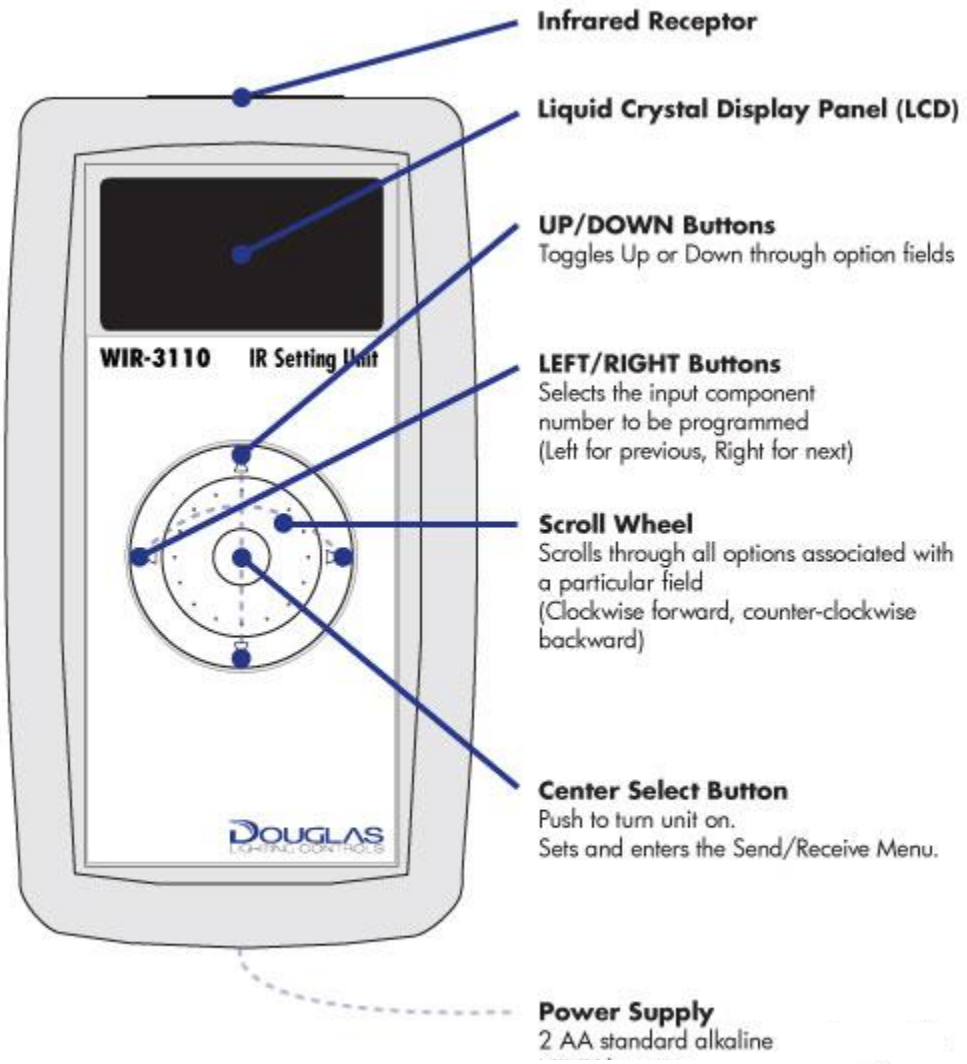
WIR-3110
Infrared Setting Unit
User Manual for
Diversa Dual Technology Sensors

1. INTRODUCTION

1.1. GENERAL DESCRIPTION

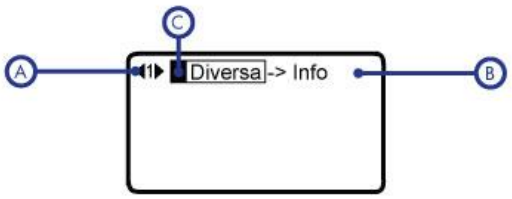
The WIR-3110 Infrared setting unit interfaces with the Di*versa* Occupancy sensors. The Di*versa* Occupancy sensors use IR technology to allow touchless programming.



2. FEATURES AND OPTIONS

Menu Navigation

A. Menu Number
B. Menu Title
C. Cursor

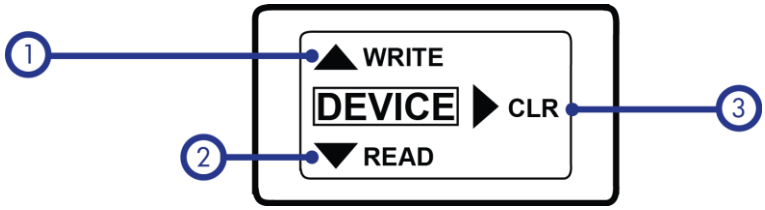


Send/Receive

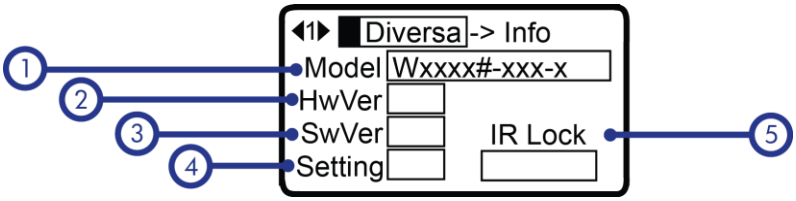
Send/Receive range varies for each sensor form factor. WOS type sensors are designed to have a very short range; hold right up to the sensor lens. WOR/WOW type sensors are designed to have a significantly longer range. A WiFi symbol will appear while the sensor is Reading or Writing.

1. Write (Push UP)
2. Read (Push DOWN)
3. Clear (Push RIGHT)
4. Off* (Push LEFT)

*programmer will turn off automatically after one minute of no activity.



2.1. Sensor Information



1) **Model Number:**
Full Model number indicating options. Note, lens type is not shown.

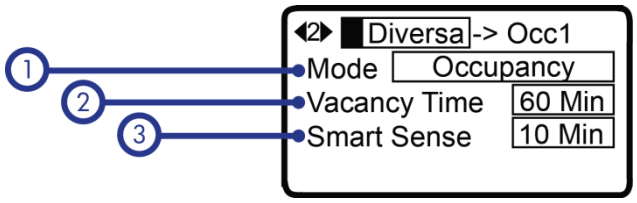
2) **Hardware Version**

3) **Firmware Version**

4) **Setting (Read only):**
This field indicates if the device is setup to use either the on-board dip switch values or the IR settings.

5) **IR Lock:**
If “Locked” the Setting DIP for configuration is ignored and only the IR settings are used.

2.2. Occupancy Setting Menu 1

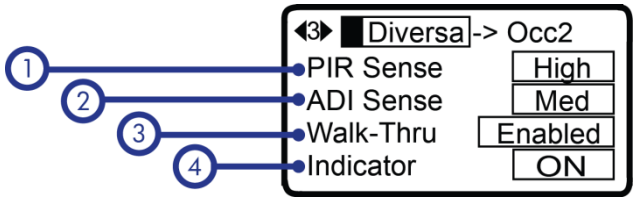


1) **Occupancy Sensor Mode:**
The "WO" Di*versa* sensors can be setup to operate like a "WV" Di*versa* sensors by selecting between "Occupancy" or "Vacancy" modes.

2) **Vacancy Time:**
- Auto
- 30 Sec
- 1 minutes
- 5 minutes
- 10 minutes
- 20 minutes
- 30 minutes
- 40 minutes
- 60 minutes
- 90 minutes
- 120 minutes

3) **Smart Sense:**
The timer keeps the ADI-Voice on after vacancy timeout, allowing the lights to be turned on with ADI-Voice detection. The selected time is used as the mid range for the adaptable.
- 15 sec
- 30 sec
- 1 minute
- 1:30 minute
- 2 minutes
- 3 minutes
- 4 minutes

2.3. Occupancy Setting Menu 2



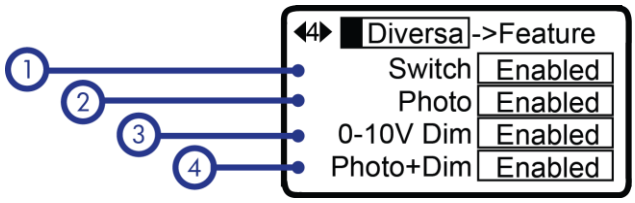
1) **Passive Infrared (PIR) Sensitivity:**
Disabled
Low
Medium
High

2) **Accurate Detection Intelligence (ADI) Voice Sensitivity:**
Disabled
Low
Medium
High

3) **Walk-Thru Mode:**
When enabled, this feature turns the lights off after 3 minutes if no occupancy detection occurs after the first 30 seconds after initial turn on.

4) **Indicating LED:**
If preferred, this allows you to disable the motion and ADI-Voice indicating LEDs.

2.4. Feature Enabling Menu



1) **Switching Feature:**
Enable or Disable on-board switch.

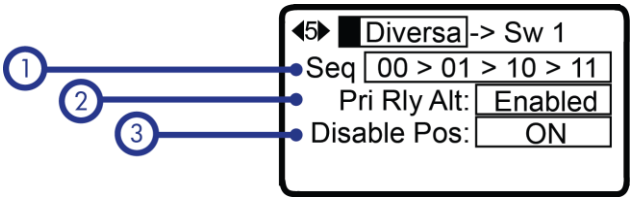
2) **Photo ON/OFF Feature:**
If equipped, enable or disable the photocell feature. This feature enables/disables lights if adequate natural light is present.

3) **0-10V Dimming:**
If equipped, enable or disable the 0-10V dimming output.

4) **Photo Controlled Dimming:**
If equipped, allow the 0-10V dimming & photo options, enabling it's function will allow the 0-10V output to be controlled by the photocell or at the fixed dim level; see menu 9.

2.5. Switch Setting Menu 1

Use this menu to configure dual pole sensors as multi-level lighting (sequencing) sensors.



1) **Sequences (2-Pole):**

Once configured using WIR-3110 with each press of the override button the Di*versa* sensor steps through the sequence, as per table below:

00 = Both poles off (START)
10 = Primary pole off, secondary pole on
11 = Both poles on

01 = Primary pole on, secondary pole off

RPT = Repeat

Start	1st Press	2nd Press	3rd Press	4th Press
00 →	01 →	10 →	11 →	00
00 →	10 →	11 →	00 →	10
00 →	01 →	11 →	00 →	01
00 →	11 →	00 →	11 →	00
00 →	01 →	00 →	01 →	00
00 →	00 →	00 →	00 →	00

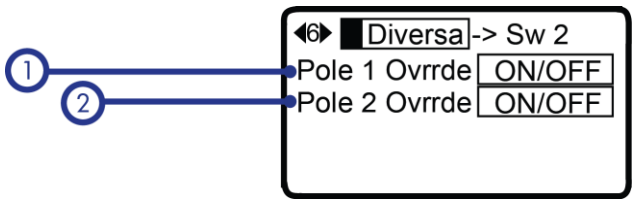
The first level is activated by the occupancy signal or switch if it is set to vacancy.

2) **Alternating Primary (2-Pole):**
When enabled, the primary pole will alternate for even lamp wear, every time occupancy is detected (does not apply to override button).

3) **Disable Mode**
The sensor can be disabled by applying 24VAC from the source on the Sensor Link wire. This option is to determine what action is to be performed.
- OFF
- 10
- 01
- 11
- – – (As-is)

2.6. Switch Setting Menu 2

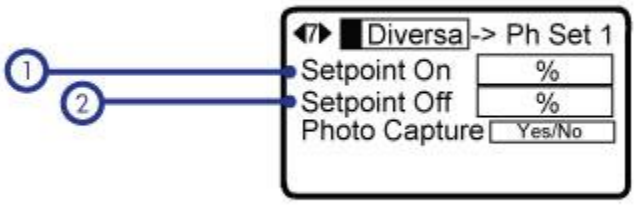
Use this menu to configure override button functionality.



1) **Pole 1 - Override:**
   - ON/OFF
   - ON Only
   - OFF Only

2) **Pole 2 - Override:**
   - ON/OFF
   - ON Only
   - OFF Only

2.7. Photo Setting Menu 1



1) **Photo Setpoint High**
For switching: When the light level is lower than this setting it will turn the lights ON when in ON/OFF photo mode.

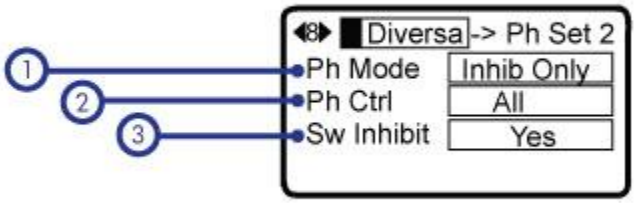
2) **Photo Setpoint Low**
For switching: When the light level is higher than this setting it will inhibit the lights from turning ON or turn them off depending on the “Photo Mode”.

Ranges:

Ceiling Mount	0-800 Lux
Wall Mount	0-800 Lux
Wall Switch	0-800 Lux

3) **Photo Capture & Temporary Dim**
These two functions are used to set the photo set points automatically. Use the temporary (30 Sec) dim to set the desired maintained light level. Then send a “Photo Capture” to read the light level.

2.8. Photo Setting Menu 2



1) **Photo Control:**
   - Disabled
   - Pole 2 Only
   - Both Poles

2) **Photo Type*:**
   Inhibit Only:
   If occupancy is detected ***AND*** there is a deficiency of natural light (as determined by photo setpoint off), the output is triggered on. Once on, the output remains on until a vacancy condition is determined by expiration of the vacancy timer. An increase in natural light will not force the lights off.

   ON/OFF Control:
   If occupancy is detected ***AND*** there is a deficiency of natural light (as determined by a programmable set point), the output is triggered on. Once on, the output remains on until a vacancy condition is determined by expiration of the vacancy timer. An increase in natural light will allow the lights to turn off and as the ambient light level drops the lights will turn on automatically.

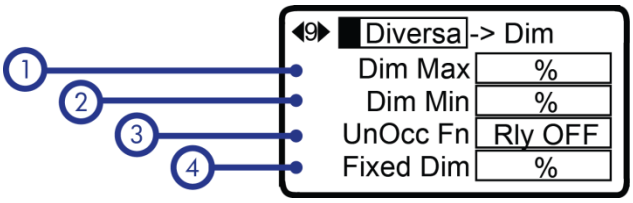
   *If Photo is disabled on Menu 4, the following features are not applicable:

   Switch Inhibit

   Photo Type

3) **Switch Inhibit*:**
   When enabled, it will inhibit the switch from turning the light on if there is sufficient ambient light detected. Photo OFF setpoint.

2.9. Dimming Setting Menu

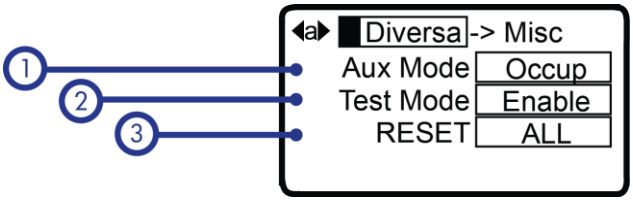


1) **Dimming Maximum Limit (%) & Fixed Dimming Output**

2) **Dimming Minimum Limit (%)**

3) **Unoccupied Function:**
   - Minimum Dim Only
   - Relay OFF

2.10. Miscellaneous Setting Menu



1) **Auxiliary Contact Mode (-R option):**
   Indicate Occupancy
   Indicate Output Signal

2) **RESET:**
   All Settings
   Photo Settings
   Audio Settings
   None

3) **Test Mode:**
   When activated, the sensor options are temporarily changed for quick reaction times (Timeout: 5 sec, Smart-Sense: 5 sec) and ADI-Voice enabled. This will drop out to normal mode after 30 minutes