



Wall Mount Motion Sensor

Model: mFi-MSW

QUICK START GUIDE

Introduction

Thank you for purchasing the Ubiquiti Networks® mFi® Wall Mount Motion Sensor. This sensor is designed for use with the mFi mPort™. Once they are connected, you can use the mFi Controller software to monitor your sensors using your web browser.

Package Contents



Wall Mount
Motion Sensor



Mounting
Bracket



Mounting
Base



Jumpers
(Qty. 3)



Anchors
(Qty. 2)



M3x20 mm Screws
(Qty. 2)



M2.6x8 mm Screws
(Qty. 2)



Quick Start
Guide

System Requirements

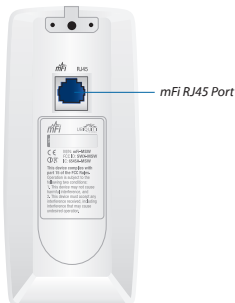
- mFi mPort
- CAT5/6 Cable
- Drill with 6 mm Drill Bit (Optional for Wall-Mount)
- Phillips Screwdriver

Hardware Overview

Front



Back



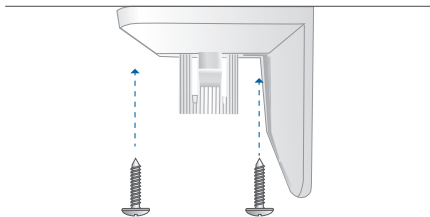
Hardware Installation

Installation Tips

- Avoid installing the sensor in areas where it will face direct or reflected sunlight.
- Ensure there are no obstructions in the field of view.
- Avoid placing the sensor in areas where the environmental temperature may change rapidly.
- Locate the sensor at least 1 meter away from the nearest fluorescent light to avoid interference.

Ceiling-Mount

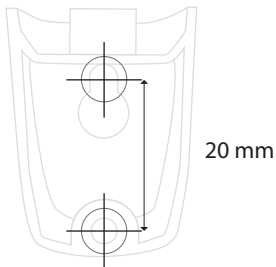
1. Use a Phillips screwdriver to secure the *Mounting Bracket* to the ceiling with the two *M3x20 mm Screws*.



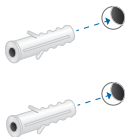
Proceed to the *Connecting the Cabling and Mounting Base* section.

Wall-Mount

1. Use a 6 mm drill bit to drill two holes 20 mm apart with one directly above the other.



2. Insert the anchors into the holes.



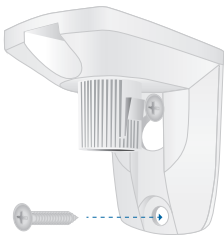
3. Use a Phillips screwdriver to secure a *M3x20 Screw* to the top anchor in the wall. Ensure to leave a clearance of approximately 1 mm between the screw head and the anchor.



4. Align the top hole of the *Mounting Bracket* over the screw and slide the *Mounting Bracket* down.



5. Use the Phillips screwdriver to secure the second *M3x20* Screw through the bottom of the *Mounting Bracket* into the anchor.

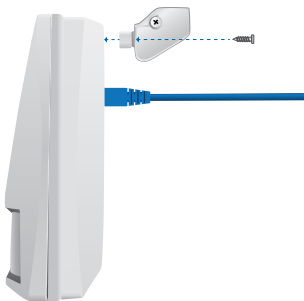


Connecting the Cabling and Mounting Base

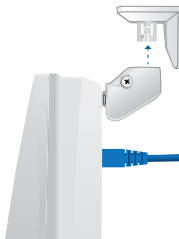
1. Connect a straight-through CAT5/6 cable to the mFi RJ45 port on the mFi-MSW.



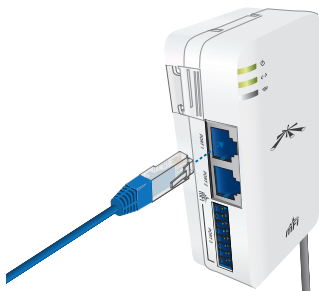
2. Secure the mFi-MSW to the *Mounting Base* using the two *M2.6x8 mm Screws*.



3. Connect the *Mounting Base* to the *Mounting Bracket*.



4. Connect the other end of the CAT5/6 cable from the sensor to an mFi RJ45 port on the mFi mPort.





Refer to the User Guide for instructions on configuring the mFi-MSW in the mFi Controller software. The User Guide is available at www.ubnt.com/mfi

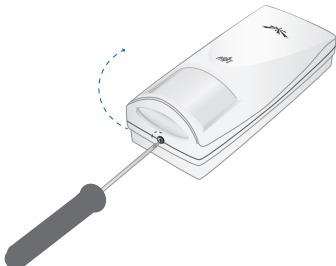
Jumper Settings

The mFi-MSW has jumpers located inside the product casing. Typically there is no need to open the casing to adjust the jumpers. The *SENS* and *LED* jumpers are the only ones that you may want to change. The *SENS* jumper can be changed to reduce the sensitivity of the microwave sensor. The *LED* jumper can be turned on so the LED is visible when the motion sensor is triggered. The LED jumper can be turned on permanently or temporarily for walk testing (testing the positioning of the sensor).

The following jumper settings are available:



Selection	 ON	 OFF
NO/NC (Normally Open, Normally Closed) This controls whether the alarm signal is normally on or off. <i>NC</i> is the default setting and should not be changed.	NC	NO
SENS (Sensitivity) Set to <i>Sensitive</i> by default, this controls the <i>Microwave Sensor</i> sensitivity. Sensitivity is reduced when set to <i>Standard</i> .	Sensitive	Standard
PIR (Passive Infrared Sensor) Enabled by default. Removing the jumper will disable this sensor.	Enabled	Disabled
MW (Microwave Sensor) Enabled by default. Removing the jumper will disable this sensor.	Enabled	Disabled
AM (Anti-Mask) In the default disabled mode, an alarm is triggered if both the PIR and MW sensors are simultaneously triggered. When enabled, an alarm will be triggered if the PIR sensor is physically blocked and the MW sensor detects an object four times continuously.	Enabled	Disabled
LED LEDs are off by default.	ON	OFF

If you need to access the jumper settings, use a Phillips screwdriver to remove the screw at the base of the sensor. Lift the case up and the jumpers will be accessible.



LED

Disabled by default, the LED can only be enabled by opening the product case and adjusting the jumper. When the LED is enabled, the bottom panel with the sensor will illuminate in one of the following colors when motion is detected.

Color	Detection
	Indicates that the microwave sensor detected motion.
	Indicates that an alarm was triggered because the infrared sensor and microwave sensor both detected motion.

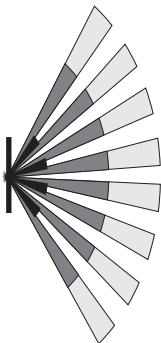


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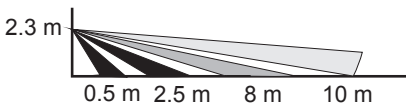
Detection Pattern

110°, 10 x 10 m at 25° C

Top View



Side View



Specifications

mFi-MSW	
Dimensions	146 x 66 x 52 mm
Weight	127 g
Power Supply	9 - 16VDC, 12VDC Typical
Current Drain	35mA @ 12VDC
Infrared Sensor	Dual Element
Microwave Sensor	DRO, Patch Antenna
Alarm Period	3 Seconds
Alarm Output	NC/NO, 24VDC, 0.2A Max.
Detection Range	10 x 10 m, 110° @ 25° C
Mounting	Wall/Ceiling (Kits included)
Mounting Height	2.3 m Typical
Detection Speed	0.3 to 3.0 m/sec
RFI Immunity	Avg. 10 V/m (80 to 2,000 MHz)
Operating Temperature	-10° to 45° C
Humidity	95% RH Max.
Ports	(1) mFi RJ45 Port

Limited Warranty

UBIQUITI NETWORKS, Inc (“UBIQUITI NETWORKS”) warrants that the product(s) furnished hereunder (the “Product(s)”) shall be free from defects in material and workmanship for a period of one (1) year from the date of shipment by UBIQUITI NETWORKS under normal use and operation. UBIQUITI NETWORKS’ sole and exclusive obligation and liability under the foregoing warranty shall be for UBIQUITI NETWORKS, at its discretion, to repair or replace any Product that fails to conform to the above warranty during the above warranty period. The expense of removal and reinstallation of any Product is not included in this warranty. The warranty period of any repaired or replaced Product shall not extend beyond its original term.

Warranty Conditions

The above warranty does not apply if the Product:

- (I) has been modified and/or altered, or an addition made thereto, except by Ubiquiti Networks, or Ubiquiti Networks’ authorized representatives, or as approved by Ubiquiti Networks in writing;
- (II) has been painted, rebranded or physically modified in any way;
- (III) has been damaged due to errors or defects in cabling;
- (IV) has been subjected to misuse, abuse, negligence, abnormal physical, electromagnetic or electrical stress, including lightning strikes, or accident;
- (V) has been damaged or impaired as a result of using third party firmware;
- (VI) has no original Ubiquiti MAC label, or is missing any other original Ubiquiti label(s); or
- (VII) has not been received by Ubiquiti within 30 days of issuance of the RMA.

In addition, the above warranty shall apply only if: the product has been properly installed and used at all times in accordance, and in all material respects, with the applicable Product documentation; all Ethernet cabling runs use CAT5 (or above), and for outdoor installations, shielded Ethernet cabling is used, and for indoor installations, indoor cabling requirements are followed.

Returns

No Products will be accepted for replacement or repair without obtaining a Return Materials Authorization (RMA) number from UBIQUITI NETWORKS during the warranty period, and the Products being received at UBIQUITI NETWORKS’ facility freight prepaid in accordance with the RMA process of UBIQUITI NETWORKS. Products returned without an RMA number will not be processed and will be returned freight collect or subject to disposal. Information on the RMA process and obtaining an RMA number can be found at: www.ubnt.com/support/warranty.

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Note

Some countries, states and provinces do not allow exclusions of implied warranties or conditions, so the above exclusion may not apply to you. You may have other rights that vary from country to country, state to state, or province to province. Some countries, states and provinces do not allow the exclusion or limitation of liability for incidental or consequential damages, so the above limitation may not apply to you. EXCEPT TO THE EXTENT ALLOWED BY LOCAL LAW, THESE WARRANTY TERMS DO NOT EXCLUDE, RESTRICT OR MODIFY, AND ARE IN ADDITION TO, THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE LICENSE OF ANY SOFTWARE (EMBEDDED IN THE PRODUCT) TO YOU. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to any transactions regarding the sale of the Products.

Compliance

FCC

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operations of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Industry Canada

This Class A digital apparatus complies with Canadian ICES-003.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

This device complies with Industry Canada licence-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.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 Canada.

Pour réduire le risque d'interférence aux autres utilisateurs, le type d'antenne et son gain doivent être choisis de façon que la puissance isotrope rayonnée équivalente (PIRE) ne dépasse pas ce qui est nécessaire pour une communication réussie.

Cet appareil est conforme à la norme RSS Industrie Canada exempts de licence norme(s). Son fonctionnement est soumis aux deux conditions suivantes:

1. cet appareil ne peut pas provoquer d'interférences et
2. cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement du dispositif.

RF Exposure Warning

The transceiver described here emits radio frequency energy. Although the power level is low, the concentrated energy from a directional antenna may pose a health hazard. Do not allow people to come closer than 20 cm to the antenna when the transmitter is operating.

Additional information on RF exposure is available on the Internet at **<http://www.fcc.gov/encyclopedia/oet-bulletins-line>**

L'émetteur-récepteur décrit ici émet de l'énergie de fréquence radio. Bien que le niveau de puissance est faible, l'énergie concentrée à partir d'une antenne directionnelle peut présenter un danger pour la santé. Ne pas permettre aux gens de se rapprocher de 20 cm à l'antenne lorsque l'émetteur est en marche.

Des renseignements supplémentaires sur l'exposition aux RF est disponible sur Internet à **<http://www.fcc.gov/encyclopedia/oet-bulletins-line>**

CE Marking

CE marking on this product represents the product is in compliance with all directives that are applicable to it.

Alert Sign (!) Follows CE Marking

Alert sign must be indicated if a restriction on use applied to the product and it must follow the CE marking.



RoHS/WEEE Compliance Statement



English

European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

Deutsch

Die Europäische Richtlinie 2002/96/EC verlangt, dass technische Ausrüstung, die direkt am Gerät und/oder an der Verpackung mit diesem Symbol versehen ist, nicht zusammen mit unsortiertem Gemeindeabfall entsorgt werden darf. Das Symbol weist darauf hin, dass das Produkt von regulärem Haushaltsmüll getrennt entsorgt werden sollte. Es liegt in Ihrer Verantwortung, dieses Gerät und andere elektrische und elektronische Geräte über die dafür zuständigen und von der Regierung oder örtlichen Behörden dazu bestimmten Sammelstellen zu entsorgen. Ordnungsgemäßes Entsorgen und Recyceln trägt dazu bei, potentielle negative Folgen für Umwelt und die menschliche Gesundheit zu vermeiden. Wenn Sie weitere Informationen zur Entsorgung Ihrer Altgeräte benötigen, wenden Sie sich bitte an die örtlichen Behörden oder städtischen Entsorgungsdienste oder an den Händler, bei dem Sie das Produkt erworben haben.

Español

La Directiva 2002/96/CE de la UE exige que los equipos que lleven este símbolo en el propio aparato y/o en su embalaje no deben eliminarse junto con otros residuos urbanos no seleccionados. El símbolo indica que el producto en cuestión debe separarse de los residuos domésticos convencionales con vistas a su eliminación. Es responsabilidad suya desechar este y cualesquiera otros aparatos eléctricos y electrónicos a través de los puntos de recogida que ponen a su disposición el gobierno y las autoridades locales. Al desechar y reciclar correctamente estos aparatos estará contribuyendo a evitar posibles consecuencias negativas para el medio ambiente y la salud de las personas. Si desea obtener información más detallada sobre la eliminación segura de su aparato usado, consulte a las autoridades locales, al servicio de recogida y eliminación de residuos de su zona o pregunte en la tienda donde adquirió el producto.

Français

La directive européenne 2002/96/CE exige que l'équipement sur lequel est apposé ce symbole sur le produit et/ou son emballage ne soit pas jeté avec les autres ordures ménagères. Ce symbole indique que le produit doit être éliminé dans un circuit distinct de celui pour les déchets des ménages. Il est de votre responsabilité de jeter ce matériel ainsi que tout autre matériel électrique ou électronique par les moyens de collecte indiqués par le gouvernement et les pouvoirs publics des collectivités territoriales. L'élimination et le recyclage en bonne et due forme ont pour but de lutter contre l'impact néfaste potentiel de ce type de produits sur l'environnement et la santé publique. Pour plus d'informations sur le mode d'élimination de votre ancien équipement, veuillez prendre contact avec les pouvoirs publics locaux, le service de traitement des déchets, ou l'endroit où vous avez acheté le produit.

Italiano

La direttiva europea 2002/96/EC richiede che le apparecchiature contrassegnate con questo simbolo sul prodotto e/o sull'imballaggio non siano smaltite insieme ai rifiuti urbani non differenziati. Il simbolo indica che questo prodotto non deve essere smaltito insieme ai normali rifiuti domestici. È responsabilità del proprietario smaltire sia questi prodotti sia le altre apparecchiature elettriche ed elettroniche mediante le specifiche strutture di raccolta indicate dal governo o dagli enti pubblici locali. Il corretto smaltimento ed il riciclaggio aiuteranno a prevenire conseguenze potenzialmente negative per l'ambiente e per la salute dell'essere umano. Per ricevere informazioni più dettagliate circa lo smaltimento delle vecchie apparecchiature in Vostro possesso, Vi invitiamo a contattare gli enti pubblici di competenza, il servizio di smaltimento rifiuti o il negozio nel quale avete acquistato il prodotto.

Declaration of Conformity

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Français [French]	Par la présente UBIQUITI NETWORKS déclare que l'appareil UBIQUITI NETWORKS, est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
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Latviski [Latvian]	Ar šo, UBIQUITI NETWORKS, deklarē, ka UBIQUITI NETWORKS ierīce, ir saskaņā ar būtiskajām prasībām un citiem attiecīgiem noteikumiem Direktīvā 1999/5/EK.
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