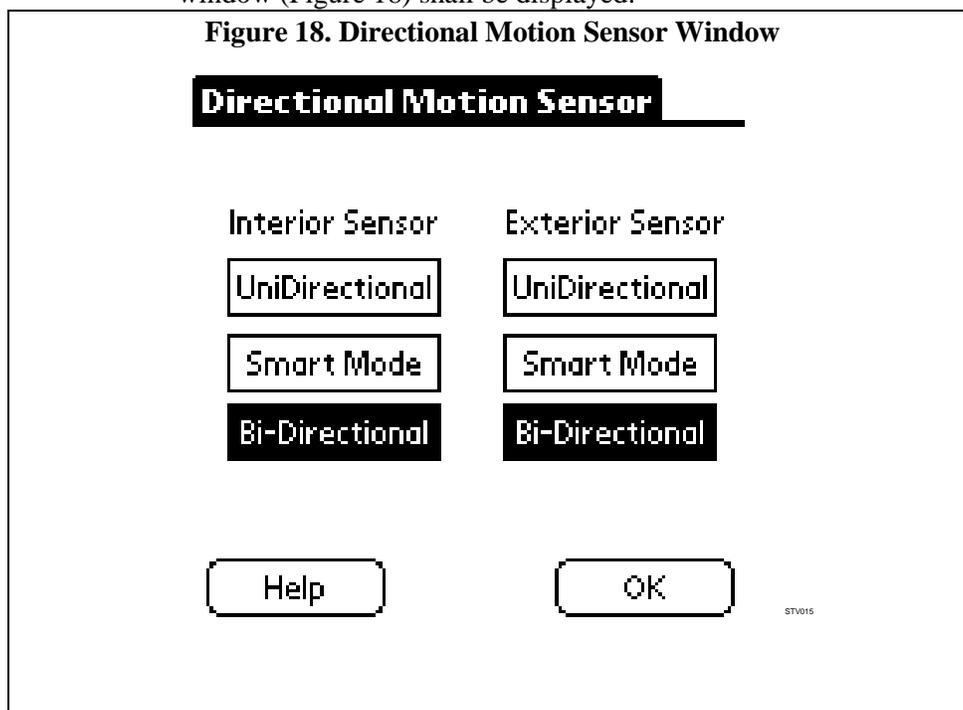
Figure 17. Aux Relay Function, Hold Time Window



- b. TAP the option corresponding to the desired aux relay activation method. The activation selections include the following:
  - Any Relay: The aux relay will activate when interior and/or exterior sensor detects or system fault.
  - Outside Relay: The aux relay will activate only when detection occurs on sensor connected to VSC connector J15.
  - Inside Relay: The aux relay will activate only when detection occurs on sensor connected to VSC connector J16.
  - On System Fault: The aux relay will activate when system fault occurs (for example, loss of camera signal)
  - IR sensor control: Used on special applications
- c. TAP the desired aux relay hold time.
- d. TAP the **OK** button. The Advanced Settings window (Figure 14 or 15) shall be displayed.

- 8.2.3 To change the **directional motion sensor mode**, PERFORM the following:
- TAP the **Directional Motion Sensor** button. The Directional Motion Sensor window (Figure 18) shall be displayed.

**Figure 18. Directional Motion Sensor Window**



**NOTE**

The Directional Motion Sensor window allows you to select bidirectional, unidirectional, or smart mode operation.

- In bidirectional operation, any motion or presence detected in the motion or safety zone while the door is closed will cause the door to open. Any detection in the zone defined as motion or safety while the door is open, opening, or closing will cause the door to open or remain open.
- In unidirectional operation, the door will open only if the pedestrian is moving *toward* the sensor—the door will not open if the pedestrian is walking *parallel to* or *away from* the sensor. Any detection while the door is open, opening, or closing will cause the door to open, but only if the object is moving toward the sensor. (It will ignore an object moving *away* from the sensor.)
- In smart mode operation, the door will open only if the pedestrian is *approaching* the sensor (as in unidirectional operation). However, once the door is open, opening, or closing any detection will cause the door to open or remain open.

- Below the **Interior Sensor** display cue, TAP the **Bidirectional**, **Smart Mode**, or **Unidirectional** button as applicable.
- Below the **Exterior Sensor** display cue, TAP the **Bidirectional**, **Smart Mode**, or **Unidirectional** button as applicable.
- TAP the **OK** button. The Advanced Settings Window (Figure 14 or 15) shall be displayed.

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8.2.4 To change the **safety retune time**, PERFORM the following:

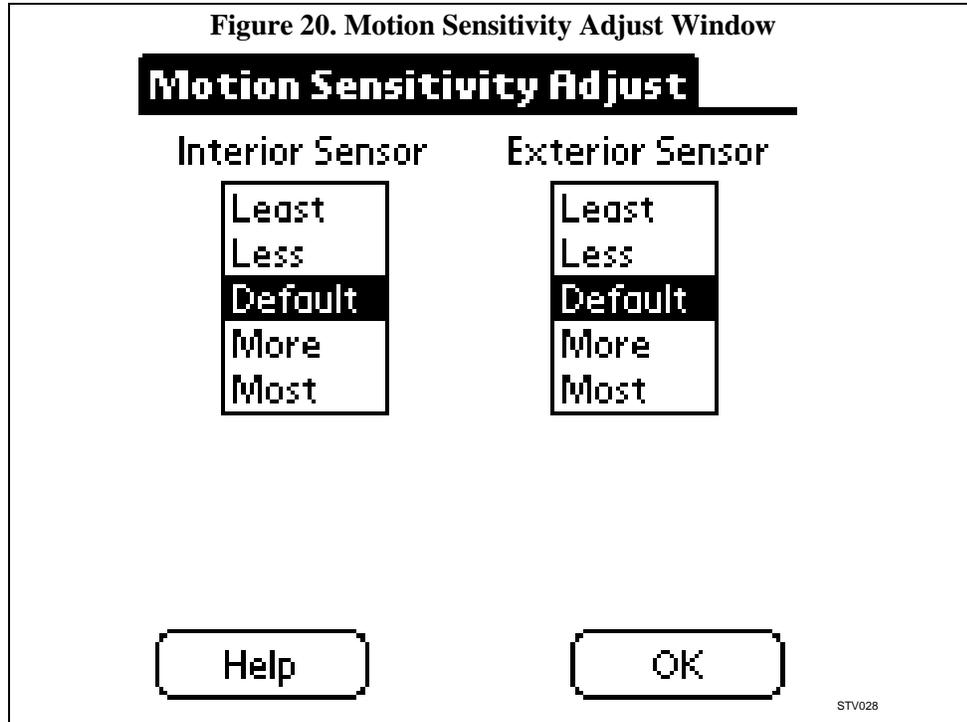
- a. TAP the **Safety Retune Time** button in the Advanced Settings Window. The Safety Retune Time Window (Figure 19) shall be displayed.



- b. Below the **Small Objects** display cue, TAP the desired safety retune time for small objects (stationary objects smaller than an 8<sup>1</sup>/<sub>2</sub>" X 11" sheet of paper).
- c. Below the **Large Objects** display cue, TAP the desired safety retune time for large objects (stationary objects larger than an 8<sup>1</sup>/<sub>2</sub>" X 11" sheet of paper).
- d. TAP the **OK** button. The Advanced Settings window (Figure 14 or 15) shall be displayed.

8.2.5 To change the **motion sensitivity setting** on all swing and slide sensors *except* Double Diamond center sensors, PERFORM the following:

- a. TAP the **Motion Sensitivity Adjust** button. The Motion Sensitivity Adjust window (Figure 20) shall be displayed.



**NOTE**

Higher sensitivity settings are best suited for sensors located on the interior of a building. The interior sensors are exposed to fewer things that could falsely trigger the door to open (such as blowing leaves).

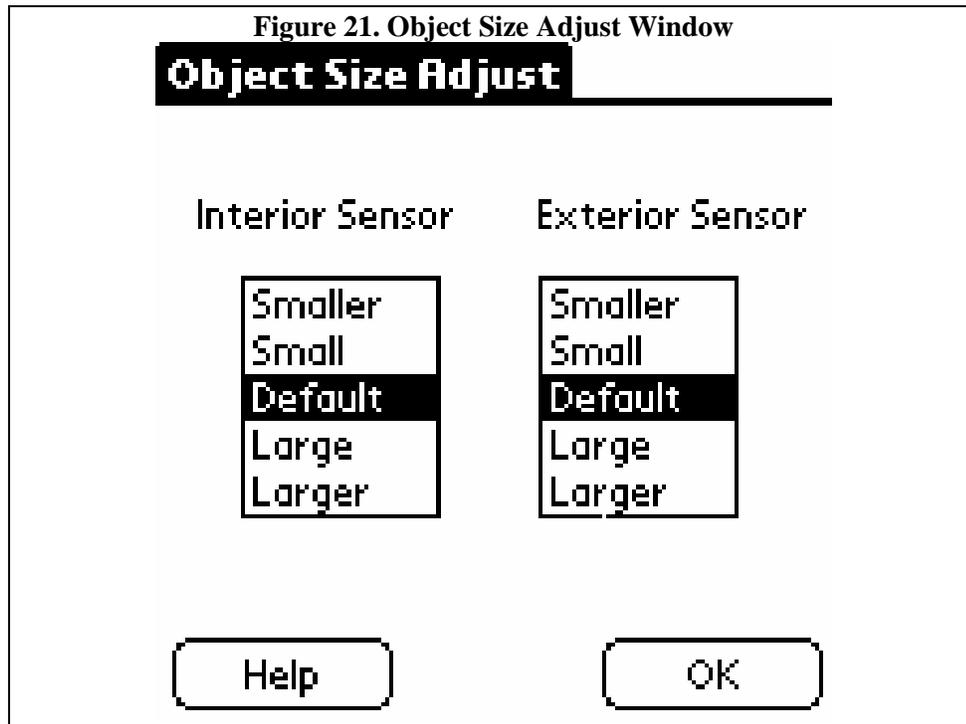
- b. Below the **Interior Sensor** display cue, TAP the applicable sensor sensitivity selection.
- c. Below the **Exterior Sensor** display cue, TAP the applicable sensor sensitivity selection.
- d. TAP the **OK** button. The Advanced Settings window (Figure 14 or 15) shall be displayed.

**NOTE**

When you have completed verifying and changing the settings, you can cancel all the advanced settings made or send them to VSC.

- 8.2.6 To change the **object size adjustment** (on a Double Diamond center sensor only), PERFORM the following:
- a. In the Advanced Settings window, TAP the **Object Size Adjust** button. The Object Size Adjust window (Figure 21) shall be displayed.

Figure 21. Object Size Adjust Window



- b. Below the **Interior Sensor** display cue, TAP the applicable sensor size selection.
- c. Below the **Exterior Sensor** display cue, TAP the applicable sensor size selection.
- d. TAP the OK button. The Advance Settings window (Figure 15) shall be displayed.

**NOTE**

When you have completed verifying and changing settings, you can cancel all of the new settings or send them to the VSC

- 8.2.7 To cancel the advanced settings changes or program the door to the new settings, PERFORM the following:
- a. To cancel the advanced settings changes, TAP the **Cancel** button. The M40 EXPRESS SETUP window (Figure 7) shall be displayed and the system shall operate according to the values that existed before any of the advanced settings were changed.
  - b. To program the door to the new settings, PERFORM the following:
    - 1) TAP the **Program Door** button. The Door Programming window shall appear momentarily. When programming has completed the system shall display the Programming Was Successful window (Figure 10).

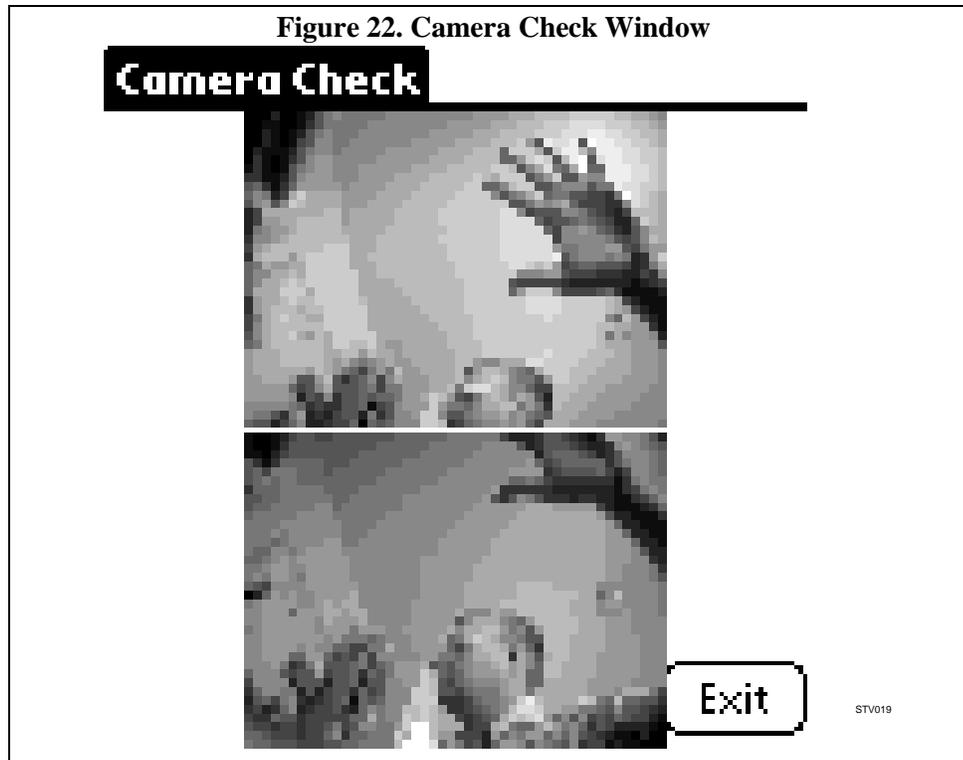
**NOTE**

The advanced settings changes do *not* take effect until the reset command is sent. Pressing the **OK** button on the Programming Was Successful window (Figure 10) sends the reset command.

- 2) TAP the **OK** button. The reset command shall be sent and the M40 EXPRESS SETUP window (Figure 7) shall be displayed.

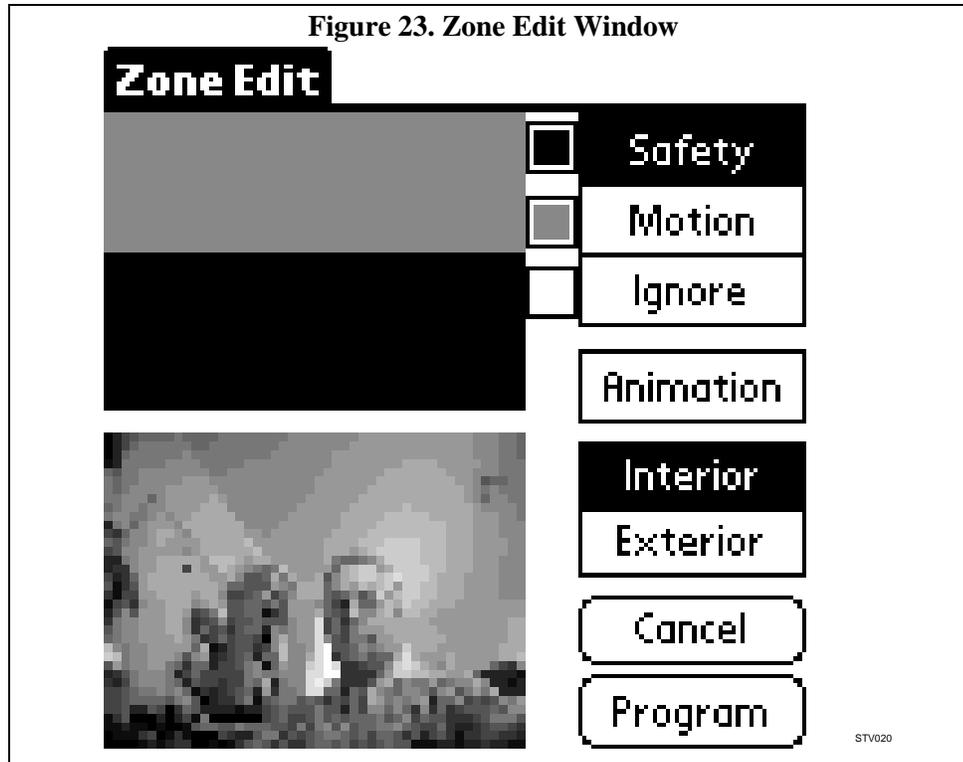
### 8.3 Viewing Camera Output

- 8.3.1 On the M40 EXPRESS SETUP window (Figure 7), TAP the **Tools** button. The Tools window (Figure 8) shall be displayed.
- 8.3.2 TAP the **Camera Check** button. The Camera Check window (Figure 22) shall be displayed. The upper portion of the screen shall show the viewing image from the interior camera. The lower portion of the screen shall show the viewing image from the exterior camera. The center of the screen shall show the door threshold. The view refreshes every 2-3 seconds.
- 8.3.3 TAP the **Exit** button to return to the Tools window.



## 8.4 Verifying and Adjusting Camera Zones

- 8.4.1 In the Tools Window, TAP the **Zone Edit** button. The Zone Edit window (Figure 23) shall be displayed. The sensor zone map shall be displayed at the top of the window and the image from the camera shall be displayed at the bottom. The highlighted button indicates the sensor that is displaying the information shown.



### NOTE

1. The Zone Edit window displays the safety, motion, and ignore zones on the zone map at the same time, with each type of zone represented by a different color. On a black and white display, the safety zone appears in black, the motion zone appears in gray, and the ignore zone appears in white. On a color display, the safety zone appears in red, the motion zone appears in yellow, and the ignore zone appears in gray. The square boxes to the left of the **Safety**, **Motion**, and **Ignore** buttons display the colors that represent each zone.
2. The zone map image area on a Palm Pilot is comprised of 108 squares: 12 squares across and 9 squares down.

- 8.4.2 To EDIT the zones, PERFORM the following:
- a. TAP the **Interior** or **Exterior** button as desired.

### NOTE

The animation feature merges the image provided by the selected camera with the image of the zone map. The two images are alternately displayed—one after the other. This allows you to see if you have edited the zone map properly in relation to the camera image. Using the Palm Pilot stylus, you can edit the selected zone map during the animation mode.

At any time during the zone edit process, you can tap the **Animation** button to overlay the camera view on the zone map. Clicking on the **Animation** button again will end the overlay feature.

- b. TAP the **Safety** button.
- c. Using the Palm Pilot stylus, DRAW on the zone map to define the safety zone needed for your application. (Any place you touch on the zone map will be defined as the safety zone.) The selected camera view shall be displayed at the bottom of the screen.
- d. TAP the **Motion** button.
- e. Using the Palm Pilot stylus, DRAW on the zone map to define the motion zone needed for your application. (Any place you touch on the zone map will be defined as the motion zone.) The selected camera view shall be displayed at the bottom of the screen.
- f. TAP the **Ignore** button.
- g. Using the Palm Pilot stylus, DRAW on the zone map to define the ignore zone needed for your application. (Any place you touch on the zone map will be defined as the ignore zone.) The selected camera view shall be displayed at the bottom of the screen.
- h. REPEAT steps 8.4.2.a through 8.4.2.g for the other camera connected to this VSC.
- i. To disregard the zone changes and retain the previous zone settings, TAP the **Cancel** button. The Tools window (Figure 8) shall be displayed, and the VSC shall retain the previous settings.
- j. To program the zone changes into the VSC, PERFORM the following:
  - 1) TAP the **Program** button. The Door Programming window shall appear momentarily. When programming has completed, the system shall display the Programming Was Successful window (Figure 10).

### NOTE

The zone changes do *not* take effect until the reset command is sent. Pressing the **OK** button on the Programming Was Successful window (Figure 10) sends the reset command.

- 2) TAP the **OK** button. The following shall occur:
  - The reset command shall be sent.
  - The door will open, stay open for 4 seconds, and then “step” closed.
  - The Tools window (Figure 8) shall be displayed.
- k. If the door package contains multiple VSCs, REPEAT steps 8.4.1 through 8.4.2 for each VSC.

## 9. FINAL TUNE-IN AND CLOSEOUT

### 9.1 **Final Tune-In Settings**

9.1.1 Refer to ANSI Standard A156.10, "American National Standard for Power Operated Doors," and ENSURE operation of the door sensor system complies with ANSI requirements.

9.1.2 When all adjustments are complete, PERFORM the following:

- a. SET door "POWER" switch to "OFF."
- b. PRESS the Palm Pilot power switch to turn power off.
- c. DISCONNECT the serial extension cable from the rotary switch box.
- d. DISCONNECT the serial extension cable from the null modem adapter/cable.
- e. DISCONNECT the null modem adapter/cable from the Palm Pilot harness.
- f. DISCONNECT the Palm Pilot harness from the Palm Pilot.

### 9.2 **Closeout Procedure**

9.2.1 ENSURE all connectors are secure.

9.2.2 ENSURE all wiring harnesses are secure and do not interfere with door operation.

9.2.3 ENSURE the header cover is secure.

9.2.4 ENSURE the glass and door trim surfaces are clean.

9.2.5 ENSURE the door installation area is clean and free of debris.

9.2.6 SET door "POWER" switch to "ON."

9.2.7 COMPLETE Work Order and REPORT your actions to the Building Superintendent.

### 9.3 **Frequently Asked Questions**

9.3.1 Refer to Attachment 3 for a listing of frequently asked questions.

### 9.4 **Replacement Parts**

9.4.1 Refer to Attachment 4 for a listing of the StanVision replacement parts.

**Attachment 1**  
**Documents, Definitions, Tools, Equipment, Materials, and Consumables**  
(Sheet 1 of 1)

**Documents**

- American National Standards Institute (ANSI) Standard A156.10, "American National Standard for Power Operated Doors"
- Stanley Access Technologies Document No. 203728, "Dura-Glide 2000-, 3000-, and 5000-Series; Dura-Guard 2000- and 3000-Series; Dura-Storm 3000-Series; and Diamond Series 2000-and 3000-Series Microprocessor Control Box Quick Reference Guide"

**Definitions**

- LED: Light-emitting diode
- Relay Hold Time: The amount of time that the relay contact will remain energized after the loss of detection from the sensor. Also referred to as release delay setting.

**Tools and Equipment** (including, but not limited to)

- Countersink-cutting tool (Severance Tool Industries Inc. P/N CK-3/4-45)
- Electric drill, metal drill bit set, concrete drill bit set
- Palm CTOOL kit (P/N 713861) Palm Pilot with serial hotsync cable and M40 express software, serial extension cable, and null modem adapter/cable
- Pliers
- Screwdriver kit
- Scribe or center punch
- Tape measure
- Wire strippers

**Materials** (including, but not limited to)

- Assorted fasteners
- Visual sensor mounting template

**Consumables** (including, but not limited to)

- Degreaser
- Clean rags
- Tie wraps
- Wire clamps

**Attachment 2**  
**Loading/Recovering the Latest Palm Pilot Software**  
(Sheet 1 of 1)

**NOTE**

1. The following instructions cover installation of the Palm Pilot software on all M-series Palm Pilot models.
2. The HotSync operation allows you to exchange and update data between your desktop or laptop computer and your Palm Pilot. This operation should be performed when your Palm Pilot software has been erased or when a newer software version must be installed.

1. ENSURE that your Palm Pilot Desktop software is installed on your computer and that you have performed your first HotSync.
2. On the Palm Pilot home screen, VERIFY battery life, and ENSURE expansion card is inserted (M125 Palm Pilots only).
3. On a desktop or laptop computer, go to [www.tritongroup.com/stanvision](http://www.tritongroup.com/stanvision) to download the latest M40 Express Software.
4. SELECT the StanVision software link (the box with the picture of the Palm Pilot).
5. SELECT the latest Palm Software. The File Download Dialog box shall be displayed.
6. SELECT **Open File from Current Location**.
7. SELECT **OK** to confirm.
8. If the Install Tool dialog box asks for a Username, SELECT the name of the Palm Pilot on which the software needs to be installed.
9. SELECT **OK** to confirm.

**NOTE**

You must perform a HotSync in order to download the software to your Palm Pilot.

10. Refer to the Palm Pilot Manual and PERFORM a HotSync operation.
11. DISCONNECT the HotSync cable from the Palm Pilot and desktop or laptop computer.

**Attachment 3**  
**Frequently Asked Questions**

(Sheet 1 of 2)

**Q:** When performing a calibration with the Palm Pilot, the calibration process failed. Why?

**A:** *The calibration process can fail if you perform the steps too quickly. You can tell the process is failing when the red and green LEDs on the VSC flash slowly. Try performing the calibration steps slowly. This problem will not occur in Palm Pilot software version 2.0 and later.*

**Q:** What happens during a door calibration? Do I have to perform a calibration every time I adjust the door?

**A:** *The calibration process is performed so the doors can learn their full open and closed positions. During calibration, the doors will open and close two times. When complete, the red safety detection LED comes on and the system learns the environment. Calibration is performed only when the doors are first installed or when a new VSC is installed.*

**Q:** The batteries fell out of my Palm Pilot. I put them back in and the Stanley M40 EXPRESS icon no longer appears on the All window. What happened?

**A:** *The software in the Palm Pilot is volatile. If the unit batteries fall out, the application software required to program the VSC is deleted. The software needs to be reinstalled on your Palm Pilot. Make sure that the batteries do not fall out of the Palm Pilot. Refer to Attachment 2 and reload/recover the latest Palm Pilot software.*

**Q:** The safety retune time adjustment seems to take a long time. Why?

**A:** *The safety relearn algorithm in the system will restart timers whenever the sensor that is learning detects motion. Be sure to keep people outside the motion zone when adjusting the safety retune time.*

**Q:** Why does the red LED on the visual sensor keep blinking?

**A:** *A faulty camera can cause the red safety detection LED to blink. Experience has also shown that when a security monitor is connected to the video output of the VSC, the red LED stays on and the Palm Pilot camera check will see only black and white lines. This also indicates that the camera is faulty. Replace the camera to correct this problem.*

**Q:** There are trees near the door installation and they cast shadows into the sensor zone. If the trees move with the wind, the moving shadows cause the doors to open. What can I do to prevent this?

**A:** *Setting the motion sensitivity setting to a lower setting or the **Least** selection on the Motion Sensitivity Adjust window usually corrects this problem.*

**Q:** Why are the LEDs on the visual sensors so hard to see?

**A:** *The LEDs are really light tubes that carry the light from the LEDs mounted on the printed circuit boards.*

**Attachment 3**  
**Frequently Asked Questions**  
(Sheet 2 of 2)

**Q:** I'm almost certain that the system settings changed from what I set them to. Is this possible?

**A:** *This is possible. If the **Factory Defaults** button on the M40 EXPRESS SETUP window is pressed, or if the **Factory** button on the Select Source window is pressed, the VSC is reset to the factory settings.*

**Q:** During a calibration, the door began to close and then reopened before reaching the full-closed position. Why didn't it go fully closed as it should?

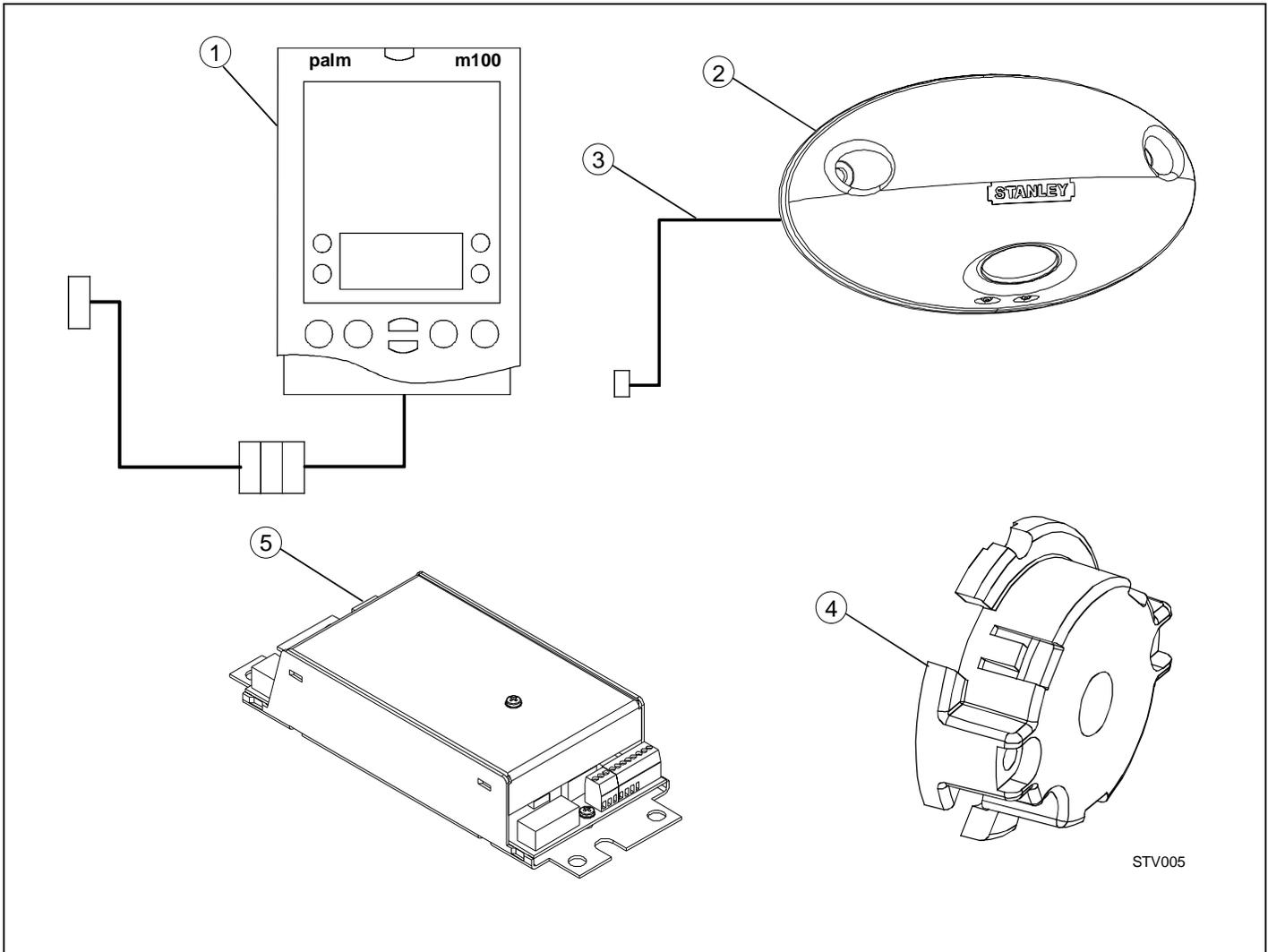
**A:** *Sometimes a faulty encoder causes this. Check that the encoder components are aligned properly on the encoder board. Another test is to swap the encoder signals with the Dura-Glide controller and check the signals using the LEDs on the DuraGlide controller.*

**Q:** The door remains open and will not operate. What could be the problem?

**A:** *Perform the following:*

- 1. Remove J14 and, using the "OPEN" and "CLOSED/LOCKED" selections on the door function switch, verify that the door will operate without StanVision connected*
- 2. Connect the Palm Pilot to the VSC.*
- 3. Go to the Camera Check window, and verify that there is video feed. If the upper and lower portions of the window are both black, the processor may be locked up. To unlock, go to the Tools window and tap the **Reset** button. This will allow the door to complete the program cycle. Be sure to verify the settings after reset.*

**Attachment 4**  
**Replacement Parts**  
 (Sheet 1 of 1)



STV005

Item No.	Part No.	Description	Item No.	Part No.	Description
1	713861	Palm programming kit (includes Palm Pilot w/ serial hotsync cable, serial extension cable, and null modem adapter/cable)	4	112005	Four-channel encoder
2	713858	Visual sensor (includes RJ-45 cable)	5	713859	Visual sensor controller
3	713860	RJ-45 cable			