VIDEO DOORPHONE SYSTEM

OWNER’S MANUAL
INSTALLATION AND OPERATION

BEFORE INSTALLING OR, OPERATING THE SYSTEM, PLEASE READ THIS MANUAL

MODEL: VI 300
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important Safety Instructions</td>
<td>1</td>
</tr>
<tr>
<td>Warning</td>
<td>2</td>
</tr>
<tr>
<td>FCC Class B Notice</td>
<td>3</td>
</tr>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>System Contents</td>
<td>4</td>
</tr>
<tr>
<td>Features</td>
<td>5</td>
</tr>
<tr>
<td>Identifying the Parts</td>
<td></td>
</tr>
<tr>
<td>Monitor</td>
<td>6</td>
</tr>
<tr>
<td>Camera</td>
<td>7</td>
</tr>
<tr>
<td>Monitor Terminal Connections</td>
<td>8</td>
</tr>
<tr>
<td>Camera Terminal Connections</td>
<td>9</td>
</tr>
<tr>
<td>Installation</td>
<td></td>
</tr>
<tr>
<td>Monitor &amp; Camera</td>
<td>10</td>
</tr>
<tr>
<td>Testing Units</td>
<td>11</td>
</tr>
<tr>
<td>Installation Tips</td>
<td>11</td>
</tr>
<tr>
<td>Operation</td>
<td></td>
</tr>
<tr>
<td>Door Camera &amp; Monitor</td>
<td>12</td>
</tr>
<tr>
<td>Trouble Shooting Guide</td>
<td>13</td>
</tr>
<tr>
<td>Technical Specifications</td>
<td>14</td>
</tr>
<tr>
<td>Appendix 1 - Connecting a Magnetic Contact</td>
<td>15</td>
</tr>
<tr>
<td>Appendix 2 - Connecting an Electric Door Strike</td>
<td>16</td>
</tr>
</tbody>
</table>
• **Read Instructions** – All the safety and operating instructions should be read before operating this equipment. These instructions should be retained for future reference.

• **Heed Warnings** – All warnings on the equipment and in the operating instructions should be adhered to. All instructions regarding care and operation of this equipment should be followed.

• **Power Sources** – Equipment should only be connected to the power supply specified in the operating instructions or as marked on the equipment.

• **Power-Cord Protection** – Keep cable cords and plugs clear of other objects, particularly at the point where they exit the equipment.

• **Cleaning** – Clean the equipment by wiping with a soft cloth, (do not use any abrasive agents or water).

• **Non-use Periods** – Power cords should be unplugged from the outlet when left unused for a long period of time.

• **Object and Liquid Entry** – Take care not to drop objects or liquids on any part of the equipment.

• **Damage Requiring Service** – The unit should be serviced by a qualified service personnel when:

  - The power-supply cord or the plug has been damaged; or
  - Objects have fallen, or liquid has been spilled onto the equipment; or
  - The equipment has been exposed to rain; or
  - The equipment does not appear to operate normally or exhibits a marked change in performance; or
  - The equipment has been dropped, and/or the enclosure has been damaged

• **Servicing** – Do not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to a Qualified Distributor’s Service Personnel.
WARNING

RISK OF ELECTRIC SHOCK. DO NOT OPEN.

CAUTION! TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

**Explanation of two Symbols**

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

THE GRAPHIC SYMBOLS WITH SUPPLEMENTAL MARKING ARE ON THE BOTTOM OF THE SYSTEM.

"WARNING – TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE”
NOTE
This equipment has been certified and found to comply with the limits regulated by FCC, EMC and LVD. Therefore, it is designed to provide reasonable protection against interference and will not cause interference with other appliance usage. However, it is imperative that user follows this manual's guidelines to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard or injury. In order to improve the feature functions and quality of this product, the specifications are subject to change without notice from time to time.

Note:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, (which can be determined by turning the equipment off and on), the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the monitor unit.
- Increase the separation between the monitor and camera.
- Connect the equipment on a separate outlet
- Consult the dealer or an experienced radio or television technician for help.
INTRODUCTION

Thank you for purchasing the Home Sentinel® Video Doorphone entry system. This model allows you to identify and communicate with callers at the door, from the security and convenience of any room in your home. Visitors activate the system by pressing a call button on the outdoor camera, which sounds a doorbell chime as well as turning on the inside video monitor. A two way audio intercom then lets you speak with visitors after first visually identifying them. It consists of a monitor station and an outdoor camera unit.

Additional accessories such as an Electric Door Strike or magnetic contacts can also be used on this system.

For more information regarding the complete line of Home Sentinel® products, please visit www.homesetninel.com

SYSTEM CONTENTS

VI 300 hands-free monitor
VI 300 Weatherproof door camera
20 Meter, 2 conductor 18 gauge cable
Adaptor
Screw
Screw crank
Wall mount plate

Note: Please remove the transparent film from the camera and monitor screen before using this system.
FEATURES

MONITOR
• High definition 4” flat screen CRT
• Auto shut off after 30 seconds for unanswered calls and 90 seconds for answered calls
• Hands free audio intercom
• Brightness and sharpness controls
• Separate bell and audio volumes
• Remote door open function (requires optional electric door strike)
• Door open/closed indicator (requires optional NC/NO contact switch)

CAMERA
• Rugged weatherproof ABS (plastic) enclosure
• 1/3” B/W image sensor
• Extra wide angle lens (>120°)
• Backlit call button
• Audio intercom with adjustable volume
IDENTIFYING THE PARTS

Monitor

1. **4” B/W flat type CRT screen**
   Displays image delivered from the door camera

2. **Hands free audio intercom**
   Emits audio from the door camera

3. **Lock release button**
   Press to remotely unlock/open your door (requires optional electric door release)

4. **Door status light indicator**
   Door light illuminates to show whether the door is opened or closed when an optional magnetic contact switch is used (NO/NC)

5. **Speak-out button (one way)**
   When this button is pressed, you can talk and the visitor can only listen in at the camera location

6. **Speakerphone button (two way)**
   When this button is pressed it allows for two way conversation between the monitor and the camera unit. Holding this button for 2 seconds turns off the system.

7. **Microphone**
   Picks up sound around the monitor

8. **Brightness tuner**
   Allows you to control the brightness of the picture

9. **Sharpness tuner**
   Allows you to control the sharpness of the picture

10. **Bell volume tuner**
    Allows you to adjust the bell volume on the monitor

11. **Speakerphone volume tuner**
    Allows you to adjust the volume for two way conversation

12. **Flip down panel with handy user instructions**
    A handy instruction sheet is available under the flip down panel
1. **1/3” B/W CCD camera**
   A discreet high resolution black & white 1/3” CCD camera is located behind the tinted cover

2. **Infrared Emitters**
   Infrared Light Emitting Diodes (LED) will detect low light, thereby giving you clear pictures at night at close range

3. **Microphone**
   Picks up sound around the camera

4. **Back-lit call button with chime**
   Press this button to ring the doorbell chime and activate the monitor. The light around the call button will illuminate when the system has power.

5. **Speaker**
   Emits sound from the monitor location

6. **Screw cover**
   This cover hides the screw that fastens the camera to the bracket
1. **Power Adapter Connection** - Remove the screw and the plastic cover to connect the 24V DC power adapter from the back of the monitor to a wall outlet using the supplied adapter. The terminal connection at the monitor is a Y-terminal, and the +/- leads need to be inserted and screwed into the corresponding contacts (refer to the DC 24V illustration).

2. **Door Camera** - Connect the 2 conductor 18 gauge wire (20 meter/65 feet) from the terminals marked, “Door Camera” on the monitor to the terminals on the camera unit, marked, “Monitor”

3. **Door Status** - Connect two wires from this terminal to an optional magnetic contact for a door or window. A NO/NC contact can be obtained at an electronics supply store.

   **Note**: You’ll notice that the Door Status Terminal has been “shorted” with a mini cable. This ensures that the Door Status indicator will remain OFF when no magnetic contact is connected.

4. **Reserve** – These terminals are not connected and should not be used.

5. **Lock Release** - Connect the wires from this terminal to an optional electronic door strike using a power supply (please see the diagram in the Installation section of this manual). The Electronic Door Strike accessory (model EDS300) can be purchased separately from Home Sentinel®, please inquire with your vendor, or refer to www.homesentinel.com for more details.
IDENTIFYING THE PARTS

Camera terminal connections

1. **Reserve** – These terminals are not connected and should not be used

2. **Volume Control** – Used to control the audio at the camera for clear audio reception

3. **Monitor** – Connect two wires from this terminal to the monitor, marked “Door Camera”
INSTALLATION

Important Note: Turn off the power to all units being used before connecting or disconnecting cables

1. Monitor Installation: Choose a suitable location inside your home and fasten the wall mount plate on the wall using the provided screws and screw crank.

2. Camera Installation: Fasten the wall mount bracket for the camera beside your door at a height of between 60”–64” from the ground, so that when the camera is installed the lens of the camera is situated at the eye level of the visitor.

3. Connect Camera to the Monitor: Run the 20m/65ft cable from the camera unit to the monitor. Connect the two wires on the Monitor input marked “Door Camera”
Note: You do not have to utilize the cable supplied with this product for this connection. An alternate solution is to use your existing doorbell wiring instead of the cable provided. You will need to disconnect the existing doorbell and the power supply if you’re using the doorbell wiring. This unique feature makes installation easier!

4. **Power-up the System**: Remove the screw and the plate on the back of the monitor. Connect the 24VDC/600mA power supply to the Y-shaped terminal (polarized), and connect the power supply to the wall outlet.

**Testing Units**

It is recommended that you test the Doorphone system before mounting it, in order to adjust the settings to the desired levels. Below are instructions on what to look for when testing:

1. Test the monitor by following these steps:
   (a) Press the call button at the camera unit. If there is power, the screen will turn on and display live video
   (b) Check and adjust the bell volume, picture quality and speakerphone volume

2. Test the camera by following these steps:
   (a) Press the call button at the camera
   (b) Press the monitor’s speakerphone button to initiate hands-free conversation
   (c) Adjust the door camera’s speakerphone volume at the back of the door camera (under the rubber cover)

**Installation Tips**

- Narrow space may cause feedback or echo on the speakerphone function
- Positioning too close to a high powered magnetic device may cause audio/video interference
- Direct sunshine on the camera can cause a blurry picture on the monitor
Below is a typical sequence depicting how the Doorphone system is used:

1. The visitor presses the Call button, which activates the monitor inside your home.

2. One way audio and video at the camera becomes active, so the visitor can be seen and heard. If there is no answer on the indoor monitor then the system will automatically shut-off after 30 seconds.

3. The person at the monitor can press the speak-out button to talk to the visitor. Pressing the speakerphone button on the monitor allows for hands-free conversation between the person at the monitor and the visitor (2 way audio).

4. Once a positive identification is made, then you can press the door release button to open the door (provided that an optional electric door strike is installed).

5. If a set of magnetic contacts are installed and connected to the monitor, when the door/window is opened (Normally closed contact) the door status light will illuminate.

6. The system will automatically disconnect after 90 seconds of no activity.
TROUBLESHOOTING GUIDE

Before requesting service, check the troubleshooting guide to solve the problem

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
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<tbody>
<tr>
<td>No Power (no picture on monitor)</td>
<td>Make sure that the AC plug is firmly inserted into the AC outlet.</td>
</tr>
<tr>
<td></td>
<td>Make sure that the Y shaped terminal is firmly inserted into the DC 24V</td>
</tr>
<tr>
<td></td>
<td>input on the monitor unit.</td>
</tr>
<tr>
<td>System is on, but no picture on the</td>
<td>Make sure that the cable is firmly connected between the monitor and the</td>
</tr>
<tr>
<td>monitor</td>
<td>camera.                     Adjust the brightness and sharpness controls.</td>
</tr>
<tr>
<td>Sound is too low</td>
<td>Adjust the volume controls.</td>
</tr>
<tr>
<td>The picture is too dark or too white</td>
<td>Adjust the brightness and sharpness controls.</td>
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Note: Be sure to use this product with the AC adapter supplied by the original manufacturer.
# TECHNICAL SPECIFICATIONS

## Camera:
- **Image sensor**: 1/3" B/W CCD
- **Resolution**: >380 TV lines
- **No. of pixels**: 251,000 pixels
- **Lens**: Wide angle >120°, F2.7
- **Illumination**: Infrared LED
- **Lux**: 0 lux (up to 3 ft from camera)
- **Operating Temp**: -25°C ~ +50°C, (-13°F ~ 122°F)
- **Dimensions**: 3.94" (W) x 5.24" (H) x 1.38" (D)

## Monitor:
- **Screen**: 4" diagonal CRT, flat type
- **Resolution**: >420 lines
- **Audio**: Hands free with 2 way semi-duplex
- **Auto timer**: 90 seconds
- **Operating Temp**: 0 ~ 40°C, (32°F ~ 104°F)
- **Power supply**: 110 VAC, 60 Hz, 16W adapter
- **Dimensions**: 6.69" (W) x 8.18"(H) x 2.13"(D)
- **Max. Wiring distance**: 325' with AWG #18 wire

Because our products are subject to continuous improvement, SVII and its subsidiaries reserve the right to modify product design and specifications without notice and without incurring any obligations. E & O.E.
Connecting a Magnetic Contact for a door or window

You can see if a door or window is open or closed using an optional NO (Normally Open) / NC (Normally Closed) magnetic contact.

**Note:** This magnetic contact can be purchased at most electronic or security supply stores.

Connect two wires (18 gauge) from the monitor input, marked “Door Status” (non-polarized) to a two terminal magnetic transmitter, mounted on the door/window frame. Mount the magnetic section on the door or window, as shown above.

(a) If the magnetic contact is NC (Normally closed), when the door/window is opened the Door Status light on the monitor will illuminate.

(b) If the magnetic contact is NO (Normally Open), when the door/window is opened the Door Status light on the monitor will turn off.
Connecting an optional Electric Door Strike or magnetic lock to a door

**Note:** Before attempting to install the Electric Door Strike or Magnetic Lock please call a professional such as a locksmith or electrician to help with your installation.

You can open the door remotely by pressing the lock release button on the monitor to release an electric door strike or magnetic lock.
Connect two wires (18 gauge) from the monitor input, marked “Lock Release” to the Electric Door Strike. One wire from the monitor will connect to the positive terminal on the power supply. The other wire from the monitor will connect to the positive terminal on the door strike unit. A third wire will connect from the negative terminal on the power supply to the negative terminal on the door strike unit.

**Important Note on Power supply**
You will need to install a power supply that is compatible with the electronic door strike installed.

For example, if a 12V DC / 320 mA Electronic Door Strike is used, then a compatible power supply would be 12V DC / 500 mA (the power supply should have a higher current rating than the door strike so that it could handle the requirement)

**CAUTION : If the current is overloaded on the lock it may cause damage on the monitor and door strike unit**