



*Wall Mount Motion Sensor*

Model: mFi-MSW

QUICK START GUIDE



## Introduction

Thank you for purchasing the Ubiquiti 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)



Quick Start  
Guide



M3x20 mm  
Screws (Qty. 2)



M2.6x8 mm  
Screws (Qty. 2)



Anchors  
(Qty. 2)

## System Requirements

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

## Hardware Overview

### Front



### Back



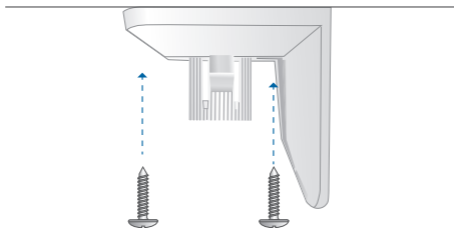
## Hardware Installation

### 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

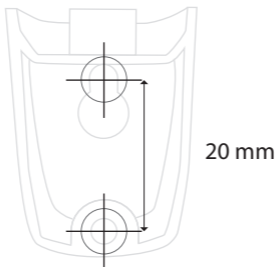
1. Use a Phillips screwdriver to secure the *Mounting Bracket* to the ceiling with the two *M3x20 mm Screws*.



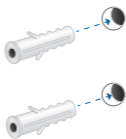
Proceed to *Connecting the Cabling and Mounting Base* on page 6.

## 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.

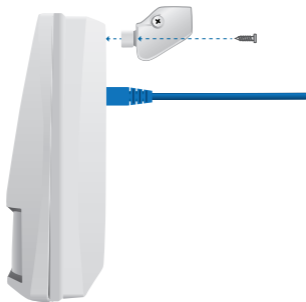


## Connecting the Cabling and Mounting Base

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

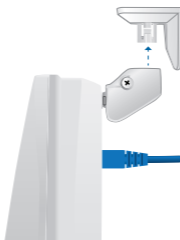


2. Secure the mFi-MSW to the *Mounting Base* using the two M2.6x8 mm Screws.

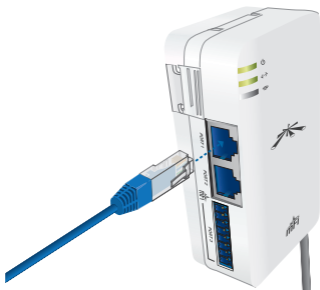




3. Connect the *Mounting Base* to the *Mounting Bracket*.



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 on the CD-ROM that was included with your mFi mPort for instructions on configuring the mFi-MSW in the mFi Controller software.

The User Guide can also be downloaded from our website at [www.ubnt.com/mfi](http://www.ubnt.com/mfi)

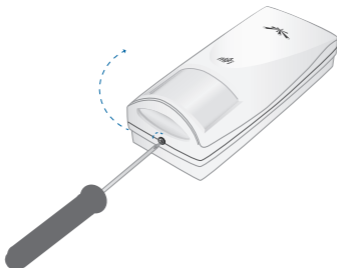
## Jumper Settings

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
<b>NO/NC (Normally Open, Normally Closed)</b> 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
<b>SENS (Sensitivity)</b> 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
<b>PIR (Passive Infrared Sensor)</b> Enabled by default. Removing the jumper will disable this sensor.	Enabled	Disabled
<b>MW (Microwave Sensor)</b> Enabled by default. Removing the jumper will disable this sensor.	Enabled	Disabled
<b>AM (Anti-Mask)</b> 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
<b>LED</b> 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

The LED is disabled by default and 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.

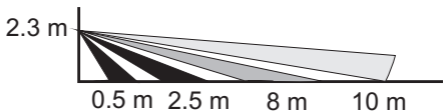
## Detection Pattern

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

## General Warranty

UBIQUITI NETWORKS, Inc (“UBIQUITI NETWORKS”) represents and warrants that the Products furnished hereunder 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 under the foregoing warranty shall be to repair or replace, at its option, any defective Product that fails during the warranty period. The expense of removal and reinstallation of any item is not included in this warranty.

The foregoing warranty is exclusive and in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose and any warranties arising from a course of dealing, usage or trade practice with respect to the products. Repair or replacement in the manner provided herein shall be the sole and exclusive remedy of Buyer for breach of warranty and shall constitute fulfillment of all liabilities of UBIQUITI NETWORKS with respect to the quality and performance of the Products. UBIQUITI NETWORKS reserves the right to inspect all defective Products (which must be returned by Buyer to UBIQUITI NETWORKS factory freight prepaid).

No Products will be accepted for replacement or repair without obtaining a Return Materials Authorization (RMA) number from UBIQUITI NETWORKS. Products returned without an RMA number will not be processed and will be returned to Buyer freight collect. UBIQUITI NETWORKS shall have no obligation to make repairs or replacement necessitated by catastrophe, fault, negligence, misuse, abuse, or accident by Buyer, Buyer’s customers or any other parties. The warranty period of any repaired or replaced product shall not extend beyond its original term.

## Warranty Conditions

The foregoing warranty shall apply only if:

- (I) The Product has not been subjected to misuse, neglect or unusual physical, electrical or electromagnetic stress, or some other type of accident.
- (II) No modification, alteration or addition has been made to the Product by persons other than UBIQUITI NETWORKS or UBIQUITI NETWORK'S authorized representatives or otherwise approved by UBIQUITI NETWORKS.
- (III) The Product has been properly installed and used at all times in accordance, and in all material respects, with the applicable Product documentation.
- (IV) All Ethernet cabling runs use CAT5 (or above) shielded cabling.

Disclaimer: UBIQUITI NETWORKS does not warrant that the operation of the products is error-free or that operation will be uninterrupted. In no event shall UBIQUITI NETWORKS be responsible for damages or claims of any nature or description relating to system performance, including coverage, buyer's selection of products for buyer's application and/or failure of products to meet government or regulatory requirements.

## Returns

In the unlikely event a defect occurs, please work through the dealer or distributor from which this product was purchased.

## 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 **[www.fcc.gov/oet/info/documents/bulletins](http://www.fcc.gov/oet/info/documents/bulletins)**

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 **[www.fcc.gov/oet/info documents/bulletins](http://www.fcc.gov/oet/info documents/bulletins)**

## 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.

### 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.

## Declaration of Conformity

Česky [Czech]	UBIQUITI NETWORKS tímto prohlašuje, e tento UBIQUITI NETWORKS device, je ve shodě se základními požadavky a dále splňuje všechny ustanovení směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede UBIQUITI NETWORKS erklærer herved, at følgende udstyr UBIQUITI NETWORKS device, overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Nederlands [Dutch]	Hierbij verklaart UBIQUITI NETWORKS dat het toestel UBIQUITI NETWORKS device, in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.  Bij deze verklaart UBIQUITI NETWORKS dat deze UBIQUITI NETWORKS device, voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.

English	Hereby, UBIQUITI NETWORKS, declares that this UBIQUITI NETWORKS device, is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Eesti [Estonian]	Käesolevaga kinnitab UBIQUITI NETWORKS seadme UBIQUITI NETWORKS device, vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
Suomi [Finnish]	UBIQUITI NETWORKS vakuuttaa täten että UBIQUITI NETWORKS device, tyypinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Français [French]	Par la présente UBIQUITI NETWORKS déclare que l'appareil UBIQUITI NETWORKS, device est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Deutsch [German]	Hiermit erklärt UBIQUITI NETWORKS, dass sich diese UBIQUITI NETWORKS device, in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMWi)
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ UBIQUITI NETWORKS ΔΗΛΩΝΕΙ ΟΤΙ UBIQUITI NETWORKS device, ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1995/5/ΕΚ.
Magyar [Hungarian]	Alulírott, UBIQUITI NETWORKS nyilatkozom, hogy a UBIQUITI NETWORKS device, megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Íslenska [Icelandic]	Hér me l sir UBIQUITI NETWORKS yfir ví a UBIQUITI NETWORKS device, er í samræmi við grunnkröfur og a rar kröfur, sem ger ar eru í tilskipun 1999/5/EC.
Italiano [Italian]	Con la presente UBIQUITI NETWORKS dichiara che questo UBIQUITI NETWORKS device, è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Latviski [Latvian]	Ar o UBIQUITI NETWORKS deklar , ka UBIQUITI NETWORKS device, atbilst Direkt vās 1999/5/EK b tiskaj m pras b m un citiem ar to saist tajiem noteikumiem.
Lietuviškai [Lithuanian]	UBIQUITI NETWORKS deklaruoja, kad šis UBIQUITI NETWORKS įrenginys atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Malti [Maltese]	Hawnhekk, UBIQUITI NETWORKS, jiddikjara li dan UBIQUITI NETWORKS device, jikkonforma mal- ti ijiet essenzjali u ma provvedimenti o rajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Norsk [Norwegian]	UBIQUITI NETWORKS erklærer herved at utstyret UBIQUITI NETWORKS device, er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.
Slovensky [Slovak]	UBIQUITI NETWORKS t mto vyhlasuje, e UBIQUITI NETWORKS device, sp a základné po iadavky a v etky príslu né ustanovenia Smernice 1999/5/ES.
Svenska [Swedish]	Härmed intygar UBIQUITI NETWORKS att denna UBIQUITI NETWORKS device, står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Español [Spanish]	Por medio de la presente UBIQUITI NETWORKS declara que el UBIQUITI NETWORKS device, cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Polski [Polish]	Niniejszym, firma UBIQUITI NETWORKS o wiadcza, e produkt serii UBIQUITI NETWORKS device, spełnia zasadnicze wymagania i inne istotne postanowienia Dyrektywy 1999/5/EC.
Português [Portuguese]	UBIQUITI NETWORKS declara que este UBIQUITI NETWORKS device, está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Română [Romanian]	Prin prezenta, UBIQUITI NETWORKS declară că acest dispozitiv UBIQUITI NETWORKS este în conformitate cu cerințele esențiale și alte prevederi relevante ale Directivei 1999/5/CE.



## Ubiquiti Networks Support

Email: **support@ubnt.com**

Phone (9 a.m. - 5 p.m. PST): **408-942-1153**

## Online Resources

Wiki Page: **wiki.ubnt.com**

Support Forum: **forum.ubnt.com**

Downloads: **downloads.ubnt.com**

