The MP-841 detector complies with the following standards:

Europe: EN 300220, EN 301489, EN 60650, EN 50139-4


USA: FCC CFR 47 Part 15
Canada: IC-RSS 247
USA: UL-2903
Canada: ULC-S306

This device complies with Part 15 of the FCC Rules with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

To comply with FCC Section 1.1310 for human exposure to radio frequency electromagnetic fields and IC requirements, implement the following instruction: A distance of at least 20 cm between the equipment and all persons should be maintained during the operation of the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Relocate or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Cet équipement génère, utilise et peut émettre de l'énergie de fréquence radio et, s'il n'est pas installé et utilisé conformément aux instructions du fabricant, peut provoquer des interférences dangereuses pour les communications radio. Toutefois, rien ne garantit l'absence d'interférences dans une installation particulière. Si cet équipement provoque des interférences nuisibles au niveau de la réception radio ou télévision, le(e) utilisateur doit être en mesure de les éliminer ou de les minimiser par l'une des mesures suivantes:

- Relocaliser ou déplacer l'antenne réceptrice.
- Augmenter la distance qui sépare l'équipement et le récepteur.
- Branchez l'équipement à un circuit différent de celui auquel est branché le récepteur.
- Consultez le revendeur ou un technicien radio/télévision expérimenté pour obtenir de l'aide.

SPECIAL COMMENTS

Even the most sophisticated detectors can sometimes be defeated or may fail to warn. Possible causes of failure are DC power failure or improper connection, malicious masking of the lens, tampering with the optical system, decreased sensitivity in ambient temperatures close to that of the human body and unexpected failure of a component part.

The above list includes the most common reasons for failure to detect intrusion, but is by no means comprehensive. It is therefore recommended that the detector and the entire alarm system be checked weekly, to ensure proper performance.

An alarm system should not be regarded as a substitute for insurance. Home and property owners or renters should continue to insure their lives and property, even though they are protected by an alarm system.

D-306173
3. INSTALLATION

3.1 General Guidance

The following tactics must be considered before selecting a location for the detector:

1. Keep away from heat sources.
2. Do not expose to air drafts.
3. Do not install outdoors.
4. Avoid direct sunshine.
5. Do not install near high-voltage electrical lines.
6. Do not install behind partitions.
7. Always mount on a solid, stable surface.

Warning! Do not obscure partially or completely the detector’s field of view.

3.2 Installation Procedure

1. Press and hold down the detectors tamper switch.
2. Push in the direction of the arrow as shown in Figure 3 to separate the detector from the bracket.
3. Mount the bracket on the wall.
4. Install new batteries.

-OR-

If batteries are already installed, pull the activation strip.
5. Mount the detector on the bracket by sliding it downward until a click is heard.
6. Keep the protective film on the unit until after the unit is mounted in its final location and ready for the walk test, then remove it.

Note: It is recommended to wait about 1 minute after battery removal, before inserting the new battery.

Caution! Risk of explosion if battery is replaced by an incorrect type. Dispose of used battery according to the manufacturer’s instructions.

MP-841 shall be installed in accordance with the Standard for Installation and Classification of Burglar and Holdup Alarm Systems, UL 681.

3.3 Replacing the Batteries

1. Press upward to separate the detector from the bracket.
2. Replace the batteries.
3. Put back the detector on the bracket.

3.4 Activating and Pairing the Detector

To pair the detector to the Touchscreen control panel, you must set it to pairing mode.
1. First set the Touchscreen panel to pairing mode and then the detector.
2. To activate, pull the activation strip that protrudes from the back of the detector, see Figure 5.
3. The green LED (see Figure 1) blinks 3 times every 5 seconds (repeated up to 20 times) to indicate that the detector is searching for the Touchscreen control panel.

Note: If detector pairing is not successful during the searching process – by tripping the motion detector or by pressing the tamper switch – the searching process will restart.

4. Complete the pairing procedure on the Touchscreen control panel. For pairing instructions see the Touchscreen control panel’s installation guide.

Note: Pairing should be performed before installation.

After the installation a good link to the panel is displayed when the Received Signal Strength Indicator (RSSI) indicated on the panel is higher than -70dBm and the Link Quality Indicator (LQI) is stronger than 250. If the RSSI and LQI values are lower, you must change the location of the detector.

3.5 Rebooting the Detector

To reboot the detector, complete the following steps:
1. Remove the battery cover.
2. Press and release the tamper switch for 1 to 2 seconds (see Figure 1).
3. Close the battery cover.

3.6 Returning the Detector to default mode

CAUTION! The default process removes the device from the network and enables re-pairing.

Prerequisite: Separate the detector from the bracket to remove both batteries. See Figure 7 for details.
1. Press and hold down the detectors tamper switch.
2. Insert one of the two batteries into the detector while observing battery polarity.
3. Release the tamper switch within 4 seconds (the LED blinks 3 times every 5 seconds).
4. To re-pair the detector, follow the instructions in section 3.4.

3.7 Walk Testing

Walk across the far end of coverage pattern in both directions. The LED should light for 2-3 seconds each time your motion is detected.

Important! Instruct the user to perform a walk test at least once a week to verify the proper functioning of the detector.

Note: After battery insertion or closing the cover (which results in closing the tamper switch) the LED lights for every motion detected. After 15 minutes the detector automatically enters normal mode in which the LED will not blink after detection.

TROUBLESHOOTING

If you encounter one of the following problems with the MP-841, perform the suggested remedy:

<table>
<thead>
<tr>
<th>Problem</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attempt to pair the sensor is unsuccessful.</td>
<td>Make sure that the sensor is reset to default mode and then set to pairing mode, see section 3.4 for details.</td>
</tr>
<tr>
<td>The sensor and the Touchscreen panel do not communicate.</td>
<td>Perform the signal strength testing procedure described in the control panel installation manual. Make sure that the signal is sufficient. If necessary, replace the sensor’s battery.</td>
</tr>
<tr>
<td>The sensor sends a Low Battery indication.</td>
<td>To resume continuous proper operation, replace both batteries within two weeks of the first Low Battery indication.</td>
</tr>
<tr>
<td>Panel does not arm because of an unrecognized sensor malfunction.</td>
<td>Consult with your installer or system provider before you disable a zone. Disable the sensor zone; see the control panel user manual for details. Note that disabling a sensor zone lowers the overall security level of the system.</td>
</tr>
</tbody>
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ENVIROMENTAL

| Protection | >20 V/m up to 1000 MHz |
| Operating | -10° to 50°C (14°F to 122°F) |
| Storage | -20°C to 80°C (4°F to 140°F) |

PHYSICAL

| Size (H x W x D) | 119 x 79 x 33.5 mm (4.68 x 3.11 x 1.31") |
| Weight (with batteries) | 119 g (4.2 oz.) |
| Color | White |
| PATENTS | U.S. Patents 5,693,943 ● 6,211,522 |

Figure 1 – General Guidelines

Figure 2 – Opening the Unit

Figure 3 – Removing the Activation Strip

Figure 4 – Bracket Mounting

Figure 5 – Mounting Detector on Bracket

Figure 6 – Mounting Detector on Bracket

Figure 7 – Replacing Batteries

Figure 8 – Coverage Pattern Walk Test
ENVIRONMENTAL
RFI Protection >20 V/m up to 1000 MHz
Operating -10°C to 50°C (-14°F to 122°F)
Storage -20°C to 60°C (-4°F to 140°F)

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Size (H x W x D) 119 x 79 x 33.5 mm (4.68 x 3.11 x 1.31")
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Color White

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Warning! Do not obscure partially or completely the detector’s field of view.

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2. Insert one of the two batteries into the detector while observing battery polarity.
3. Release the tamper switch within 4 seconds (the LED blinks 3 times every 5 seconds).

Note: After battery insertion or closing the cover (which results in closing the tamper switch) the LED enters normal mode in which the LED will not blink after detection.

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1. Press upward to separate the detector from the bracket.
2. Replace the batteries.
3. Put back the detector on the bracket.

Figure 7 – Replacing Batteries

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1. First set the Touchscreen control panel to pairing mode and then the detector.
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4. To re-pair the detector, follow the instructions in section 3.4.

3.7 Walk Testing
Walk across the far end of coverage pattern in both directions. The LED should light for 2–3 seconds each time your motion is detected.
Important! Instruct the user to perform a walk test at least once a week to verify the proper functioning of the detector.

Note: After battery insertion or closing the cover (which results in closing the tamper switch) the LED flashes for 2 minutes and the detector goes into walk-test mode for 15 minutes. In walk-test mode the LED lights for every motion detected. After 15 minutes the detector automatically enters normal mode in which the LED will not blink after detection.

TROUBLESHOOTING
If you encounter one of the following problems with the MP-841, perform the suggested remedy:

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MP-841 
Wireless Digital Pet Immune PIR Detector

1. INTRODUCTION

The MP-841 pet immune detector is a microprocessor-controlled wireless digital PIR detector supported by ZigBee Home Automation 1.2.

The detector has the following features:

- Detection distance up to 15 meters (49.2 ft).
- Uniform Detection.
- White light immunity.
- Enhanced Pet immunity up to 85lbs (Target Specific Imaging™ (TSI) technology patented).
- Enhanced false alarm rejection (The advanced True Motion Recognition™ algorithm patented).
- No vertical adjustment is needed.
- In normal mode, after detection, the detector goes to sleep to save battery power. It wakes again and reverts to a ready state, if there is no subsequent detection throughout the following 2-minute period.
- Temperature compensation.
- Front tamper protection.
- Black mirror technology provides excellent white light protection.
- Elegantly styled, sturdy case.

2. SPECIFICATIONS

**Detector Type:**
- Dual element low-noise pyro electric sensor 27 “far” parabolic black mirrors (54 “beams”).
- 9 “near” cylinder black mirrors (18 “curtains”).
- Pet immunity protection is provided by a specific optical attenuator on the mirror.
- 15 x 15 mm, (49.2 x 49.2 ft.) / 90°
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- 15 x 15 mm, (49.2 x 49.2 ft.) / 90°

**Max. Coverage:**
- Up to 38 kg (85 lbs.) Pet immunity of 85 lbs is up to 3.0 ft. (10 m) range.

**Electrical:**
- Two 3V Lithium batteries, type CR-123A.
- For UL installations, use Panasonic and GP only.
- 1400 mAh

**Nominal Battery Capacity:**
- 8 years of typical use.

**Battery Life:**
- Initial battery life is estimated to last up to 8 years.
- Battery life can be significantly reduced when used in excessive heat or cold conditions.

**Battery Power Test:**
- Battery tests are performed immediately upon battery insertion and periodically every several hours.

**FUNCTIONAL:**
- Alarm Period: 3 seconds

**Visual Indications:**
- Red LED lights for about 3 seconds during transmission of alarm or tamper messages.
- Green LED flashes during the power-up stabilization period.
- Red LED flashes during the power-up stabilization period.
- Rearm Timer:
- After restoring (pressing) the tamper switch.
- Red LED does not light during transmission of supervision messages.
- Tamper Alert:
- Red LED lights for about 3 seconds during transmission of alarm or tamper messages.

**WIRELESS:**
- ZigBee H.A 1.2
- Supports Home Automation 1.2.

**Network Frequency:**
- 2.405 – 2.480 Ghz as per IEEE 802.15.4

**Tamper Alert:**
- Reported when a tamper event occurs and in any subsequent message, until the tamper switch is restored.

**Mounting Options:**
- Surface or corner mounting.
- 1.8-2.4 m (6-8 ft.) for pet rejection, the optimal height is 2.1 m (7 ft.)

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