

Compact outdoor detector

**fit series**

**WIRELESS MODEL**

FTN-R	Battery operated model with 2 PIRs
FTN-RAM	FTN-R with anti-masking

- Long battery life
- Easy wiring by a connector
- Multi fixing separate box
- Compact design
- 190° adjustable bracket
- Intelligent AND logic
- Digital anti-masking (RAM model)
- Wall tamper (option)

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**1 INTRODUCTION**

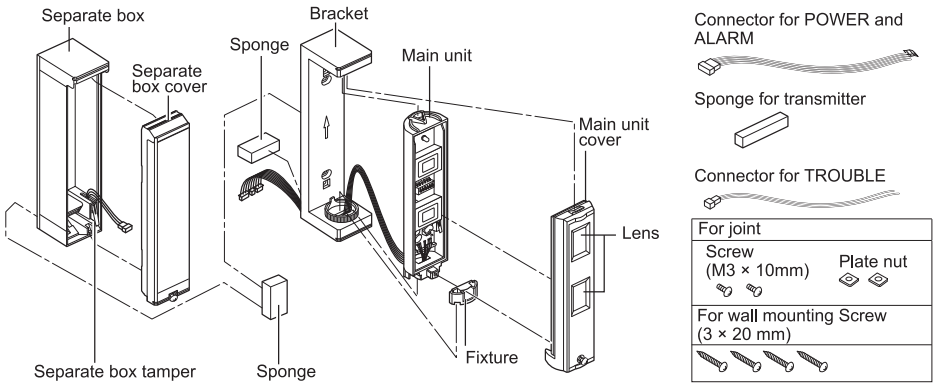
**1-1 BEFORE INSTALLATION**

<b>Warning</b>	Failure to follow the instructions provided with this indication and improper handling may cause death or serious injury.
<b>Caution</b>	Failure to follow the instructions provided with this indication and improper handling may cause injury and/or property damage.

The check mark indicates recommendation. The nix sign indicates prohibition.

<p> <b>Warning</b></p> <p>Do not remove the PCB.</p>	<p> <b>Caution</b></p> <p>Do not remove the separate box tamper.</p>	<p> <b>Caution</b></p> <p>Do not touch the PCB except for the DIP switch.</p>
<p> <b>Mounting height.</b></p> <p>0.8 to 1.2 m (2.6 to 3.9 ft.)</p> <p>Parallel</p>	<p> <b>Keep the detector parallel to the ground.</b></p> <p>Tilt</p>	<p> <b>Consider the direction of the intruder, for the setting of the detection area.</b></p>
<p>Install the detector in a place where it is free from false alarm factors. For example:</p>		
<p>• Sunlight and reflection</p>	<p>• Heat source</p>	<p>• Objects moving in the wind</p>

## 1-2 PARTS IDENTIFICATION



**Note>>**

Transmitter and battery are not included.

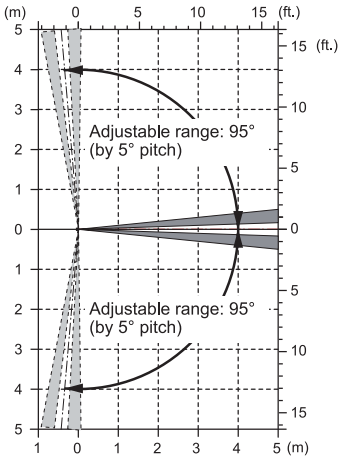
### -Optional accessories

Wall tamper (WRS-03)



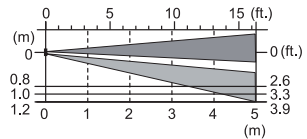
## 1-3 DETECTION AREA

**Top view**

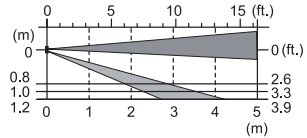


**Side view**

5 m detection length



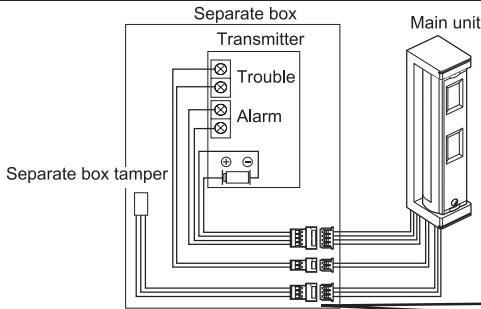
2 m detection length



## 2 INSTALLATION

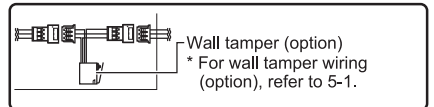
### 2-1 WIRING DIAGRAM

- Overall wiring diagram



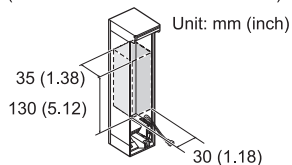
**Note>>**

- The battery in the transmitter is shared with the detector.
- Connection for TROUBLE is used when monitoring for Tamper and Anti Mask.



## 2-2 TRANSMITTER PREPARATION

The transmitter used should have the internal dimensions of H 130 × W 30 × D 35 mm.  
(H 5.12 × W 1.18 × D 1.38 inches)



### Connectors to be used

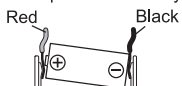
Connector for POWER and ALARM



Connector for TROUBLE

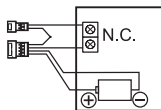


How to position a battery



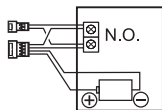
### - When monitoring ALARM and TROUBLE using the transmitter with 1 external input

External input is N.C.



... DIP switch 3: OFF (N.C.)

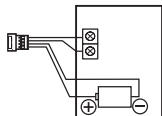
External input is N.O.



... DIP switch 3: ON (N.O.)

### - To monitor only the ALARM using a transmitter with 1 external input

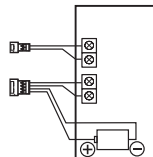
Connector for POWER and ALARM



### - To monitor the ALARM and TROUBLE using a transmitter with 2 external inputs

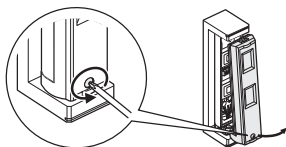
Connector for TROUBLE

Connector for POWER and ALARM

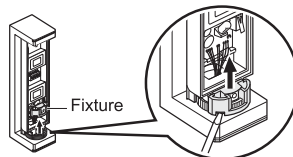


## 2-3 BEFORE WALL MOUNTING

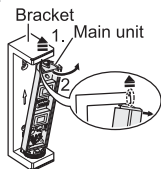
1 Open the main unit cover.



2 Remove the fixture.

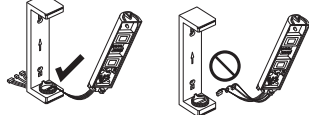


3 Hold the top of the bracket and remove the main unit.

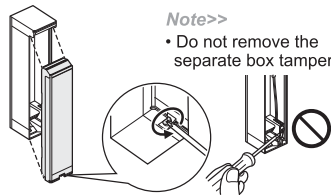


**Note>>**

• Be sure to keep connectors installed through the bottom part of bracket after main unit is removed.



4 Open the separate box.



**Note>>**

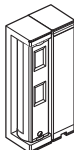
• Do not remove the separate box tamper.

5 Select the mounting method.

Stacking method (2-4)



Side-by-side method (2-5)



Top-to-bottom method (2-5)



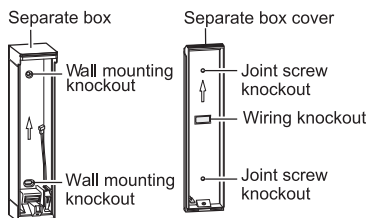
**Note>>**

• Be sure to mount the main unit on the top.

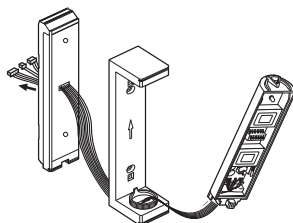
## 2-4 STACKING METHOD

For the side-by-side method and the top-to-bottom method, refer to page 6.

6 Open the knockout.



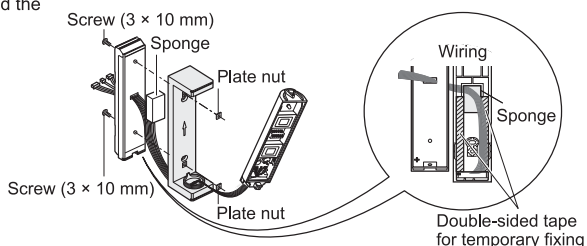
7 Pull the connectors through the wiring knockout.



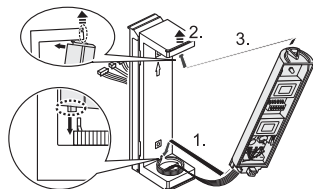
8 Attach the separate box cover and the bracket.

**Note>>**

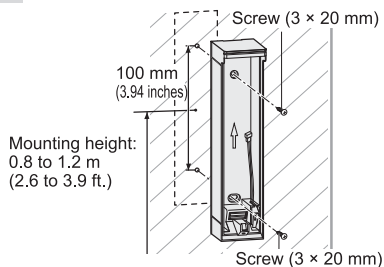
- Be careful not to attach separate box cover upside down.
- Be careful not to pinch wires.



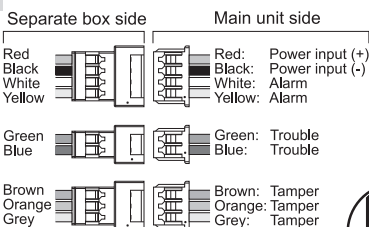
9 Hold the top part of the bracket and mount the main unit.



10 Mount the separate box on the wall.



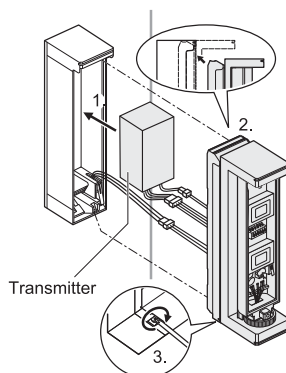
11 Connect the connectors.



**Notes>>**

- The tamper output is not exclusive.
  - The anti-masking and tamper circuits share the trouble output.
  - For the wall tamper wiring connection (option), refer to 5-1.
  - When the main unit tamper connector is connected to the separate box tamper connector, if the tamper connector connection was subsequently disconnected or cut, the tamper circuit would not activate.
- In order to detect the possible disconnection of the connector connection, cut the jumper wire (orange) as shown in the illustration.
- In this case be sure to connect the separate box tamper, otherwise the trouble output will remain active.

12 Install the transmitter and attach the separate box cover.



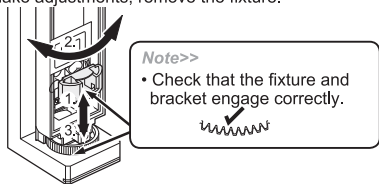
**Note>>**

- Please use the sponge for transmitter when needed.

13 Determine the horizontal detection angle and attach the fixture.

**Note>>**

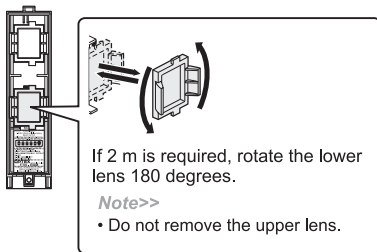
- To make adjustments, remove the fixture.



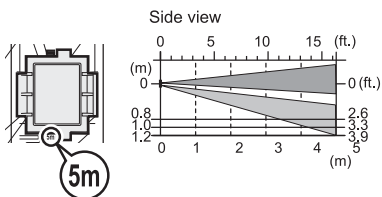
**Note>>**  
Align the detection area parallel to the wall to reduce interference with the wall.

- When the unit is mounted on the corner to look ahead along the wall, choose the guide-mark located on the opposite side of the wall.
- When the unit is mounted on the wall to look transversely, choose the guide-mark engraved.

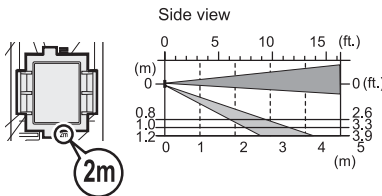
14 Determine the detection length. (2 m or 5 m)



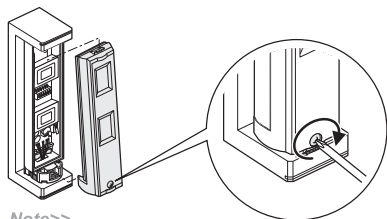
**5 m detection length (Factory default)**



**2 m detection length**



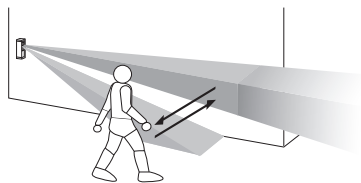
15 Attach the main unit cover.



**Note>>**

- To prepare for walk test, check that DIP switch 1 (WALK TEST MODE) is set to "ON (TEST)" before attaching main unit cover.

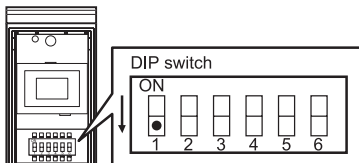
16 Perform walk test.



17 After walk test is complete, set DIP switch 1 (WALK TEST MODE) from "ON" to "OFF".

**Note>>**

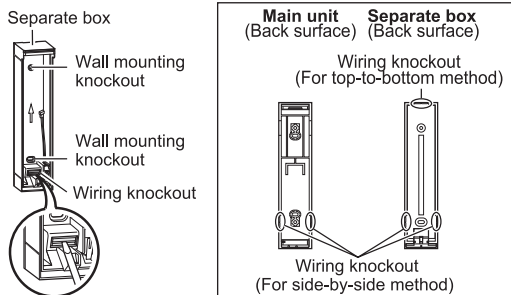
- The battery life will be shortened unless the DIP switch 1 is set to "OFF".
- To use the LED in normal operating condition, set the DIP switch 4 to "ON".



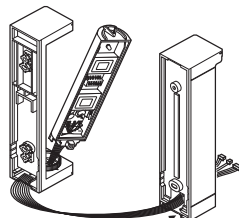
## 2-5 SIDE-BY-SIDE AND TOP-TO-BOTTOM METHOD

For the stacking method, refer to 2-4.

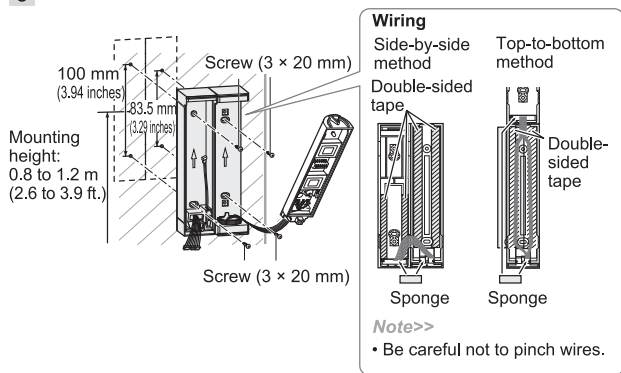
- 6 Open the knockout.



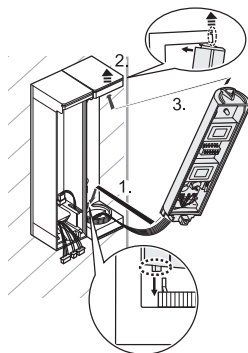
- 7 Pull the wire connectors through wiring knockout.



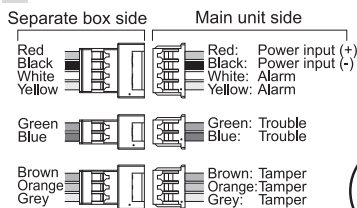
- 8 Mount the bracket and the separate box to the wall.



- 9 Hold the top part of the bracket and mount the main unit.



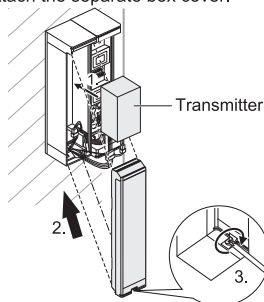
- 10 Connect the connectors.



### Notes>>

- The tamper output is not exclusive. The anti-masking and tamper circuits share the trouble output.
- For the wall tamper wiring connection (option), refer to 5-1.
- When the main unit tamper connector is connected to the separate box tamper connector, if the tamper connector connection was subsequently disconnected or cut, the tamper circuit would not activate. In order to detect the possible disconnection of the connector connection, cut the jumper wire (orange) as shown in the illustration. In this case be sure to connect the separate box tamper, otherwise the trouble output will remain active.

- 11 Install the transmitter and attach the separate box cover.

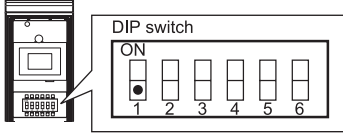


- 12 For the subsequent procedure, refer to steps 13 to 17 (page 5).

# 3 WALK TEST

## 3-1 WALK TEST

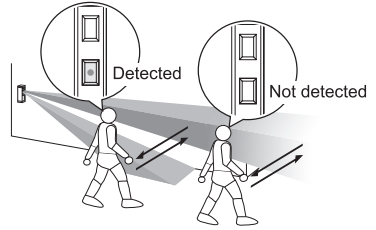
1 Set the DIP switch 1 (WALK TEST MODE) to "ON (TEST)".



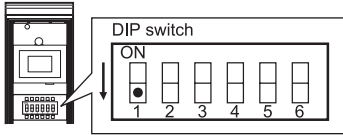
Note>>

- The switch is set to "ON (TEST)" by factory default.

2 Check that LED lights for 2 seconds when the intended object is detected.



3 Set the DIP switch 1 (WALK TEST MODE) to "OFF (NORM)".



Note>>

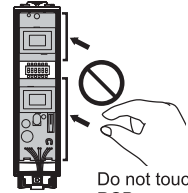
- The battery life will be shortened unless the DIP switch 1 is set to "OFF".
- To use the LED in normal operating condition, set the DIP switch 4 to "ON".

# 4 DIP SWITCH SETTING

DIP switch

- 1 WALK TEST MODE
- 2 BATTERY SAVING TIMER
- 3 ALARM & TROUBLE OUTPUT
- 4 LED
- 5 PIR SENSITIVITY
- 6 ANTI-MASKING

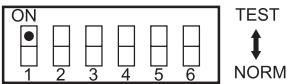
●: Factory default



Do not touch the PCB except for the DIP switch.

## 4-1 WALK TEST MODE

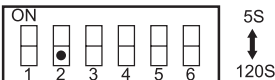
DIP switch 1 FTN-R FTN-RAM



Position	Function
TEST (Factory default)	<ul style="list-style-type: none"> <li>• The LED lights irrespective of the DIP switch 4 (LED) setting.</li> <li>• The DIP switch 2 (BATTERY SAVING TIMER) setting is inactive.</li> </ul>
NORM	<ul style="list-style-type: none"> <li>• The LED lights depending on the DIP switch 4 (LED) setting.</li> <li>• The DIP switch 2 (BATTERY SAVING TIMER) setting is active.</li> </ul>

## 4-2 BATTERY SAVING TIMER

DIP switch 2 FTN-R FTN-RAM



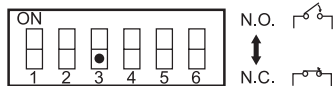
Position	Function
5S	5 sec.
120S (Factory default)	120 sec.

Note>>

- The detector will not generate alarms at intervals shorter than the specified time.

## 4-3 ALARM &amp; TROUBLE OUTPUT

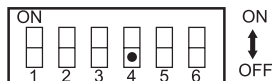
DIP switch 3

FTN-R  
FTN-RAM

Position	Function
N.O. N.C. (Factory default)	N.O. output N.C. output

## 4-4 LED

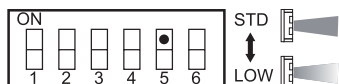
DIP switch 4

FTN-R  
FTN-RAM

Position	Function
ON	LED ON
OFF (Factory default)	LED OFF <i>Note&gt;&gt;</i> • If the LED lights, check the DIP switch 1 (WALK TEST MODE) setting.

## 4-5 PIR SENSITIVITY

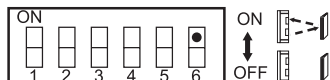
DIP switch 5

FTN-R  
FTN-RAM

Position	Function
STD (Factory default)	Normal sensitivity
LOW	Low sensitivity

## 4-6 ANTI-MASKING

DIP switch 6

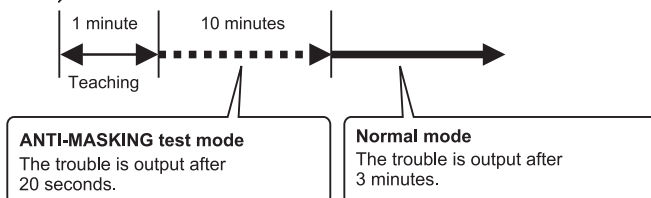
FTN-R  
FTN-RAM

Position	Function
ON (Factory default)	ANTI-MASKING ON
OFF	ANTI-MASKING OFF

**-ANTI-MASKING function**

When masking condition continues more than 3 minutes, TROUBLE will be generated. TROUBLE is generated after 20 seconds under the anti-masking test mode.

Teaching mode starts when both the separate box cover and the main unit cover are attached. Please be careful not to leave any object within 1 m from the unit.

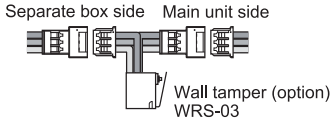




## 5 OTHERS

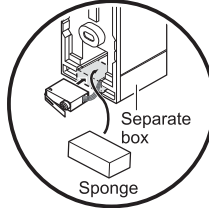
### 5-1 WALL TAMPER (OPTION) CONNECTION

Connect the tamper connector as shown below when connecting a wall tamper (option).

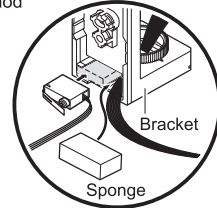


#### Mounting position

Stacking method

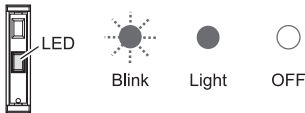


#### Side-by-side method and top-to-bottom method



### 5-2 LED LIGHT PATTERN

The following explains the LED light pattern.



Detector condition	LED indicator
Warm-up <i>Notes&gt;&gt;</i> • The LED blinks even if the DIP switch 4 (LED) is set to "OFF".	→  120 sec. Blinks for approx. 120 seconds.
Alarm	→  2 sec. Lights for 2 seconds.
Masking detection (FTN-RAM only)	→  →  →  → Blinks 3 times and then repeats.

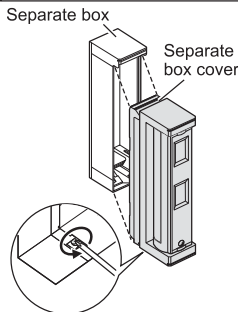
## 6 BATTERY

The detector shares the battery with the transmitter. Check that the 2.5 to 10.0 V power battery is used for the transmitter.

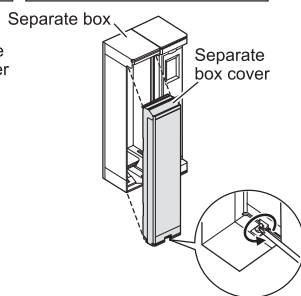
### 6-1 HOW TO REPLACE BATTERY

- 1 Open the separate box, and disconnect the transmitter connector. (It is not necessary for the main unit to be opened.)

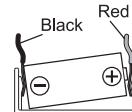
#### Stacking method



#### Side-by-side method and top-to-bottom method



- 2 Replace the battery.



- 3 Connect the connector, and close the separate box.

#### *Note>>*

- Check that the warm-up period is started.

### 6-2 BATTERY LIFE

The values indicated are only for reference on condition that the detector is exceptionally operated by the sole battery. It is impossible to indicate the battery life under the normal operation as the battery in the transmitter is shared with the detector.

	Interval 120 sec	Interval 5 sec
CR123A (3 V, 1300 mAh)	Approx. 6 years	Approx. 5 years
CR2 (3 V, 750 mAh)	Approx. 4 years	Approx. 3 years
1/2AA (3.6 V, 1000 mAh)	Approx. 5 years	Approx. 4 years

#### *Notes>>*

- Data shown here is when the LED is off, AM is on. Battery life becomes shorter when the LED is on.

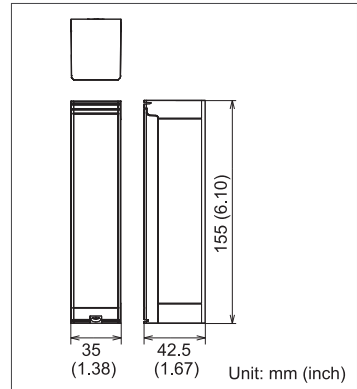
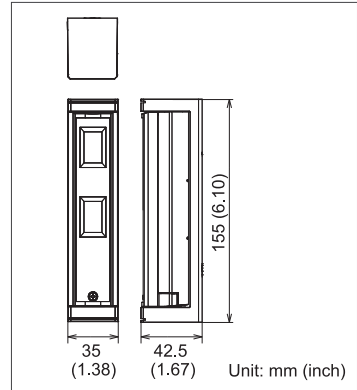
# 7 SPECIFICATIONS

## 7-1 SPECIFICATIONS

Model	FTN-R	FTN-RAM
Detection method	Passive infrared	
PIR coverage	5 × 1 m (16.4 × 3.3 ft.)	
Detection length limit	2 m, 5 m (6.6 ft., 16.4 ft.)	
Detectable speed	0.3 to 1.5 m/s (1 to 4.9 ft./s)	
Sensitivity	2.0°C (at 0.6 m/s) (3.6°F (at 2 ft./s))	
Operation voltage	2.5 to 10 VDC	
Power input	3 to 9 VDC (Lithium or Alkaline Battery)	
Current draw	9 µA (at stand-by)/ 3 mA (max.) (at 3 VDC)	10 µA (at stand-by)/ 3 mA (max.) (at 3 VDC)
Alarm period	2.0 ±1.0 sec.	
Warm-up period	Approx. 120 sec. (LED blinks)	
Alarm output	N.C./N.O. Selectable-Solid State Switch 10 VDC 0.01 A (max.)	
Trouble output	N.C./N.O. Selectable-Solid State Switch 10 VDC 0.01 A (max.)	
LED indicator	Enable: During DIP switch 1 (WALK TEST MODE) or DIP switch 4 (LED) ON Disable: During normal operation Light/Blink: Warm-up, alarm, masking detection (FTN-RAM only)	
Operation temperature	-20°C to +60°C (-4°F to +140°F)	
Environment humidity	95% max.	
Weatherproof	IP55	
Mounting	Wall (Outdoor, Indoor)	
Mounting height	0.8 to 1.2 m (2.6 to 3.9 ft.)	
Weight	190 g (6.7 oz.)	
Accessories	Connector for POWER and ALARM, connector for TROUBLE, plate nut × 2, screw (M3 × 10 mm) × 2, screw (3 × 20 mm) × 4, sponge for transmitter	

\* Specifications and design are subject to change without prior notice.

## 7-2 DIMENSIONS



### Note>>

- These units are designed to detect an intruder and activate an alarm control panel. Being only a part of a complete system, we cannot accept responsibility for any damages or other consequences resulting from an intrusion. These products conform to the EMC Directive 2004/108/EC.



**OPTEX CO., LTD. (JAPAN)**

URL: <http://www.optex.net/>

**OPTEX INC. (U.S.)**

URL: <http://www.optexamerica.com/>

**OPTEX DO BRASIL LTDA. (Brazil)**

URL: <http://www.optex.net/br/es/sec/>

**OPTEX (EUROPE) LTD. / EMEA HQ (U.K.)**

URL: <http://www.optexeurope.com/>

**OPTEX TECHNOLOGIES B.V. (The Netherlands)**

URL: <http://www.optex.eu/>

**OPTEX SECURITY SAS (France)**

URL: <http://www.optex-security.com/>

**OPTEX SECURITY Sp.z o.o. (Poland)**

URL: <http://www.optex.com.pl/>

**OPTEX PINNACLE INDIA, PVT., LTD. (India)**

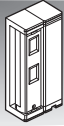
URL: <http://www.optex.net/in/en/sec/>

**OPTEX KOREA CO., LTD. (Korea)**

URL: <http://www.optexkorea.com/>

**OPTEX (DONGGUAN) CO., LTD. SHANGHAI OFFICE (China)**

URL: <http://www.optexchina.com/>



Détecteur compact  
d'extérieur

Série fit

**MODELE SANS FIL**

FTN-R	Modèle sur batterie avec 2 PIR
FTN-RAM	FTN-R avec anti-masquage

- Longue durée des batteries
- Câblage facile par bornier
- Boîtier séparé pour fixations (flexible)
- Apparence compact
- Rotule réglable 190°
- Intelligent AND Logic
- Fonction anti-masquage numérique (uniquement pour RAM)
- Autoprotection murale (option)

## SOMMAIRE

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1-3 ZONE DE DÉTECTION	2	4-5 SENSIBILITE DE PIR	8
<b>2</b> INSTALLATION		4-6 ANTI-MASQUAGE NUMÉRIQUE	8
2-1 SCHEMA DU CABLAGE	2	<b>5</b> DIVERS	
2-2 PREPARATION DE L'EMETTEUR RADIO	3	5-1 CONNEXION D'AUTOPROTECTION MURALE (OPTION)	9
2-3 AVANT MONTAGE MURAL	3	5-2 FORME DE LUMIERE LED	9
2-4 METHODE PAR EMPILEMENT	4	<b>6</b> BATTERIE	
2-5 METHODE COTE A COTE ET EN SUPERPOSITION	6	6-1 COMMENT REMPLACER LA BATTERIE	9
<b>3</b> TEST DE MARCHÉ		6-2 DUREE DE LA BATTERIE	9
3-1 TEST DE MARCHÉ	7	<b>7</b> SPECIFICATIONS	
<b>4</b> REGLAGE DES INTERRUPTEURS DIP		7-1 SPECIFICATIONS	10
4-1 MODE DE TEST DE MARCHÉ	7	7-2 DIMENSIONS	10

## 1 INTRODUCTION

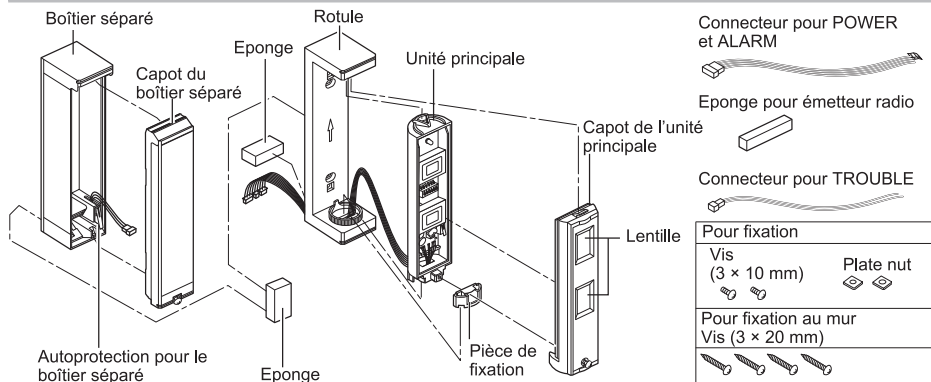
### 1-1 AVANT L'INSTALLATION

	<b>Avertissement</b>	Le non respect des instructions données avec ce signe et une mauvaise manipulation peuvent causer la mort ou des blessures graves.
	<b>Attention</b>	Le non respect des instructions données avec ce signe et une mauvaise manipulation peuvent causer des blessures et/ou des dommages aux biens.

Le signe de coche indique une recommandation. Le signe de négation indique une interdiction.

<p> <b>Avertissement</b></p> <p>Ne pas enlever le PCB.</p>	<p> <b>Attention</b></p> <p>Ne pas enlever le boîtier séparé.</p>	<p> <b>Attention</b></p> <p>Ne pas toucher le PCB sauf les interrupteurs DIP.</p>
<p> <b>Hauteur de montage.</b></p> <p>Entre 0,8 et 1,2 m (Entre 2,6 et 3,9 ft.)</p> <p>Parallèle</p>	<p><b>Maintenir le détecteur parallèle au sol.</b></p> <p>Ne pas incliner</p>	<p><b>Tenir compte de la direction d'approche d'une personne de même que de la zone de détection.</b></p>
<p>Installer le détecteur dans un emplacement ne présentant pas de cause de fausses alarmes. Par exemple :</p> <ul style="list-style-type: none"> <li>• Lumière solaire et réflexion</li> </ul>	<ul style="list-style-type: none"> <li>• Source de chaleur</li> </ul>	<ul style="list-style-type: none"> <li>• Objets bougeant au vent</li> </ul>

## 1-2 IDENTIFICATION DES PIÈCES

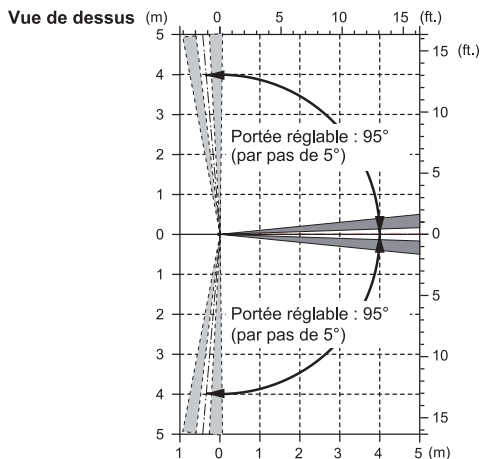
**-Accessoires en option****Remarque>>**

Emetteur et batterie ne sont pas inclus.

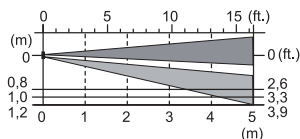
Autoprotection murale (WRS-03)



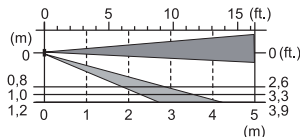
## 1-3 ZONE DE DETECTION

**Vue de coté**

## Distance de détection 5 m

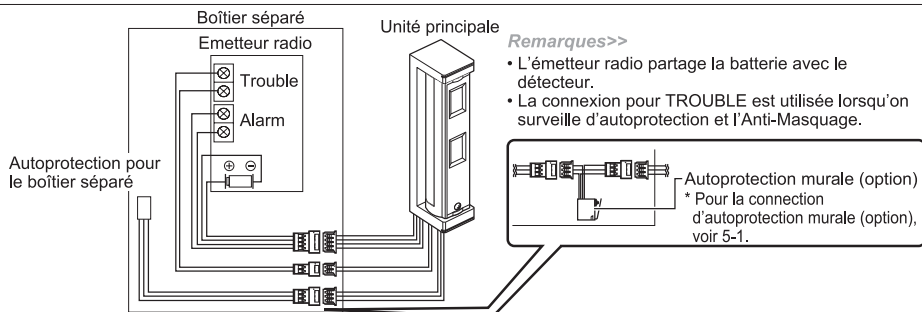


## Distance de détection 2 m



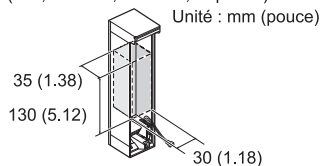
## 2 INSTALLATION

## 2-1 SCHEMA DU CABLAGE

**- Schéma du câblage général**

## 2-2 PREPARATION DE L'EMETTEUR RADIO

L'émetteur radio utilisé devrait avoir des dimensions intérieur side de H 130 × L 30 × P 35 mm.  
(H 5,12 × L 1,18 × P 1,38 pouce)



### Connecteurs à utiliser

Connecteur pour POWER et ALARM



Connecteur pour TROUBLE

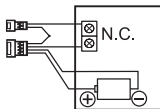


Comment placer une batterie

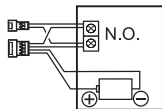


### - Utilisation de l'émetteur radio avec 1 sortie externe en surveillant l'ALARM et TROUBLE

L'entrée externe est N.C.



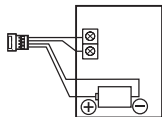
L'entrée externe est N.O.



... Interrupteur DIP 3 : OFF (N.C.)    ... Interrupteur DIP 3 : ON (N.O.)

### - Pour surveiller que l'ALARM en utilisant un émetteur radio avec une entrée externe

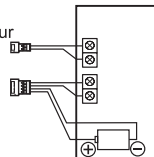
Connecteur pour POWER et ALARM



### - Pour surveiller ALARM et TROUBLE en utilisant un émetteur radio avec 2 entrées externes

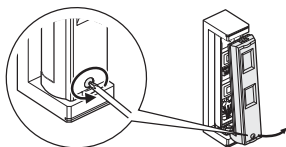
Connecteur pour TROUBLE

Connecteur pour POWER et ALARM

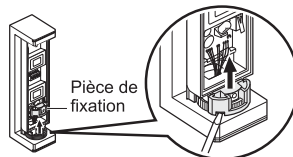


## 2-3 AVANT MONTAGE MURAL

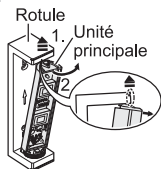
1 Ouvrir le capot de l'unité principale.



2 Enlever la pièce de fixation.

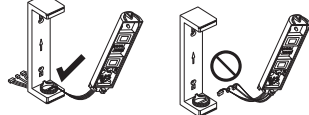


3 Maintenir le dessus du rotule et retirer l'unité principale.



#### Remarque>>

• Assurez-vous de laisser les connecteurs installés à travers le fond du rotule après avoir démonté l'unité principale.



4 Ouvrir le boîtier séparé.



#### Remarque>>

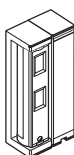
• Ne pas enlever l'autoprotection du boîtier séparé.

5 Sélectionner la méthode de montage.

Méthode par empilement (2-4)

Méthode côte à côte (2-5)

Méthode par superposition (2-5)



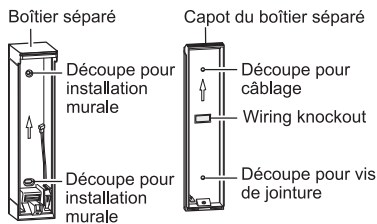
#### Remarque>>

• Assurez-vous de monter l'unité principale sur le dessus.

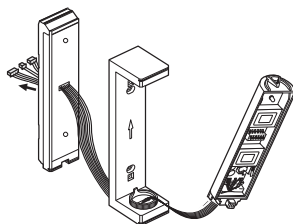
## 2-4 METHODE PAR EMPILEMENT

Pour les méthodes côte à côte et par superposition, voir page 6.

### 6 Ouvrir la découpe.



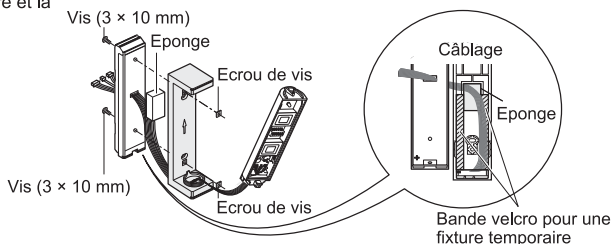
### 7 Tirer les connecteurs à travers la découpe pour câblage.



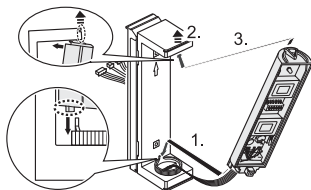
### 8 Attacher le capot du boîtier séparé et la rotule.

#### Remarques>>

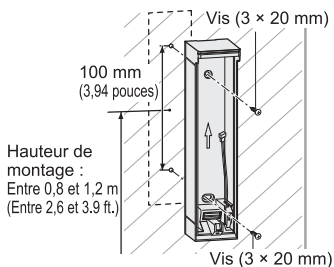
- Assurez-vous de ne pas monter le capot du boîtier séparé à l'envers.
- Prendre soin de ne pas pincer les connecteurs.



### 9 Maintenir la partie supérieur de la rotule et monter l'unité principale.

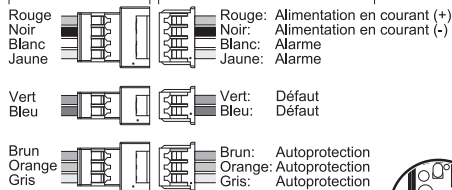


### 10 Monter le boîtier séparé au mur.



### 11 Raccorder les connecteurs

Côté du boîtier séparé Côté de l'unité principale

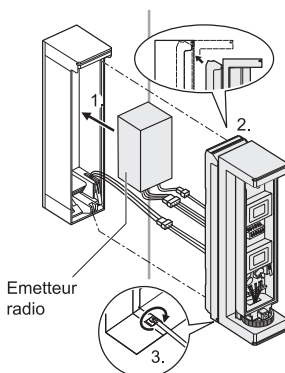


#### Remarques>>

- La sortie d'autoprotection n'est pas exclusive. Les circuits Anti-masquage et Autoprotection partagent la sortie Défaut.
  - Pour le raccordement de l'autoprotection murale (option), voir 5-1.
  - Quand le connecteur de l'autoprotection de l'unité principale est raccordé au connecteur de l'autoprotection du boîtier séparé, le circuit d'autoprotection ne sera pas activé en cas de déconnexion ou de coupure.
- Pour détecter une éventuelle déconnexion, couper le cavalier (orange) comme indiqué sur le dessin.
- Dans ce cas, connecter l'autoprotection du boîtier séparé, sinon la sortie défaut reste active.



### 12 Installer l'émetteur radio et fixer le capot du boîtier séparé.



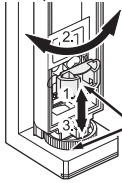
#### Remarque>>

- Utiliser l'éponge pour l'émetteur radio si nécessaire.

13 Déterminer l'angle de détection horizontale et fixer.

**Remarque>>**

- Enlever la pièce de fixation pour faire des réglages.



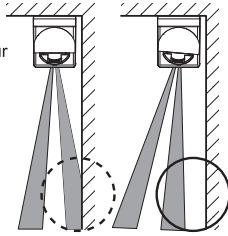
**Remarque>>**

- Vérifier le bon engagement de la pièce de fixation et de la rotule.

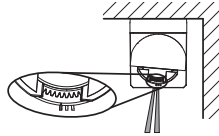


**Remarques>>**

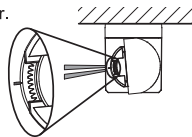
Aligner la zone de détection parallèle au mur pour réduire l'interférence du mur.



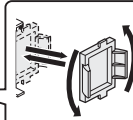
- Installation au coin.



- Installation parallèle au mur.



14 Déterminer la portée de détection. (2 m ou 5 m)

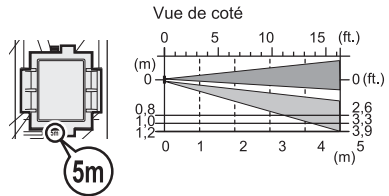


S'il faut 2 m, tourner la lentille inférieure de 180 degrés.

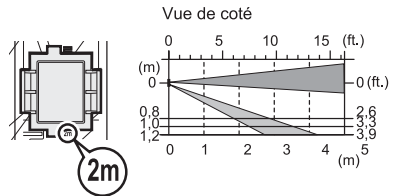
**Remarque>>**

- Ne pas enlever la lentille supérieure.

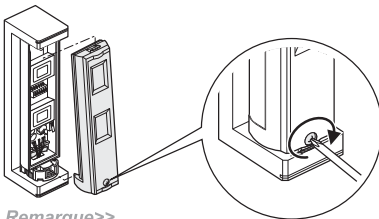
**Distance de détection 5 m (Réglage d'usine)**



**Distance de détection 2 m**



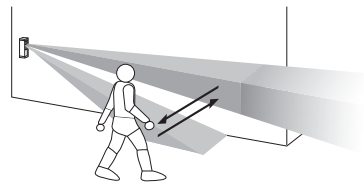
15 Fixer le capot de l'unité principale.



**Remarque>>**

- Pour préparer le test de marche, vérifier que l'interrupteur DIP 1 (MODE DE TEST DE MARCHÉ) est mis sur ON (TEST) avant de remettre le capot de l'unité principale.

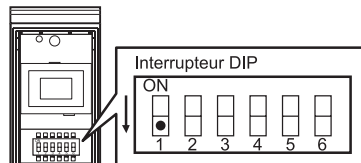
16 Réaliser le test de marche.



17 Après le test de marche, changer l'interrupteur DIP 1 (MODE DE TEST DE MARCHÉ) de ON à OFF.

**Remarque>>**

- La durée de la batterie sera abrégée si l'interrupteur DIP 1 n'est pas mis sur OFF.
- Pour utiliser la LED dans les conditions de fonctionnement normal, mettre l'interrupteur DIP 4 sur ON.

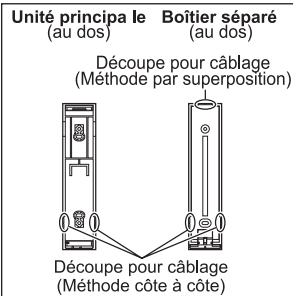
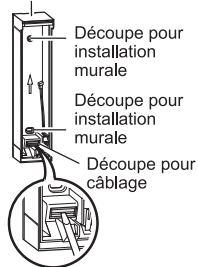


## 2-5 METHODE COTE A COTE ET EN SUPERPOSITION

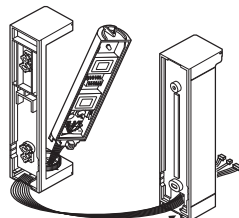
Pour la méthode superposée, voir 2-4.

### 6 Ouvrir la découpe.

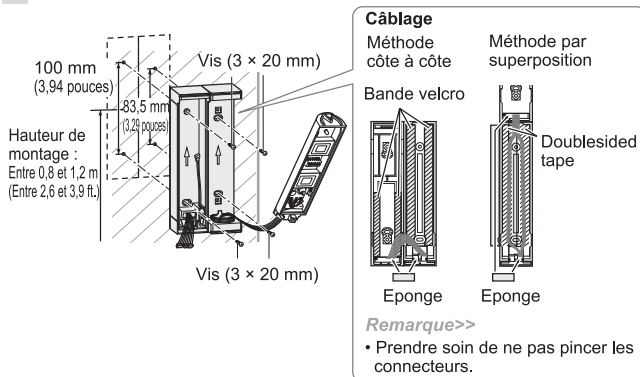
Boîtier séparé



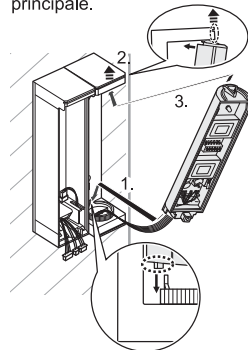
### 7 Tirer les connecteurs à travers la découpe pour câblage.



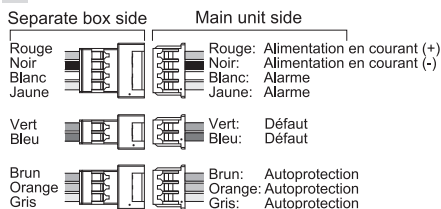
### 8 Monter la rotule et le boîtier séparé au mur



### 9 Maintenir la partie supérieure de la rotule et monter l'unité principale.



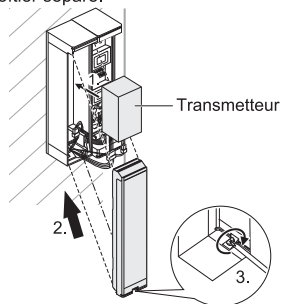
### 10 Connect the connectors.



#### Remarques >>

- La sortie autoprotection n'est pas exclusive. Les circuits Anti-masquage et Autoprotection partagent la sortie Défaut.
- Pour le raccordement de l'autoprotection murale (option), voir 5-1.
- Quand le connecteur de l'autoprotection de l'unité principale est raccordé au connecteur de l'autoprotection du boîtier séparé, le circuit d'autoprotection ne sera pas activé en cas de déconnexion ou de coupure. Pour détecter une éventuelle déconnexion, couper le cavalier (orange) comme indiqué sur le dessin. Dans ce cas, connecter l'autoprotection du boîtier séparé, sinon la sortie défaut reste active.

### 11 Installer l'émetteur et fixer le couvercle du boîtier séparé.



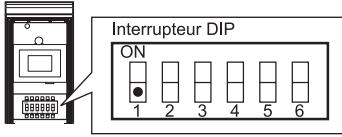
### 12 Pour la suite, voir les étapes 13 à 17 (page 5).



### 3 TEST DE MARCHE

#### 3-1 TEST DE MARCHE

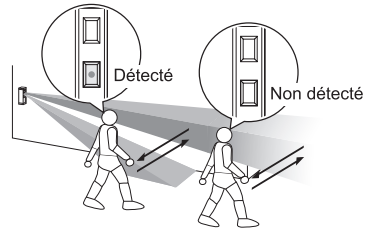
1 Mettre l'interrupteur DIP 1 (MODE DE TEST DE MARCHE) sur ON (TEST).



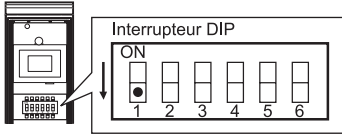
Remarque>>

- L'interrupteur est sur ON (TEST) par réglage d'usine.

2 Vérifier que la LED s'allume pendant 2 secondes quand l'objet prévu est détecté.



3 Mettre l'interrupteur DIP 1 (MODE DE TEST DE MARCHE) sur OFF (NORM).



Remarques>>

- La durée de la batterie sera abrégée si l'interrupteur DIP 1 n'est pas mis sur OFF.
- Pour utiliser la LED dans les conditions de fonctionnement normal, mettre l'interrupteur DIP 4 sur ON.

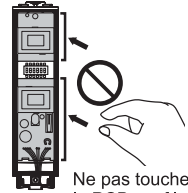
### 4 REGLAGES DES INTERRUPTEURS DIP



Interrupteur DIP

1 MODE DE TEST DE MARCHE  
2 MINUTERIE D' ECONOMIE DE BATTERIE  
3 SORTIE ALARM ET TROUBLE  
4 LED  
5 SENSIBILITE DE PIR  
6 ANTI-MASQUAGE

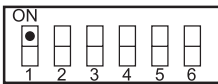
● : Réglage d' usine



Ne pas toucher le PCB sauf les interrupteurs DIP.

#### 4-1 MODE DE TEST DE MARCHE

Interrupteur DIP 1 FTN-R FTN-RAM

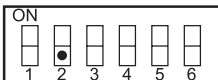


TEST  
↕  
NORM

Position	Function
TEST (Réglage d'usine)	<ul style="list-style-type: none"> <li>• La LED s'allume quel que soit le réglage de l'interrupteur DIP 4 (LED).</li> <li>• Le réglage de l'interrupteur DIP 2 (MINUTERIE D'ECONOMIE DE BATTERIE) est sans effet.</li> </ul>
NORM	<ul style="list-style-type: none"> <li>• La LED s'allume selon le réglage de l'interrupteur DIP 4 (LED).</li> <li>• Le réglage de l'interrupteur DIP 2 (MINUTERIE D'ECONOMIE DE BATTERIE) est actif.</li> </ul>

#### 4-2 MINUTERIE D'ECONOMIE DE BATTERIE

Interrupteur DIP 2 FTN-R FTN-RAM



5S  
↕  
120S

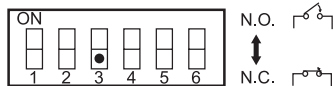
Position	Function
5S	5 sec.
120S (Réglage d'usine)	120 sec.

Remarques>>

- Le détecteur ne déclenchera pas d'alarme à des intervalles inférieurs à la durée spécifiée.

## 4-3 SORTIE ALARM ET TROUBLE

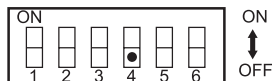
Interrupteur DIP 3

FTN-R  
FTN-RAM

Position	Function
N.O.	Sortie N.O.
N.C. (Réglage d'usine)	Sortie N.C.

## 4-4 LED

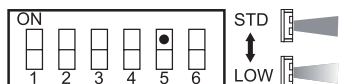
Interrupteur DIP 4

FTN-R  
FTN-RAM

Position	Function
ON	LED ON
OFF (Réglage d'usine)	LED OFF <i>Remarque&gt;&gt;</i> • Si la LED s'allume, vérifier l'interrupteur DIP 1 (MODE TEST DE MARCHE) réglage.

## 4-5 SENSIBILITE DE PIR

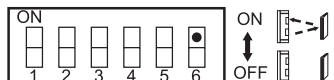
Interrupteur DIP 5

FTN-R  
FTN-RAM

Position	Function
STD (Réglage d'usine)	Sensibilité normale
LOW	Sensibilité faible

## 4-6 ANTI-MASQUAGE NUMÉRIQUE

Interrupteur DIP 6

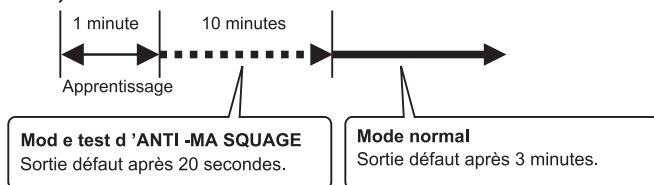
FTN-R  
FTN-RAM

Position	Function
ON (Réglage d'usine)	ANTI-MASQUAGE ON
OFF	ANTI-MASQUAGE OFF

**-Fonction ANTI-MASQUAGE numérique**

Si un masquage dure plus de 3 minutes, un DEFAULT sera émis.  
Un Défaut est émis après 20 secondes en mode de test d'anti-masquage.

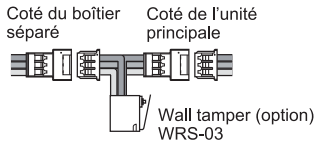
Le mode apprentissage démarre lorsque le capot du boîtier séparé et de l'unité principale sont fixés.  
Prendre soin de ne laisser aucun objet à moins de 1 m de l'unité.



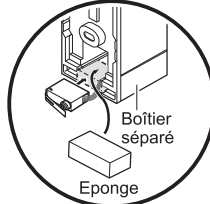
## 5 DIVERS

### 5-1 CONNEXION D'AUTOPROTECTION MURALE (OPTION)

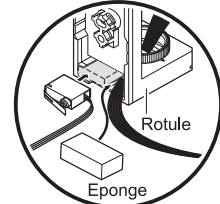
Raccorder le connecteur d'autoprotection comme indiqué ci-dessous pour connecter une autoprotection murale (option).



#### Position de montage Méthode d'empilement

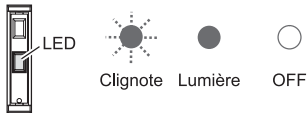


#### Méthode côte à côte et superposée



### 5-2 FORME DE LUMIERE LED

Ci-après le fonctionnement de la LED.



Etat du détecteur	LED indicator
Préparation <i>Remarque&gt;&gt;</i> • La LED clignote si l'interrupteur DIP 4 (LED) est mis sur OFF.	→ Clignote environ 120 secondes.
Alarme	→ S'allume pendant 2 secondes.
Détection du masquage (FTN-RAM uniquement)	→  →  → Clignote 3 fois puis recommence.

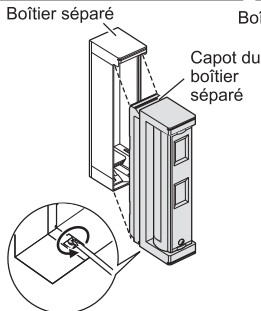
## 6 BATTERIE

Le détecteur partage la batterie avec l'émetteur radio. Vérifier que la batterie d'alimentation de 2,5 à 10,0 V est utilisée.

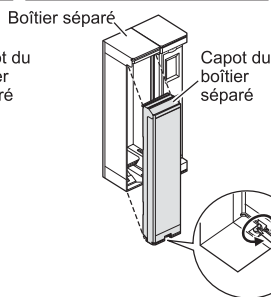
### 6-1 COMMENT REMPLACER LA BATTERIE

- Ouvrir le boîtier séparé, et déconnecter le raccord du transmetteur. (Il n'est pas nécessaire d'ouvrir l'unité principale.)

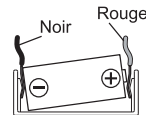
#### Méthode d'empilement



#### Méthode côte à côte et superposée



- Remplacer la batterie.



- Reconnecter et fermer le boîtier séparé.

#### *Remarque>>*

- Vérifier que la mise en chauffe a commencé.

### 6-2 DUREE DE LA BATTERIE

Les valeurs données sont uniquement indicatives et sont basées sur un détecteur exceptionnellement alimenté par la batterie seule. Il est impossible de donner une durée de batterie en fonctionnement normal parce que la batterie du transmetteur est partagée avec le détecteur.

	Intervalle 120 sec	Intervalle 5 sec
CR123A (3 V, 1300 mAh)	Approx. 6 ans	Approx. 5 ans
CR2 (3 V, 750 mAh)	Approx. 4 ans	Approx. 3 ans
1/2AA (3,6 V, 1000 mAh)	Approx. 5 ans	Approx. 4 ans

#### *Remarque>>*

- Les données indiquées ici sont valables lorsque la LED est éteinte et la fonction Anti-masquage numérique est sur ON. La durée de la batterie est abrégée lorsque la LED est allumée.

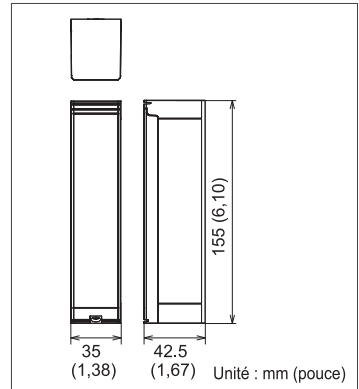
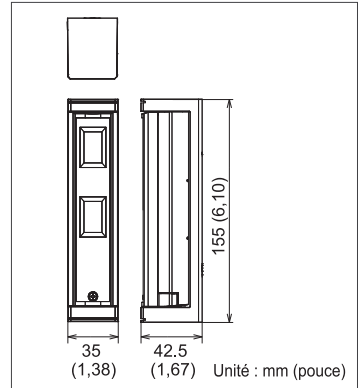
# 7 SPECIFICATIONS

## 7-1 SPECIFICATIONS

Modèle	FTN-R	FTN-RAM
Méthode de détection	Infrarouge passif	
Couverture PIR	5 × 1 m (16,4 × 3,3 ft.)	
Distances limites	2 m, 5 m (6,6 ft., 16,4 ft.)	
Vitesse détectable	Entre 0,3 et 1,5 m/s (Entre 1 et 4,9 ft./s)	
Sensibilité	2,0°C (à 0,6 m/s) (3,6°F (à 2'/s))	
Tension de fonctionnement	Entre 2.5 et 10 VDC	
Alimentation	Entre 3 et 9 VDC (Lithium ou Batterie alcaline)	
Consommation de courant	9 µA (en stand-by)/ 3 mA (max.) (à 3 VDC)	10 µA (en stand-by)/ 3 mA (max.) (à 3 VDC)
Période d'alarme	2,0 plus/moins 1,0 sec.	
Période de chauffe	Approx. 120 sec. (la LED clignote)	
Sortie alarme	N.C./N.O. Interrupteur semi-conducteur sélectionnable 10 VDC 0,01 A (max.)	
Sortie défaut	N.C./N.O. Interrupteur semi-conducteur sélectionnable 10 VDC 0,01 A (max.)	
Indications LED	En fonction : Lorsque l'interrupteur DIP 1 (MODE DE TEST DE MARCHÉ) ou l'interrupteur DIP 4 (LED) est sur ON  Hors fonction : En fonctionnement normal Allumée/Clignotante : Préparation, alarme, détection de masquage (FTN-RAM uniquement)	
Température de fonctionnement	Entre -20°C et +60°C (Entre -4°F et +140°F)	
Humidité	95% max.	
Étanchéité	IP55	
Montage	Sur mur (Extérieur, Intérieur)	
Hauteur de montage	Entre 0,8 et 1,2 m (Entre 2,6 et 3,9 ft.)	
Poids	190 g (6,7 oz.)	
Accessoires	Connecteur pour POWER et ALARM, connecteur pour TROUBLE, écrou de vis × 2, vis (3 × 10 mm) × 2, vis (3 × 20 mm) × 4, éponge pour l'émetteur radio	

\* Les spécifications et le design sont sujets à modifications sans préavis.

## 7-2 DIMENSIONS



### Remarque>>

- Ces unités sont conçues pour détecter un intrus et pour actionner un panneau de contrôle d'alarme. Comme ce ne sont que des parties d'un système complet, nous ne pouvons accepter aucune responsabilité ou autre conséquence suite à une intrusion. Ces produits sont conformes à la Directive EMC 2004/108/EC.



**OPTEX CO., LTD. (JAPAN)**

URL: <http://www.optex.net/>

**OPTEX INC. (U.S.)**

URL: <http://www.optexamerica.com/>

**OPTEX DO BRASIL LTDA. (Brazil)**

URL: <http://www.optex.net/br/es/sec/>

**OPTEX (EUROPE) LTD. / EMEA HQ (U.K.)**

URL: <http://www.optexeurope.com/>

**OPTEX TECHNOLOGIES B.V.**

(The Netherlands)

URL: <http://www.optex.eu/>

**OPTEX SECURITY SAS (France)**

URL: <http://www.optex-security.com/>

**OPTEX SECURITY Sp.z o.o. (Poland)**

URL: <http://www.optex.com.pl/>

**OPTEX PINNACLE INDIA, PVT., LTD. (India)**

URL: <http://www.optex.net/in/en/sec/>

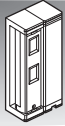
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URL: <http://www.optexchina.com/>



Kompakter Melder zur Außenmontage

**ii-Serie**

**KABELLOSES MODELL**

FTN-R	Batteriebetriebenes Modell mit 2 PIRs
FTN-RAM	FTN-R mit Anti-Masking

- Lunga durata della batteria
- Einfacher Anschluss mit Stecker
- Montage mehrerer separater Gehäuse
- Kompaktes Design
- 190° einstellbare Halterung
- Intelligentes UND logisch
- Digitales Anti-Masking (RAM-Modell)
- Wandsabotage (optional)

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**1 EINLEITUNG**

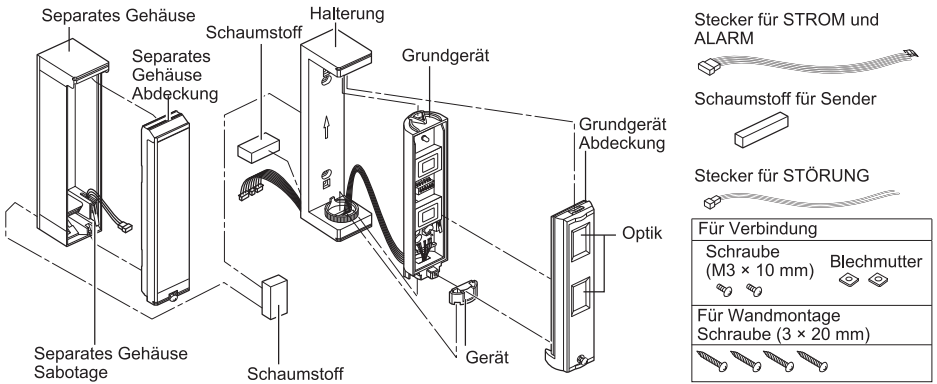
**1-1 VOR DER INSTALLATION**

<b>⚠ Warnung</b>	Die Nichteinhaltung der Anweisungen in diesem Handbuch und falsche Handhabung können zum Tod oder zu schweren Verletzungen führen.
<b>⚠ Vorsicht</b>	Die Nichteinhaltung der Anweisungen mit diesem Warnsymbol und falsche Handhabung können zu Verletzungen und/oder Sachschäden führen.

Die Markierung **✓** bedeutet Empfehlung. Das Nix-Symbol **⊘** zeigt Unzulässigkeit an.

<b>⚠ Warnung</b> Entfernen Sie nicht die Leiterplatte. 	<b>⚠ Vorsicht</b> Entfernen Sie nicht die Sabotage für das separate Gehäuse. 	<b>⚠ Vorsicht</b> Berühren Sie nicht die Leiterplatte, außer für den DIP-Schalter. 
Montagehöhe <b>✓</b> 0,8 bis 1,2 m Parallel	Halten Sie den Melder parallel zum Boden. Neigung	Berücksichtigen Sie die Richtung, aus der sich eine Person nähert, sowie den Erkennungsbereich. 
Installieren Sie den Melder an einem Standort, der frei von Fehlalarmfaktoren ist. Beispielsweise:		
• Sonneneinstrahlung und Reflektion 	• Wärmequelle 	• Gegenstände, die sich im Wind bewegen 

## 1-2 TEILEKENNZEICHUNG



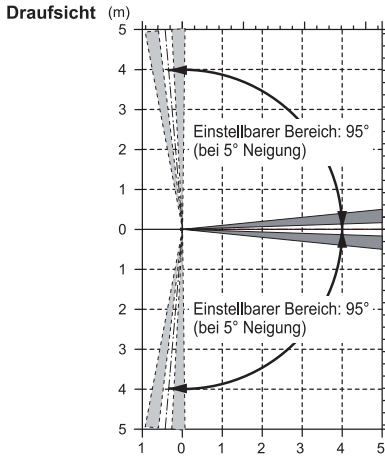
### Hinweis>>

Sender und Batterie gehören nicht zum Lieferumfang.

### -Optionales Zubehör

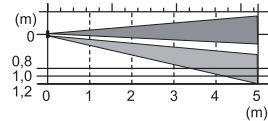


## 1-3 ERKENNUNGSBEREICH

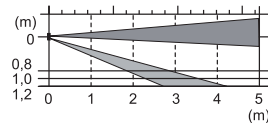


### Seitenansicht

5 m Erkennungsreichweite



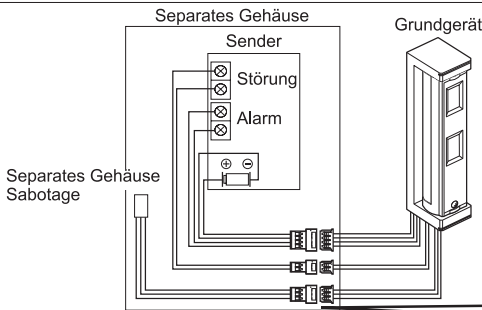
2 m Erkennungsreichweite



## 2 INSTALLATION

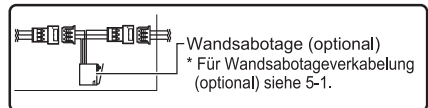
### 2-1 SCHALTPLAN

#### - Schaltplan



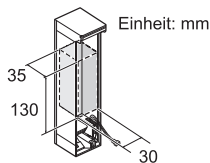
### Hinweise>>

- Die Batterie im Sender wird gemeinsam mit dem Melder genutzt.
- Der Anschluss für STÖRUNG wird bei Sabotage- und Anti-Masking-Überwachung verwendet.



## 2-2 SENDE R VORBEREITEN

Der verwendete Sender muss die internen Abmessungen H 130 × B 30 × T 35 mm haben.



### Zu verwendender Stecker

Stecker für STROM und ALARM

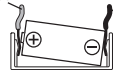


Stecker für STÖRUNG



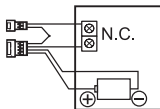
Batterie einsetzen

Rot Schwarz



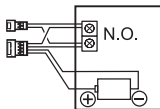
### - Überwachung von ALARM und STÖRUNG mit Sender mit 1 externen Eingang

Externer Eingang ist Ruhekontakt



... DIP-Schalter 3: AUS (Ruhekontakt)

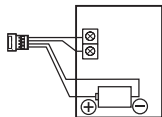
Externer Eingang ist Arbeitskontakt



... DIP-Schalter 3: EIN (Arbeitskontakt)

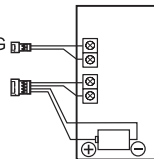
### - Überwachung nur des ALARMS mit einem Sender mit 1 externen Eingang

Stecker für STROM und ALARM



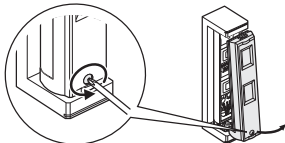
### - Zur Überwachung von ALARM und STÖRUNG mit einem Sender mit 2 externen Eingängen

Stecker für STÖRUNG  
Stecker für STROM und ALARM

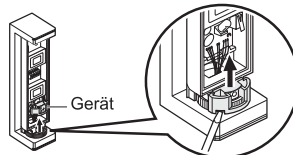


## 2-3 VOR DER WANDMONTAGE

1 Öffnen Sie die Abdeckung des Grundgeräts.



2 Nehmen Sie das Gerät ab.

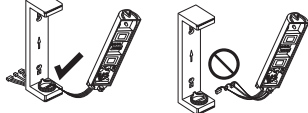


3 Halten Sie die Halterung oben fest und nehmen Sie das Grundgerät heraus.

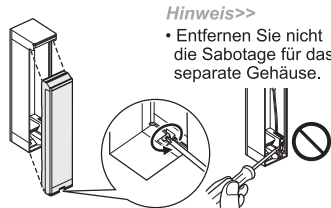


**Hinweis>>**

• Achten Sie darauf, die Anschlüsse durch die Unterseite der Halterung zu führen, nachdem das Grundgerät entfernt wurde.



4 Öffnen Sie das separate Gehäuse.



**Hinweis>>**

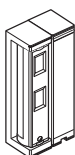
• Entfernen Sie nicht die Sabotage für das separate Gehäuse.

5 Wählen Sie die Montagemethode.

Übereinander-Methode (2-4)

Übereinander-Methode (2-5)

Übereinander-Methode (2-5)



**Hinweis>>**

• Achten Sie darauf, das Grundgerät oben zu montieren.

ENGLISH

FRANÇAIS

DEUTSCH

ITALIANO

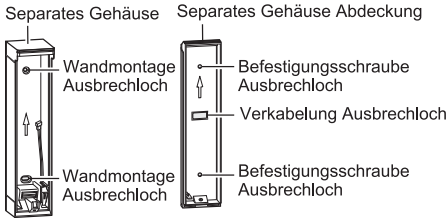
ESPAÑOL

PORTUGUÊS

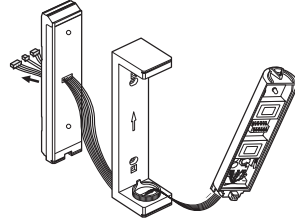
## 2-4 ÜBEREINANDER-METHODE

Für die Nebeneinandermethode und die Oben-nach-unten-Methode siehe Seite 6.

6 Durchstoßen Sie das Ausbrechloch.



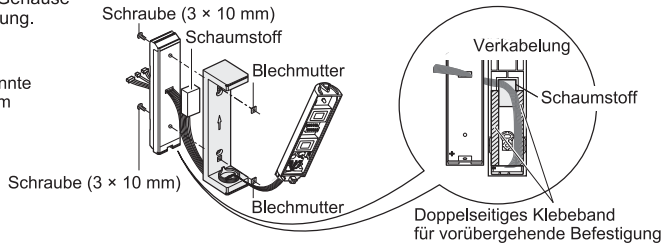
7 Fädeln Sie die Stecker durch das Ausbrechloch.



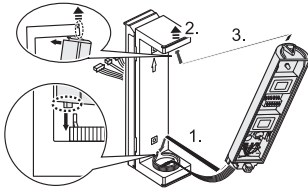
8 Schließen Sie das separate Gehäuse und montieren Sie die Halterung.

### Hinweise>>

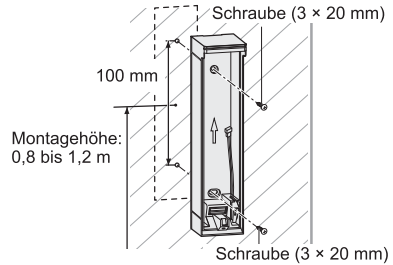
- Achten Sie darauf, das getrennte Gehäuse nicht verkehrt herum anzubringen.
- Achten Sie darauf, die Kabel nicht einzuklemmen.



9 Halten Sie die Halterung oben fest und montieren Sie das Grundgerät.



10 Montieren Sie das separate Gehäuse an der Wand.



11 Schließen Sie die Stecker an.

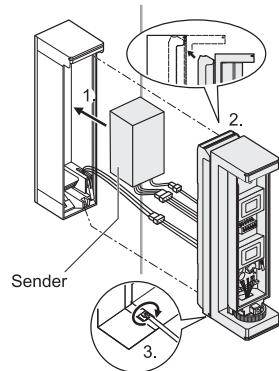
Separates Gehäuse Seite		Grundgerät Seite		
Rot	↔	Rot:	↔	Stromeingang (+)
Schwarz	↔	Schwarz:	↔	Stromeingang (-)
Weiß	↔	Weiß:	↔	Alarm
Gelb	↔	Gelb:	↔	Alarm
Grün	↔	Grün:	↔	Störung
Blau	↔	Blau:	↔	Störung
Braun	↔	Braun:	↔	Sabotage
Orange	↔	Orange:	↔	Sabotage
Grau	↔	Grau:	↔	Sabotage



### Hinweise>>

- Der Sabotageausgang ist nicht exklusiv. Anti-Masking- und Sabotageschaltkreise nutzen gemeinsam den Störungsausgang.
  - Für Wandsabotageanschluss (optional) siehe 5-1.
  - Wenn der Sabotagestecker des Grundgeräts am Sabotageanschluss des separaten Gehäuses angeschlossen ist, so wird der Sabotageschaltkreis nicht aktiviert, sofern der Sabotagestecker anschließend abgezogen oder abgeschnitten wird.
- Um einen abgetrennten Stecker zu erkennen, trennen Sie das Kabel der Brücke (orange) durch, wie in der Abbildung dargestellt. In diesem Fall achten Sie darauf, die Sabotage des separaten Gehäuses anzuschließen, da der Störungsausgang anderenfalls aktiv bleibt.

12 Installieren Sie den Sender und bringen Sie das separate Gehäuse an.



### Hinweis>>

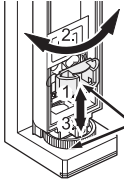
- Verwenden Sie den Schaumstoff für Sender, falls erforderlich.



**13** Legen Sie den horizontalen Erkennungswinkel fest und montieren Sie das Gerät.

**Hinweis>>**

- Nehmen Sie das Gerät ab, um Einstellungen vorzunehmen.

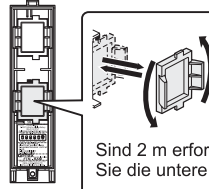


**Hinweis>>**

- Vergewissern Sie sich, dass Gerät und Halterung korrekt miteinander verbunden sind.



**14** Legen Sie die Reichweite des Erkennungsbereichs fest. (2 m oder 5 m)



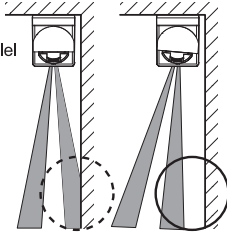
Sind 2 m erforderlich, so drehen Sie die untere Optik um 180°.

**Hinweis>>**

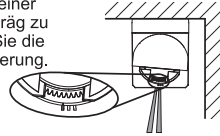
- Entfernen Sie nicht die obere Optik.

**Hinweis>>**

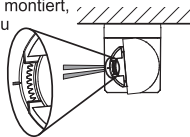
Richten Sie den Erkennungsbereich parallel zur Wand aus, um Störungen, die von der Wand ausgehen, auszuschließen.



- Ist das Gerät auf einer einer Wand montiert, um schräg zu sehen, so verwenden Sie die eingravierte Richtmarkierung.

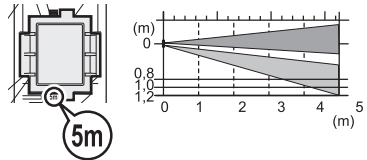


- Ist das Gerät auf einer Ecke montiert, um an einer Wand entlang zu sehen, so verwenden Sie die Richtmarkierung auf der gegenüberliegenden Seite der Wand.



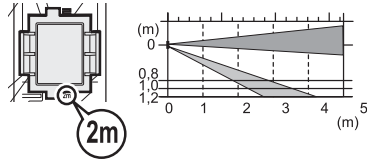
**5 m Erkennungsreichweite (Werkseinstellung)**

Seitenansicht

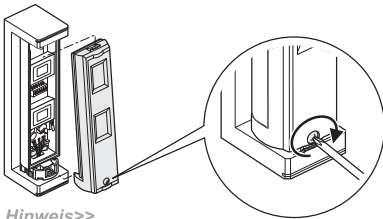


**2 m Erkennungsreichweite**

Seitenansicht



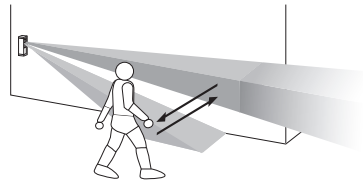
**15** Schließen Sie das Gerätegehäuse.



**Hinweis>>**

- Zur Vorbereitung des Gehtests vergewissern Sie sich, dass DIP-Schalter 1 (GEHTESTMODUS) auf „EIN (TEST)“ eingestellt ist, bevor Sie die Abdeckung des Grundgeräts installieren.

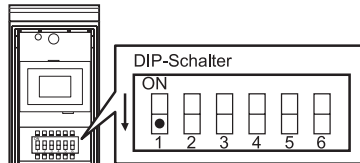
**16** Gehtest durchführen.



**17** Nach beendetem Gehtest stellen Sie DIP-Schalter 1 (GEHTESTMODUS) von „EIN“ auf „AUS“.

**Hinweis>>**

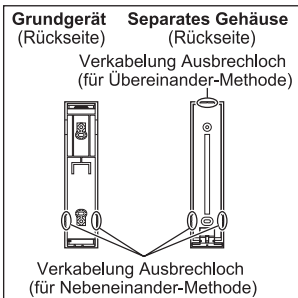
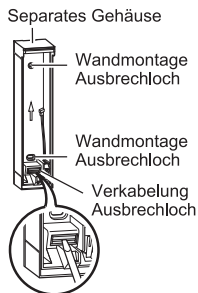
- Die Lebensdauer der Batterie verkürzt sich, sofern DIP-Schalter 1 nicht auf „OFF“ eingestellt ist.
- Zur Verwendung der LED im normalen Betriebszustand stellen Sie DIP-Schalter 4 auf „ON“.



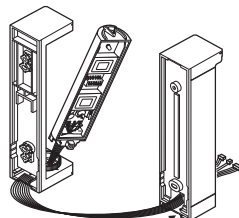
## 2-5 NEBENEINANDER UND ÜBEREINANDER

Für Systeme übereinander siehe 2-4.

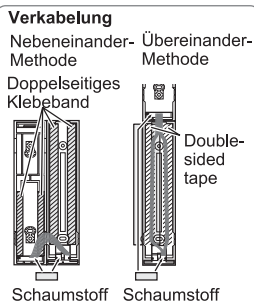
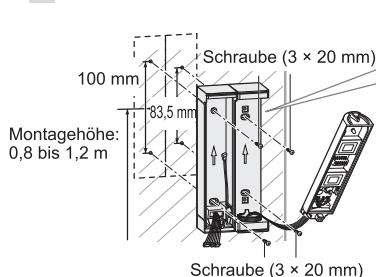
- 6 Durchstoßen Sie das Ausbrechloch.



- 7 Fädeln Sie die Stecker durch das Ausbrechloch.



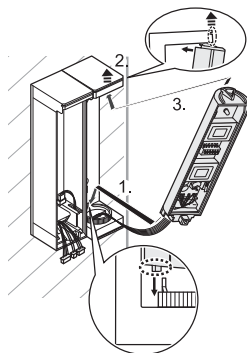
- 8 Montieren Sie die Halterung und das separate Gehäuse an der Wand.



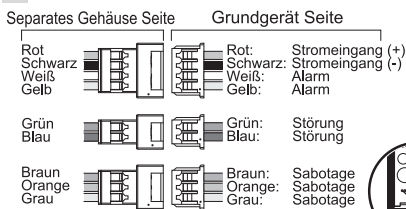
**Hinweis>>**

- Achten Sie darauf, die Kabel nicht einzuklemmen.

- 9 Halten Sie die Halterung oben fest und montieren Sie das Grundgerät.



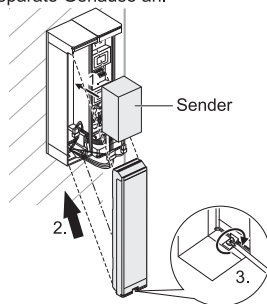
- 10 Schließen Sie die Stecker an.



**Hinweis>>**

- Der Sabotageausgang ist nicht exklusiv. Anti-Masking- und Sabotageschaltkreise nutzen gemeinsam den Störungsausgang.
- Für Wandsabotageanschluss (optional) siehe 5-1.
- Wenn der Sabotagestecker des Grundgeräts am Sabotageanschluss des separaten Gehäuses angeschlossen ist, so wird der Sabotageschaltkreis nicht aktiviert, sofern der Sabotagestecker anschließend abgezogen oder abgeschnitten wird. Um einen abgetrennten Stecker zu erkennen, trennen Sie das Kabel der Brücke (orange) durch, wie in der Abbildung dargestellt. In diesem Fall achten Sie darauf, die Sabotage des separaten Gehäuses anzuschließen, da der Störungsausgang anderenfalls aktiv bleibt.

- 11 Installieren Sie den Sender und bringen Sie das separate Gehäuse an.

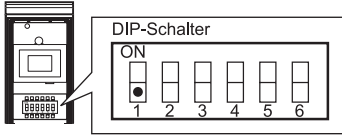


- 12 Für das weitere Verfahren siehe Schritte 13 bis 17 (Seite 5).

# 3 GEHTEST

## 3-1 GEHTEST

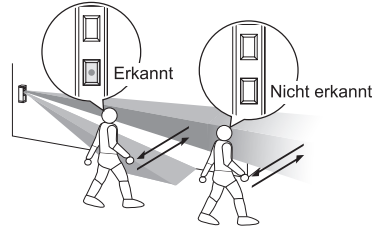
1 Stellen Sie DIP-Schalter 1 (GEHTESTMODUS) auf „ON (TEST)“.



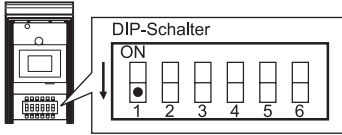
**Hinweis>>**

• Der Schalter ist werksseitig auf „ON (TEST)“ eingestellt.

2 Vergewissern Sie sich, dass die LED für 2 Sekunden leuchtet, wenn das beabsichtigte Objekt erkannt wird.



3 Stellen Sie DIP-Schalter 1 (GEHTESTMODUS) auf „OFF (NORM)“.



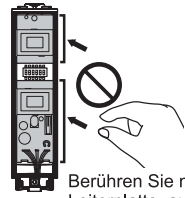
**Hinweis>>**

• Die Lebensdauer der Batterie verkürzt sich, sofern DIP-Schalter 1 nicht auf „OFF“ eingestellt ist.  
• Zur Verwendung der LED im normalen Betriebszustand stellen Sie DIP-Schalter 4 auf „ON“.

# 4 DIP-SCHALTER EINSTELLEN



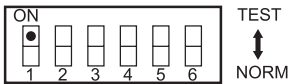
	<p>DIP-Schalter</p> <p>1 GEHTESTMODUS</p> <p>2 BATTERIE ENERGIESPAR-TIMER</p> <p>3 ALARM- UND STÖRUNGSAUSGANG</p> <p>4 LED</p> <p>5 PIR-EMPFINDLICHKEIT</p> <p>6 ANTI-MASKING</p>
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Berühren Sie nicht die Leiterplatte, außer für den DIP-Schalter.

## 4-1 GEHTESTMODUS

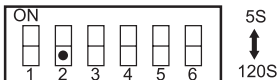
DIP-Schalter 1 FTN-R FTN-RAM



Position	Function
TEST (Werkseinstellung)	<ul style="list-style-type: none"> <li>Die LED leuchtet unabhängig von der Einstellung DIP-Schalter 4 (LED).</li> <li>DIP-Schalter 2 (BATTERIE ENERGIESPAR-TIMER) ist inaktiv.</li> </ul>
NORM	<ul style="list-style-type: none"> <li>Die LED leuchtet abhängig von der Einstellung DIP-Schalter 4 (LED).</li> <li>DIP-Schalter 2 (BATTERIE ENERGIESPAR-TIMER) ist aktiv.</li> </ul>

## 4-2 BATTERIE ENERGIESPAR-TIMER

DIP-Schalter 2 FTN-R FTN-RAM



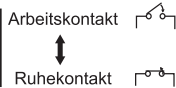
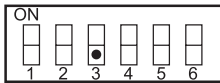
Position	Function
5S	5 sec.
120S (Werkseinstellung)	120 sec.

**Hinweis>>**

• Der Melder löst keinen Alarm in Intervallen kürzer als die spezifizierte Zeit aus.

## 4-3 ALARM- UND STÖRUNGSAUSGANG

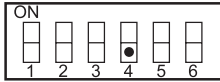
DIP-Schalter 3

FTN-R  
FTN-RAM

Position	Function
Arbeitskontakt	Arbeitskontakt Ausgang
Ruhekontakt (Werkseinstellung)	Ruhekontakt Ausgang

## 4-4 LED

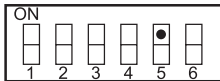
DIP-Schalter 4

FTN-R  
FTN-RAM

Position	Function
EIN	LED EIN
AUS (Werkseinstellung)	LED AUS <i>Hinweis&gt;&gt;</i> • Leuchtet die LED auf, so überprüfen Sie die Einstellung von DIP-Schalter 1 (GEHTESTMODUS).

## 4-5 PIR-EMPFINDLICHKEIT

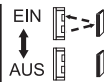
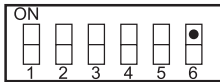
DIP-Schalter 5

FTN-R  
FTN-RAM

Position	Function
STD (Werkseinstellung)	Normale Empfindlichkeit
NIEDRIG	Geringe Empfindlichkeit

## 4-6 ANTI-MASKING

DIP-Schalter 6

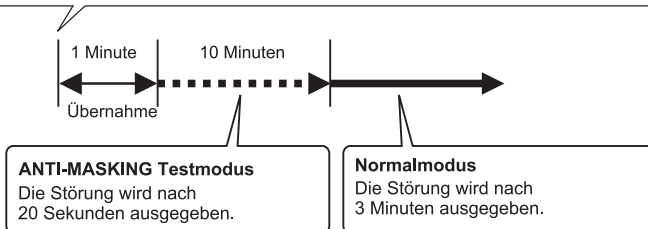
FTN-R  
FTN-RAM

Position	Function
EIN (Werkseinstellung)	ANTI-MASKING EIN
AUS	ANTI-MASKING AUS

**-ANTI-MASKING Funktion**

Besteht der Masking-Zustand länger als 3 Minuten, so wird eine STÖRUNG ausgelöst. Eine STÖRUNG wird nach 20 Sekunden im Anti-Masking-Testmodus ausgelöst.

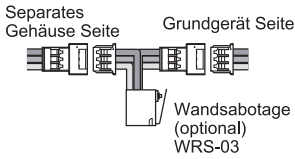
Der Übernahmemodus startet, wenn sowohl die Abdeckung des separaten Gehäuses wie auch des Grundgeräts installiert sind. Achten Sie darauf, keine Gegenstände innerhalb von 1 m zum Gerät zu lassen.



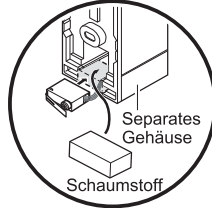
## 5 SONSTIGES

### 5-1 WANDSABOTAGE (OPTIONAL) ANSCHLUSS

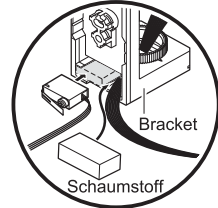
Schließen Sie den Sabotagestecker bei Anschluss der Wandsabotage (optional) an, wie nachstehend dargestellt.



#### Montageposition Übereinander-Methode

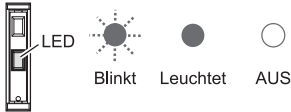


#### Nebeneinander-Methode und Übereinander-Methode



### 5-2 LED-BLINKMUSTER

Nachstehend wird das LED-Leuchtmuster beschrieben.



Melderzustand	LED-Anzeige
<b>Aufwärmen</b> <i>Hinweis&gt;&gt;</i> • Die LED blinkt, selbst wenn DIP-Schalter 4 (LED) auf „OFF“ eingestellt ist.	120 sec. Blinkt für ca. 120 Sekunden.
<b>Alarm</b>	2 sec. Leuchtet für 2 Sekunden.
<b>Masking-Erkennung</b> (nur FTN-RAM)	Blinkt 3 Mal, dann Wiederholung.

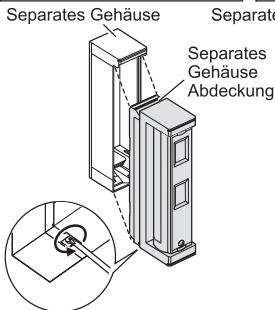
## 6 BATTERIE

Der Melder nutzt die Batterie gemeinsam mit dem Sender. Vergewissern Sie sich, dass die 2,5 bis 10,0 V Batterie für den Sender verwendet wird.

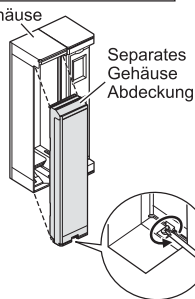
### 6-1 BATTERIE AUSTAUSCHEN

- Öffnen Sie das separate Gehäuse und ziehen Sie den Senderstecker ab. (Das Gerät muss nicht geöffnet werden.)

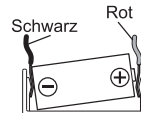
#### Übereinander-Methode



#### Nebeneinander-Methode und Übereinander-Methode



- Tauschen Sie die Batterie aus.



- Schließen Sie den Stecker an und schließen Sie das separate Gehäuse.

#### *Hinweis>>*

- Vergewissern Sie sich, dass die Aufwärmzeit gestartet wird.

### 6-2 LEBENSDAUER DER BATTERIE

Die angegebenen Werte dienen nur als Referenz und unter der Bedingung, dass der Melder nur batterieversorgt ist. Es ist nicht möglich, die Lebensdauer der Batterie im Normalbetrieb anzuzeigen, da die Batterie im Sender gemeinsam mit dem Melder genutzt wird.

	Intervall 120 s	Intervall 5 s
CR123A (3 V, 1300 mAh)	Ca. 6 Jahre	Ca. 5 Jahre
CR2 (3 V, 750 mAh)	Ca. 4 Jahre	Ca. 3 Jahre
1/2AA (3,6 V, 1000 mAh)	Ca. 5 Jahre	Ca. 4 Jahre

#### *Hinweis>>*

- Diese Daten gelten für LED aus, AM ein. Die Lebensdauer der Batterie verkürzt sich, wenn die LED leuchtet.

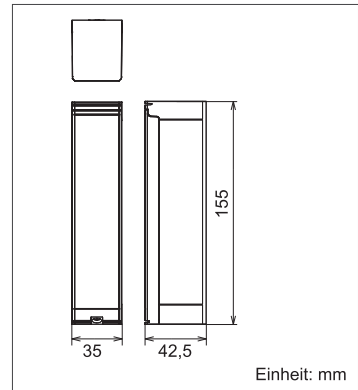
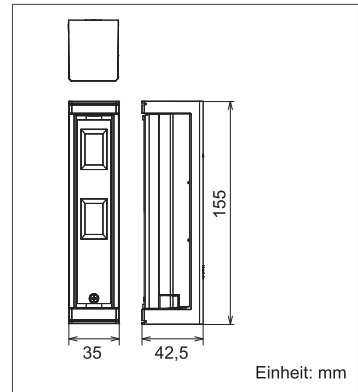
# 7 TECHNISCHE DATEN

## 7-1 TECHNISCHE DATEN

Modell	FTN-R	FTN-RAM
Erkennungsverfahren	Passiv Infrarot	
PIR-Abdeckung	5 × 1 m	
Reichweite des Erkennungsbereichs	2 m, 5 m	
Erkennbare Geschwindigkeit	0,3 bis 1,5 m/s	
Empfindlichkeit	2,0°C (bei 0,6 m/s)	
Betriebsspannung	2,5 bis 10 VDC	
Stromeingang	3 bis 9 VDC (Lithium- oder Alkali-Batterie)	
Stromaufnahme	9 µA (im Stand-by-Modus)/3 mA (max.) (bei 3 VDC)	10 µA (im Stand-by-Modus)/3 mA (max.) (bei 3 VDC)
Alarmdauer	2,0 ±1,0 s	
Aufwärmzeitraum	Ca. 120 s (LED blinkt)	
Alarmausgang	Ruhekontakt/Arbeitskontakt Umschaltbar-Festkörperschalter 10 VDC 0,01 A (max.)	
Störungsausgang	Ruhekontakt/Arbeitskontakt Umschaltbar-Festkörperschalter 10 VDC 0,01 A (max.)	
LED-Anzeige	Aktivieren: Während DIP-Schalter 1 (GEHTESTMODUS) oder DIP-Schalter 4 (LED) EIN Deaktivieren: Während des Normalbetriebs Leuchtet/Blinkt: Aufwärmen, Alarm, Masking-Erkennung (nur FTN-RAM)	
Betriebstemperatur	-20°C bis +60°C	
Luftfeuchtigkeit	95% (max.)	
Wetterschutz	IP55	
Montage	Wand (Außenmontage, Innenmontage)	
Montagehöhe	0,8 bis 1,2 m	
Gewicht	190 g	
Zubehör	Stecker für STROM und ALARM, Stecker für STÖRUNG, Blechmutter × 2, Schraube (M3 × 10 mm) × 2, Schraube (3 × 20 mm) × 4, Schaumstoff für Sender"	

\* Änderung der technischen Daten und des Designs vorbehalten.

## 7-2 ABMESSUNGEN



### Hinweis>>

- Diese Geräte sind so konzipiert, dass sie einen Eindringling erkennen und einen Alarm auf dem Bedienfeld auslösen. Da diese nur ein Teil eines Gesamtsystems sind, übernehmen wir keine Haftung für Schäden oder sonstige Konsequenzen, die durch einen Eindringling entstehen. Diese Produkte erfüllen die EMC-Richtlinie 2004/108/EC.



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**OPTEX SECURITY SAS (France)**

URL: <http://www.optex-security.com/>

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Rilevatore compatto  
per uso all'esterno

Serie *iii*

**MODELLO WIRELESS**

FTN-R	Modello funzionante a batteria con 2 PIR
FTN-RAM	FTN-R con antimascheramento

- Lunga durata della batteria
- Design compatto
- Antimascheramento digitale (modello RAM)
- Cablaggio semplice, attraverso un connettore
- Staffa regolabile a 190°
- Elemento antimanomissione a parete (opzionale)
- Cassetta separata con fissaggio multiplo
- Intelligente E logico

## INDICE

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## 1 INTRODUZIONE

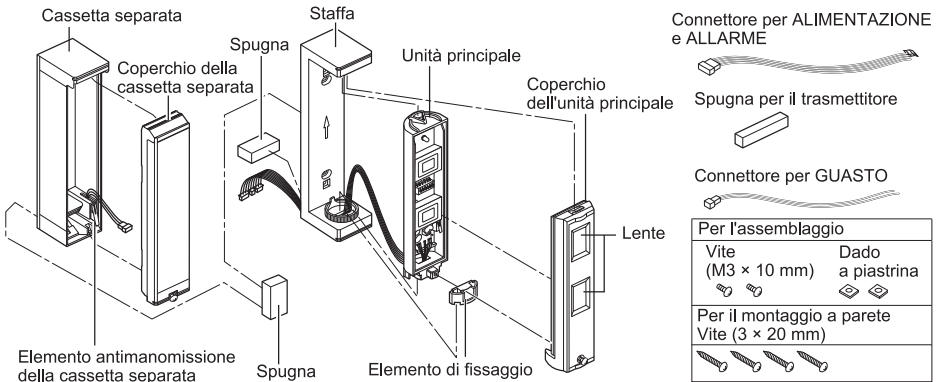
### 1-1 PRIMA DELL'INSTALLAZIONE

	<b>Pericolo</b>	La mancata osservanza delle istruzioni fornite in corrispondenza di questa indicazione e l'uso improprio possono causare la morte o lesioni gravi.
	<b>Avvertenza</b>	La mancata osservanza delle istruzioni fornite in corrispondenza di questa indicazione e l'uso improprio possono causare lesioni e/o danni materiali.

Il se gno di spun ta indica un a raccomandazione. Il sim bolo di d ivieto indica un divieto.

Pericolo	Avvertenza	Avvertenza
Non rimuovere la scheda. 	Non rimuovere la cassetta antimanomissione separata. 	Non toccare la scheda, ad eccezione del DIP switch. 
Altezza di montaggio Da 0,8 a 1,2 m Parallelo	Tenere il rilevatore parallelo al suolo. Inclinazione	Si consideri la direzione di una persona che si avvicina e l'area di rilevamento. 
Installare il rilevatore in un luogo in cui non siano presenti possibili cause di falso allarme. Ad esempio:		
• Luce del sole e riflessi 	• Fonte di calore 	• Oggetti in movimento nel vento 

## 1-2 DESCRIZIONE DELLE PARTI



**Nota >>**

Il trasmettitore e la batteria non sono inclusi.

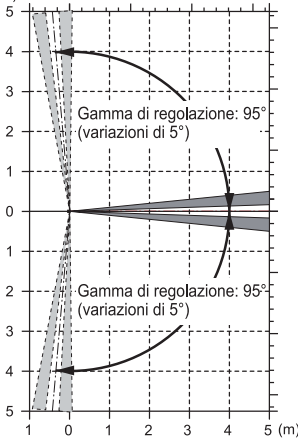
### -Accessori opzionali

Elemento antimanomissione a parete (WRS-03)



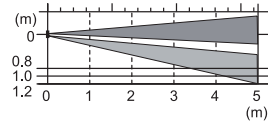
## 1-3 AREA DI RILEVAMENTO

**Vista dall'alto (m)**

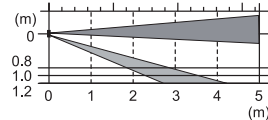


**Vista laterale**

Portata di rilevamento 5 m



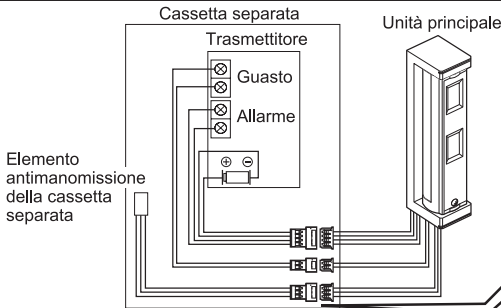
Portata di rilevamento 2 m



## 2 INSTALLAZIONE

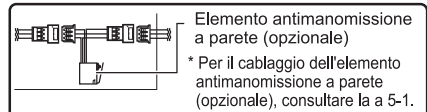
### 2-1 SCHEMA DI CABLAGGIO

- Schema generale di cablaggio



**Nota >>**

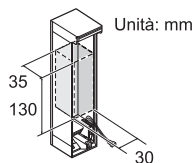
- La batteria del trasmettitore è condivisa con il rilevatore.
- Il collegamento per l'uscita di GUASTO si utilizza durante il monitoraggio per individuare manomissione e mascheramento.





## 2-2 PREPARAZIONE DEL TRASMETTITORE

Il trasmettitore utilizzato deve avere le seguenti dimensioni interne: A 130 x L 30 x P 35 mm.



### Connettori da utilizzare

Connettore per ALIMENTAZIONE e ALLARME

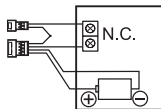


Connettore per GUASTO



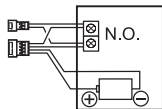
### - In caso di monitoraggio delle uscite di ALLARME e GUASTO con un ingresso esterno

L'ingresso esterno è N.C.



...DIP switch 3: SPENTO (N.C.)

L'ingresso esterno è N.O.

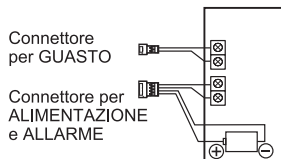


...DIP switch 3: ACCESO (N.O.)

### - Per monitorare solo l'uscita di ALLARME utilizzando un trasmettitore con un ingresso esterno

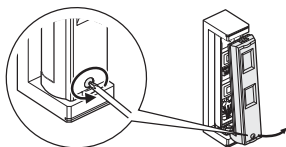


### - Per monitorare le uscite di ALLARME e di GUASTO utilizzando un trasmettitore con due ingressi esterni



## 2-3 PRIMA DEL MONTAGGIO A PARETE

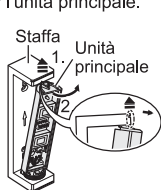
- 1 Aprire il coperchio dell'unità principale.



- 2 Rimuovere l'elemento di fissaggio.

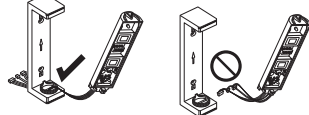


- 3 Trattenere la parte superiore della staffa e rimuovere l'unità principale.



**Nota>>**

• Verificare che i connettori siano installati attraverso la parte inferiore della staffa, dopo aver rimosso l'unità principale.



- 4 Aprire la cassetta separata.

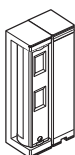


- 5 Selezionare il metodo di montaggio.

Metodo a impilamento (2-4)



Metodo affiancato (2-5)



Metodo verticale (2-5)



**Nota>>**

• Montare l'unità principale in alto.

ENGLISH

FRANÇAIS

DEUTSCH

ITALIANO

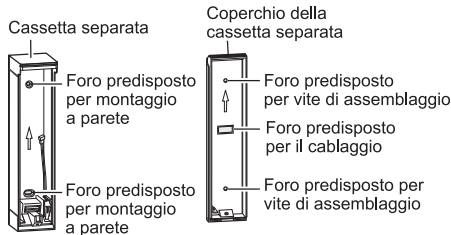
ESPAÑOL

PORTUGUÊS

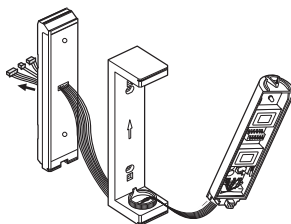
## 2-4 METODO A IMPILAMENTO

Per il metodo affiancato e il metodo verticale, consultare la pagina 6. Aprire il foro predisposto.

6 Aprire il foro predisposto.



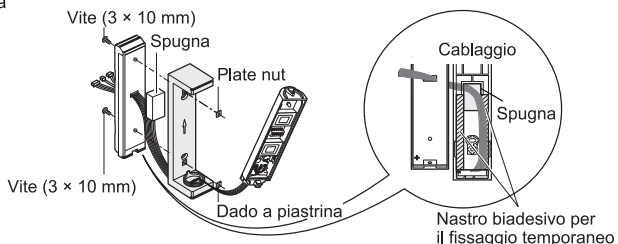
7 Tirare i connettori attraverso i fori predisposti per il cablaggio.



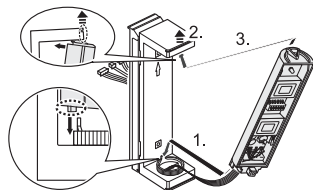
8 Fissare il coperchio della cassetta separata e la staffa.

**Nota>>**

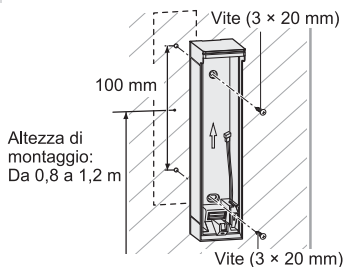
- Prestare attenzione a non fissare il coperchio della cassetta separata capovolto.
- Prestare attenzione a non pizzicare i fili.



9 Trattenerne la parte superiore della staffa e montare l'unità principale.



10 Montare sulla parete la scatola separata.



11 Collegare i connettori.

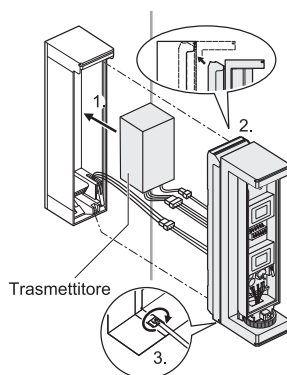
Lato cassetta separata	Lato dell'unità principale
Rosso	Rosso: Alimentazione (+)
Nero	Nero: Alimentazione (-)
Bianco	Bianco: Allarme
Giallo	Giallo: Allarme
Verde	Verde: Guasto
Blu	Blu: Guasto
Marrone	Marrone: Interruttore antimanomissione
Arancione	Arancione: Interruttore antimanomissione
Grigio	Grigio: Interruttore antimanomissione

**Nota>>**

- L'uscita antimanomissione non è esclusiva. Il circuito antimascheramento e il circuito antimanomissione condividono l'uscita di guasto.
- Per il cablaggio elettrico dell'elemento antimanomissione a parete (opzionale), consultare la 5-1.
- Quando il connettore antimanomissione dell'unità principale è collegato al connettore antimanomissione della cassetta separata, se il connettore antimanomissione viene successivamente scollegato o tagliato, il circuito antimanomissione non si attiva. Per rilevare l'eventuale disconnessione del connettore, interrompere il ponticello (arancione) come mostrato nella figura. In questo caso, collegare che la cassetta antimanomissione separata, altrimenti l'uscita di guasto rimarrà attiva.



12 Installare il trasmettitore e fissare il coperchio della cassetta separata.



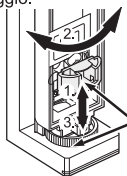
**Nota>>**

- Utilizzare la spugna per il trasmettitore, se necessario.

13 Determinare l'angolo di rilevamento orizzontale e collegare l'elemento di fissaggio.

**Nota>>**

- Per effettuare le regolazioni, rimuovere l'elemento di fissaggio.



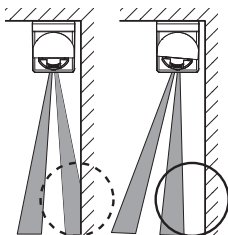
**Nota>>**

- Verificare che l'elemento di fissaggio e la staffa si incastrino correttamente.



**Nota>>**

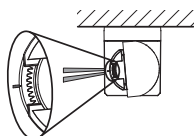
Allineare l'area di rilevamento in modo che sia parallela alla parete per ridurre l'interferenza con la parete.



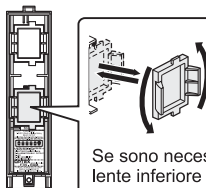
- Quando l'unità è montata sulla parete, rivolta in senso trasversale, scegliere il contrassegno guida inciso.



- Quando l'unità è montata su un angolo, rivolta in avanti lungo la parete, scegliere il contrassegno guida posto sul lato opposto della parete.



14 Determinare la portata di rilevamento. (2 m o 5 m)

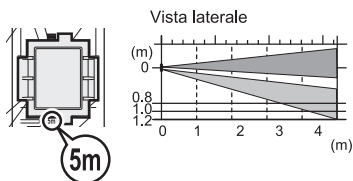


Se sono necessari 2 m, ruotare la lente inferiore di 180 gradi.

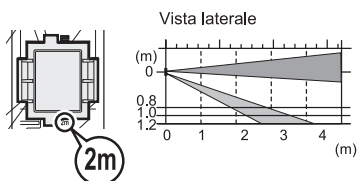
**Nota>>**

- Non rimuovere la lente superiore.

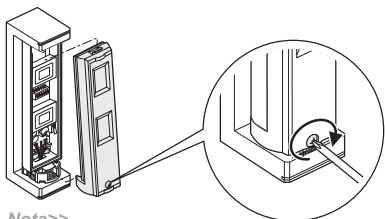
**Portata di rilevamento 5 m (impostazione predefinita)**



**Portata di rilevamento 2 m**



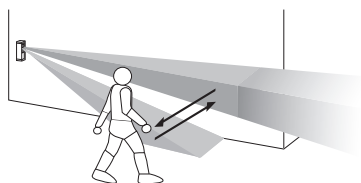
15 Fissare il coperchio dell'unità principale.



**Nota>>**

- Per prepararsi al test di transito, controllare che il DIP switch 1 (TIMER PER RISPARMIO BATTERIA) sia impostato su "ON" prima di fissare il coperchio dell'unità principale.

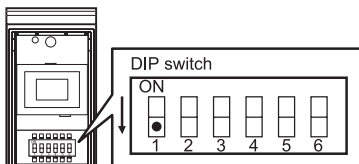
16 Eseguire il test di transito.



17 Dopo aver completato il test di transito, spostare il DIP switch 1 (MODALITÀ TEST DI TRANSITO) dalla posizione "ON" alla posizione "OFF".

**Nota>>**

- La durata della batteria sarà ridotta, se il DIP switch 1 non è impostato su "OFF".
- Per utilizzare il LED in condizioni di normale funzionamento, impostare il DIP switch 4 su "ON".



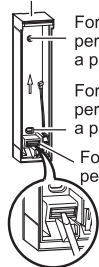
## 2-5 METODO AFFIANCATO E METODO VERTICALE

Per il metodo impilato, fare consultare la 2-4.

### 6 Aprire il foro predisposto.

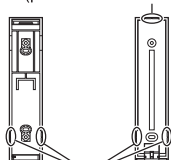
Cassetta separata

Foro predisposto per montaggio a parete  
 Foro predisposto per montaggio a parete  
 Foro predisposto per il cablaggio



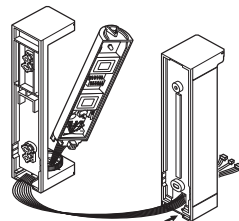
Unità principale (superficie posteriore) Cassetta separata (superficie posteriore)

Foro predisposto per il cablaggio (per il metodo sovrapposto)



Foro predisposto per il cablaggio (per il metodo affiancato)

### 7 Tirare i connettori dei fili attraverso i fori predisposti per il cablaggio.



### 8 Montare sulla parete la staffa e la cassetta separata.

**Cablaggio**

Metodo affiancato      Metodo verticale

Nastro biadesivo      Doublesided tape

Spugna      Spugna

**Nota >>**

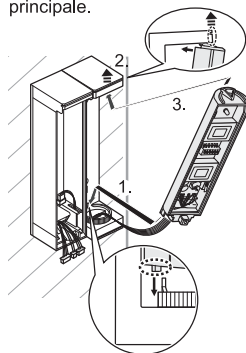
- Prestare attenzione a non pizzicare i fili.

100 mm  
 83,5 mm  
 Altezza di montaggio:  
 Da 0,8 a 1,2 m

Vite (3 × 20 mm)

Vite (3 × 20 mm)

### 9 Trattenerne la parte superiore della staffa e montare l'unità principale.



### 10 Collegare i connettori.

Lato cassetta separata      Lato dell'unità principale

Rosso: Alimentazione (+)  
 Nero: Alimentazione (-)  
 Bianco: Allarme  
 Giallo: Allarme

Verde: Guasto  
 Blu: Guasto

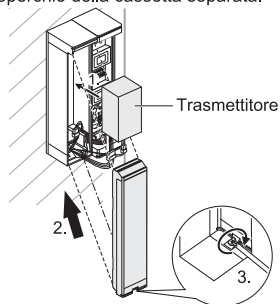
Marrone: Interruttore antimanomissione  
 Arancione: Interruttore antimanomissione  
 Grigio: Interruttore antimanomissione

**Nota >>**

- L'uscita antimanomissione non è esclusiva. Il circuito antimascheramento e il circuito antimanomissione condividono l'uscita di guasto.
- Per il cablaggio elettrico dell'elemento antimanomissione a parete (opzionale), consultare la a 5-1.
- Quando il connettore antimanomissione dell'unità principale è collegato al connettore antimanomissione della cassetta separata, se il connettore antimanomissione viene successivamente scollegato o tagliato, il circuito antimanomissione non si attiva. Per rilevare l'eventuale disconnessione del connettore, interrompere il ponticello (arancione) come mostrato nella figura. In questo caso, collegare che la cassetta antimanomissione separata, altrimenti l'uscita di guasto rimarrà attiva.



### 11 Installare il trasmettitore e fissare il coperchio della cassetta separata.



### 12 Per la procedura successiva, consultare le fasi da 13 a 17 (pagina 5).

### 3 TEST DI TRANSITO

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DEUTSCH

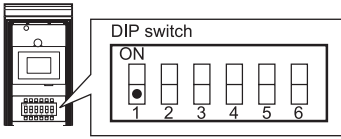
ITALIANO

ESPAÑOL

PORTUGUÊS

#### 3-1 TEST DI TRANSITO

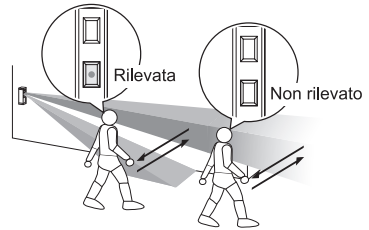
1 Impostare il DIP switch 1 (MODALITÀ TEST DI TRANSITO) su "ON (TEST)".



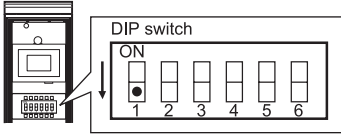
Nota>>

- L'interruttore è impostato su "ON (TEST)" per impostazione .

2 Verificare che il LED si illumini per 2 secondi quando viene rilevato l'oggetto desiderato.



3 Impostare il DIP switch 1 (MODALITÀ TEST DI TRANSITO) su "OFF (NORM)".



Nota>>

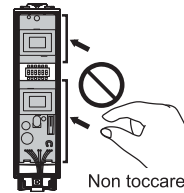
- La durata della batteria sarà ridotta, se il DIP switch 1 non è impostato su "OFF".
- Per utilizzare il LED in condizioni di normale funzionamento, impostare il DIP switch 4 su "ON".

### 4 IMPOSTAZIONI DIP SWITCH



DIP switch	Funzioni
1	MODALITÀ TEST DI TRANSITO
2	TIMER RISPARMIO BATTERIA
3	USCITA ALLARME E GUASTO
4	LED
5	SENSIBILITÀ PIR
6	ANTIMASCHERAMENTO

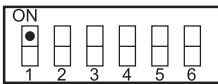
• : Impostazione predefinita



Non toccare la scheda, ad eccezione del DIP switch.

#### 4-1 MODALITÀ TEST DI TRANSITO

DIP switch 1 FTN-R FTN-RAM



TEST

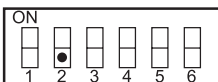


NORM

Posizione	Funzioni
TEST (impostazione predefinita)	<ul style="list-style-type: none"> <li>• Il LED si illumina indipendentemente dalle impostazioni del DIP switch 4 (LED).</li> <li>• L'impostazione del DIP switch 2 (TIMER PER RISPARMIO BATTERIA) non è attiva.</li> </ul>
NORM	<ul style="list-style-type: none"> <li>• Il LED si illumina in base alle impostazioni del DIP switch 4 (LED).</li> <li>• L'impostazione del DIP switch 2 (TIMER PER RISPARMIO BATTERIA) è attiva.</li> </ul>

#### 4-2 TIMER PER RISPARMIO BATTERIA

DIP switch 2 FTN-R FTN-RAM



5S



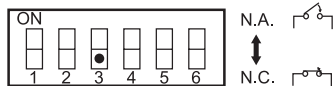
120S

Posizione	Funzioni
5S	5 sec.
120S (impostazione predefinita)	120 sec.

Nota>>

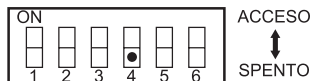
- Il rilevatore non genera allarmi a intervalli più brevi del tempo specificato.

## 4-3 USCITA ALLARME E GUASTO

DIP switch 3 **FTN-R**  
**FTN-RAM**

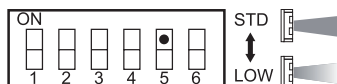
Posizione	Funzioni
N.A.	Uscita N.O.
N.C. (impostazione predefinita)	Uscita N.C.

## 4-4 LED

DIP switch 4 **FTN-R**  
**FTN-RAM**

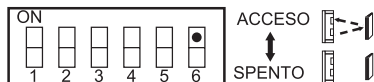
Posizione	Funzioni
ACCESO	LED ACCESO
SPENTO (impostazione predefinita)	LED SPENTO
	<i>Nota&gt;&gt;</i> • Se il LED si accende, controllare l'impostazione del DIP switch 1 (MODALITÀ TEST DI TRANSITO).

## 4-5 SENSIBILITÀ PIR

DIP switch 5 **FTN-R**  
**FTN-RAM**

Posizione	Funzioni
STD (impostazione predefinita)	Sensibilità normale
BASSA	Bassa sensibilità

## 4-6 ANTIMASCHERAMENTO

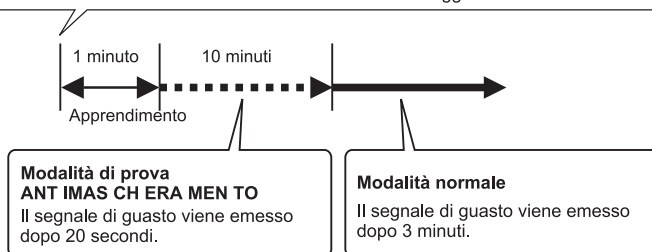
DIP switch 6 **FTN-R**  
**FTN-RAM**

Posizione	Funzioni
ACCESO (impostazione predefinita)	ANTIMASCHERAMENTO ATTIVATO
SPENTO	ANTIMASCHERAMENTO DISATTIVATO

**-Funzione ANTIMASCHERAMENTO**

Se la condizione mascheramento persiste per oltre 3 minuti, verrà generato un segnale di GUASTO. Il segnale di guasto viene generato dopo 20 secondi, in modalità di test antimascheramento.

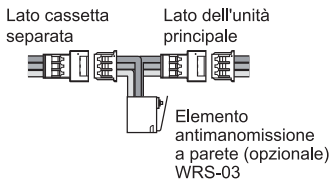
Quando il coperchio della scatola separata e il coperchio dell'unità principale vengono collegati, inizia la modalità di apprendimento. Prestare attenzione a non lasciare alcun oggetto entro 1 m di distanza dall'unità.



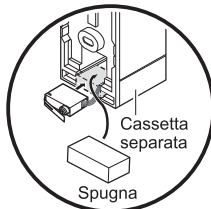
## 5 ALTRI

### 5-1 COLLEGAMENTO ELEMENTO ANTIMANOMISSIONE (OPZIONALE)

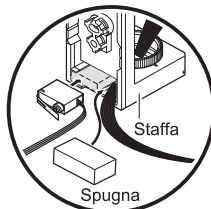
Collegare il connettore antimanomissione come illustrato di seguito, se si collega un elemento antimanomissione a parete (opzionale).



#### Posizione di montaggio Metodo a impilamento



#### Metodo affiancato e metodo verticale



### 5-2 SEQUENZA LUCE LED

Di seguito è illustrata la sequenza di illuminazione del LED.



Condizioni rilevatore	Indicatore LEDs
Riscaldamento <b>Nota&gt;&gt;</b> • Il LED lampeggia anche se il DIP switch 4 (LED) è impostato su "OFF".	120 sec. Lampeggia per circa 120 secondi.
Allarme	2 sec. Si illumina per 2 secondi.
Rilevamento mascheramento (solo FTN-RAM)	 Lampeggia 3 volte e poi ripete la sequenza.

## 6 BATTERIA

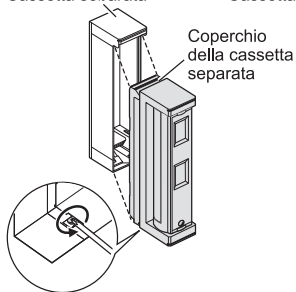
Il rilevatore condivide la batteria con il trasmettitore. Verificare che il trasmettitore disponga di alimentazione mediante una batteria da 2,5 a 10,0 V.

### 6-1 COME SOSTITUIRE LA BATTERIA

- 1 Aprire la cassetta separata e scollegare il connettore del trasmettitore. (Non è necessario aprire l'unità principale).

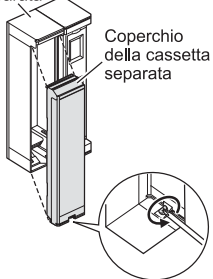
#### Metodo a impilamento

Cassetta separata

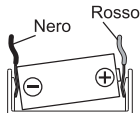


#### Metodo affiancato e metodo verticale Metodo verticale

Cassetta separata



- 2 Sostituire la batteria.



- 3 Collegare il connettore e chiudere la cassetta separata.

#### Nota>>

- Verificare che la fase di riscaldamento venga avviata.

### 6-2 DURATA DELLA BATTERIA

I valori indicati servono solo come riferimento, nel caso in cui il rilevatore sia eccezionalmente alimentato solo con la batteria. È impossibile indicare la durata della batteria in condizioni di normale funzionamento, perché la batteria del trasmettitore è in comune con il rilevatore.

	Intervallo di 120 s	Intervallo di 5 s
CR123A (3 V, 1300 mAh)	Circa 6 anni	Circa 5 anni
CR2 (3 V, 750 mAh)	Circa 4 anni	Circa 3 anni
1/2AA (3,6 V, 1000 mAh)	Circa 5 anni	Circa 4 anni

#### Nota>>

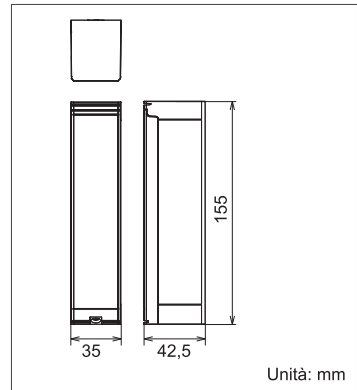
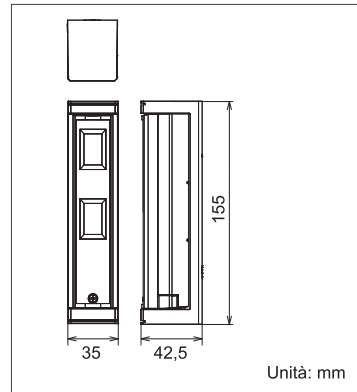
- I dati riportati qui si riferiscono a una situazione in cui il LED spento e la modalità AM è attiva. Quando il LED è acceso, la durata della batteria si riduce.

# 7 CARATTERISTICHE TECNICHE

## 7-1 CARATTERISTICHE TECNICHE

Modello	FTN-R	FTN-RAM
Metodo di rilevamento	A infrarossi, passivo	
Copertura PIR	5 × 1 m	
Limite lunghezza di rilevamento	2 m, 5 m	
Velocità rilevabile	Da 0,3 a 1,5 m/s	
Sensibilità	2,0°C (a 0,6 m/s)	
Tensione di esercizio	Da 2,5 a 10 VDC	
Alimentazione	Da 3 a 9 VDC (batterie alcaline o al litio)	
Assorbimento di corrente	9 µA (in standby)/ 3 mA (max) (a 3 VDC)	10 µA (in standby)/ 3 mA (max) (a 3 VDC)
Durata allarme	2,0 ± 1,0 s	
Periodo di riscaldamento	Circa 120 secondi (il LED lampeggia)	
Uscita allarme	N.C./N.O. Sensori allo stato solido selezionabili - 10 VDC, 0,01 A (max)	
Uscita di guasto	N.C./N.O. Sensori allo stato solido selezionabili - 10 VDC, 0,01 A (max)	
Indicatore LED	Abilitato: Quando il DIP switch 1 (MODALITÀ TEST DI TRANSITO) o il DIP switch 4 (LED) sono accesi Disabilitato: Durante il normale funzionamento Illuminato/Lampeggiante: Riscaldamento, allarme, rilevamento mascheramento (solo FTN-RAM)	
Temperatura di esercizio	Da -20°C a +60°C	
Umidità ambientale	95% (max)	
Resistente agli agenti atmosferici	IP55	
Montaggio	Parete (all'esterno, all'interno)	
Altezza di montaggio	Da 0,8 a 1,2 m	
Peso	190 g	
Accessori	Connettore per ALIMENTAZIONE e ALLARME Connettore per GUASTO, dado a piastrina × 2, vite (M3 × 10 mm) × 2, vite (3 × 20 mm) × 4, spugna per trasmettitore"	

## 7-2 DIMENSIONI



\* Caratteristiche tecniche e design sono soggetti a modifiche senza preavviso.

### Nota>>

- Queste unità sono progettate per rilevare un intruso e attivare un pannello di controllo che emette un allarme. Poiché il dispositivo è solo una parte di un sistema completo, il produttore non assume alcuna responsabilità per eventuali danni o altre conseguenze derivanti da un'intrusione. Questi prodotti sono conformi alla Direttiva EMC 2004/108/CE.



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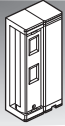
URL: <http://www.optexkorea.com/>

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Detector compacto de exteriores

Serie III

**MODELO INALÁMBRICO**

FTN-R	Modelo que funciona con batería con dos PIRs
FTN-RAM	Igual que el FTN-R pero con anti enmascaramiento

- Batería de larga vida útil
- Fácil cableado mediante un conector
- Caja separada multi fijación
- Diseño compacto
- Soporte ajustable a 190°
- Lógica inteligente AND
- Anti enmascaramiento digital (sólo modelos RAM)
- Tamper de pared (opcional)

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<b>3</b> PRUEBA DE FUNCIONAMIENTO (WALK TEST)		6-2 VIDA ÚTIL DE LA BATERÍA .....
3-1 PRUEBA DE FUNCIONAMIENTO .....	7	<b>7</b> ESPECIFICACIONES
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4-1 MODO PRUEBA DE FUNCIONAMIENTO.....	7	7-2 DIMENSIONES .....

**1 INTRODUCCIÓN**

**1-1 ANTES DE LA INSTALACIÓN**

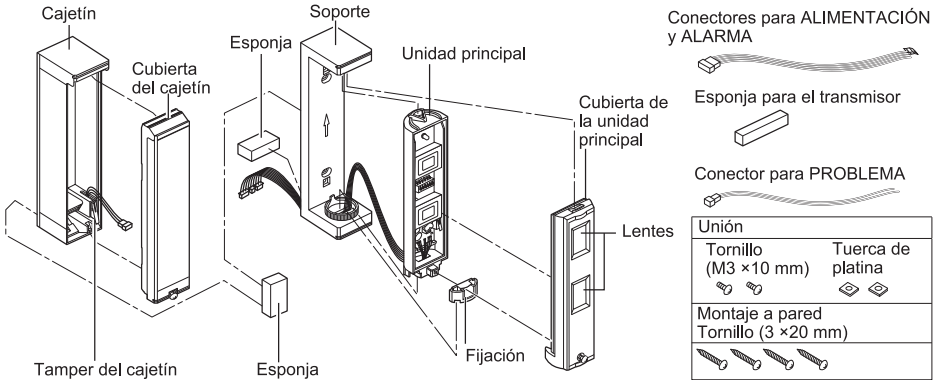
	<b>Advertencia</b>	Respete estas instrucciones de seguridad para prevenir serios daños o incluso la muerte.
	<b>Precaución</b>	Siga estas precauciones para prevenir heridas potenciales o daños materiales.

El signo indica Recomendación.

El signo indic a Prohibición.

Advertencia	Precaución	Precaución
<p>No extraiga la PCB.</p>	<p>No retire el tamper del cajetín.</p>	<p>No toque la PCB excepto el conmutador DIP.</p>
<p>Altura de montaje</p> <p>De 0,8 a 1,2 m (De 2,6 a 3,9 ft.) Paralelo</p>	<p>Mantenga el detector paralelo al suelo.</p> <p>Inclinación</p>	<p>Considere la dirección de una persona aproximándose al sensor, así como el área de detección.</p>
<p>Instale el sensor en un lugar adecuado evitando que se produzcan falsas alarmas. Por ejemplo evite:</p>		
<p>• Luz solar directa o reflejada</p>	<p>• Fuente de calor</p>	<p>• Objetos que se mueven con el viento</p>

## 1-2 IDENTIFICACIÓN DE LAS PARTES



**Nota >>**

El transmisor y la batería no vienen incluidos.

### -Accesorios opcionales

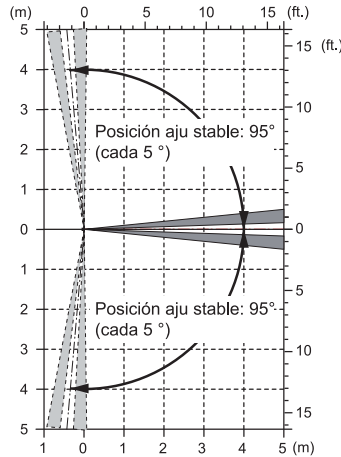
Tamper de pared (WRS-03)



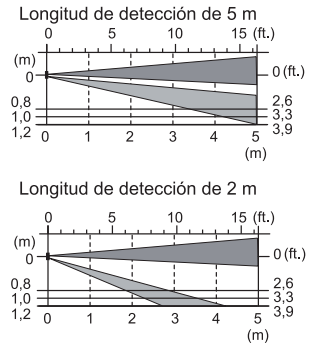
Unión	
Tornillo (M3 x10 mm)	Tuerca de platina
Montaje a pared Tornillo (3 x20 mm)	

## 1-3 ÁREA DE DETECCIÓN

**Vista superior del área de detección**



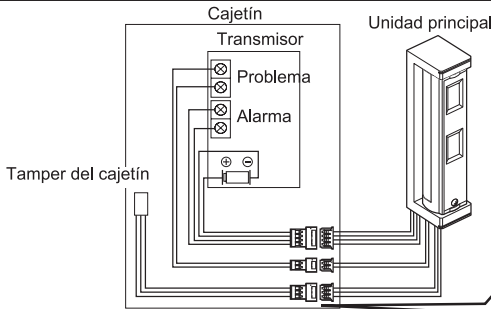
**Vista lateral del área de detección**



## 2 INSTALACIÓN

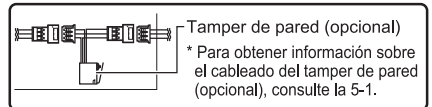
### 2-1 ESQUEMA DEL CABLEADO

- Esquema general del cableado



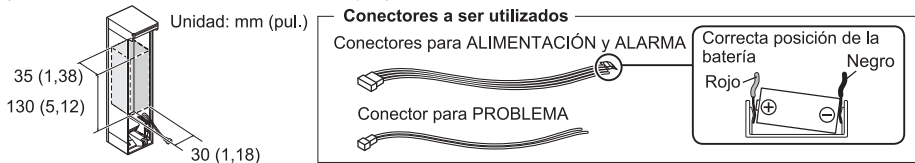
**Nota >>**

- La batería del transmisor es compartida con el detector.
- La conexión para PROBLEMA se utiliza para monitorizar el Tamper y el Anti Mask.



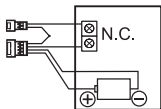
## 2-2 PREPARACIÓN DEL TRANSMISOR

El transmisor utilizado deberá tener unas dimensiones internas de: Alto 130 x Ancho 30 x Profundidad 35 mm. (Alto 5,12 x Ancho 1,18 x Profundidad 1,38 pul.)



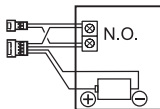
### - Cuando se monitorea la ALARMA y el PROBLEMA usando el transmisor con 1 salida externa

La entrada externa es N.C.



3 ... Conmutador DIP 3: OFF (N.C.)

La entrada externa es N.O.

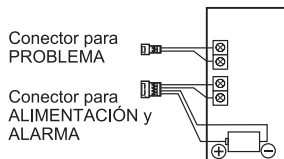


3 ... Conmutador DIP 3: ON (N.O.)

### - Para monitorizar solo la ALARMA usando un transmisor con 1 entrada externa.

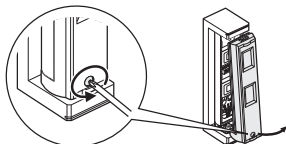


### - To monitor the ALARM and TROUBLE using a transmitter with 2 external inputs

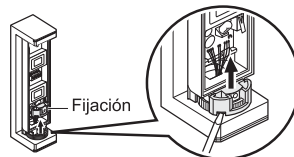


## 2-3 ANTES DEL MONTAJE EN LA PARED

1 Abra la cubierta de la unidad principal.



2 Retire la fijación.

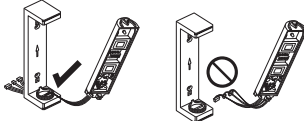


3 Sostenga la parte superior del soporte y retire la unidad principal.

*Nota>>*



• Asegúrese de que los conectores están instalados a través de la parte inferior del soporte después de que la unidad principal se haya retirado.



4 Abra el cajetín.

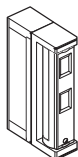
*Nota>>*

• No retire el tamber del cajetín.

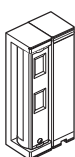


5 Seleccione el método de montaje.

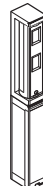
Método de apilamiento (2-4)



Método juntas en serie (2-5)



Método una encima de la otra (2-5)



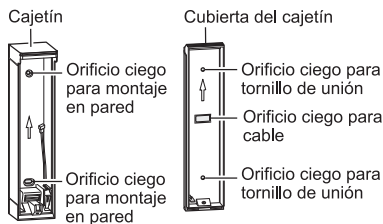
*Nota>>*

• Compruebe que monta la unidad principal en la parte superior.

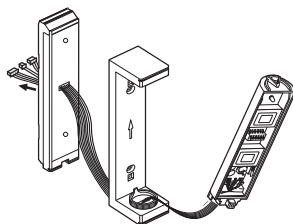
## 2-4 MÉTODO DE APILAMIENTO

Para obtener información sobre el método juntas en serie y método una encima de la otra, consulte la página 6.

### 6 Abra el orificio ciego



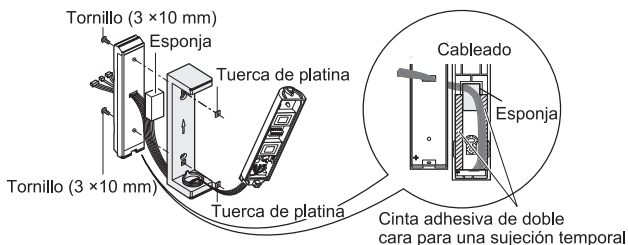
### 7 Tire de los conectores a través de orificio ciego del cableado



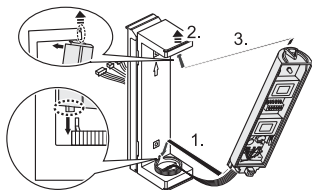
### 8 Ajuste la cubierta del cajetín y el soporte.

**Nota>>**

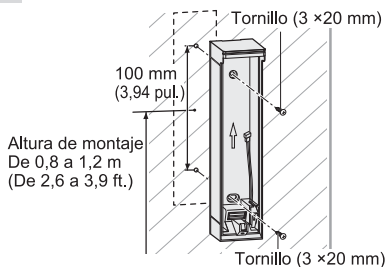
- Tenga cuidado de no ajustar la cubierta del cajetín al revés.
- Tenga cuidado de no "pellizcar" los cables.



### 9 Sostenga la parte superior del soporte y monte la unidad principal.



### 10 Monte el cajetín sobre la pared.



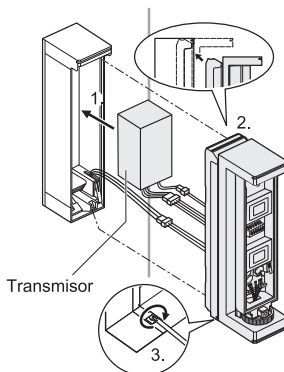
### 11 Conexiones los conectores.

Lado del cajetín	Lado de la unidad principal
Rojo	Rojo: Entrada alimentación (+)
Negro	Negro: Entrada alimentación (-)
Blanco	Blanco: Alarma
Amarillo	Amarillo: Alarma
Verde	Verde: Problema
Azul	Azul: Problema
Marrón	Marrón: Tamper (Sabotaje)
Naranja	Naranja: Tamper (Sabotaje)
Gris	Gris: Tamper (Sabotaje)

**Nota>>**

- La salida Tamper no es exclusiva. Los circuitos Anti-masking y Tamper comparten la salida Problema.
- Para obtener más información sobre la conexión del cableado para el tamper de pared (opcional), consulte la 5-1.
- Cuando el conector tamper de la unidad principal está conectado al conector tamper del cajetín y si la conexión del tamper ha sido subsecuentemente desconectada o cortada, el circuito tamper no se activará. Para poder detectar la posible desconexión de los conectores, corte el cable de acoplamiento (naranja) como se muestra en la ilustración. En este caso asegúrese de conectar el tamper del cajetín, de lo contrario la salida de problema permanecerá activa.

### 12 Instale el transmisor y ajuste la cubierta del cajetín.



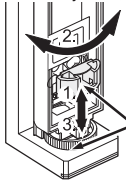
**Nota>>**

- Por favor use la esponja para el transmisor cuando sea necesario.

- 13 Determine el ángulo horizontal de detección y ajuste la seguro de fijación.

**Nota>>**

- Para realizar ajustes, retire la fijación.



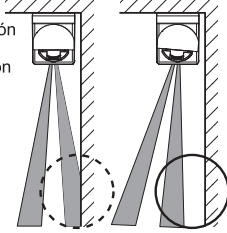
**Nota>>**

- Compruebe que la fijación y el soporte se ajusten correctamente.

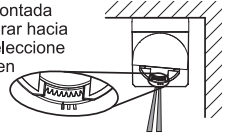


**Nota>>**

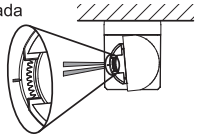
Alinee el área de detección paralela a la pared para reducir la interferencia con la pared.



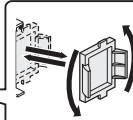
- Cuando la unidad es montada en una esquina para mirar hacia el frente de la pared, seleccione la marca-guía ubicada en el lado opuesto de la pared.



- Cuando la unidad es montada en la pared para mirar transversalmente, seleccione la marca-guía inscrita.



- 14 Determine la longitud de detección. (2 m ó 5 m)

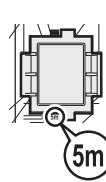


Si se selecciona 2 m, gire las lentes inferiores 180 grados.

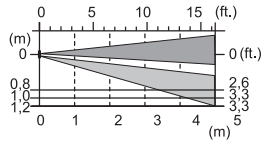
**Nota>>**

- No retire las lentes superiores.

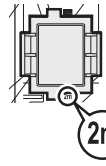
#### Longitud de detección 5 m (Preajuste de fábrica).



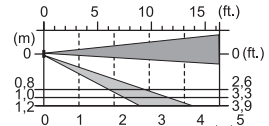
Vista lateral del área de detección



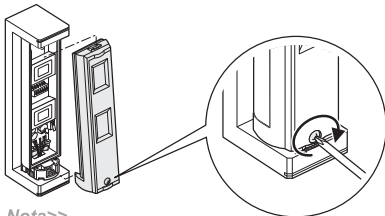
#### Longitud de detección de 2 m



Vista lateral del área de detección



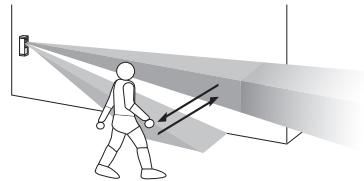
- 15 Ajuste la cubierta de la unidad principal.



**Nota>>**

- Para realizar una prueba de funcionamiento, compruebe que el conmutador DIP 1 (MODO PRUEBA DE FUNCIONAMIENTO) está ajustado en "ON (PRUEBA)" antes de ajustar la cubierta de la unidad principal.

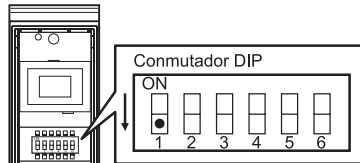
- 16 Realice la prueba de funcionamiento.



- 17 Después de que se haya realizado la prueba del funcionamiento, ajuste el conmutador DIP 1 (MODO PRUEBA FUNCIONAMIENTO) cambiándolo de "ON" a "OFF".

**Nota>>**

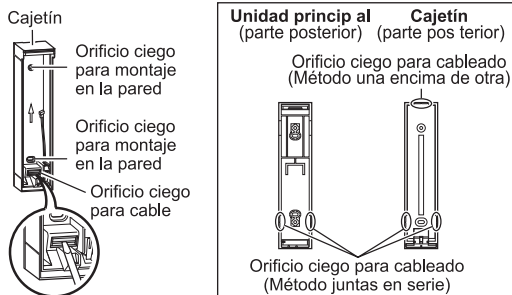
- La vida útil de la batería se acortará a menos que el conmutador DIP 1 sea ajustado en la posición de "OFF".
- Para usar el LED en las condiciones normales operativas, ajuste el conmutador DIP 4 a la posición de "ON".



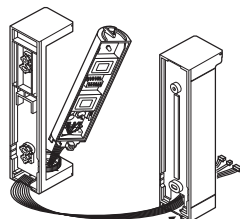
## 2-5 MÉTODO DE INSTALACIÓN (JUNTAS Y/O ENCIMA UNA DE OTRA)

Para obtener información sobre el método de apilamiento, consulte la 2-4.

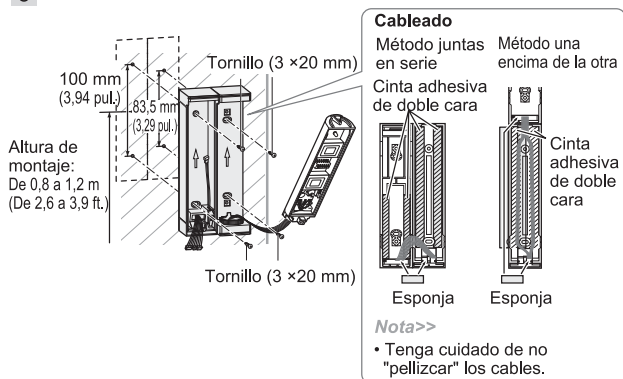
### 6 Abra el orificio ciego.



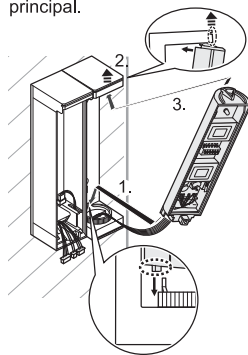
### 7 Tire los conectores a través del orificio ciego del cableado.



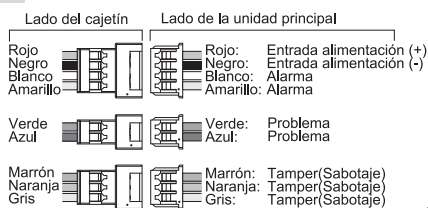
### 8 Monte el soporte y el cajetín sobre la pared.



### 9 Sostenga la parte superior del soporte y monte la unidad principal.



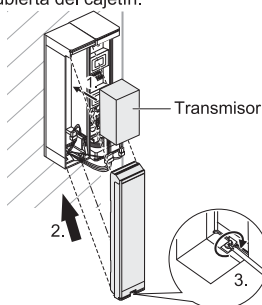
### 10 Conexiones los conectores.



#### Nota >>>

- La salida Tamper no es exclusiva. Los circuitos Anti-masking y Tamper comparten la salida Problema.
- Para obtener información sobre la conexión del cableado (opcional), consulte la 5-1.
- Cuando el conector tamper de la unidad principal está conectado al conector tamper del cajetín y si la conexión del tamper ha sido subsecuentemente desconectada o cortada, el circuito tamper no se activará. Para poder detectar la posible desconexión de los conectores, corte el cable de acoplamiento (naranja) como se muestra en la ilustración. En este caso asegúrese de conectar el tamper del cajetín, de lo contrario la salida de problema permanecerá activa.

### 11 Instale el transmisor y ajuste la cubierta del cajetín.



### 12 Para obtener información sobre el procedimiento posterior, consulte los pasos de la 13 a la 17 (página 5).

### 3 PRUEBA DE FUNCIONAMIENTO (WALK TEST)

ENGLISH

FRANÇAIS

DEUTSCH

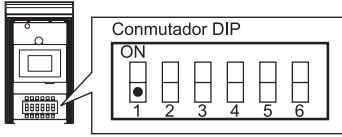
ITALIANO

ESPAÑOL

PORTUGUÊS

#### 3-1 PRUEBA DE FUNCIONAMIENTO

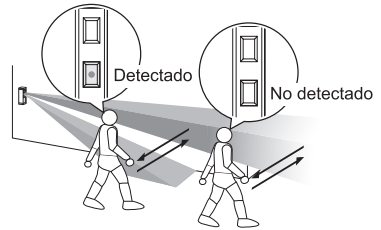
1 Ajuste el conmutador DIP 1 (MODO PRUEBA DE FUNCIONAMIENTO) en la posición "ON (PRUEBA)".



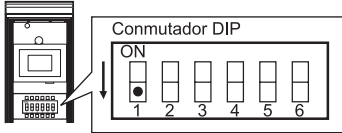
Nota>>

- El interruptor está ajustado en la posición "ON (PRUEBA)" como preajuste de fábrica.

2 Compruebe las luces LED durante 2 segundos cuando el objeto deseado haya sido detectado.



3 Ajuste el conmutador DIP 1 (MODO PRUEBA DE FUNCIONAMIENTO) en la posición "OFF (NORMAL)".



Nota>>

- La vida útil de la batería se acortará a menos que el conmutador DIP 1 sea ajustado en la posición de "OFF".
- Para usar el LED en las condiciones normales operativas, ajuste el conmutador DIP 4 a la posición de "ON".

### 4 AJUSTE CONMUTADOR DIP

Conmutador DIP

1 MODO PRUEBA DE FUNCIONAMIENTO

2 TEMPORIZADOR DE AHORRO DE BATERÍA

3 SALIDA ALARMA Y SALIDA PROBLEMA

4 LED

5 SENSIBILIDAD PIR

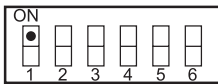
6 ANTI-MASKING

•: Factory default



#### 4-1 MODO PRUEBA DE FUNCIONAMIENTO

Conmutador DIP 1 FTN-R FTN-RAM

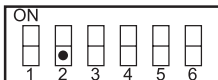


PRUEBA  
↕  
NORM

Posición	Función
PRUEBA (por defecto)	<ul style="list-style-type: none"> <li>• Las luces LED se encienden independientemente del ajuste del conmutador DIP 4 (LED).</li> <li>• El ajuste del conmutador DIP 2 (TEMPORIZADOR DE AHORRO DE BATERÍA) no está activado.</li> </ul>
NORMAL	<ul style="list-style-type: none"> <li>• Las luces LED se encienden dependiendo del ajuste del conmutador DIP 4 (LED).</li> <li>• El ajuste del interruptor DIP 2 (TEMPORIZADOR DE AHORRO DE BATERÍA) está activado.</li> </ul>

#### 4-2 TEMPORIZADOR DE AHORRO DE BATERÍA

Conmutador DIP 2 FTN-R FTN-RAM



5S  
↕  
120S

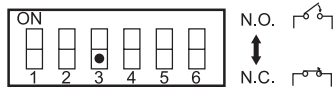
Posición	Función
5S	5 seg.
120S (por defecto)	120 seg.

Nota>>

- El detector no activará ninguna alarma cuando los intervalos sean más cortos que el tiempo especificado.

## 4-3 SALIDA ALARMA Y SALIDA PROBLEMA

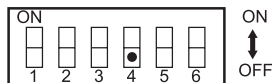
Conmutador DIP 3

FTN-R  
FTN-RAM

Posición	Función
N.O.	Salida N.O.
N.C. (por defecto)	Salida N.C.

## 4-4 LED

Conmutador DIP 4

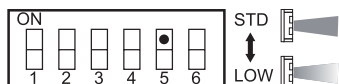
FTN-R  
FTN-RAM

Posición	Función
ON	LED ON
OFF (por defecto)	LED OFF

*Nota>>*  
• Si las LED se iluminan, compruebe el ajuste del conmutador DIP 1 (MODO PRUEBA DE FUNCIONAMIENTO).

## 4-5 SENSIBILIDAD PIR

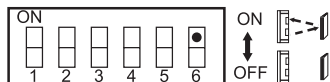
Conmutador DIP 5

FTN-R  
FTN-RAM

Posición	Función
STD (por defecto)	Sensibilidad Normal
LOW-BAJA	Sensibilidad Baja

## 4-6 ANTI-MASKING

Conmutador DIP 6

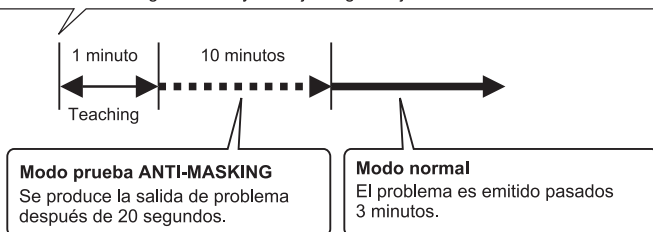
FTN-R  
FTN-RAM

Posición	Función
ON (por defecto)	ANTI-MASKING ON
OFF	ANTI-MASKING OFF

**-Función ANTI-MASKING**

Cuando la condición de enmascaramiento continua durante más de 3 minutos, se genera un PROBLEMA. El PROBLEMA se genera después de transcurrir 20 segundos bajo el modo de prueba de anti-masking.

El modo Teaching se inicia cuando tanto la cubierta del cajetín como la cubierta de la unidad principal están acopladas. Por favor tenga cuidado y no deje ningún objeto a una distancia inferior a 1 m desde la unidad.





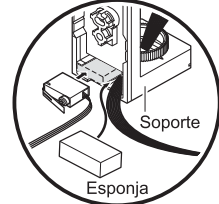
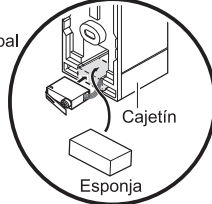
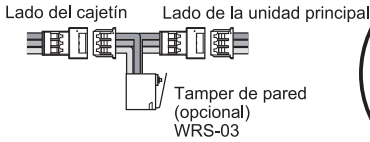
## 5 OTROS

### 5-1 WALL TAMPER (OPTION) CONNECTION

Conecte los conectores tamper como se indica debajo cuando se vaya a conectar el tamper de pared (opción).

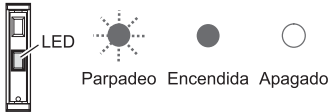
**Posición de montaje**  
Método de apilamiento

Método de instalación  
(juntas y/o encima una de otra)



### 5-2 DISPOSICIÓN DE LAS LUCES LED

La siguiente información explica las indicaciones de las luces LED.



Condición de detección	Indicador LED
<b>Calentamiento</b> <i>Nota&gt;&gt;</i> • Las LED parpadean aunque el conmutador DIP 4 (LED) esté ajustado en posición de "OFF".	→  120 sec. Parpadea durante aproximadamente 120 segundos.
<b>Alarm</b>	→  2 sec. Se enciende fijo durante 2 segundos.
<b>Antienmascaramiento (Sólo FTN-RAM)</b>	→  →  → Parpadea 3 veces y después se repite.

## 6 BATERÍA

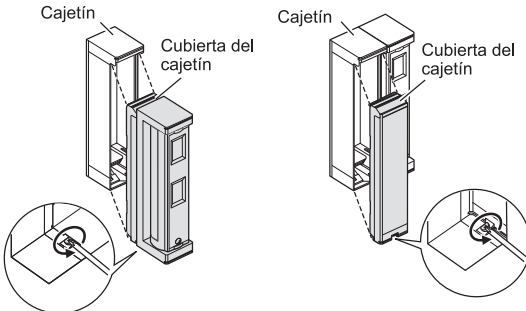
El detector comparte la batería con el transmisor. Compruebe que se utilice una batería de 2,5 a 10,0 V para el transmisor.

### 6-1 CÓMO SUSTITUIR LA BATERÍA

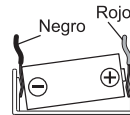
- Abra el cajetín y desconecte el conector del transmisor. (No es necesario abrir la unidad principal).

Método de apilamiento.

Juntas y/o encima una de otra



- Sustituya la batería.



- Conecte el conector y cierre el cajetín.

*Nota>>*

- Compruebe que se ha iniciado el periodo de restablecimiento.

### 6-2 VIDA ÚTIL DE LA BATERÍA

Los valores indicados son sólo de referencia sobre la condición de que el detector está siendo operado excepcionalmente sólo por la batería. Es imposible indicar la vida útil de la batería bajo condiciones normales de operatividad debido a que la batería en el transmisor está compartida con el detector.

	Intervalo de 120 seg.	Intervalo de 5 seg.
CR123A (3 V, 1300 mAh)	Aprox. 6 años.	Aprox. 5 años.
CR2 (3 V, 750 mAh)	Aprox. 4 años.	Aprox. 3 años.
1/2AA (3,6 V, 1000 mAh)	Aprox. 5 años.	Aprox. 4 años.

*Nota>>*

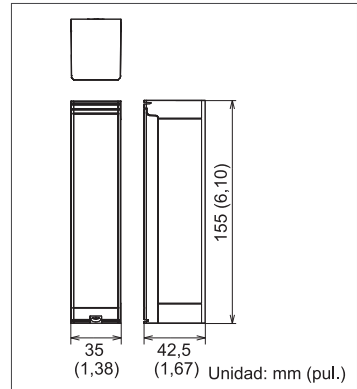
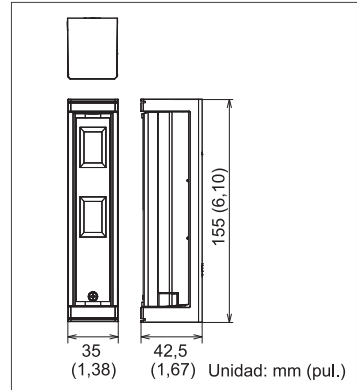
- Los datos indicados aquí corresponden a cuando los LED están desactivados y AM está activada. La vida útil de la batería se acorta cuando los LED están activados.

# 7 ESPECIFICACIONES

## 7-1 ESPECIFICACIONES

Modelo	FTN-R	FTN-RAM
Método de detección	Infrarrojos pasivos	
Cobertura PIR	5 × 1 m (16,4 × 3,3 ft.)	
Límite de la longitud de detección	2 m, 5 m (6,6 ft., 16,4 ft.)	
Velocidad detección	De 0,3 a 1,5 m/s (De 1 a 4,9 ft./s)	
Sensibilidad	2,0°C (at 0,6 m/s) (3,6°F (at 2'/s))	
Voltaje de operación	De 2,5 a 10 VDC	
Entrada	De 3 a 9 VDC (Batería de Litio o Alkalina)	
Consumo de corriente	9 µA (modo espera)/ 3 mA (máx.) (a 3 VDC)	10 µA (modo espera)/ 3 mA (máx.) (a 3 VDC)
Periodo de alarma	2,0 ±1,0 seg.	
Periodo de restablecimiento	Aprox. 120 seg. (Las LED parpadean)	
Salida de alarma	N.C./N.O. Seleccionable Estado Sólido Interruptor 10 VDC 0,01 A (máx)	
Salida de problemas	N.C./N.O. Seleccionable Estado Sólido Interruptor 10 VDC 0,01 A (máx)	
Indicador LED	Se permite: Cuando el interruptor DIP 1 (MODO PRUEBA DE FUNCIONAMIENTO) o el interruptor DIP 4 están activados (ON). No se permite: Durante la operación normal. Encendido/Parpadeo: Calentamiento, alarma, detección masking (Sólo FTN-RAM).	
Temperatura de trabajo	De -20°C a +60°C (De -4°F a +140°F)	
Humedad ambiente	Máx. 95%.	
Resistente al agua	IP55	
Montaje	Pared (Exteriores, Interiores)	
Altura de montaje	De 0,8 a 1,2 m (De 2,6 a 3,9 ft.)	
Peso	190 g (6,7 oz.)	
Accesorios	Conector para ENCENDIDO y ALARMA conector para PROBLEMA, tuerca de platina × 2, tornillo (M3 × 10 mm) × 2, tornillos (3 × 20 mm) × 4, esponja para el transmisor.	

## 7-2 DIMENSIONES



\* Las especificaciones y el diseño pueden sufrir modificaciones sin previo aviso.

### Nota>>

- Estas unidades han sido diseñadas para detectar intrusos y activar una alarma en un panel de control. Debido a que sólo es una parte de un sistema completo, nosotros no podemos aceptar ninguna responsabilidad en caso de que se produzcan daños u otras consecuencias que sean resultado de una intrusión. Estos productos cumplen la directiva de EMC 2004/108/EC.



**OPTEX CO., LTD. (JAPAN)**

URL: <http://www.optex.net/>

**OPTEX INC. (U.S.)**

URL: <http://www.optexamerica.com/>

**OPTEX DO BRASIL LTDA. (Brazil)**

URL: <http://www.optex.net/br/es/sec/>

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URL: <http://www.optex.eu/>

**OPTEX SECURITY SAS (France)**

URL: <http://www.optex-security.com/>

**OPTEX SECURITY Sp.z o.o. (Poland)**

URL: <http://www.optex.com.pl/>

**OPTEX PINNACLE INDIA, PVT., LTD. (India)**

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**OPTEX KOREA CO.,LTD. (Korea)**

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Detector compacto  
para ambientes externos

Série III

**MODELO SEM FIOS**

FTN-R	Modelo operado por bateria com 2 PIRs
FTN-RAM	FTN-R com antimascaramento

- Vida útil prolongada da bateria
- Facilidade de fiação através do uso de um conector
- Caixa separada de fixação múltipla
- Design compacto
- Suporte ajustável a 190°
- Lógico E inteligente
- Antimascaramento digital (modelo RAM)
- Tamper para montagem na parede (opcional)

## CONTEÚDO

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## 1 INTRODUÇÃO

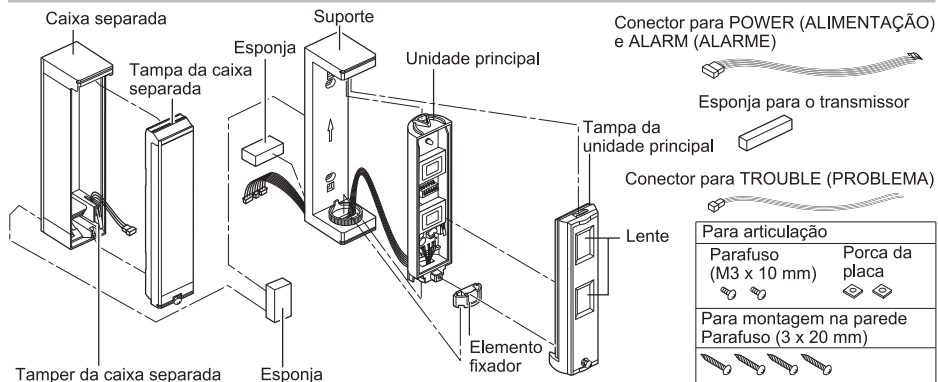
### 1-1 ANTES DA INSTALAÇÃO

<b>Advertência</b>	Não seguir as instruções fornecidas com esta indicação e uma manipulação inadequada pode causar ferimentos graves ou até a morte.
<b>Cuidado</b>	Não seguir as instruções fornecidas com esta instalação e uma manipulação inadequada pode causar ferimentos e/ou danos à propriedade.

A m arca de ver ificação o indica que há recomendações. O si nal nix in dica que há uma proibição.

<b>Advertência</b>	<b>Cuidado</b>	<b>Cuidado</b>
Não remova a PLACA DE CIRCUITO IMPRESSO.	Não remova o tamper da caixa separada.	Não toque na PLACA DE CIRCUITO IMPRESSO exceto para ajustes das chaves DIP.
Altura da montagem                      0,8 à 1,2 m (2,6 à 3,9 ft.) Paralelo	Mantenha o detector paralelo ao solo.                      Inclinação	Considere a direção pela qual uma pessoa está se aproximando, bem como a área de detecção.
Instale o detector em um local onde não possam existir fatores geradores de alarmes falsos. Por exemplo: <ul style="list-style-type: none"> <li>• Luz solar e reflexão                              </li> <li>• Fonte de calor                              </li> <li>• Objetos se movendo com o vento                              </li> </ul>		

## 1-2 IDENTIFICAÇÃO DAS PARTES



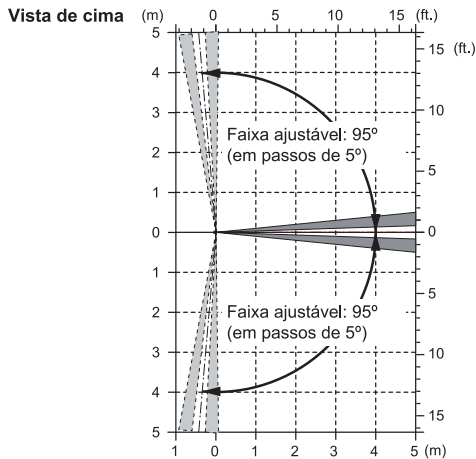
### -Acessórios opcionais

**Nota>>**

Transmissor e bateria não incluídos.

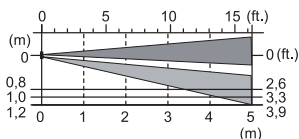
Tamper para montagem na parede (WRS-03)

## 1-3 ÁREA DE DETECÇÃO

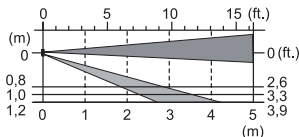


### Vista lateral

Alcance de detecção de 5 m



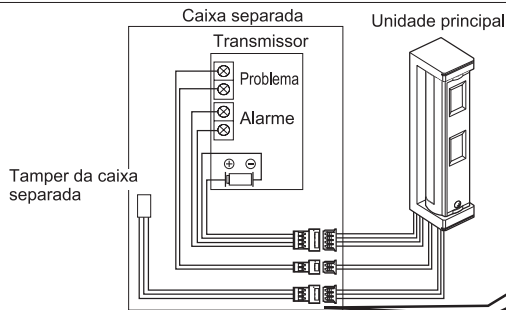
Alcance de detecção de 2 m



## 2 INSTALAÇÃO

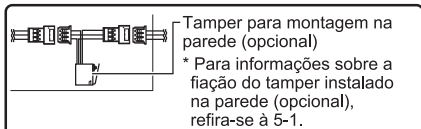
### 2-1 DIAGRAMA DA FIAÇÃO

- Diagrama geral da fiação



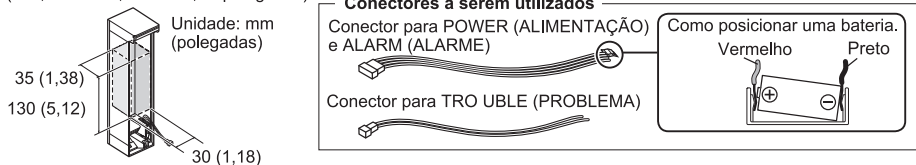
**Nota>>**

- A bateria no transmissor é compartilhada com o detector.
- A conexão para TROUBLE (PROBLEMA) é utilizada quando monitorar qualquer tentativa relacionada ao tamper ou a função de antimascaramento.



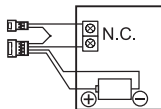
## 2-2 PREPARAÇÃO DO TRANSMISSOR

O transmissor utilizado deverá possuir dimensões internas de A 130 x L 30 x P 35 mm.  
(H 5,12 x W 1,18 x D 1,38 polegadas)



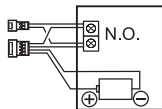
- Quando o monitoramento ALARM (ALARME) e TROUBLE (PROBLEMA) utilizando o transmissor com 1 entrada externa

A entrada externa está N.F.



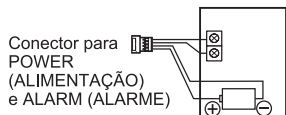
3 ... Chave DIP 3: OFF (N.F.)

A entrada externa está N.A.

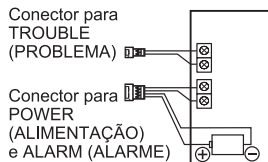


3 ... Chave DIP 3: ON (N.A.)

- Para monitorar somente o ALARME utilizando um transmissor com 1 entrada externa.

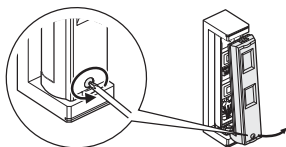


- Para monitorar o ALARME e PROBLEMA utilizando um transmissor com 2 entradas externas.

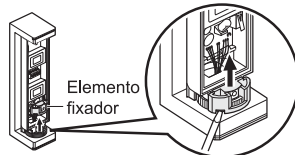


## 2-3 ANTES DA MONTAGEM EM PAREDE

1 Abra a tampa da unidade principal.



2 Remova o elemento fixador.

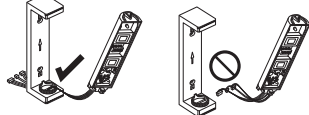


3 Segure a parte superior do suporte e remova a unidade principal.



**Nota>>**

• Certifique-se de manter os conectores instalados através da parte inferior do suporte após a remoção da unidade principal.



4 Abra a caixa separada.

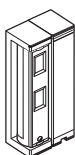


5 Selecione o método de montagem.

Método de empilhamento (2-4)

Método lado-a-lado (2-5)

Método de cima para baixo (2-5)



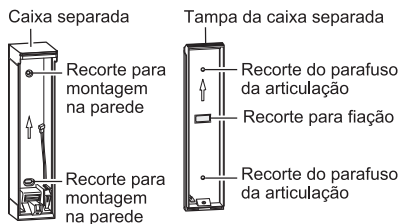
**Nota>>**

• Certifique-se de montar a unidade principal na parte superior.

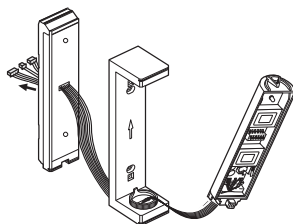
## 2-4 MÉTODO DE EMPILHAMENTO

Para o método de instalação lado-a-lado e para o método de cima para baixo, refira-se à página 6. Abra o recorte.

6 Abra o recorte.



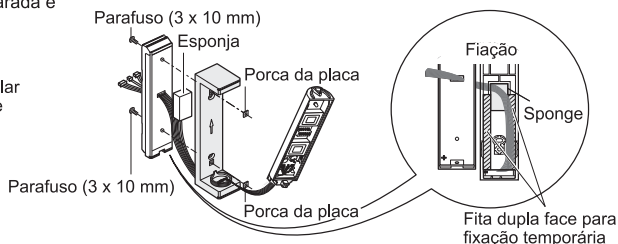
7 Puxe os conectores pelo recorte da fiação.



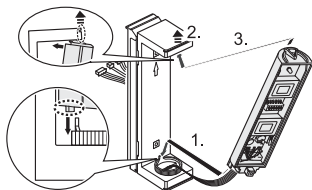
8 Acople a tampa da caixa separada e o suporte.

### Notas>>

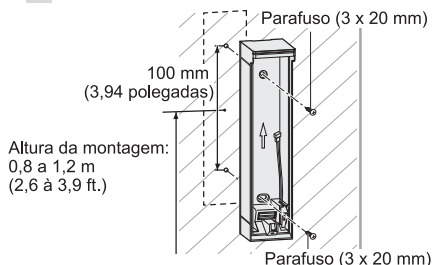
- Tenha cuidado para não acoplar a tampa da caixa separada de cabeça para baixo.
- Tenha cuidado para não comprimir os cabos.



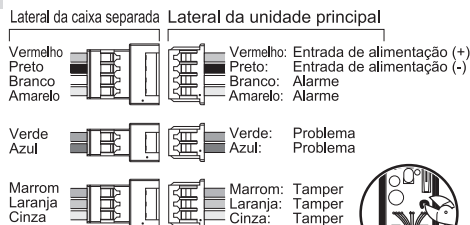
9 Segure a parte superior do suporte levantado e monte a unidade principal.



10 Monte a caixa separada na parede.



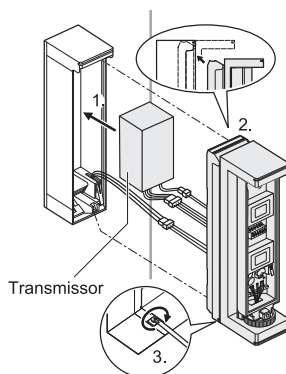
11 Conecte os conectores.



### Notas>>

- A saída do tamper não é exclusiva. Os circuitos de antimascaramento e do tamper compartilham a saída Trouble (Problema).
- Para a conexão da fiação do tamper instalado na parede (opcional), refira-se à 5-1.
- Quando o conector do tamper da unidade principal estiver conectado ao conector do tamper da caixa separada, se a conexão do conector do tamper for subsequentemente desconectada ou cortada, o circuito do tamper poderá não ser ativado. Para detectar uma possível desconexão do conector, corte o fio-ponte (laranja) conforme indicado na figura. Neste caso, certifique-se de conectar o tamper da caixa em separado, caso contrário a informação sobre a detecção de um problema permanecerá ativa.

12 Instale o transmissor e acople a tampa da caixa separada.



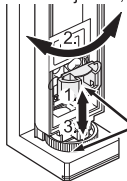
### Nota>>

- Utilize a esponja para o transmissor quando necessário.

13 Determine o ângulo de detecção horizontal e acople o elemento fixador.

Nota>>

- Para realizar ajustes, remova o elemento fixador.



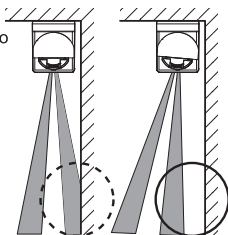
Nota>>

- Verifique se o elemento fixador e o suporte estão encaixados corretamente.

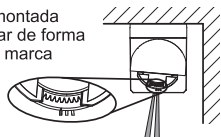


Notas>>

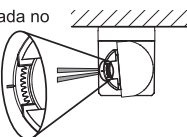
Alinha a área de detecção paralela à parede para reduzir a interferência com a parede.



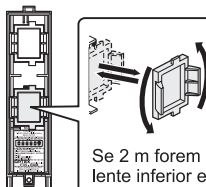
- Quando a unidade for montada na parede para visualizar de forma transversal, selecione a marca de guia impressa.



- Quando a unidade for montada no canto para visualização ao longo da parede, selecione a marca de guia localizada no lado oposto da parede.



14 Determine o alcance de detecção. (2 m ou 5 m)

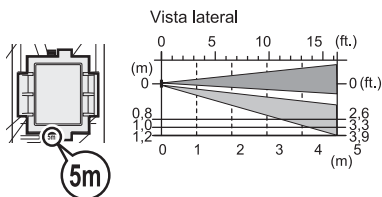


Se 2 m forem necessários, gire a lente inferior em 180 graus.

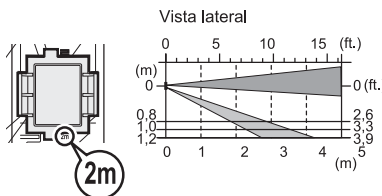
Nota>>

- Não remova a lente superior.

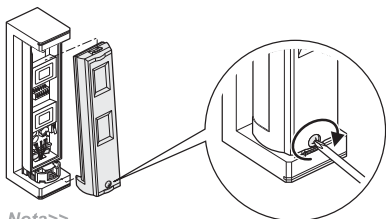
Alcance de detecção de 5 m (padrão de fábrica)



Alcance de detecção de 2 m



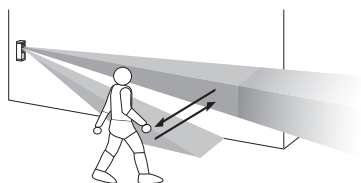
15 Acople a tampa da unidade principal.



Nota>>

- Para preparar-se para o teste de caminhada, verifique se a chave DIP 1 (WALK TEST MODE) (MODO TESTE DE CAMINHADA) está ajustada para "ON (TEST) (TESTE)" antes de acoplar a tampa da unidade principal.

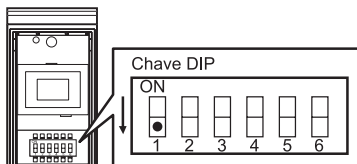
16 Realizar teste de caminhada.



17 Após a conclusão do teste de caminhada, troque o ajuste da chave DIP 1 (WALK TEST MODE) (MODO TESTE DE CAMINHADA) de "ON" para "OFF".

Notas>>

- A vida útil da bateria será reduzida exceto se a chave DIP 1 for ajustada para "OFF".
- Para utilizar o LED sob condições normais de operação, ajuste a chave DIP 4 para "ON".

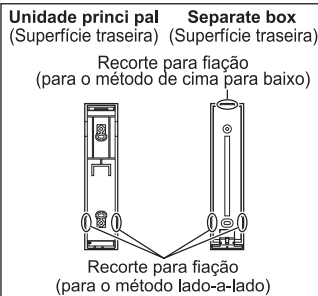
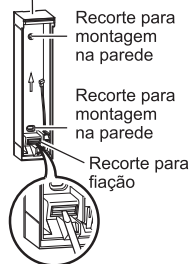


## 2-5 MÉTODO LADO-A-LADO E DE CIMA PARA BAIXO

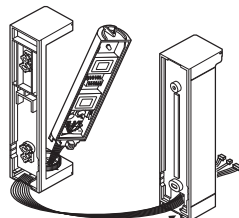
Para o método de empilhamento, refira-se à 2-4.

### 6 Abra o recorte.

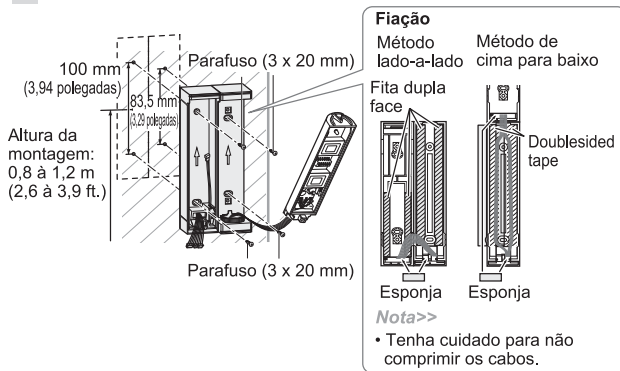
Caixa separada



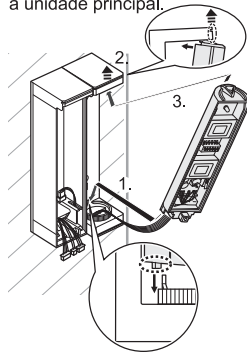
### 7 Puxe os conectores do cabo pelo recorte da fiação.



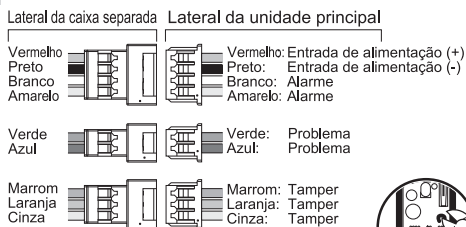
### 8 Monte o suporte e a caixa separada na parede.



### 9 Segure a parte superior do suporte levantado e monte a unidade principal.



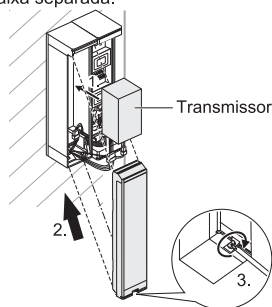
### 10 Conecte os conectores.



#### Notas>>

- A saída do tamper não é exclusiva. Os circuitos de antimascaramento e do tamper partilham a saída Trouble (Problema).
- Para a conexão da fiação do tamper instalado na parede (opcional), refira-se à 5-1.
- Quando o conector do tamper da unidade principal estiver conectado ao conector do tamper da caixa separada, se a conexão do conector do tamper for subsequentemente desconectada ou cortada, o circuito do tamper poderá não ser ativado o circuito do tamper não será ativado.

### 11 Instale o transmissor e acople a tampa da caixa separada.



### 12 Para o procedimento subsequente, refira-se aos passos 13 a 17 (páginas 5).



### 3 TESTE DE CAMINHADA

ENGLISH

FRANÇAIS

DEUTSCH

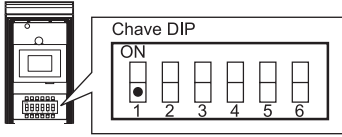
ITALIANO

ESPAÑOL

PORTUGUÊS

#### 3-1 TESTE DE CAMINHADA

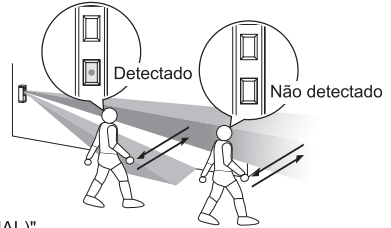
- 1 Ajuste a chave DIP 1 (WALK TEST MODE) (MODO TESTE DE CAMINHADA) para "ON (TEST) (TESTE)".



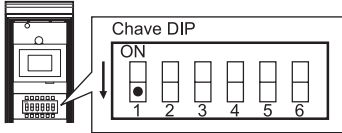
Nota>>

- A chave está ajustada para "ON (TEST) (TESTE)" como padrão de fábrica.

- 2 Verifique se o LED é aceso durante 2 segundos quando o objeto pretendido é detectado.



- 3 Ajuste a chave DIP 1 (WALK TEST MODE) (MODO TESTE DE CAMINHADA) para "OFF (NORM) (NORMAL)".



Nota>>

- A vida útil da bateria será reduzida exceto se a chave DIP 1 for ajustada para "OFF".
- Para utilizar o LED sob condições normais de operação, ajuste a chave DIP 4 para "ON".

### 4 AJUSTE DAS CHAVES DIP



•: Padrão de fábrica

Chave DIP

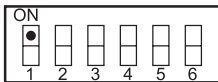
- 1 MODO TESTE DE CAMINHADA
- 2 TIMER DE ECONOMIA DA BATERIA
- 3 SAÍDA DE ALARME E PROBLEMA
- 4 LED
- 5 SENSIBILIDADE PIR
- 6 ANTI-MASCARAMENTO



Não toque na PLACA DE CIRCUITO IMPRESSO exceto para ajustes das chaves DIP.

#### 4-1 MODO TESTE DE CAMINHADA

Chave DIP 1 FTN-R  
FTN-RAM



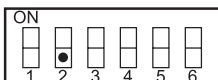
TEST (TESTE)

↑  
↓  
NORM

Posição	Função
TEST (TESTE) (Padrão de fábrica)	<ul style="list-style-type: none"> <li>• O LED será aceso independentemente do ajuste da chave DIP 4 (LED).</li> <li>• O ajuste da chave DIP 2 (BATTERY SAVING TIMER) . (TIMER DE ECONOMIA DE BATERIA) está inativo.</li> </ul>
NORMAL	<ul style="list-style-type: none"> <li>• O LED será aceso dependendo do ajuste da chave DIP 4 (LED).</li> <li>• O ajuste da chave DIP 2 (BATTERY SAVING TIMER) (TIMER DE ECONOMIA DE BATERIA) está ativo.</li> </ul>

#### 4-2 TIMER DE ECONOMIA DE BATERIA

Chave DIP 2 FTN-R  
FTN-RAM



5S  
↑  
↓  
120S

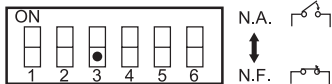
Posição	Função
5S	5 sec.
120S (Padrão de fábrica)	120 sec.

Nota>>

- O detector não irá gerar alarmes a intervalos inferiores ao tempo especificado.

#### 4-3 SAÍDA DE ALARME E PROBLEMA

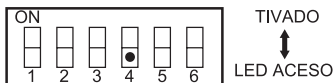
Chave DIP 3 **FTN-R**  
**FTN-RAM**



Posição	Função
N.A.	Saída N.A.
N.F. (Padrão de fábrica)	Saída N.F.

#### 4-4 LED

Chave DIP 4 **FTN-R**  
**FTN-RAM**

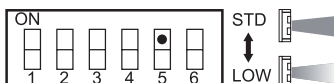


Posição	Função
ATIVADO	LED ACESO
DESATIVADO (Padrão de fábrica)	LED APAGADO

*Nota>>*  
• Se o LED for aceso, verifique o ajuste da chave DIP 1 (WALK TEST MODE) (MODO TESTE DE CAMINHADA).

#### 4-5 SENSIBILIDADE DO PIR

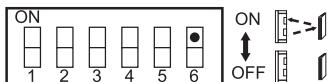
Chave DIP 5 **FTN-R**  
**FTN-RAM**



Posição	Função
STD (Padrão de fábrica)	Sensibilidade normal
LOW	Baixa sensibilidade

#### 4-6 ANTI-MASKING

Chave DIP 6 **FTN-R**  
**FTN-RAM**

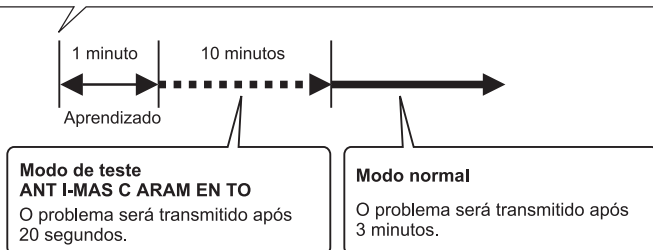


Posição	Função
ATIVADO (Padrão de fábrica)	ANTI-MASCARAMENTO ON (ATIVADO)
OFF	ANTI-MASCARAMENTO OFF (DESATIVADO)

#### -Função ANTI-MASCARAMENTO

Quando a condição de mascaramento continuar durante mais de 3 minutos, um TROUBLE (PROBLEMA) será gerado. UM PROBLEMA é gerado após 20 segundos sob o modo de teste de antimascaramento.

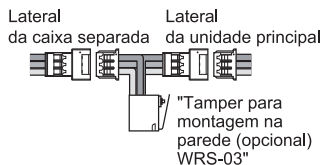
O modo de aprendizagem será iniciado quando a tampa da caixa separada e a tampa da unidade principal estiverem acopladas. Cuidado para não deixar qualquer objeto a uma distância de menos de 1 metro da unidade.



## 5 OUTROS

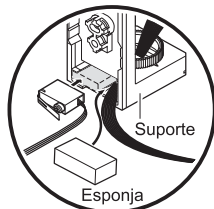
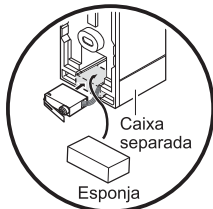
### 5-1 CONEXÃO DO TAMPER PARA MONTAGEM NA PAREDE (OPCIONAL)

Conecte o conector do tamper conforme indicação abaixo quando conectar um dispositivo anti-infiltração montado na parede (opcional).



#### Posição de montagem

Método de empilhamento      Método lado-a-lado e de cima para baixo



### 5-2 PADRÃO DA LUZ DO LED

O que segue explica o padrão de acendimento do LED.



Condição do detector	LED indicador
Aquecimento <i>Nota&gt;&gt;</i> • O LED pisca mesmo que a chave DIP 4 (LED) seja ajustada para "OFF".	→  120 sec. Pisca durante aprox. 120 segundos.
Alarme	→  2 sec. Acende por 2 segundos.
Deteção de mascaramento (somente FTN-RAM)	→  →  →  → Pisca 3 vezes e repete.

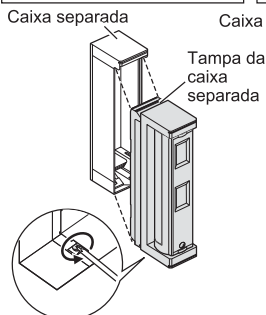
## 6 BATERIA

O detector compartilha a bateria com o transmissor. Verifique se a bateria de 2,5 a 10,0 V está sendo utilizada para o transmissor.

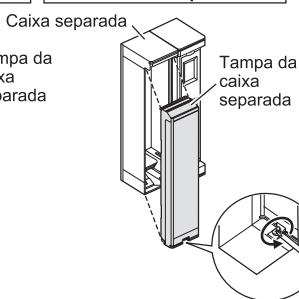
### 6-1 COMO SUBSTITUIR A BATERIA

- Abra a caixa separada e desconecte o conector do transmissor. (Não é necessário que a unidade principal seja aberta.)

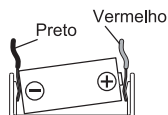
#### Método de empilhamento



#### Método lado-a-lado e Método de cima para baixo



- Substitua a bateria.



- Conecte o conector e feche a caixa separada.

#### *Nota>>*

- Verifique se o período de aquecimento foi iniciado.

### 6-2 VIDA ÚTIL DA BATERIAS

Os valores indicados são somente para referência sob a condição de que o detector seja excepcionalmente operado pela bateria individualmente. É impossível indicar a vida útil da bateria sob operação normal já que a bateria do transmissor é compartilhada com o detector.

	Intervalo de 120 segundos	Intervalo de 5seg
CR123A (3 V, 1300 mAh)	Aprox. 6 anos	Aprox. 5 anos
CR2 (3 V, 750 mAh)	Aprox. 4 anos	Aprox. 3 anos
1/2AA (3,6 V, 1000 mAh)	Aprox. 5 anos	Aprox. 4 anos

#### *Nota>>*

- Os dados indicados aqui se referem quando o LED está APAGADO, AM significa APAGADO. A vida útil da bateria será reduzida quando o LED estiver ACESO.

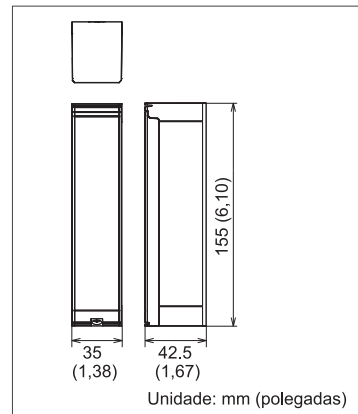
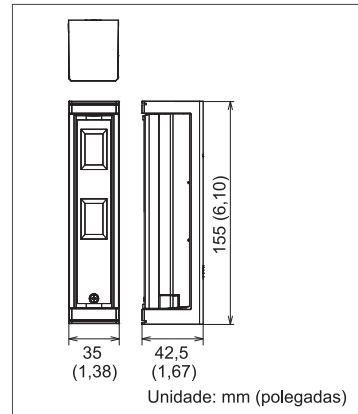
# 7 ESPECIFICAÇÕES

## 7-1 ESPECIFICAÇÕES

Modelo	FTN-R	FTN-RAM
Método de detecção	Infravermelho passivo	
Cobertura PIR	5 × 1 m (16,4 × 3,3 ft.)	
Limite do alcance de detecção	2 m, 5 m (6,6 ft., 16,4 ft.)	
Velocidade detectável	0,3 à 1,5 m/s	
Sensibilidade	2,0°C (a 0,6 m/s)	
Tensão operacional	2,5 à 10 VDC	
Entrada de alimentação	3 à 9 VDC (Pilha de lítio ou alcalina)	
Consumo de corrente	9 µA (em espera)/ 3 mA (máximo) (a 3 VDC)	10 µA (em espera)/ 3 mA (max.) (a 3 VDC)
Saída de alarme	2,0 ±1,0 sec.	
Período de aquecimento	Aprox. 120 seg. (o LED pisca)	
Saída de alarme	N.F./N.A. Chave em estado sólido selecionável 10 VDC 0,01 A (máximo)	
Informação sobre a existência de um problema	N.F./N.A. Chave em estado sólido selecionável 10 VDC 0,01 A (máximo)	
LED indicador	Habilitar: Durante a ativação da chave DIP 1 (MODO TESTE DE CAMINHADA) ou da chave DIP 4 (LED). Desabilitar: Durante um corte ou desconexão durante uma operação normal. Aceso/Piscando: Aquecimento, alarme, detecção de mascaramento (somente FTN-RAM).	
Temperatura operacional	-20°C à +60°C (-4°F à +140°F)	
Umidade ambiental	95% no máximo	
À prova de intempéries	IP55	
Montagem	Parede (Ambiente externo, interno)	
Altura da montagem	0,8 à 1,2 m (2,6 à 3,9 ft.)	
Peso	190 g	
Acessórios	Conector para POWER (ALIMENTAÇÃO) e ALARM (ALARME), conector para TROUBLE (PROBLEMA), 2 porcas para a placa, 2 parafusos (M3 x 10 mm), 4 parafusos (3 x 20 mm), esponja para o transmissor.	

\* As especificações e o projeto estão sujeitos a modificação sem prévio aviso.

## 7-2 DIMENSÕES



### Nota>>

- Estas unidades são projetadas para detectar um intruso e ativar um painel de controle de alarme. Sendo somente parte de um sistema completo, não podemos aceitar qualquer responsabilidade por quaisquer danos ou outras consequências resultantes de uma intrusão. Estes produtos estão em conformidade com a Diretiva EMC 2004/108/EC.



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