

# AutoVIEW™ IR

## Presenter's Camera Control System

*With Adjustable Active Infrared, Ceiling Mounted Presence Sensors*



**Figure 1:**  
The Vaddio AutoVIEW IR Ceiling Mounted, Active IR Presence Sensor

## INTRODUCTION

Vaddio's AutoVIEW™ IR Ceiling Mounted Presenter Camera Control System provides for automated presenter control over the Vaddio™ family of camera switching systems.

The AutoVIEW IR system is activated when a presenter moves into one of the active infrared presence sensing zones. Camera presets are assigned to those zone locations and programmed into the ControlVIEW™ Xtreme. As the presenter walks into different IR zones in the room (i.e. behind the lectern, up to the whiteboard, etc...) the active IR sensor (see Figure 1) detects the presence of the presenter within the zone and triggers the AutoVIEW Control Expander, which in turn commands the cameras attached to the ControlVIEW Xtreme to move to the camera preset assigned to that zone automatically.

The AutoVIEW Active IR sensor is adjustable for precise presenter control over each IR sensing zone. Each Active IR sensor is equipped with a metal mounting enclosure that can be mounted in acoustical ceiling tiles or sheetrock ceilings.

The AutoVIEW IR system is the perfect addition to the Vaddio ControlVIEW Xtreme, ProductionVIEW or the original ControlVIEW camera controller when used in a hands-free, presenter controlled camera-switching conferencing environment.

## INTENDED USE

Before installing and operating the Vaddio AutoVIEW IR System, please read the entire manual thoroughly. The system was designed, built and tested for use indoors with the provided power supply. The use of a power supply other than the one provided or outdoor operation has not been tested and could damage the system and/or create a potentially unsafe operating condition.

## SAVE THESE INSTRUCTIONS

The information contained in this manual will help you install and operate your Vaddio AutoVIEW IR Presenter Control System. If these instructions are lost or misplaced, Vaddio keeps copies of Specifications, Installation and User Guides and most pertinent product drawings for the Vaddio product line on the Vaddio website. These documents can be downloaded from [www.vaddio.com](http://www.vaddio.com) free of charge.

## IMPORTANT SAFEGAURDS



Read and understand all instructions before using. Do not operate these products if they have been have been dropped or damaged. In this case, a Vaddio technician must examine the product before operating. To reduce the risk of electric shock, do not immerse in water or other liquids and avoid extremely humid conditions.

**Use only the power supplies provided with the AutoVIEW IR Camera Location System. Use of any unauthorized power supply will void any and all warranties.**

## UNPACKING

Carefully remove the products and all of the parts from the packaging. Unpack and identify the following parts:

### The AutoVIEW IR System (999-1700-000, 999-1700-001-PAL) includes:

- The AutoVIEW Control Expander with PowerRite™ power supply
- Three (3) Active IR Sensors in metal mounting back can enclosures with RJ-45 connectors, six (6) tile support rails and three (3) dark acrylic lens covers
- Three (3) AutoVIEW IR Interface Controllers with three (3) PowerRite power supplies (one per Interface Controller)
- Three (3) - 3' (.9m) Cat. 5 patch cables

**Figure 2:**  
Vaddio AutoVIEW IR  
System Components



**The AutoVIEW IR Single Sensor (999-1701-000, 999-1701-001-PAL) includes (Figure 3):**

- One (1) Active IR Sensor in metal mounting back can enclosures with RJ-45 connector, two (2) tile support rails and dark acrylic lens cover
- One (1) AutoVIEW IR Interface Controller with one (1) PowerRite power supply
- One (1) - 3' (.9m) Cat. 5 patch cables



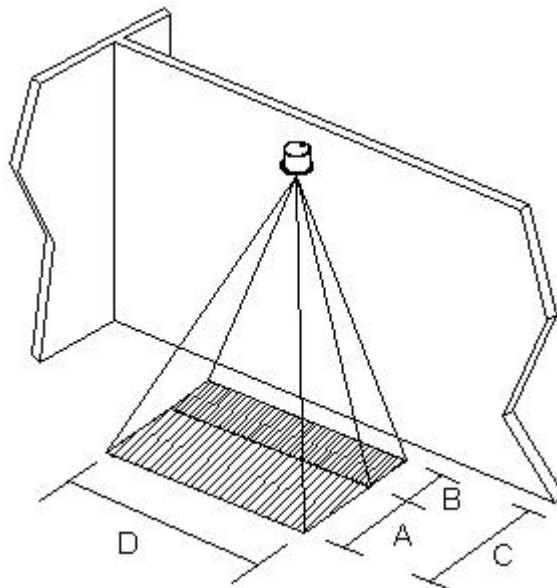
**Figure 3:**  
Vaddio Single  
AutoVIEW IR  
Sensor Kit

## INSTALLATION

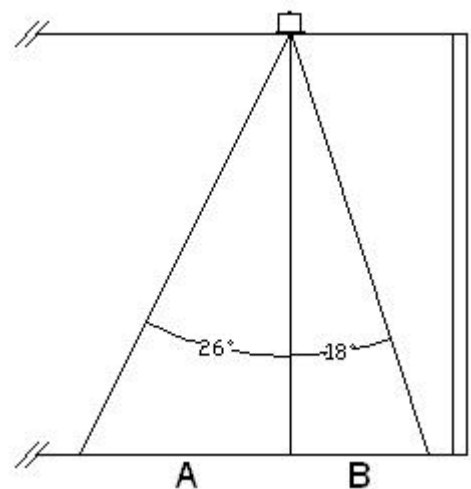
### Sensors

Installation of the AutoVIEW IR Presenter Camera Control System is as unique as it is simple. With any Vaddio product, understanding the key system components is essential.

The sensors are active infrared using near infrared reflection to actively sense the presence of something or someone within the sensing zone. Much like automatic door sensors for grocery or department stores, the sensors detect the presence in a combined "Approach" and "Inner" sensing zone, which can be tuned for the specific environment in which it operates see Figures 4 and 5).



**Figure 4:**  
The A zone represents the Approach detection zone. The B zone is the Inner detection zone. Both zones are adjustable for depth.



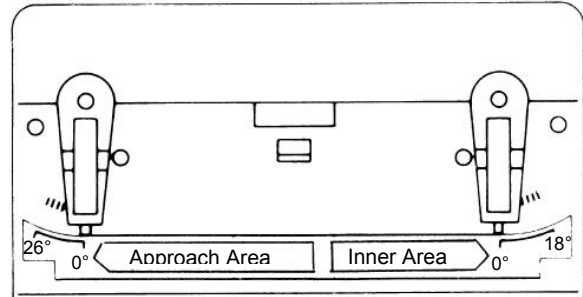
**Figure 5: Side View of IR Zone**

- The A (Approach) zone is adjustable between 0° and 26°.
- The B (Inner) zone is adjustable between 0° and 18°.
- Together the zones are adjustable up to 44° depth.

## INSTALLATION (continued)

Each Active IR Zone is essentially a rectangular area that is narrow at the top and wider at the bottom. To adjust the IR zones A (Approach) and B (Inner) zone depth, use the mechanical focusing elements on the side of the sensor and set them to tailor the depth of both sensing zones (Figure 6).

**Figure 6:**  
Adjust the focusing elements for both the A (Approach) and B (Inner) zone depth.



On the Opposite side of the IR sensor from the Approach and Inner area adjustment potentiometers, there are three other controls to be set (Table 1). Set these parameters to the appropriate value.

Control	Value Range	Recommended Setting
Frequency Switch	L to H	Change the frequency switch when the detection area of another IR sensor is overlapping.
Presence Detection Timer	2 – 15 – 60 Seconds	Set to 60 Seconds for this application
Mounting Height Setting	6.5' (2m) to 13.1' (4m)	Adjust to height of ceiling height of IR Sensor installation

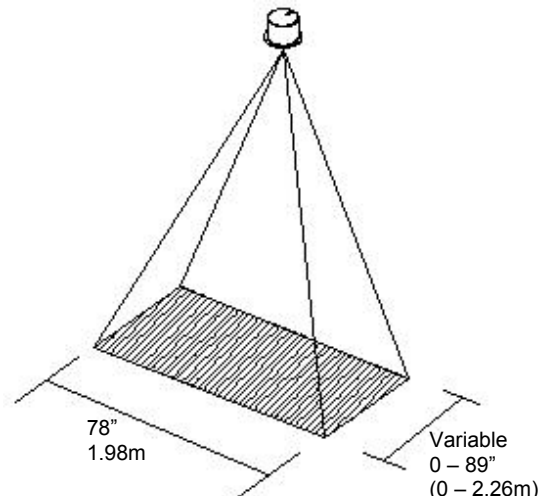
Like any IR sensor, the ceiling height will affect the overall IR zone size. The table below lists three common ceiling heights and the variable zone sizes available at those heights.

**Table 2:** Ceiling Heights and sensing zone sizes (see Figure 4 for zone labeling)

Ceiling Height	Width (D)	Depth (A) Approach	Depth (B) Inner	Total Depth (C) (A + B)
8.2' (2.5m)	71" (180cm)	0" – 51" (0 – 130cm)	0" – 31" (0 – 80cm)	0" – 82" (0 – 208cm)
9.8' (3m)	86" (218cm)	0" – 59" (0 – 150cm)	0" – 39" (0 – 100cm)	0" – 98" (0 – 249cm)
13.1' (4m)	114" (290 cm)	0" – 74" (0 – 190cm)	0" – 51" (0 – 130cm)	0" – 125" (0 – 317cm)

**Figure 7: Example**

In an 9' (2.74m) ceiling and the ceiling height set accordingly, the width of the rectangular sensing zone will be approximately 78" (1.98m) and the rectangle depth can range between 0" (0m) and 89" (2.26m)

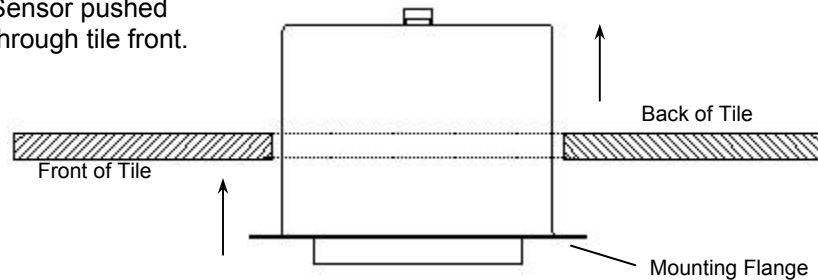


## INSTALLATION (continued)

Each sensor is pre-mounted in a metal back box enclosure and two (2) tile support rails are included for acoustical tile installations. For drywall ceiling installations, simple drywall anchors will easily support the weight of the sensor and metal back box.

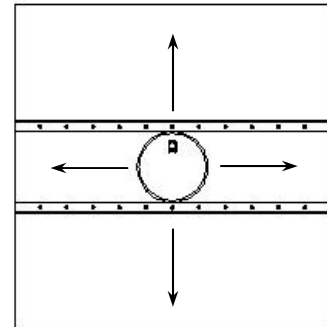
Carefully determine the location of the IR sensing zones and install the sensor into the ceiling by first cutting a 5-1/4" circle (see attached template) into the ceiling tile or drywall. After the position within the tile is chosen, marked and cut, push the back can through the front of the tile (Figure 8).

**Figure 8:**  
Sensor pushed through tile front.



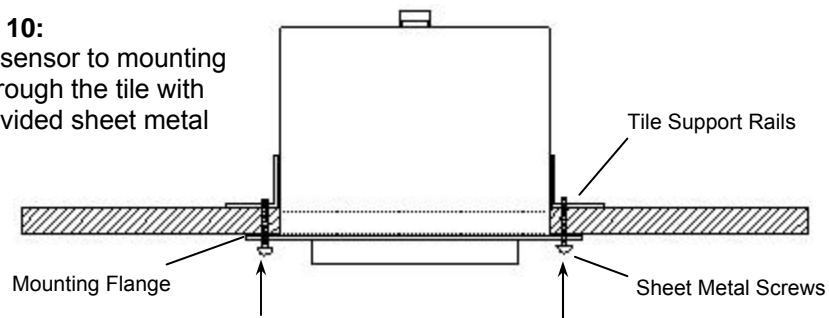
For ceiling tiles, support bars are provided to avoid tile sag. The sensor may be located in any part of the tile as long as the holes in the support rails (approx. every 2" or 5.08cm) line up with the holes in the sensor-mounting flange (Figure 9).

**Figure 9:**  
Sensor back can shown inserted through back of a 2' x 2' square tile. Tile support braces are provided for flexible mounting within the 2' square. The rails can move in parallel across the tile and has 2" (5.08cm) hole spacing across the length of the rails for attachment of the front mounting flange of the back can. Position the sensor accordingly.



With the provided sheet metal screws, attach the tile support rails through the sensor-mounting flange and tile (Figure 10) and snap on front lens cover (Figure 11). For drywall ceilings, use standard drywall anchors instead of rails.

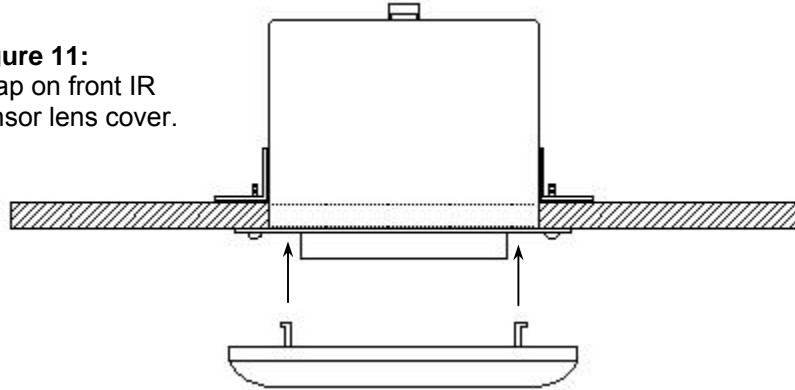
**Figure 10:**  
Attach sensor to mounting rails through the tile with the provided sheet metal screws



**INSTALLATION  
(continued)**

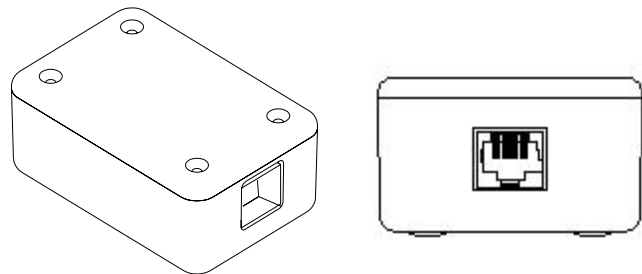
**Interface  
Controller  
Connection**

**Figure 11:**  
Snap on front IR  
sensor lens cover.

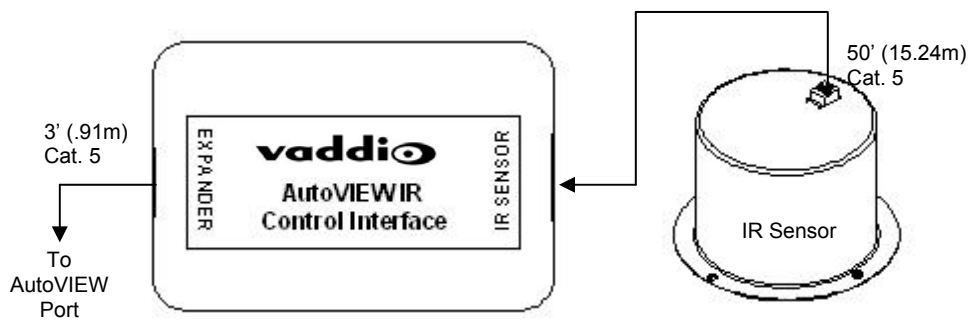


The AutoVIEW IR sensor is connected to the Interface Controller (Figure 12) with a Cat. 5 cable using RJ-45 connections. Using a Cat. 5 cable (not provided), connect the sensor to the Interface Controller marked “IR SENSOR”

**Figure 12:**  
AutoVIEW IR Control  
Interface – Iso View  
(left) and end view  
(right)



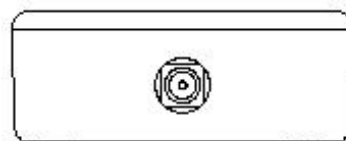
Next connect the AutoVIEW Interface Controller to one of the AutoVIEW Control Expander’s AutoVIEW ports with the provided 3’ (.91m) Cat. 5 cable (Figure 13).



**Figure 13:** Sensor and Interface Controller Connectivity

Power is supplied to the AutoVIEW IR Interface Controller with an external power supply (Figure 14).

**Figure 14:**  
Power supply connection on  
side of Interface Controller



## INSTALLATION (continued)

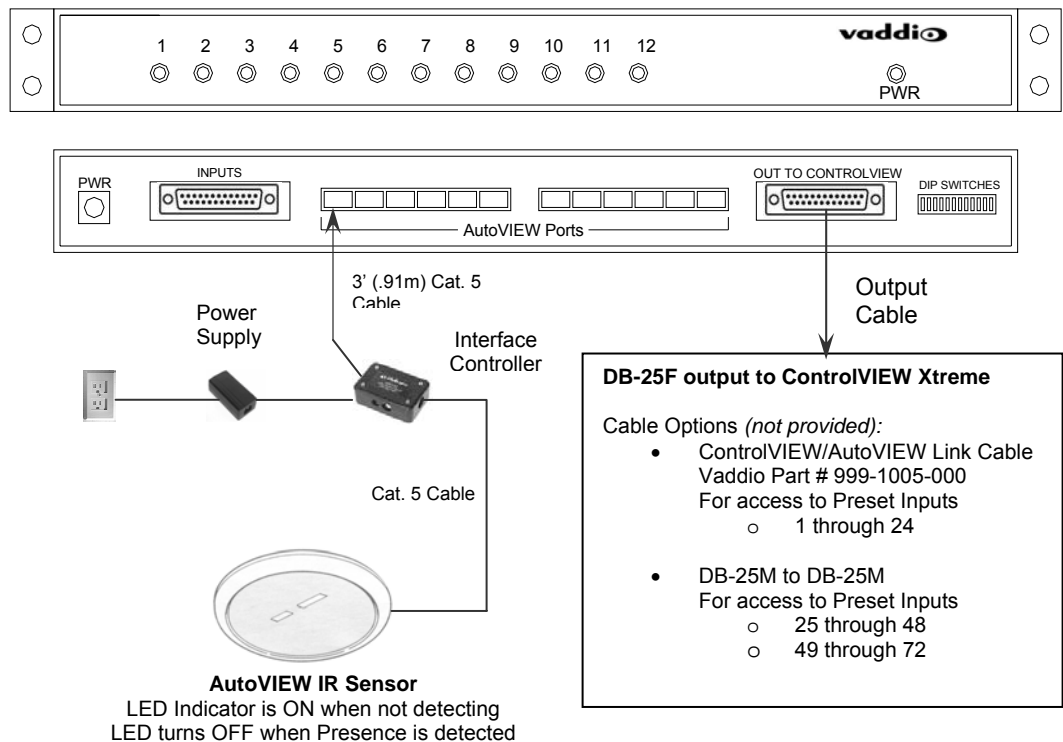
### AutoVIEW Control Expander

The front panel of the AutoVIEW Control Expander features twelve 12 AutoVIEW LED activation LEDs that will pulse on and off when the sensor is activated on and presence is detected. The pulse is created by the AutoVIEW IR Interface Controller and is required in order to give another trigger priority (i.e. mic switch and gate activation on MicVIEW™ Microphone Switcher/Mixer) over the sensor.

*Important Note: IR Sensors have equal switching priority and only one sensor can be activated at a time. Activating two sensors concurrently will cause undesirable camera switching (in one second intervals) between the sensor locations.*

The front panel and back panel diagrams and a quick connection diagram for a single IR sensor are shown below (see Figure 15). For Other AutoVIEW Switching applications, please see the manual for the AutoVIEW Control Expander (formerly the ControlVIEW Control Expander)

**Figure 15:** Front and back panel Diagrams of AutoVIEW Control Expander with Single IR sensor connected.



### Setting Dip Switches

Set LED Dip Switches for each IR Sensor used on the back of the AutoVIEW Control Expander for the corresponding port number to the “ON” or up position (i.e., DIP Switch 1 controls Input 1 - see Figure 16).

**Figure 16:** Dip Switches should be in “UP” position for each IR Sensor used



**DB-25  
Pin-Outs for  
Output Cable to  
ControlVIEW  
Xtreme**

**Table 3:** DB-25 Output Pin-outs



Each of the first 12 output pins corresponds directly with the number on the AutoVIEW Port (12 output contacts = 12 AutoVIEW Ports. Pins 13 and 25 are not used.

Pin	Pin Function
1	Preset 1
2	Preset 2
3	Preset 3
4	Preset 4
5	Preset 5
6	Preset 6
7	Preset 7
8	Preset 8
9	Preset 9
10	Preset 10
11	Preset 11
12	Preset 12
13	NOT USED
14	Ground
15	Ground
16	Ground
17	Ground
18	Ground
19	Ground
20	Ground
21	Ground
22	Ground
23	Ground
24	Ground
25	NOT USED

**Additional Documents (manuals)**

The AutoVIEW IR Presenter's Camera Control System is intended for use with the Vaddio ControlVIEW Xtreme. Please refer to the ControlVIEW Xtreme manual for programming and assignment of camera inputs, presets and positioning information. These manuals are free of charge at <http://www.vaddio.com>.

**CARE AND CLEANING**

Do not attempt to take the products in this system apart. There are no user-serviceable components inside.

- Do not spill liquids on the products
- Keep these devices away from food and liquid
- For smears or smudges on the sensor, wipe with a clean, soft cloth. Do not use any abrasive chemicals.

**OPERATING AND STORAGE CONDITIONS**

Do not store or operate the AutoVIEW IR System under the following conditions for any circumstance:

- Temperatures above 40°C (104°F)
- Temperatures below 0°C (32°F)
- High humidity, condensing or wet environments
- Dusty environments
- In inclement weather
- Under severe vibration



## WARRANTY INFORMATION

**Hardware\* Warranty** - One year limited warranty on all parts. Vaddio warrants this product against defects in materials and workmanship for a period of one year from the day of purchase if Vaddio receives notice of such defects during the warranty. They will, at its option, repair or replace products that prove to be defective.

**Exclusions** - The above warranty shall not apply to defects resulting from: improper or inadequate maintenance by the customer, customers applied software or interfacing, unauthorized modifications or misuse, operation outside the normal environmental specifications for the product, use of the incorrect power supply, or improper site operation and maintenance.

**Vaddio Customer service** – Vaddio will test, repair, or replace the product or products without charge if the unit is under warranty. If the product is out of warranty, Vaddio will test then repair the product or products. The cost of parts and labor charge will be estimated by a technician and confirmed by the customer prior to repair. All components must be returned for testing as a complete unit. Vaddio will not accept responsibility for shipment after it has left the premises.

**Vaddio Technical support** - Vaddio technicians will determine and discuss with the customer the criteria for repair costs and/or replacement. Vaddio Technical Support can be contacted through one of the following resources: e-mail support at [vaddio\\_support@photo-control.com](mailto:vaddio_support@photo-control.com) or online at [www.vaddio.com](http://www.vaddio.com).

**Return Material Authorization (RMA) number** - Before returning a product for repair or replacement request an RMA from Vaddio's technical support. Provide a technician with a return phone number, e-mail address, shipping address, and product serial numbers. Describe the reason for repairs or returns as well as the date of purchase. Include your assigned RMA number in all correspondence with Vaddio. Write your assigned RMA number on the outside of the box when returning the product.

**Voided warranty** – The warranty does not apply if the original serial number has been removed or if the product has been disassembled or damaged through misuse, accident, modifications, or unauthorized repair.

**Shipping and handling** - Vaddio will not pay for inbound shipping transportation or insurance charges or accept any responsibility for laws and ordinances from inbound transit. Vaddio will pay for outbound shipping, transportation, and insurance charges all items under warranty but will not assume responsibility for loss and/or damage by the outbound freight carrier.

- If the return shipment appears damaged, retain the original boxes and packing material for inspection by the carrier.
  - Contact your carrier immediately.

**Products not under warranty** - Payment arrangements are required before outbound shipment for all out of warranty products.

\*Vaddio manufactures its hardware products from parts and components that are new or equivalent to new in accordance with industry standard practices.



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