ELAN™ SENSE
SENSORS
Installation Manual

ELAN
H O M E   S Y S T E M S ™

2428 Palumbo Dr. Lexington, KY 40509
(859) 269-7760
www.elanhomesystems.com

ELAN™SENSE Installation Manual

Introduction

ELANSENSE components were designed to provide a complete array of automation sensing solutions that work reliably and consistently. Each of the six sensors complements the others and was created for a specific purpose. Designed as a family, the ELANSENSE line has similar hookup and adjustment procedures and identical programming routines. Each unit is designed to work with ELAN's VIA!®TOOLS setup software, VIA!®SR1, VIA!®2-SS1, S6, S12, D1200, D1650 and HD Series equipment as well as in stand-alone applications. This manual describes basic hookup and operation of each ELANSENSE component. Each sensor utilizes a 1/8" (3.5mm) stereo mini-plug that easily connects to any ELAN automation product and creates a closed contact when it is triggered. Most of the sensors are adjustable as appropriate for the sensor type. A Red LED on each unit blinks when the sensor is activated.

ELANSENSE Adjustments

With the exception of the Contact Closure Sensor, Doorbell Sensor, and Voltage Sensor, each unit has two adjustments: Delay and Sensitivity. Delay affects the amount of time the sensor remains triggered after the triggering condition has stopped occurring. Delay can be set from 0 to 15 seconds. Sensitivity affects how easy it is to trigger the sensor. The lower the Sensitivity, the harder the sensor is to trigger. Potentiometers for adjusting Sensitivity and Delay are located on the side of the sensor's housing.

DELAY ➕ ➕ SENSITIVITY

Specifications

Power Requirements............. 5 VDC, <10mA
Polarity .... Tip-5VDC (White)
.... Ring-Open Collector Transistor Closure (Red)
.... Sleeve-Ground (Black)

Limited Warranty

Audio Sensor (AUDSENSOR)

The ELAN™SENSE Audio Sensor is designed to reliably provide status feedback in line-level audio sensing applications. This sensor is connected between a source's line-level audio output and the input of an amplifier, receiver, or ELAN multi-zone controller. DO NOT USE IN SPEAKER-LEVEL APPLICATIONS such as amplifier outputs, volume controls, etc.!

Connections
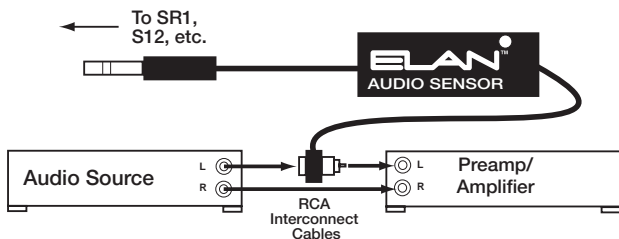
1. Plug the 1/8" mini-plug into the Sensing Device (SR-1, S6, etc.)
2. Connect the female side of the Audio Sensor's RCA Interface jack to the left or right line-level output of the audio source.
3. Plug the male end of the Interface jack into the correct left or right input jack of a receiver, amplifier, or multi-zone controller.
4. Plug the remaining side (left or right) into the other input.
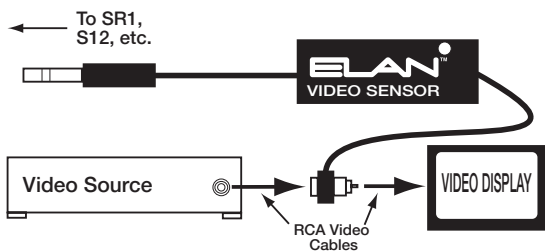
Adjustments

Delay: Adjust counter-clockwise to reduce the amount of time before the sensor turns off once the audio signal is no longer present.

Sensitivity: Adjust counter-clockwise to reduce Sensitivity.

Video Sensor (VIDSENSOR)

The ELAN™SENSE Video Sensor is designed to detect Composite video signals originating from source components such as TV's, DVD players, VCRs, video games, security cameras, and ELAN Z•880 Video Controllers. This sensor is easily connected between a source's Composite video output and the input of a TV, System12, Z•880, VIA!® Touch Panel, VCR, A/V receiver, etc.

Connections

1. Plug 1/8" mini-plug into the sensing device (SR1, S12, etc.)
2. Connect the female side of the video sensor's RCA Video Interface jack to a Composite video cable attached to the Composite video output of the source.
3. Plug the male end of the RCA Video Interface jack into the Composite video jack of the destination TV, Z•880, or other device.

Adjustments

Delay: Adjust counter-clockwise to reduce the amount of time before the sensor turns off once the video signal is no longer present.

Sensitivity: Adjust counter-clockwise to reduce Sensitivity.

Contact Closure Sensor (CTSENSOR)

The ELAN™SENSE Contact Closure Sensor detects dry switch/relay closure. This sensor has a barrier strip connector used for signal connections. The CTSENSOR will connect to leads coming from a dry-contact relay and going to a Sense Input of ELAN's SR1, S6, S12, etc., as well as stand-alone applications.

Connections

1. Plug 1/8" mini-plug into the Sensing Device (SR-1, S6, etc.)
2. Connect **+** and **-** leads coming from a dry-contact relay to the barrier strip.
3. When the sensor receives a contact closure, it will send a trigger to the sensing device.

Adjustments

There are no adjustments for the Contact Closure Sensor.

Voltage Sensor (VTSENSOR)

The Voltage Sensor is designed to reliably provide feedback in voltage sensing applications. This sensor detects AC or DC voltage from 9-24 Volts and is designed to work with ELAN's SR1, S6, S12, D1200, D1650, and HD Series equipment as well as stand-alone applications.

Connections

1. Plug 1/8" mini-plug into the Sensing Device (SR1, S6, etc.)
2. Connect **+** and **-** leads from device to be sensed to the barrier strip on the other end of the sensor assembly.
3. When the sensor receives a voltage signal, it will send a trigger to the sensing device.

Adjustments

There are no adjustments for the Voltage Sensor.

LED/Light Sensor (LTSENSOR)

The ELAN™SENSE LED/Light Sensor is designed to create a trigger when various types of light are present. The Light Sensor can detect daylight, room light, LEDs, various displays, etc. Red/Green color filters allow for specific ON/OFF status detection with bi-color Red/Green LEDs. Use the Red filter to detect Red LEDs. Use the Green filter to detect Green LEDs. Remove the filters to detect other types of light including LED's that are not Red or Green.

Connections

1. Plug 1/8" mini-plug into the Sensing Device (SR-1, S6, etc.)
2. Attach the LED/Light Sensor to the device to be sensed.

Adjustments

DELAY: Adjust counter-clockwise to reduce amount of time before Sensor turns Off once the LED or light is no longer present.
SENSITIVITY: Adjust counter-clockwise to reduce the sensitivity.

Changing Color Filters

Use the Red or Green filters to detect specific ON/OFF status on equipment that has bi-color Red/Green LEDs.
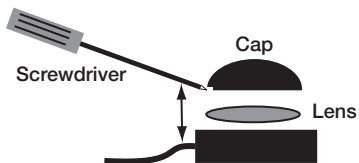

1. Remove cap by prying off (use small screwdriver inserted in notch)
2. Install or change lens
3. Reinstall cap

1. Pry off the sensor's cap to gain access to the lens.
2. Install Green lens to detect Green LED status (blocks Red).
3. Install Red lens to detect Red LED status (blocks Green).
4. Remove all lenses to detect daylight, room light, white ambient light, or LEDs that are not Red/ Green bi-color.

Doorbell Sensor (DBSENSOR)

The ELAN™SENSE Doorbell Sensor is designed to detect the voltage drop that occurs when a doorbell is activated. This sensor has a barrier strip connector used for doorbell connections.

Connections
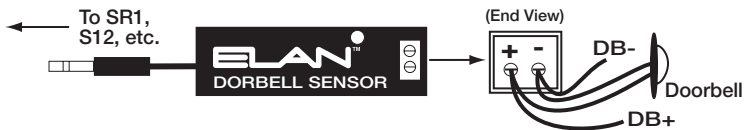
1. Plug 1/8" mini-plug into the Sensing Device (SR1, S6, S12, etc.).
2. Connect **+** and **-** leads in from the doorbell to the barrier strip on the other end of the sensor assembly. Make these connections in parallel to the Doorbell **+** and **-** wires .
3. When the sensor receives a doorbell signal, it will send a trigger to the sensing device.

Adjustments

There are no adjustments for the Doorbell Sensor.

4

Current/Magnetic Field Sensor (CRSENSOR)

The ELAN™SENSE Current/Magnetic Field Sensor is designed to reliably detect AC current in power cords as well as AC magnetic fields generated by motors, transformers, TV's, etc. The CRSENSOR comes with a unique and flexible clamping device that accomodates a wide variety of different sized AC power cords. The base of this unit is removable when magnetic flyback detection is desired. This sensor can be custom-tailored for different devices using the Sensitivity and Delay adjustments. This sensor detects current of 240mA or higher (low-voltage).

Connections
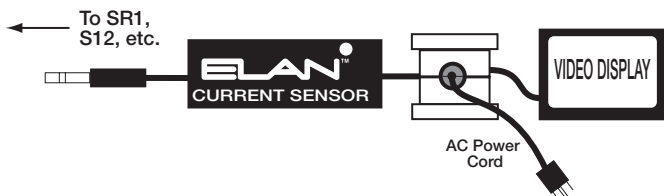
1. Plug 1/8" mini-plug into the Sensing Device (SR1, S12, etc.)
2. The Current Sensor uses an integral, adjustable clamp to attach to power cords.
   a. Select appropriate position of cable clamp (see diagram below).
   b. Place cable inside of clamp and tighten screws snugly.

Largest Power Cords

Smaller Round Cords

Flat "Lamp" Cords
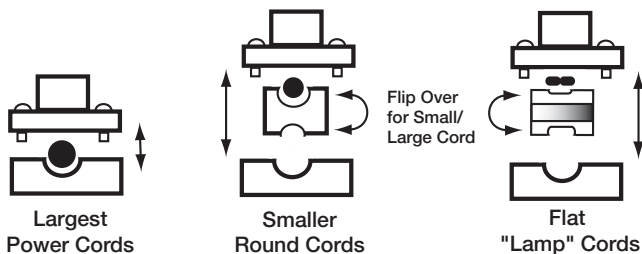
3. This clamp can be removed for situations that require the sensor to be mounted directly to the device to be monitored.
   a. Remove clamp base, cable clamp, and screws.
   b. Attach sensor with double-faced tape to device to be monitored (see diagram below).
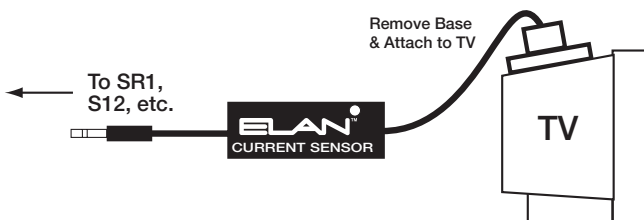
Adjustments
Delay: Adjust counter-clockwise to reduce the amount of time before sensor turns Off once current is no longer present.
Sensitivity: Adjust counter-clockwise to reduce the Sensitivity.