

OMVC OUTDOOR MOTION VIEWER

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Product Summary

The OMVC 200/601/702/703/800 MotionViewer is a wireless, battery operated, motion activated outdoor camera designed for use in Videofied[®] security systems.

- Powered by 4 Lithium batteries for extended battery life.
- Lens for vertical curtain detection.
- 4 infrared LEDs for 12m night vision.
- Fully weatherproof (IP54) and temperature resistant (-25°C/+70°C).
- Tilt sensor tamper.
- Transmits check-in/status signal every 8 minutes.



Installation Guidelines

For easier installation, programming and RF testing should be done to check for good communication between the control panel and all system devices before mounting system devices.

Install the detector and other system devices in the order of the following steps:

> Programming/RF Testing - program detector and all other devices into the control panel and test RF communication from each intended device location to the control panel.

> Mounting - mount detector at the tested location.

Mounting

- > Use proper tools and hardware.
- > Mount camera between 2.5 m to 3,5 m height.

> The OMVC MotionViewer detection distance may vary depending the detector mounting (height, tilt). The OMVC is not suitable to protect an area, it needs to be used to protect the perimeter of an installation.

> Mount detector aimed to protect the perimeter.

> In order to reduce false alarms, do not aim the detector toward vegetation, a road, or unlimited space.

> Do not cover the Fresnel lens.



MB110 Mounting kit for Outdoor MotionViewer



Programming/RF Testing/Mounting

The following provides summarized steps for device programming, testing, and mounting. For complete details, refer to the control panel installation manual.

1 Separate the base from the box

2 Install 4 3.6V LS14500 SAFT batteries observing correct polarity.

3 Put control panel into Programming/Configuration mode.

4 Using a programmed alphanumeric keypad, proceed through menus until the display shows ADD A NEW DEVICE.

5 Press OK/YES. the display shows PRESS PROGRAM BUTTON OF DEVICE.

6 Press and release program button on the OMVC MotionViewer.

The OMVC PIR flashes.

7 Wait for keypad display to show CAMERA(1 - 25) PROGRAMMED. Press OK/YES, the display shows RADIO RANGE TEST? Press OK/YES again. The camera LED starts flashing and keypad display shows RF TEST.

8 Take the OMVC camera to its intended mounting location and make sure LED flashes continuously or you receive a 9/9 indicating good communication with the control panel.



9 Press OK/YES to end radio range test then press ESC/NO.

10 The keypad displays :

AREA ALLOCATION :

AREA:1

Press either arrow button repeatedly until desired area number appear then press OK/YES. By default all devices in Area 1 are automatically delayed.

11 The display shows NAME + LOCATION:

Enter appropriate device name/location (up to 16 characters), then press OK/YES. The display shows the device number and name for your verification.

12 Mount the OMVC on the MB 110 or the MBW110 Mounting kit. Follow the installation guidelines shown in this document.

13 Press OK/YES. The display shows FUNCTIONAL DEVICE TEST? Press OK/YES and verify camera operation. The activation of the LED will determine the detection field.

14 Press OK/YES to end detection verification.

15 The display shows OPERATION COMPLETED or ADD A NEW DEVICE? Press YES/OK. Repeat steps 1 – 14 for remaining cameras.

16 When finished, exit from configuration mode.







Program button

Mounting Recommendations

Please direct the OMVC along a **fence** or a **wall** in order to protect an **access point**. The detector should not be mounted close or above an access point. Such installation increase the probability of a missed intrusion.

For optimal use, the OMVC MotionViewer mounting shall respect the following recommendations:

Mounting height :

RSI Video Technologies recommends a **2,5 m to 3,5 m** mounting height.

When you install the MotionViewer higher, **the detection distance is raised**. However the sensitivity is reduced and the blind area under the MotionViewer is larger.

When you install the MotionViewer lower, **the sensitivity is raised** and the blind area under the detector is reduced. However the detection distance will be reduced.

Tilt :

Raising or reducing the tilt, even slightly, has a big impact on the detection distance and on the blind area under the MotionViewer. We recommend to slightly tilt the OMVC to **reduce its detection range** and avoid **false alarms**.

To precisely determine the tilt angle use a smartphone app like Smart Protactor (Android) or Pitch Gauge (iOs).

Max detection distance : OMVC		Tilt angle				OMVC 601 Tilt angle	
		5 °	10°	15°	20 °	30 °	10°
Mounting height	2.5 m	12 m*	11 m	8 m	6,5 m		
	2.75 m	12 m*	12 m	9m	7m	5m	
	3 m	12 m*	12 m*	9,5 m	7,5m	5,5m	
	3.25 m		12 m*	10 m	8m	5,5m	
	3.5 m		12 m*	11 m	8,5m	6m	29ft

Theoretical values estimated for default sensitivity.

These values only represent the physical limits of the OMVC detection and not its maximum detection range. Long range sensitivity is reduced and depends on infrared detection properties (see page 5).

* In some cases, false alarms can be triggered from outside the 12m detection limit (street, bushes, trees, etc). If that happens, please slightly tilt the OMVC downward to prevent false alarms.



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Perimeter protection



Tilt Tamper

The OMVC MotionViewer can detect manipulation thanks to its built-in electronic accelerometer.

This device can detect shocks, movements, wall or cover tamper but also changes in its orientation.

When a movement of the OMVC is detected, the LED lights up for 3 seconds.



When it is armed for the first time, the OMVC registers its position in space. If its orientation is significantly changed on its transverse or longitudinal axis, a tamper alarm is sent to the panel. As for every Videofied device, the tamper is active 24/7.

If the detector is moved, the TAMPER notification will be displayed on the keypad the next time the system is armed. Press OK/YES to acknowledge that notification and confirm the detector new position. If the TAMPER event is set as ALARM/END, a tamper restoral event is sent to the panel.

Tilt tamper disabling (only for OMVC version 07.06.04.XX and later)

The OMVC Motionviewer must be deleted from the panel memory to disable tamper.

- 1. Delete the OMVC from the device configuration menu.
- 2. Press and hold the OMVC initialization button for 5 seconds. The red LED will turn on for 2 seconds to confirm the setting.
- 3. Pair the OMVC back with your panel.

The re-enabling tamper procedure is the same as described above. When the tamper is enabled however, the red LED turns on for 2 seconds, turns off for half a second and turns back on for 2 seconds.





Infrared detection

The OMVC outdoor MotionViewer uses standard infrared detection. The PIR is optimized for the detection of individuals.

Several parameters affect the detection :

- Subject thermal signature (size, width, temperature and emissivity).
- Detection environment (ambient temperature, reflectivity of the surfaces, the presence of water or moist surfaces).
- Speed and direction of the movement.
- OMVC setup (tilt, height, sensitivity).



Important :

It is essential to monitor the proper functioning of the infrared detection using the FUNCTIONAL TEST feature in the panel MAINTENANCE menu.

A red status LED lights up when the OMVC is detecting. Use that test to determine the pattern of the detection field.





Sensitivity adjustment

The OMVC detector comes with the capability of adjusting the sensitivity level of the PIR. It can improve the detection or, on the contrary, reduce false alarms. Raising sensitivity will raise detection range, the detection field will be larger and smaller thermal signatures will be detected. You should only use this feature when the site has been diagnosed as needing this adjustment. It cannot be used to optimize detection as the adjustment may be too high and generate either false alarms or missed intrusions.

Examples : Plant growth, pets.

Please note that the detector must be installed to prevent intrusions (aim the detector towards an access point), sensitivity adjustment will have no effect if the installation doesn't comply with the installation recommendations described in this document.

Adjust sensitivity for the OMVC MotionViewer

To change the OMVC sensitivity, you need to change the **detector name**:



Enter the detector name then enter the **\$** symbol at the end and the chosen digit (without space). The number following **\$** will depend on the necessary adjustment:

	SENSITIVITY ADJUSTMENT
MINIMAL SENSITIVITY	detector_name \$2
LOW SENSITIVITY	detector_name \$1
DEFAULT SENSITIVITY	detector_name
HIGH SENSITIVITY	detector_name \$8
MAXIMAL SENSITIVITY	detector_name \$9

\$ Symbol

CMA keypad : Press @ repeatedly until \$ is displayed **XMA/XMB keypad** : Press **1** repeatedly until \$ is displayed



Security notes / (FR) Notes de sécurité / (DE) Hinweise zur Sicherheit

English

- Remove the batteries before any maintenance !
- WARNING, there is a risk of explosion if a battery is replaced by an improper model !
- Observe polarity when setting up the batteries!
- Do not litter the batteries when they are used! Dispose of them properly according to Lithium Metal requirements

Français

- Retirez les piles avant toute opération de maintenance !
- Attention ! Il y a un risque d'explosion si la batterie utilisée est remplacée par un mauvais modèle !
- Respectez la polarité lors de la mise en place des piles !
- Ne jetez pas les batteries usagées ! Ramenez-les à votre installateur ou à un point de collecte spécialisé.

Deutsch

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- Batterien vor jeglichen Wartungsarbeiten entfernen!
- Vorsicht, es besteht Explosionsgefahr, wenn eine Batterie durch eine Batterie falschen Models ersetzt wird!
- Achten Sie beim Einsetzen der Batterien auf die Polung!
- Entsorgen Sie Batterien nicht im normalen Haushaltsmüll! Bringen Sie Ihre verbrauchten Batterien zu den öffentlichen Sammelstellen.

FCC Regulatory Information for USA and CANADA

FCC Part 15.21 Changes or modifications made to this equipment not expressly approved by RSI Video Technologies may void the FCC authorization to operate this equipment.

FCC Part 15.105 Class B

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:

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

Radio frequency radiation exposure information according 2.1091 / 2.1093 / OET bulletin 65

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada.

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.

Cet appareil est conforme à la Partie 15 des règlementations de la FCC et avec la norme RSS-210 de l'Industrie Canadienne. Son fonctionnement est soumis aux deux conditions suivantes :

- Cet appareil ne doit pas causer d'interférences nuisibles et
- 2 Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement indésirable.



Panel compatibility

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ELECTRICAL PROPERTIES

Power requirements	Type C - 4 Lithium batteries 3,6 V LS14500	
Battery life		
Standard usage (up to 5 videos p	per month) 4 years	
High usage (about 30 videos per month) 2 years		
Standby current consumption	130 µA	
Max current consumption	320 mA	

W, XL, XT, XV and their variants

RADIO PROPERTIES

RF S2View[®] technology

Radio type	Spread spectrum bidirectionnal
Operating frequency 868MHz - OMVC 200 (Europe, Africa, 902/928MHz - FHSS – OMVC601 (US 915/928MHz - FHSS – OMVC702, ON 902/907.5MHz & 915/928MHz – FHS	A, Canada, South America) /IVC703 (Australia, South America)
Transmission security	AES encryption algorithm
Supervision	Radio, batteries, tamper, position
Radio antenna	Integrated

VIDEO PROPERTIES

Camera	
Angle	90°
Sensor type	CMOS
Daylight video	Programmable : Color or B&W
Night video	Automatic black & white infrared
Infrared illumination	Automatic with 4 IR LEDs
Infrared illumination distance	Up to 12m
Video	
Video format	MJPEG-WMV, MJPEG-DIFF
Frame rate	5 images per second
Video duration	Programmable (10 seconds by default)
Video resolution	QVGA (320x240)
Average video file size	220 kb
Image	
Format	JPEG
Resolution	VGA (640x480)
Average image file size	8 kb

DETECTION PROPERTIES

Infrared detection spec	ifications
Technology	Passive infrared DSF
Туре	Dual element sensor
Detection lens	1 m wide curtair
Tamper detection	
Tilt	Position change, shock, wall and cover tamper
BOX	
Physical properties	
Material	Polycarbonate UL94
Dimensions	130,5mm x 102,44mm x 141,5mm
Weight	261g (without batteries
Environmental data	
Operating temperature	-25°/+70°C
Max. relative humidity	95%, without condensing
Protection marking	IP 54 / IK 06
Installation / Mounting	

Mounting height	2.5 m to 3.5 m
Mounting angle	5° to 10°
Mounting	Use mounting kit (sold separately)





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STANDARDS AND CERTIFICATIONS

OMVC 200)	868MHz
Europe	CE	Compliant with the annex IV of the R&TTE Directive 1999/5/EC Intertek LSS (EN50131-2-2) Id: 16LHK0199-01
OMVC 601	I	902/928MHz - FHSS
Argentina	COMISIÓN NACIONAL DE COMUNICACIONES	Certification number C-17501
Canada		IC (RSS-247 issue 1) Id: 8816A-MV50
Columbia		
Costa Rica		SUTEL 00914-SUTEL-DGC-2017
Mexico		IFT Certification number RCPSISI17-0298
Panama		Certification number 1718
Peru	Certification number TRSS38410 «En Perú, este equipo diseñado para la banda de 902-928MHz, debe ser configurado para operar solo en la banda 915-928MHz con una PIRE de hasta 1W (30dBm) y sujeto a las Condiciones de Operación que establezca el MTC.»	
USA	FC	(Part 15C) ld: X46MV50



This symbol on the product or on its packaging indicates that this product should not be treated as household waste. It must be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health. The recycling of materials will help to conserve natural resources.

For more information about recycling of this product, please contact your local municipality, your waste disposal service or the company that installed the product.

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