BEA
We open up New Horizons
A HALMA GROUP COMPANY

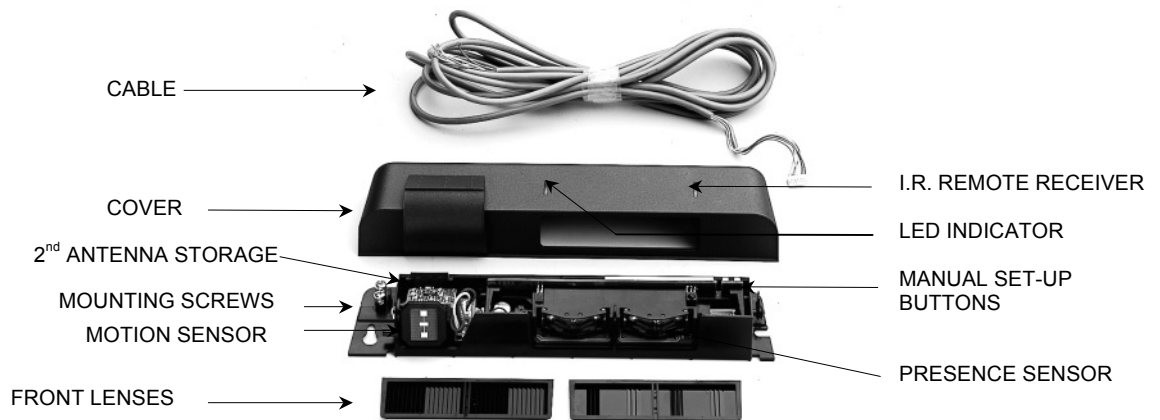| COMBINED SAFETY & ACTIVATION SENSOR	The Wizard IIC (PN:10WIZARDIIC) combines k-band microwave and focused active infrared technology to provide superior activation and safety for an automatic sliding door system. For activation, the unit provides digitally processed and sophisticated motion tracking technology for unidirectional sensing when energy conservation is critical. For safety, the unit emits 2 rows of 24 beams of focused presence technology that provides extraordinary safety. The active infrared remains active even when the door is closing. An "ALL RELAY" output is also possible, thus making it compatible with older non-microprocessed control boxes.

TECHNICAL SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Supply voltage	12 to 24 VAC / VDC: -5% to +10%
Power frequency	50 / 60 Hz
Power consumption	< 3 W
Mounting height • Standard • High	 5'9" to 8'2" 8'2" to 13"
SMR data input	10 to 30 V DC
Delay of the output activation after stimulation	transistor : < 1ms
3-color LED	• RED : presence detection • GREEN : motion detection • ORANGE :monitoring process
Temperature range	-30°F to +131°F
Degree of protection	NEMA 3S / (IP54)
Product conformity	R&TTE 1999/5/EC & EMC 89/336/EEC BZT Germany, TÜV
Dimensions	10.4 " x 2.2 " x 1.9 "
Weight	.55 lbs / 250 g
Housing material	ABS & LURAN S
Color of Housing	Anthracite gray (standard), aluminum or white finish
Cable length	10' of 9-conductor cable

	MOTION SENSOR	PRESENCE SENSOR
Technology	Microwave and microprocessor Transmitter frequency :24.125 GHz Transmitter radiated power : <20 dBm EIRP Transmitter power density : < 5 mW/cm²	Focused active infrared and Self-monitored microprocessor Spot diameter (standard) : 4" max Number of spots : 24 or 12 spots by curtain Number of curtains : 2
Detection field (standard) • Wide field • Narrow field	 13'0" W x 6'6" D 6'6" W x 8'2" D	 6'6" W x 13.75" D 3'3" W x 13.75" D
Detection mode	Minimum detection speed 2 inches / sec. (measured in the sensor axis)	Response time : < 128ms
Angle :	from 15° to 50° in elevation (adjustable)	from - 4° to + 4° (adjustable)
Output specification	Relay (free of potential change-over contact) : • Max contact voltage : 42V AC/DC • Max contact current : 1A (resistive) • Max switching power : 30W (DC) / 60VA (AC)	Transistor (optocoupled transistor) • Max output current : 100 mA • Max switching power : 48 V DC
Output hold-time	0.5s to 9s (adjustable)	1s (fixed)
Manual adjustment	• orientation of sensing field (mechanically) • shape of the sensing field (choice of antenna) • multiple functions (using push buttons).	• orientation of sensing field • shape of the sensing field (choice of front lens) • multiple functions (by push buttons).
Remote control adjustments	• Sensitivity. • Hold time. • Detection mode. • Immunity • Output configuration.	• Sensitivity. • Auto-learn time • Monitoring mode • Number of Curtains • Relay / Transistor configuration • Rain Mode • Snow Mode

CABLE

COVER

2nd ANTENNA STORAGE

MOUNTING SCREWS

MOTION SENSOR

FRONT LENSES

I.R. REMOTE RECEIVER

LED INDICATOR

MANUAL SET-UP BUTTONS

PRESENCE SENSOR

SAFETY & ESD PRECAUTIONS

1. DO NOT attempt any internal repair of the sensor. All repairs and/or component replacements must be performed by BEA, Inc. Unauthorized disassembly or repair….
   - may jeopordize personal safety and may expose one to the risk of electrical shock
   - may adversely affect the safe and reliable performance of the product
   - will result in a voided product warranty

2. Follow these recommendations:
   - Shut off all power before attempting any wiring procedure
   - Maintain a clean and safe work environment when working in public areas
   - Constantly be aware of pedestrian traffic around the door
   - Always stop pedestrian traffic through the doorway when performing tests that may result in unexpected reactions by the door
   - Always check placement of all wiring and components before powering up to ensure that moving door parts will not catch any wires and cause damage to equipment
   - Ensure compliance with all applicable safety and performance standards upon completion of installation

ELECTROSTATIC DISCHARGE (ESD) PRECAUTIONS

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
**ELECTROSTATIC
SENSITIVE DEVICES**

Circuit board components are vulnerable to damage by electrostatic discharge (ESD). ESD can cause immediate or subtle damage to sensitive electronic parts. An electrostatic charge can build up on the human body and then discharge when you touch a board. A discharge can be produced when walking across a carpet and touching a board, for example. Before handling any board, make sure you dissipate your body's charge.

CAUTION: In the event a unit needs to be opened, observe the following precautions.

- Ground yourself by touching a conductive surface of the door or other element connected to common earth ground to discharge the static electricity present in your body.
- Avoid walking around while replacing items inside the case, especially if you are on carpet or during conditions of low temperature and low humidity.
- Handle the board by the edges only to avoid touching electronic components.
- Store a loose board in an anti-static bag.

|	
MECHANICAL INSTALLATION	1. Remove the cover from the unit as shown in picture "A". After the Wizard is attached to the header, the cover may be removed by inserting small screwdriver behind the Wizard and gently prying cover off as shown in picture "B".

A

B
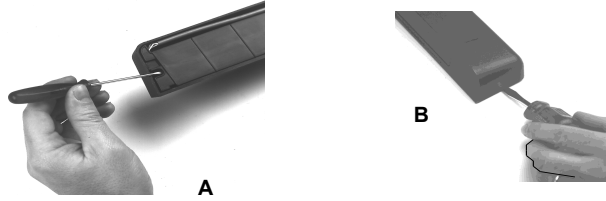
2. Attach mounting template to the center of header as shown – template should be 0"-2" above bottom edge of header. Drill the hole marked for wire passage and drill pilot holes for screw mounting.

NOTE: Flush mount with bottom of header is necessary for for all neagtive IR angles.

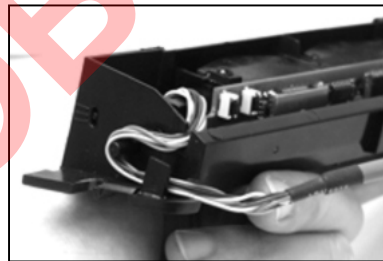Mount the sensor at a maximum height of 2" (5cm) from the bottom line of the door operator.
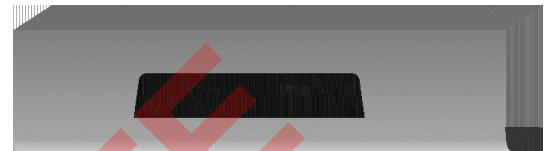
Use the mounting template to drill holes and position the sensor.

3. Insert mounting screws about halfway in and install the Wizard onto the screws. When in place, tighten screws to secure to header. Leave cover off until mechanical adjustments are complete.

ELECTRICAL INSTALLATION	1. With Wizard in place, locate the enclosed cable and feed the stripped end through the wire passage hole in header. Leave enough slack to allow connection to the Wizard and proper routing of wire around the plastic post as shown below. Please observe proper routing of the cable as shown – this is to divert rainwater from the Wizard if it should run down the cable, and also provides for proper routing to allow easy cover installation on the Wizard.

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ELECTRICAL INSTALLATION – WIRING	Perform the following for wiring the Wizard to an automatic door control:

Perform the following for wiring the Wizard to an automatic door control:

Wizard Wire Color	Connect To: Microprocessed Controls	Connect To: Controls without safety circuit
Red	12 to 24 VAC / VDC: -5% to +10%	12 to 24 VAC / VDC: -5% to +10%
Black	12 to 24 VAC / VDC: -5% to +10%	12 to 24 VAC / VDC: -5% to +10%
White	Common at Door Control	Common at Door Control
Green	Activation Input at Door Control	Activation Input at Door Control
Brown	Common at Door Control	Common at Door Control
Blue	Safety Input at Door control	Activation Input at Door Control

Other Wiring Notes:

1. When connecting to a microprocessed control box, the Motion output and presence output wires may be connected to separate inputs or may also be to a mutual input, as some controls may only have an activation input, while others may have an activation input, as well as a safety (or presence) input. For example:

FOR CONTROLS WITH ONLY AN ACTIVATION INPUT:
Two options exist for this configuration. First the White and Green may be connected to Brown and Blue (respectively), OR the F1 key may be set to a value of 1, in which case ONLY the White and Green wires are used to provide output for motion and presence detection.
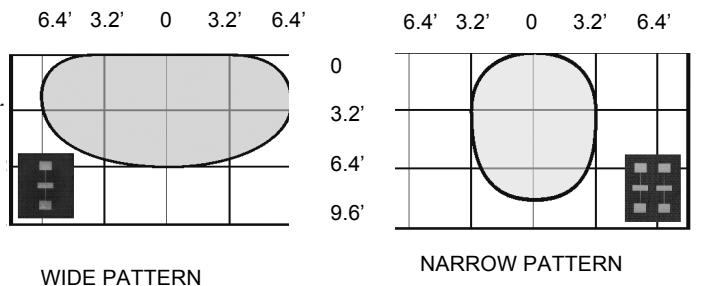

WIZARD

Red - 12 to 24 VAC / VDC: -5% to +10%
Black - 12 to 24 VAC / VDC: -5% to +10%
White – Common at Door Control
Green – Activation at Door Control
Brown
Blue

OR

WIZARD

Red - 12 to 24 VAC / VDC: -5% to +10%
Black - 12 to 24 VAC / VDC: -5% to +10%
White – Common at Door Control
Green – Activation at Door Control
Brown – Not Used
Blue – Not Used

+   Program the Wizard F1 key to a value of 1.
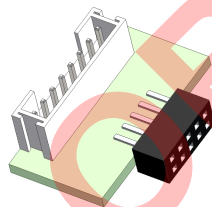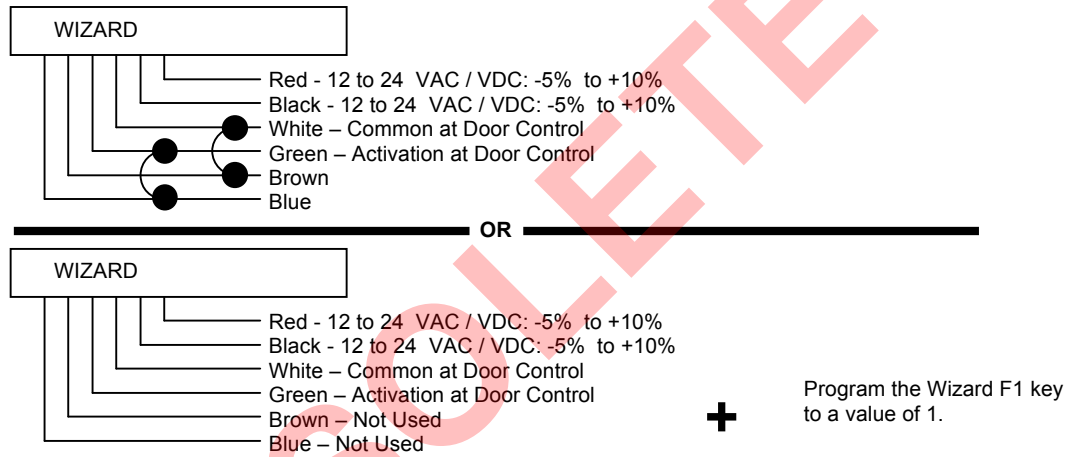
NOTE: If installing a Wizard IIC, and using an old style 6 pin Wizard cable, use BEA's adaptor board (PN: 20.5048) to facilitate easy connection.

20.5048

MECHANICAL ADJUSTMENTS

1. Insert the desired microwave planar antenna for a narrow or wide field of detection.

7'-0" height :   Wide= [13' (W) X 6' 6" (D)]   Narrow= [6 6" (W) X 8' 2" (D)]

6.4' 3.2' 0 3.2' 6.4'   6.4' 3.2' 0 3.2' 6.4'

0
3.2'
6.4'
9.6'

WIDE PATTERN   NARROW PATTERN

- The optional narrow-field antenna is located in a slot behind the mounted antenna as shown.
- To remove the antenna, carefully remove the protective cover and change antenna.
- Once proper antenna is in place, adjust angle of antenna as necessary.

**MECHANICAL ADJUSTMENTS MOTION SENSING FIELD**

1. The position of the sensing field is determined by the vertical angle of the planar antenna. The angle is adjusted in 3° increments by gently rotating the antenna forward or back. The default mounting angle is 30° - Patterns shown in diagram below are those at 30°.

6.4' 3.2' 0 3.2' 6.4'

Wide Pattern

0
3.2'
6.4'
9.6'

Narrow Pattern
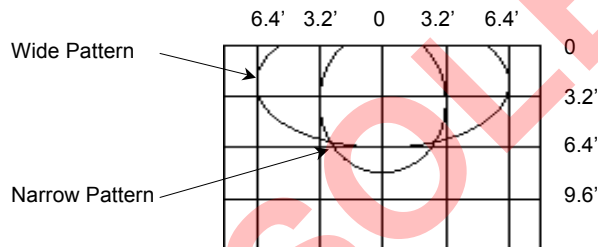
2. The tilt angle will be greatly determined by the position of the sensor with relation to the face of the door. A 15º angle will result in the pattern being drawn back towards the door, where as the 45º will place the pattern farther away. Be certain to walk-test detection field and insure compliance with current applicable ANSI standards.
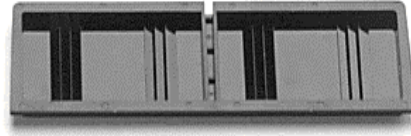
MECHANICAL ADJUSTMENTS PRESENCE SENSING FIELD

1. Install the desired lens for the infrared curtain (presence), as shown below.
   • Narrow Lens is suitable for smaller door openings or high mounting height applications.
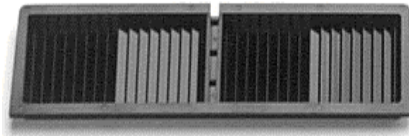
Narrow-field Lens

[3'3" (W) X 13.75" (D)]

Wide-field Lens

[6' 6" (W) X 13.75" (D)]

2. The infrared presence pattern may be adjusted in two different ways:
   • First, the pattern may be adjusted nearer or farther from the door.
   • Second, the pattern width may be adjusted to suit the particular door application
3. The adjustment screw will bring the pattern nearer or farther from the face of the door by adjusting the tilt angle from +4° to –4°. At the standard mounting height, one complete clockwise turn of the adjustment screw will move the pattern approximately 3 inches closer to the door. The precise location of the infrared beam may be found by using the BEA Spotfinder (PN: 10SPOT) after the Wizard has been powered up. IMPORTANT NOTE: The Spotfinder is only used as an aide to locate the infrared curtain, and does not imply an exact point of detection.

+4   – 4

+4° | -4°
0°
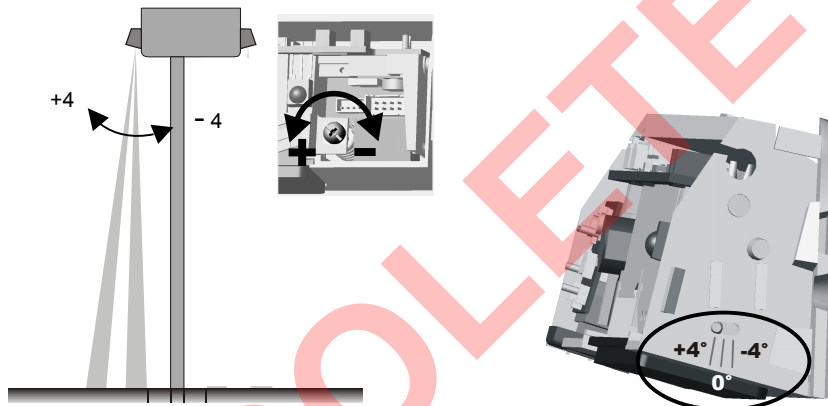
A counterclockwise rotation of the screw will result in the curtain moving farther from the face of the door. A clockwise rotation will result in a negative angle, drawing the curtain closer to the door. A plastic pin indicator is provided at the side of the sensor to aide in the positioning of the curtain.

BEA'S UNIVERSAL REMOTE CONTROL

• BEA's remote control provides ease of programming for the Wizard SMR. A program guide follows for useful reference. Before beginning, make sure the batteries are in the remote control are charged – replace as necessary.

   • Open the battery compartment at the back of the remote control.
   • Insert 2 AAA batteries – observe polarity
   • Close battery compartment

Every programming session must begin by unlocking the sensor. Thereafter, a program setting may be altered by pressing the desired function key, followed by the desired value for that function. When all programming is complete, press the lock key twice to retain settings. Use the following as a guide:

Unlock the sensor to enter into adjustment session (if no access code has been entered)	Press Unlock key — RED LED flashes slowly
To change the value of a parameter (ex. Maximum duration of presence detection)	Select parameter to change — RED LED flashes quickly — 0-9 Enter new value — RED LED flashes slowly
… to change any other parameters (ex. Output Configuration)	Select parameter to change — RED LED flashes quickly — 0-9 Enter new value — RED LED flashes slowly
To check the value of a parameter (ex. maximum duration of presence detection)	Select parameter to check — RED LED flashes quickly — ? Press Question Mark — GREEN GREEN GREEN GREEN … The number of green flashes indicate the value of this parameter — RED LED flashes slowly
Lock the adjustment session and go back to normal function	Press Lock key twice — Or [lock] + lock code

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Safety output re-direction **F1**

0: no redirection
1: transfer presence detection to activation output (all relay output)
2: activation output only upon motion AND presence detection
NOTE: When restoring defaults (magic wand then 9), the F1 key, if set to a value other than the default, will remain on it's current setting.

Relay Hold time 🕐

0 (0.5s) → 9 (9s)

Sensitivity

0 (min) → **9** (max) **default =7**

Microwave Detection mode ◄--►

1: bidirectional mode
2: unidirectional mode
3: unidirectional mode with MTF

Note: Defaults are shown in bold print

External Monitoring SMR ▣▸

0: monitoring disabled (OFF) SMR OFF
1: monitoring enabled (ON) SMR ON

Installation Configuration

	Mounting Height	Pulse Frequency
1	**Low**	**Low**
2	High	Low
3	Low	High
4	High	High

Door control **F2**

1: normal
   (LED in normal mode)
2: door permanently open (red LED ON)
3: door permanently closed (red LED OFF)

Microwave Immunity 《▪》

1: Reduced
2: normal
3: Increased
4 through 9: Higher number equals higher immunity level.

IMPORTANT: Immunity levels above 3 are intended for applications where excessive interference may be causing unintended detection. When applying a value of 4 or higher, only increment the value one step at a time, followed by a walk-test. When complete, ensure compliance to all applicable safety standards for performance.

Rain Mode / Snow Mode:
The Rain Mode or Snow Mode is designed to minimize the effect of heavy rain or snow, respectively, on the Wizard's auto-learn requirements. When programmed for these modes, the mode will be enabled after the Wizard goes through two auto-learn cycles within 6 detections of the sensor. To exit the special mode, simply launch a setup, or power the sensor off and then back on.

Number of IR curtains

1: 1 curtain
   (safety curtain close to the door)
2: 2 curtains
3: 2nd curtain in dynamic mode –
Enabled only after a motion detection

Unlock / Check values / Lock

Unlock	🔓
Check values	?
Lock	🔒

Output configuration

	Motion-Out	Presence-Out
1	Active/ N.O.	Passive/ N.C.
2	Passive/ N.C.	Active/ N.O.
3	Passive/ N.C.	Passive/ N.C.
4	**Active/ N.O.**	**Active/ N.O.**

Infrared immunity

1: normal
2: rain-mode
3: snow-mode
4. extreme snow mode
5. blizzard mode

Automatic Learn Time

0: 30 seconds
1: 1 minute
2: 2 minutes
3: 5 minutes
4: 10 minutes
5: 20 minutes
6: 60 minutes
9: Infinity – no learn

Setup

🪄	🪄	launch a quick setup
🪄	0	launch an assisted setup
🪄	9	restore factory settings

Notes:
- Defaults are shown in **bold print**
- When restoring factory defaults (Magic Wand + 9), the sensor will self-launch a setup
- Quick Setup has a 2 second duration
- Assisted Setup is recommended for first time setup. Duration is 16 seconds, and will automatically trigger door to the open position during the setup routine.
- When restoring defaults (magic wand then 9), the F1 key, if set to a value other than the default, will remain on it's current setting.

PROGRAMMING NOTES	**Door Control Mode (F2)**	The Door Control Mode is used to simulate a permanent detection, or non-detection, and is a useful setting while performing service to the door.
	Installation Configuration Key	The Installation Configuration key is used for changing the pulse frequency of the sensor for the purpose of reducing chances of cross-talk between sensors.
	Sensor Output	When launching a sensor setup, the sensor may or may not cause a door opening cycle. This is because the output from the sensor may be tied to the safety circuit of the door controller, which is typically disabled at the closed door position. For a quick setup, this is Ok. For an assisted setup, the installer must launch the setup, then active the door to the open position immediately thereafter. A normal setup routine will then follow.
	Lock Key	Always be sure to press the LOCK key twice, following any programming of the sensor. If the LOCK key is not pressed twice, the changes will not be permanently stored in the memory.
	Rain Mode	Rain Mode: When the infrared immunity level is set to Rain Mode, a specific trigger is required to enter into the mode: If the sensor completes 2 learn cycles within 6 detections, it will enter into Rain Mode. During this mode, the sensor will change the 2nd infrared curtain (the one farthest from the door) to IR motion (as opposed to IR presence). This will last for 1 hour, or until power is reset, or until a new setup is launched, whichever occurs first.
	Snow Mode	Snow Mode: When the infrared immunity level is set to Snow Mode, a specific trigger is required to enter into the mode: If the sensor completes 2 learn cycles within 6 detections, it will enter into Snow Mode. During this mode, the sensor will change the 2nd infrared curtain (the one farthest from the door) to IR motion (as opposed to IR presence). Additionally, the automatic learn time will change from whatever it was set to, to 10 seconds. This will last for 1 hour, or until power is reset, or until a new setup is launched, whichever occurs first. If Snow Mode is selected, additional beams or sensors may be required to maintain compliance with applicable safety standards.
	Extreme Snow Mode	Extreme Snow Mode: When the infrared immunity level is set to Extreme Snow Mode, a specific trigger is required to enter into the mode: If the sensor completes 2 learn cycles within 6 detections, it will enter into Extreme Snow Mode. During this mode, the sensor will change the 2nd infrared curtain (the one farthest from the door) to IR motion (as opposed to IR presence). The sensor will employ additional software routines to reject the detection of heavy snow. Additionally, the automatic learn time will change from whatever it was set to, to 10 seconds. This will last for 1 hour, or until power is reset, or until a new setup is launched, whichever occurs first. If Extreme Snow Mode is selected, additional beams or sensors may be required to maintain compliance with applicable safety standards.
	Blizzard Mode	Blizzard Mode: When the infrared immunity level is set to Blizzard Mode, a specific trigger is required to enter into the mode: If the sensor completes 2 learn cycles within 6 detections, it will enter into Blizzard Mode. During this mode, the sensor will operate both of the infrared curtains as infrared motion (as opposed to IR presence). This will last for 1 hour, or until power is reset, or until a new setup is launched, whichever occurs first. If Blizzard Mode is selected, additional beams or sensors may be required to maintain compliance with applicable safety standards.

<table>
<tr><td rowspan="3">LAUNCHING A SETUP OF THE INFRARED CURTAINS</td><td>Unlock the sensor to enter into adjustment session</td><td>Press Unlock key</td><td>RED LED flashes slowly</td><td></td></tr>
<tr><td>To launch an assisted setup
→ recommended after mechanical adjustments of the IR sensor module.
→ recommended once after the first installation</td><td>Press Setup key followed by 0</td><td>RED/GREEN LED alternating</td><td>The sensor performs a door opening and closing cycle to check the influence of the door leaves to the safety curtains. See Troubleshooting if RED LED flashes quickly after setup.</td></tr>
<tr><td>To launch a short setup
→ recommended after change of parameters by remote control</td><td>Press Setup key twice</td><td>RED/GREEN LED alternating</td><td>The sensor only takes a new reference picture.</td></tr>
</table>

MANUAL SET-UP (without remote)	• Set-up of the Wizard may be accomplished by the use of two Wizard mounted programming buttons. The procedures below indicate how to program using these buttons.

• The two set-buttons are located at the right side of the Wizard (as viewed when mounted to header). To begin, briefly press the right button and move away from the sensing patterns.

Manual Push-Buttons →
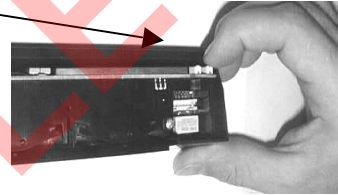
TO RESET THE UNIT to factory defaults including the access code.
• Press and hold both buttons simultaneously until both red and green LED lights flash alternately

TO CUSTOMIZE SETTINGS FROM FACTORY DEFAULTS
• To enter the customizing mode: Press the right button until the LED light flashes and then release
• To return to standard mode: Press the right button again until the LED light stops flashing and then release

CUSTOMIZING MODE
• The red LED light indicates the number for the parameter being altered (1 flash = parameter #1)
• The green LED light indicates the value for the parameter being altered (1 flash means value = 1)
• The right button enables selection of the parameter number being altered (+1 for each press)
• The left button enables alteration of the parameter (+1 for each press)

• **HELPFUL HINT:** When the sensor is wired correctly, pressing and holding the left button will result in disconnecting all outputs from that sensor, thus allowing the door to close if no other devices are being activated.

MANUAL SET-UP
(without remote)

PARAMETER NUMBER (altered by the right button and confirmed by **RED LED**)	PARAMETER	VALUES (altered by the left button and confirmed by **GREEN LED**)	DEFAULT VALUE
1	Radar Sensitivity	0-9	7
2	Relay hold time	0-9	0
3	Output configuration	1-4	4
4	Auto-learn presence sensing	0-9	0
5	Detection mode	1-3	3
6	Microwave Immunity	1-3	3
7	IR Immunity	1-3	3
8	Not Used	Displays 8 Orange Flashes	
9	SMR mode	0-1	0
10	IR curtain	1-3	1
11	Secondary Sensitivity	0-9	0
12	Height & Frequency	1-4	1
13	Output Re-Direction	0-2	0
14	Door control function	1-3	1

EXAMPLE: Change radar sensitivity from 7 to 9 and set hold time to 4 seconds:
1.   Press the right button for 2 settings, you will enter the customizing mode
•   The green LED flashes once (parameter 1)
•   The red LED flashes 7 times (sensitivity = 7)
•   Press the left button twice to move from sensitivity = 7 to sensitivity = 9

2.   Press the right button once to move to Parameter 2 (relay hold time)
•   The green LED flashes twice (parameter 2)
•   The red LED does not flash (hold time = 0 seconds)
•   Press the left button four times to move from hold time = 0 to hold time = 4 seconds

NOTE:
1.   When the highest value for the parameter has been reached, the value will "roll over" to its lowest value (e.g. for radar mode: 1, 2, 3, then 1, 2, …).
2.   The sensor automatically returns to standard mode if neither button has been pressed for one minute.

POWER-UP PROCEDURES	STEP	USER'S ACTION	RESULT
	STEP 1	With all wiring in place, apply power to door control and 12 to 24 VAC / VDC: -5% to +10% to Wizard. Once powered, observe LED status on the Wizard. Stop all traffic through the doorway while performing this step, and remain clear of the Wizard's detection zones.	The Wizard will show a steady red LED during the set-up procedure. Once the Wizard completes set-up, the door will close and begin normal operation thereafter. Setup process takes approximately 6 seconds, if uninterrupted.
	STEP 2	If the sensor is being powered for the first time, because of new installation or sensor is being replaced, unlock the Wizard and Press the Magic Wand Key, followed by a number 0. Observe the LED status during setup. Once set-up is complete, the LED indication will reflect the status of the set-up. Observe the LED while standing outside of the detection zones.	• NO LED UPON COMPLETION = Successful set-up • RED LED ON = Presence being detected - Wizard is seeing an object. • GREEN LED MOMENTARILY ON = MOTION DETECTION (Wizard sees movement). Adjust microwave functions: angle, sensitivity, immunity. • ORANGE LED ON = Possible fault. If LED stays on, reset power and observe LED. If it comes back on steady, replace Wizard.

	STEP 3	Proceed with fine tuning the mechanical , as well as the program adjustments of the Wizard. Refer to the applicable sections of this manual for altering any settings. Be sure to check:
		   • Motion width & depth
		   • Presence width & depth
		   • Position of infrared curtain
		   • Sensitivity of motion field
			Sensor must always be adjusted to be in compliance with the current version of ANSI A156.10

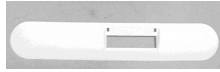| TROUBLE-SHOOTING -	PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
	Orange LED is illuminated on Wizard.	1. Wizard IR is in saturation 2. Internal fault within the Wizard 3. Faulty Power Input	1. Launch a new setup and remain all clear from the detection area. 2. Remove power, then re-apply. Input power may have fluctuated beyond tolerances.

	Red LED on at Wizard.	1. Wizard in detection.	1. If red LED is on at Wizard:
			  a. Adjust infrared pattern away from the door and launch a new set-up. Refer to page 5 for infrared adjustments. Use BEA Spotfinder to accurately adjust the position of the pattern.
			  b. If hi-intensity lights or high gloss floors are saturating the area of detection, change the Infrared Sensitivity setting to reduced sensitivity – see page 7, and launch a new set-up to re-learn the environment.

	Red LED flashes for approx. 10 seconds when attempting a set-up.	1. Infrared curtains are too close to the door and the sensor detects a door influence.	1. Adjust Infrared curtain as necessary. Use of BEA's Spotfinder during this process is recommended.

TROUBLE-SHOOTING - Cont.	PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
	Door opens when it should close.	1. Relay Configuration on wrong setting.	1. Check Relay Configuration setting.
	Door will not close Red LED off at Wizard.	1. On-Off switch at door control in wrong position or is faulty. 2. Improper Relay Configuration on Wizard. 3. Faulty door control.	1. Check to insure On-Off switch for door is in the ON or AUTOMATIC position. If switch is in correct position, check switch with multi-meter for proper operation. 2. Insure correct polarity at Brown and Blue wires 3. Check Relay Configuration setting on each Wizard. Refer to page 6 for settings. 4. Remove all sensor inputs from the door control. If door remains open, fault exists with door control or motor. Refer to manufacturer's manual for further troubleshooting. If door closes with sensor inputs removed, fault exists with sensors or related wiring.
	Door will not open.	1. On-Off switch at door control in wrong position or is faulty. 2. Wizard not detecting traffic. 3. Faulty wiring between sensor and door control. 4. Faulty door control.	1. Check to insure that On-Off switch for door is in ON or AUTOMATIC position. If it is in correct position, check switch with multi-meter for proper operation. 2. Walk in and out of Wizard detection area, if red LED does not illuminate check: a. Power supply for Wizard: 12 to 24 VAC / VDC: -5% to +10% b. Check SMR setting on each Wizard. The SMR should be disabled unless system is being used with BEA's Door Control Unit (DCU). c. Check Relay Configuration for each Wizard. 3. Remove all sensor inputs from the door control. Jumper the common and activate terminals of the door control. If door does not open, fault lies within door control or motor. Refer to manufacturer's manual for further troubleshooting. If door opens, fault lies with sensors or related wiring. 4. Refer to Step 3.
	Door keeps recycling open.	1. Wizard is seeing door. 2. Wizard is seeing movement from unwanted objects. 3. Vibration is triggering the Wizard.	1. Observe LED status on each Wizard. Green LED indicates motion detection, red LED indicates presence. If LED's are illuminating make sensor adjustments as necessary to eliminate unwanted detection. Check angle and sensitivity for presence and motion. 2. Check for moving objects in the path of detection, such as posters, banners, etc. 3. Locate source of vibration and correct as necessary.
	Wizard will not respond to remote control.	1. Batteries in remote are dead or are installed improperly.	1. Check to insure that the batteries are installed correctly – observe polarity. 2. Replace batteries - AAA 1.5 volt.
	Wizard will not unlock when access code is entered.	1. Improper code being entered.	1. Reset code to the default value of 0000 by performing the following: a. Cut and restore power supply. No code is required to unlock during the first minute after powering. Reset code prior to locking.
	Red LED is flashing rapidly after attempting set-up.	Detection field was violated during set-up of the Wizard.	1. Launch a new set-up and insure that the detection field remains all clear until set-up is complete. 2. Wizard may be seeing the door as it is closing. Adjust infrared curtain and launch a new set-up.
	Wizard will not detect – door stays open	Improper SMR setting	1. If the Wizard is NOT being used with a BEA DCU, set SMR to a value of 0.

| ACCESSORIES | • Weather Hood Unit (10URC) | • Ceiling Adaptor (10WCA) | • Remote Control (10REMOTE) | • Cable Adapter (20.5048) | • SpotFinder (10SPOT) |

| COMPANY CONTACT | If after troubleshooting a problem, a satisfactory solution cannot be achieved, please call B.E.A., Inc. for further assistance during Eastern Standard Time at **1-800-523-2462 from 7am - 5pm.** **For after-hours, call East Coast: 1-866-836-1863 or 1-800-407-4545 / Mid-West: 1-888-308-8843 / West Coast: 1-866-721-8646. DO NOT** leave any problem unresolved. If you must wait for the following workday to call B.E.A., leave the door inoperable until satisfactory repairs can be made. **NEVER** sacrifice the safe operation of the automatic door or gate for an incomplete solution. |
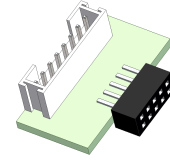
OBSOLETE

The purpose of the addendum is to accommodate for the differences in the Standard Rocker Switch package and the Rotary Switch package. The standard wiring provided with the Rotary Switch Package is incompatible when using the partial opening switch selection with the Wizard sensor system.

When using the Stanley Rotary Switch on a Duraglide slider package with a newer style Stanley interface board, observe the following:

• The brown wire from the Wizard must be connected to terminal #3 (Common) on TB-3 of the interface.

BESAM CUD/J-9 AMD2 SLIDING DOOR WITH WIZARD SYSTEM
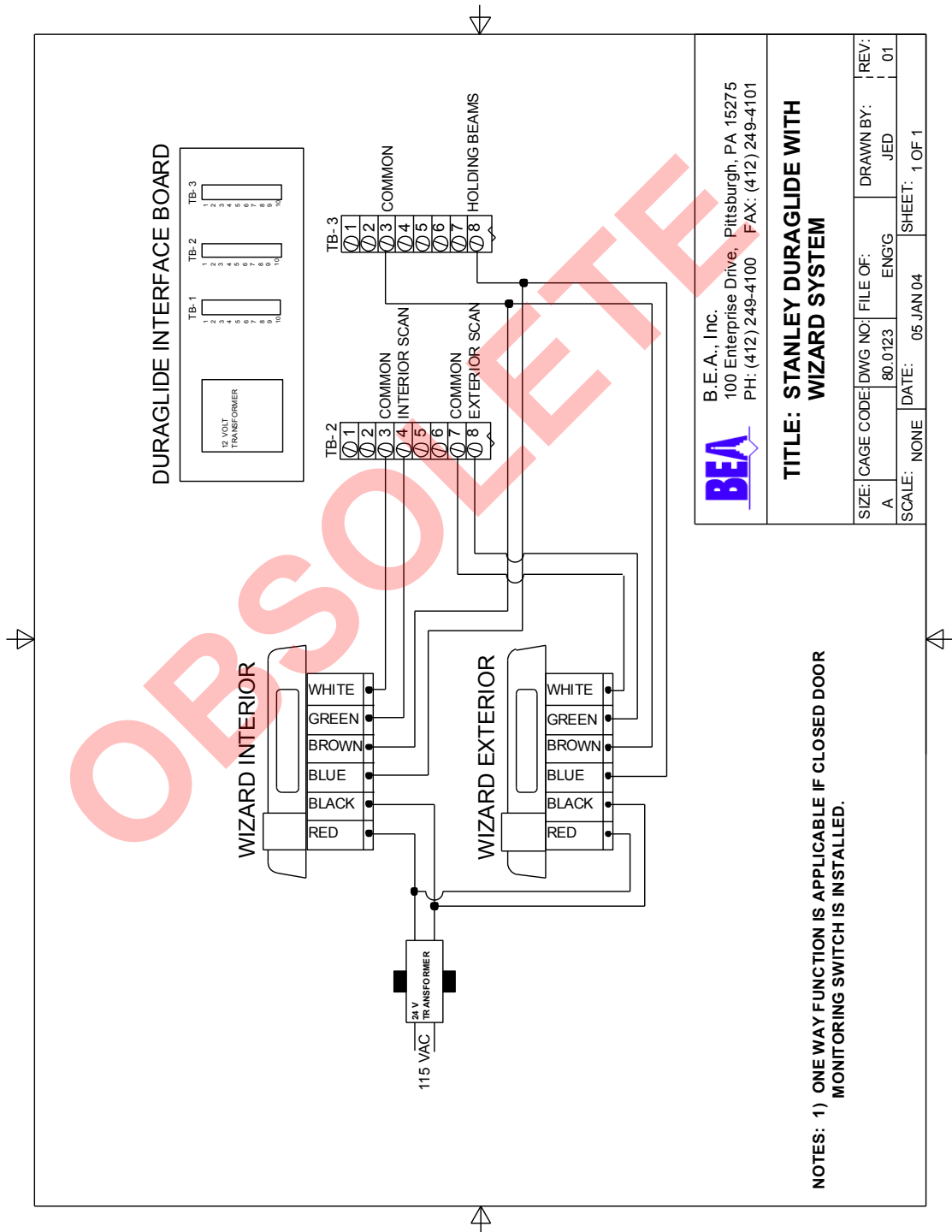
B.E.A., Inc.
100 Enterprise Drive, Pittsburgh, PA 15275
PH: (412) 249-4100   FAX: (412) 249-4101

TITLE: BESAM CUD/J-9 AMD2 SLIDING
DOOR WITH WIZARD SYSTEM

| SIZE: A | CAGE CODE: | DWG NO: 80.0058 | FILE OF: ENG'G | DRAWN BY: JED | REV: 01 |
| SCALE: NTS | | DATE: 07 JAN 04 | | | SHEET: 1 OF 1 |

AMD2 CONTROL

R	RESET
1	- 0 VDC
2	PARTIAL OPEN
3	EXIT
4	OFF
5	- 0 VDC
6	STOP IMPULSE
7	PRES. IMPULSE(1)
8	C-SWITCH, 0 VDC (See Note #1)
9	PRES. IMPULSE(2)
10	+ 18 VDC
11	- 0 VDC
12	OUTER IMPULSE
13	INNER IMPULSE
14	+ 18 VDC
15	
16	} LOCKING DEVICE

6 5 4 3 2   PS-6
*

* Optional - connect
to reset (TB1 R) if required.

(See Note #3)

WIZARD INTERIOR

GREEN
WHITE
BROWN
BLUE
BLACK
RED

(See Note #2)

WIZARD EXTERIOR

GREEN
WHITE
BROWN
BLUE
BLACK
RED

(See Note #2)

24 V TRANSFORMER

115 VAC

NOTE:
1) DO NOT CONNECT BROWN WIRES TO C-SWITCH COMMON PIN#8.
2) OBSERVE POLARITY WITH THE WIZARD BROWN WIRE
   CONNECTING TO GROUND (0 VDC).
3) A JUMPER MUST BE INSTALLED IN PINS 9,12 ON CONTROL BOX FOR
   RE-ENTRY SENSOR IN ONE-WAY TRAFFIC AS PER ANSI STANDARD 8.2.3.

OBSOLETE

UniSlide Control

Pin	Label
16	+ 24 VDC
15	MONITORED SAFETY/ONLY PHOTOCELL
14	C-SWITCH/MONITORED INNER IMPULSE
13	STOP IMPULSE
12	PRESENCE IMPULSE 2
11	PRESENCE IMPULSE 1
10	- 0 VDC
9	+ 24 VDC
8	SYNCHRONIZING OUTPUT
7	SYNCHRONIZING INPUT
6	KEY IMPULSE
5	OUTER IMPULSE
4	- 0 VDC
3	+ 24 VDC
2	INNER IMPULSE
1	- 0 VDC

WIZARD INTERIOR

GREEN
WHITE
BROWN
BLUE
BLACK
RED

WIZARD EXTERIOR

GREEN
WHITE
BROWN
BLUE
BLACK
RED

24 V TRANSFORMER

115 VAC

NOTE: 1) DO NOT CONNECT BROWN WIRES TO C-SWITCH COMMON.
2) OBSERVE POLARITY WITH THE BROWN WIRE CONNECTED TO GROUND (0 VDC).
3) A JUMPER MUST BE INSTALLED BETWEEN PINS 5, 12 ON THE CONTROL BOX TO ALLOW FOR RE-ENTRY SENSOR IN ONE-WAY TRAFFIC MODE TO COMPLY WITH ANSI A156.10 SECTION 8.2.3.

B.E.A., Inc.

TITLE: BESAM UNISLIDE SLIDING DOOR WITH WIZARD SYSTEM

SIZE:	CAGE CODE:	DWG NO:	FILE OF:	DRAWN BY:	REV:
A		80.0163	ENG'G	JED	01
SCALE:	NONE		DATE: 06 JAN 04	SHEET: 1 OF 1	

OBSOLETE

POWER INPUT
120 VAC

3-PIN
NEUTRAL
EARTH/ GROUND
MAIN
WHITE
GREEN
BLACK

96005-900
QUANTUM-SLIDE
TRANSFORMER BOX

GREEN / YELLOW
RED
RED

ACCESSORIES 24 VAC PINS 3,4
ACCESSORIES 24 VDC PIN 1(+) PIN 2(-)

96010-900
QUANTUM-SLIDE
CONTROL BOX

LOOK-SEE OUTPUT PINS 17,18
MORNING ENTRY PINS 15,16
WEATHERWISE PINS 11,12
BREAKAWAY PINS 13,14
EXTERIOR ACTIVATE PINS 9,10
LOOK-SEE COM LINE PIN 8
3 OR 4 WAY SWITCH PINS 5,6,7
SAFETY BEAMS PINS 3,4
INTERIOR ACTIVATE PINS 1,2

INTERIOR WIZARD

GREEN
WHITE
BLUE
BROWN
BLACK
RED

EXTERIOR WIZARD

GREEN
WHITE
BLUE
BROWN
BLACK
RED

115 VAC
24 V
TRANSFORMER

OBSOLETE

NOTES: 1) OBSERVE POLARITY ON WIZARD PRESENCE OUTPUT
(+) BLUE AND (-)BROWN WIRES. BLUE CONNECTS TO
PIN 3 AND BROWN CONNECTS TO PIN 4 ON THE DOOR
CONTROL.

B.E.A., Inc.
100 Enterprise Drive, Pittsburgh, PA 15275
PH: (412) 249-4100   FAX: (412) 249-4101

BEA

TITLE: DOROMATIC 96 K SLIDER WITH
WIZARD, MICROCELL 1 SYSTEM

SIZE:	CAGE CODE:	DWG NO:	FILE OF:	DRAWN BY:	REV:
A		80.0137	ENG'G	JED	01
SCALE:	NONE	DATE: 05 JAN 04		SHEET: 1 OF 1	