Daintree® Wireless People Counting Sensor

(WMZ10)

STOP

BEFORE YOU BEGIN
Read these instructions completely and carefully.
Save these instructions for future use.

⚠ WARNING / AVERTISSEMENT

RISK OF ELECTRICAL SHOCK
- Turn power off before inspection, installation or removal.
- Follow all NEC and local codes.
- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- Wear safety glasses and proper aid during installation and maintenance.
- Install this kit only in the luminaires that has the construction features and dimensions shown in the photographs and/or drawings.
- Above ceiling access required.
- While the sensor is designed to withstand Electrostatic Discharge (ESD), it is always advisable to touch a grounded metal object before handling the sensor, particularly in an operating fixture.

RISQUES D'INCENDIE OU DE DÉCHARGES ÉLECTRIQUES
- Coupez l'alimentation avant d"inspecter, installer ou déplacer le luminaire.
- Respectez tous les codes NEC et codes locaux.
- Ne pas percer ou altérer les trous d'un boitier contenant filou composant électrique durant l'installation.
- Porter des lunettes de sécurité et les aides appropriéeslors de l'installation et de l'entretien.
- Installez ce kit uniquement dans les appareils d'éclairagequi a les caractéristiques de la construction et les dimensions indiquées dans les photographies et/ou dessins.
- Accès requis au-dessus du plafond.
- Bien que le capteur soit conçu pour résister aux décharges électrostatiques (ESD), il est toujours conseillé de toucher un objet métallique mis à la terre avant de manipuler le capteur, en particulier dans une installation en fonctionnement.

⚠ WARNING

RISK OF ELECTRIAL SHOCK. Disconnect power before service, installation or maintenance of the product.

⚠ WARNING

RISK OF INJURY. Wear safety glasses and gloves during installation and servicing.

⚠ WARNING

RISK OF FIRE. Follow all relevant IEC or UL instructions and local building codes

The **WMZ10** is part of the Daintree Networked product portfolio, an open networked wireless controls solution to address evolving environmental regulations and transform spaces into intelligent environments for buildings of all sizes. The WMZ10 utilizes the Daintree Networked for dimmable light luminaire control, daylight harvesting, occupancy detection and non-camera based people counting. The WMZ10 is capable of advertising BLE beacons in the iBeacon format for enabling Indoor Positioning Solutions.

Save These Instructions

These instructions do not purport to cover all details or variations in components nor to provide for every possible contingency to be met in further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purpose, the matter should be referred to Current. Current does not claim liability for any installation not performed according to this guide or not by a qualified electrician.

CONTACT FACTORY for details and limitations when seeking to add this device to a luminaire being used with an emergency system other than Battery Backup.

① Preparing Electrical Wiring

Electrical Requirements
In case of power supply miswiring, mains can be present on the device. Make sure all electricity is switch off before inspection.

Grounding Requirements
In case of power supply miswiring, mains can be present on the device. Make sure all electricity is switch off before inspection.

ESD *Avoidance of Electrostatic Discharge*
While the sensor is designed to withstand Electrostatic Discharge (ESD), it is always advisable to touch a grounded metal object before handling the sensor, particularly in an operating fixture.

IMPORTANT

To ensure the product warranty is valid, please ensure all installation instructions and environmental conditions for storage and operation are complied with. Only Current trained contractors can install the product.

② FCC/ IC Compliance Statements

This device complies with the part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operations.

This device contains license-exempt transmitter(s)/receivers(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operations of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d´Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L´exploitations est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
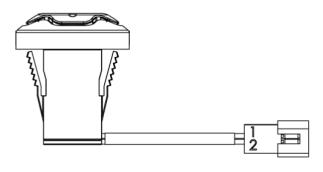
To satisfy FCC-ISED RF exposure requirements a separation distance of 20 cm or more must be maintained between the antenna of this device and persons during operation. Operation at closer than 20 cm is not permitted.
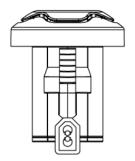
Pour être conforme aux limites d'expositon aux ondes RF des normes FCC/ISED, une distance de séparation d'au moins 20 cm doe être maintenue entre l'antenne de cet appareil et toute personne pendant son operation. Mettre en operation ced appareil a une distance plus rapprochée que 20 cm n'est pas permis.
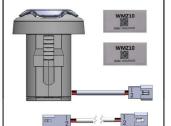
③ Installation/Mounting

- WMZ10 Can be mounted into a 7/8" hole directly in a drywall ceiling, or drop ceiling tile.
- Ribbed wings hold the sensor in place to the ceiling.
- Recommended Mounting Height is 9'-11'

WMZ10
- Daintree Wireless People Counting Sensor
- CMP Cable
- Identification sticker labels

NOTE:
- All cables are CMP (Plenum) rated.
- Identification sticker labels are to be placed on or near luminaire and on a floor plan for mapping

④ Installation/Mounting

The sensor shall be installed and commissioned by a trained individual.

- Please note, that the sensor shall be installed with the arrow (on lens) facing North.
- It is important that the sensors are all oriented in the same direction to ensure optimal performance.

Mounting Height	Max. Coverage (sq. ft.)
9	64 (8 ft. x 8 ft. Square)
10	81 (9 ft. x 9 ft. Square)
11	100 (10 ft. x 10 ft. Square)

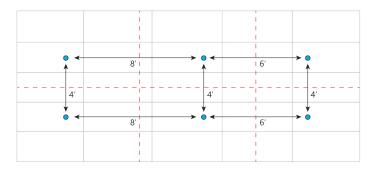DT050-Daintree-WMZ10-People-Counting-Install-Instructions_R01

⑤ Installation/Spacing

In order to effectively count occupants in the room, the sensors must be spaced uniformly in a grid pattern.
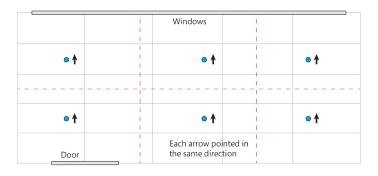If working in a room with drop ceilings, the grid must correspond with the ceiling tiles.

Each sensor has a 4' max field of view on each side. Distances between sensors and IEEE numbers must be recorded.
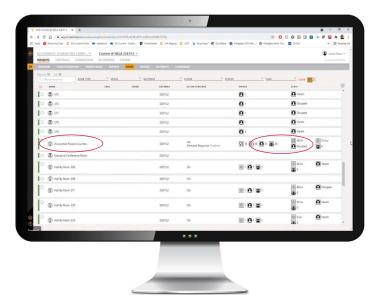
Ex. 2'x4' Ceiling Tiles

⑥ Installation/Orientation

- Each WMZ10 sensor has an arrow embossed on the sensor's face. This Arrow must be oriented in a known direction.
- We recommend the arrow on each sensor in a room be pointed AWAY from the wall with the door or entryway.
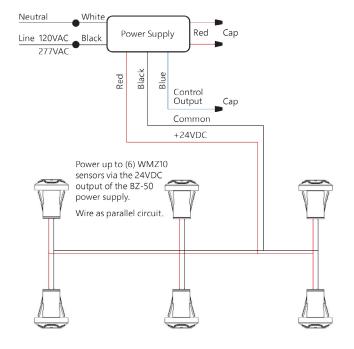

⑦ Reporting

- People Counting Reporting is provided in the Insights > Zones section of Daintree Controls Software (DCS) in the Daintree Networked Wireless Controls platform. For more information on DCS or Daintree Networked, visit LED.com.
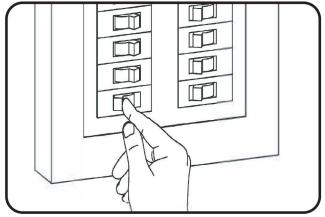

⑧ Wiring

Neutral — White
Line 120VAC — Black
277VAC
Power Supply
Red — Cap
Red Black Blue
Control Output — Cap
Common
+24VDC

Power up to (6) WMZ10 sensors via the 24VDC output of the BZ-50 power supply.

Wire as parallel circuit.

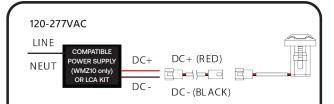## ⑨ SENSOR ACCESSORY INSTALLATION STANDALONE UNIT (NO LED FIXTURE)
FOLLOW OPTION A OR B FOR NON ENCLOSED OR ENCLOSED INSTALLATION
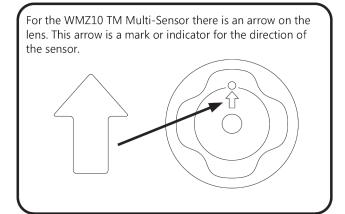
Ⓐ DISCONNECT POWER

Remove power by switching circuit breaker to the off position.

Ⓑ VERIFY POWER SUPPLY AND SENSOR ARE COMPATIBLE

COMPATIBLE POWER SUPPLY (WMZ10 only) OR LCA KIT

To verify a compatible power supply, please refer to the Power Supply Compatibility List table on each device's spec sheet.

Note: Connect TM sensor to Current Lighting Solutions, LLC LED drivers or control modules not capable of providing greater than 15VA power, including but not limited to models listed in Power Supply Compatibility List.

Ⓒ MAKE ELECTRICAL CONNECTIONS

120-277VAC
LINE
NEUT
COMPATIBLE POWER SUPPLY (WMZ10 only) OR LCA KIT
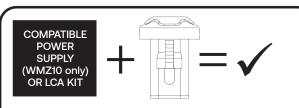DC+
DC-
DC+ (RED)
DC- (BLACK)

Connect wires from the power supply or LCA Kit to the sensor input wires. Connect the power supply input wires to the appropriate power source. Use only U.L. approved wire connectors for all electrical connections. Be sure to insulate unused leads INDIVIDUALLY to 600Vrms using U.L. approved wire connectors.
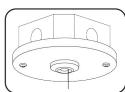
Ⓓ CEILING INSTALLATION (SEE OPTION A OR B)

OPTION A
• Direct ceiling install (CMP cable used)

OPTION B
• Metal box/conduit install

Install the sensor unit into the ceiling following the same steps as mentioned in Option A or B of this installation guide.

Ⓔ TM MULTI-SENSOR ORIENTATION MARK

For the WMZ10 TM Multi-Sensor there is an arrow on the lens. This arrow is a mark or indicator for the direction of the sensor.
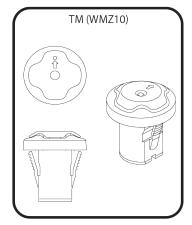

Ⓕ TM MULTI-SENSOR ORIENTATION REQUIREMENT

When the sensor is installed, all sensors should face the same direction. The arrow can be used to point all sensors in one direction. As a reference all sensors installed should have the arrow pointing North.
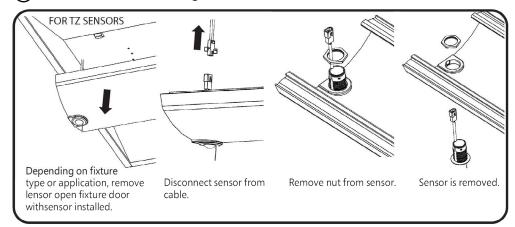
Current ⊡

LED.com

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10　SENSOR PLACEMENT
IDENTIFY SENSOR MODEL INSTALLED
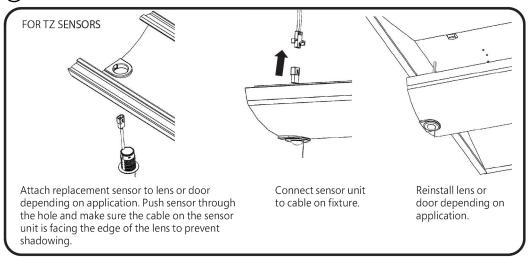
A　Identify sensor model installed

TM (WMZ10)

B　Remove sensor from ceiling or LED

FOR TZ SENSORS

Depending on fixture type or application, remove lensor open fixture door withsensor installed.

Disconnect sensor from cable.

Remove nut from sensor.

Sensor is removed.

C　Install replacement sensor fixture

FOR TZ SENSORS

Attach replacement sensor to lens or door depending on application. Push sensor through the hole and make sure the cable on the sensor unit is facing the edge of the lens to prevent shadowing.

Connect sensor unit to cable on fixture.

Reinstall lens or door depending on application.

Note:

* Identification sticker labels are to be placed on or near luminaire and on a floor plan for mapping.
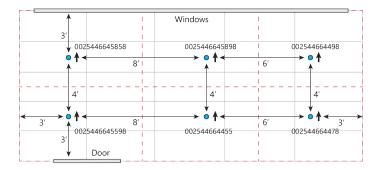
11　TROUBLESHOOTING - Planning Deployment

Obstacles to Avoid

Sprinkler heads, lighting, fire alarms, and HVAC registers must be designed around.

⑫ TROUBLESHOOTING - What to Document

- Locations and relative distance of sensors
- Orientation of sensors
- IEEE number of sensors

⑬ TECHNICAL DATA

Product Specifictions:	
Sensor Type	People counting, occupancy
Dimensions	See dimensioned diagram
Weight	0.016 kg
Voltage Rating	9.5-24 VDC, Class 2 (See note below)
Current Consumption	50mA
Operating Ambient Temperature Range	0-50°C (Indoor)
Status Indicator	LED pattern indicates network join status
Connections	See connection diagram
Mounting Hole	Installs within a 22mm (0.87") hole
Recommended Mounting Height	9-11 ft; Recommended to be spaced 8 ft apart on the x,y grid
Warranty	5 years

Note: I Connect WMZ10 to Current LED drivers or control modules capable of providing greater than 15VA power, including but not to models listed in the Power Supply Compatibility List (see page 7).

⑭ PRODUCT AVAILABILITY

SKU	Descriptions	Model
93106832	Wireless People Counting Sensor	WMZ10

⑮ PRODUCT CERTIFICATIONS
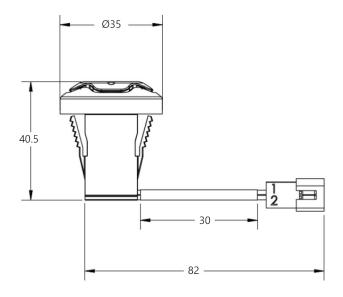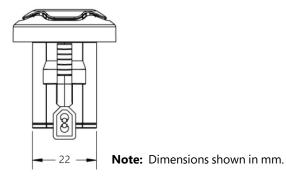
FCC ID: 2AS3F-WMZ10

IC: 25008-WMZ10

Additional Information:	
Purpose of the Control	Operating Control
Method of Mounting Control	Independently Mounted Control. Model WMZ10 intended for flush mounting into a recessed cavity.
Type of Action and Additional Features	Type 1
Control Pollution Degree	2
Function/Software Class and Structure	Class A
ORated Impulse Voltage	330V

Note: Any external cables connected to devices not to exceed 30 meters length.

16　PRODUCT DIMENSIONS

Ø35

40.5

30

82

22

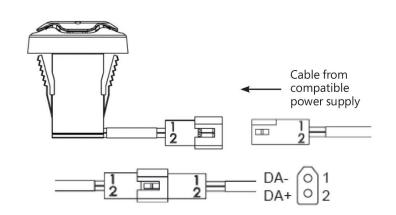**Note:** Dimensions shown in mm.

17　WIRING DIAGRAM

Connect the WMZ10 Sensor to a compatible power supply using the provided connector.

While the sensor is designed to withstand Electrostatic Discharge (ESD), it is always advisable to touch a grounded metal object before handling the sensor, particularly in a operating fixture.

Cable from compatible power supply

DA-　1
DA+　2

18　POWER SUPPLY COMPATIBILITY LIST

Manufacturer	Manufacturer P/N	Input Voltage (VAC)	Output Voltage (VDC)	WMZ10
Current	WA100	120-277 VAC	24 VDC	Compatible
Current	WGA100	120-277 VAC	24 VDC	Compatible
Wattstopper	BZ-50	120-277 VAC	24 VDC	Compatible
Current	LCACBA0TWUNGALV	120-277 VAC	12-20 VDC	Compatible
Current	GEMOD/DB010	120-277 VAC	DA Output 16 VDC	Compatible
Current	GED22MCRP500	120-277 VAC	DA Output 16 VDC	Compatible
Current	GED90MCRP1750	120-277 VAC	DA Output 16 VDC	Compatible
Current	GED100MCC2P480	120-277 VAC	DA Output 16 VDC	Compatible

Note: Refer to power supply amperage rating to ensure the quantity of WMZ sensors does not exceed power supply amperage.

> ### ⚠ CAUTION
> The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FOR STANDALONE SENSOR ACCESSORIES THE FOLLOWING STATEMENTS APPLY

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

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1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radio électrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Note: This equipment has been tested and found to comply with the limit for a Class B digital device, pursuant to a 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 instructions, may cause harmful interference to a 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 receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced ratio/TV technician for help.

To satisfy FCC/ISED RF exposure requirements a separation distance of 20 cm or more must be maintained between the antenna of this device and persons during operation. Operation at closer than 20cm is not permitted.

Pour satisfaire aux exigences d'exposition RF FCC/ISED, une distance de séparation de 20 cm ou plus doit être maintenue entre l'antenne de cet appareil et les personnes pendant le fonctionnement. Une opération à moins de 20 cm n'est pas autorisée.

These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to Current.

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