

# VideoMitter™ Lite

## Video & Audio Wireless Transceivers!



- ✓ **Digital Data Transmission**  
*for cleaner, sharper images over longer distances*
- ✓ **Privacy Pairing Function**  
*for private video transmission, helping comply with the Data Protection Act*
- ✓ **Loophroughs**  
*easily add an extra monitor with audio at both the transceiver and receiver end*
- ✓ **Handshake Routine**  
*2 way reporting for maximum security*
- ✓ **Whisper Mode**  
*listens for data at a low power for energy efficiency*

**Digital, Reliable Transmission, up to 1.2Km!\***

### Typical Installation



NB: VideoMitter Lite units are **NOT** compatible with VideoMitter MK1 & MK2 and can **NOT** be used together

\*Additional antennas required for 1.2Km

# VideoMitter™ Lite Instructions

## Things the professionals know!

Tip

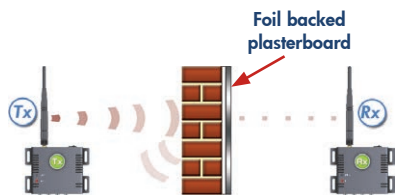
- different sites will affect the range.



1. The signal will not go through hills. The density of the hill and water it contains in the soil absorbs the microwave signal.



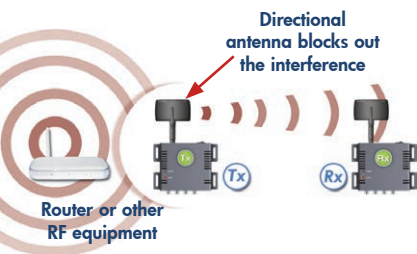
2. The signal will go through branches of trees but remember that microwave signals will be attenuated greatly by water. Leaves and plants are full of water so the distance is reduced. To help, fit the best directional antennas and/or avoid the trees.



3. In modern buildings sometimes the structure is lined with "FOIL". This can reflect or "ground" the wireless signal. Avoid transmitting through such "shields". If wiring is not an option then use the powerful directional antennas to help or mount the Rx unit on the exterior of a building in an ABS box.



4. Remember if you are installing on a day when the weather is good the signal will be good. However, when it is raining heavily the microwave signal will be absorbed by the rain and reduce the distance. So always keep the distance to a minimum and allow for the use of additional directional antennas.



5. On some sites you may have other RF equipment that can interfere with the VideoMitters and reduce the range or cause poor performance. The best solution for a site like this is fitting directional antennas as they help "block" out the interference.

# VideoMitter™ Lite Instructions

## Things the professionals know!

### Tip

**- getting maximum performance when fitting multiple pairs of VideoMitters on the same site.**

When you are fitting multiple pairs of VideoMitters on the same site, it's really important to have some knowledge of good installation practice of wireless devices.

When you are installing any transmission device, it's always good practice to keep it a reasonable distance away from another transmission devices. This is because the signal from one could overwhelm the other leading to poor performance of one or both devices. Poor performance may result in intermittent loss of signal or non operation.

The VideoMitters are actually "transceivers" this means that the "transmitters" and the "receivers" BOTH transmit and means you also need to keep pairs of receivers a reasonable distance from each other.

The standard antenna that the VideoMitters are supplied with is called an "Omni-directional" antenna, this means it transmits in "all" directions. So when two transmitters are close to each other they will be transmitting signals at each other as well as the receiver which is why you need to keep them spaced apart, spacing of 1-2 metres is required between each transmitting device.

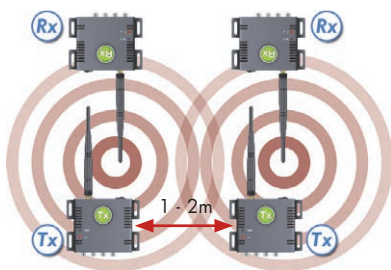
Professional installers of wireless equipment would always use "directional" antennas so that one transmitter is aiming its signal directly at its own receiver and therefore the signal is far less likely to interfere with another transmitter located near it.

So on sites with multiple pairs of video transmitters, it is always recommended to use directional antennas for a professional installation.

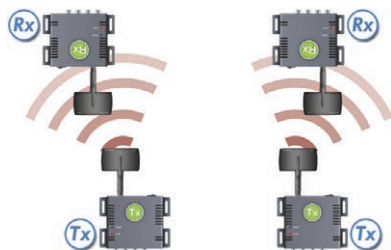
The added benefit of the directional antennas is that they will also add increased range making the whole system more reliable.

### Tip

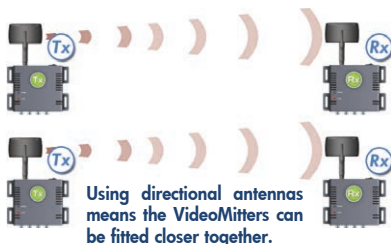
The VideoMitter has 20 channels so theoretically 20 pairs can be used per site however it is only recommended to use 4 pairs per site to minimise any chance of cross interference.



**Two transmitters close together with omni directional antennas, the signal from each can overwhelm each other. Try keeping them at least 1-2 metres apart.**



**Adding directional antennas means the transmitters next to each other don't overwhelm each other with erroneous transmission.**



**Using directional antennas means the VideoMitters can be fitted closer together.**

# VideoMitter™ Lite Instructions

Read these instructions before using the MIT160 and MIT170 as they contain vital information...

## Connections - TX/RX

Although identical in appearance each unit is clearly marked on the face as:

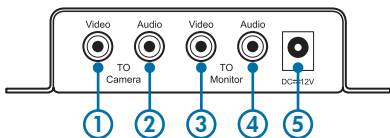
TX - Transmitter



RX - Receiver

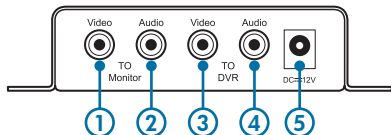


The **Transmitter** unit has the following connections



1. Video in connection via a phono socket
2. Audio in connection via a phono socket
3. Video loopthrough via a phono socket for adding an extra monitor at the transmitter end
4. Audio loopthrough via a phono socket for playing audio through a monitor or speakers at the transmitter end
5. 2.1mm12v D.C. power connection

The **Receiver** unit has the following connections



1. Video loopthrough via a phono socket for adding an extra monitor at the receiver end
2. Audio loopthrough via a phono socket for playing audio through a monitor or speakers at the receiver end
3. Video out connection via a phono socket
4. Audio out connection via a phono socket
5. 2.1mm12v D.C. power connection

**Both** units have the following connections

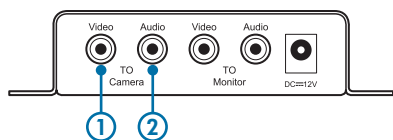


1. Power On/Off Switch
2. Antenna Connection (RP SMA Male Socket) connects to extension cables or direct connection antenna models

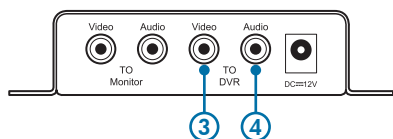
# VideoMitter™ Lite Instructions

## Connecting the Video & Audio

### Transmitter



### Receiver



Connect the video input feed to the yellow video phono socket marked 'To Camera' (1) on the Transmitter.

Connect the video output feed to the yellow video phono socket marked 'To DVR' (3) on the Receiver.

If using audio, use the white audio phono input marked 'To Camera' (2) on the Transmitter.

Connect the audio output feed to the white audio phono socket marked 'To DVR' (4) on the Receiver.

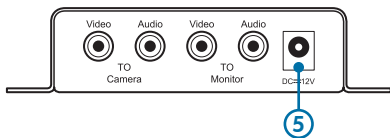
A video/audio lead with phono connections at both ends is supplied. You may need to fit the **CON003** Phono to BNC converter to the yellow phono connector if the video input feed has a BNC connection. The video/audio lead supplied is 125cm long. If you need to use an alternative lead, remember that both video and audio signals require both a signal AND a ground connection to complete the circuit.

Converts a Phono Plug into a BNC Plug



**CON003**

## Powering the Units



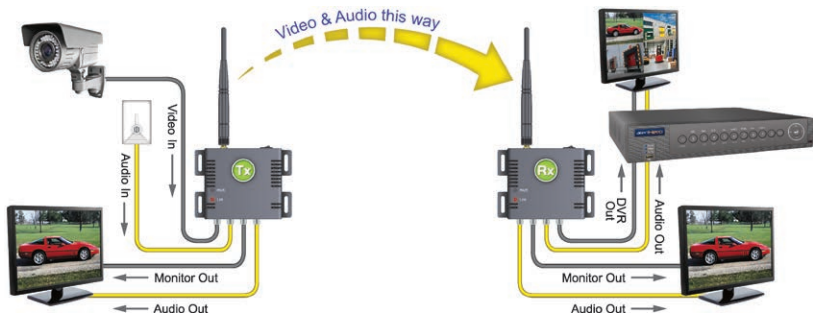
Both the transmitter and receiver are supplied with a power supply unit (PSU). If alternative PSUs are used, the PSU for the receiver needs to be capable of supplying 12V D.C. @ 260mA continuously. The transmitter needs a PSU capable of supplying 12V D.C. @ 235mA continuously. Please keep this in mind if you are intending to share a PSU for both the TX unit and your chosen CCTV camera. When choosing any PSU for CCTV equipment ensure that it is fully regulated or you risk damaging the CCTV equipment. A good quality supply such as the "AntiHum" series featured on page 14 is ideal.



12v DC 500mA PSU

**POW150**

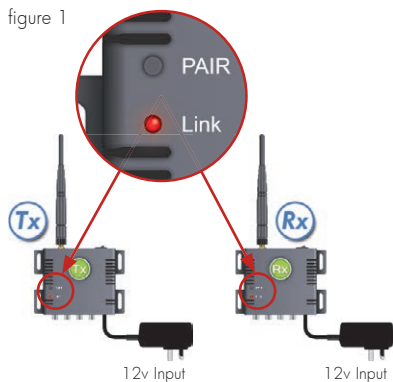
# VideoMitter™ Lite Instructions



## Pairing Receiver with Transmitter

For security purposes and to ensure that transmissions are only shared by the receiver connected, the transmitter is paired with the receiver. This is done automatically by randomly setting the same ID in both units from an extensive ID range. Note that when purchasing a transmitter and receiver they are already paired and it is unlikely that you will need to rerun the pairing process. However if one of the units is replaced or taken to another site, it will be necessary to do this. This is a simple process that will take only a few minutes.

figure 1



## Checking if the units are paired

1. Set the units up at least 2 feet apart.
2. Connect a 12v DC regulated power supply to the **Transmitter**. The red Link LED will light, then extinguish.
3. Connect a 12v DC regulated power supply to the **Receiver**. The red Link led will light, then extinguish.
4. After 4 seconds, on both units, the Link LEDs will light permanently if the units are paired. (**figure 1**)
5. If the Link LEDs are not lit then the units are not paired, then follow the instructions on the next page.

# VideoMitter™ Lite Instructions

## How to Pair Units

1. First ensure that a monitor is connected to the **RX Receiver** and a video feed to the **TX Transmitter**. Press the **RECEIVER** pair matching button down for 3 seconds. The monitor will then start pairing to the transmitter and the led on the transmitter will extinguish.



2. A countdown on the monitor then gives you 17 seconds to press the pairing button on the **TRANSMITTER**. Hold the button down until the led starts flashing.



3. When pairing is complete the monitor will display

**PAIRING OK /  
SAVE DATA**



4. When the transmitter and receiver are successfully paired the monitor will display the camera picture and in the top right hand corner of the display screen a signal strength bar will show up to 5 bars.



5. In the event that no signal is displayed after the pairing process, this means that the transmitter and receiver have failed to pair within the countdown period. **Return to step 1.**



6. If no video signal is displayed, check that a video source is connected to the transmitter. **Return to step 1.**



✓ **If both Transmitter and Receiver Link LEDs are lit permanently, the units are paired.**

If the LEDs are not both lit, then start the pairing procedure again. If you press only one pairing button on units that are already paired, you do not lose the pairing. After one minute it will be paired with its original unit.

### Only one Transmitter and one Receiver

The pairing process effectively works with only one transmitter and one receiver. It will not allow two or more receivers to pair with the same transmitters. If this is attempted, the following is displayed on the monitor connected to the receiver that is not paired. Note that the pairing process pairs the transmitter and receiver for security purposes, so that only the data transmitted is seen by the paired receiver. It does not determine the channel used.



# VideoMitter™ Lite Instructions

## Installation Procedure

The transmitter and receiver will give the best results if there is line of sight between them. Obstructions will affect transmissions if the digital signal is corrupted, but provided the receiver sees the digital signal you will always get excellent quality results similar to the picture quality generated by the camera. With digital, it will always be a good picture or nothing. It is therefore advisable to mount the transmitter and receiver at an adequate height to avoid vehicles and people.

**If using several transmitters in the same location try to keep them 1 metre or more apart. Also it is good practice to fit directional antennas where multiple pairs are used.**

**This also applies to the “receivers” try and also keep them 1 metre apart.**

The units have wall mount fixing lugs for internal installation but for external applications, they must be installed in a suitable IP rated plastic enclosure. Do not use metal enclosures. If fitting the Transmitter or Receiver in an enclosure it is not necessary to make a hole in the plastic enclosure if it is large enough to house the complete unit including the antenna. If not, it is not recommended to have the antenna protruding from a hole in the top of the enclosure unless a watertight seal can be made between the antenna and box. It is therefore recommended to mount the unit so that any hole cut for the antenna is made in the base of

the enclosure and a good silicon seal made to protect from water/moisture (**figure 2**).

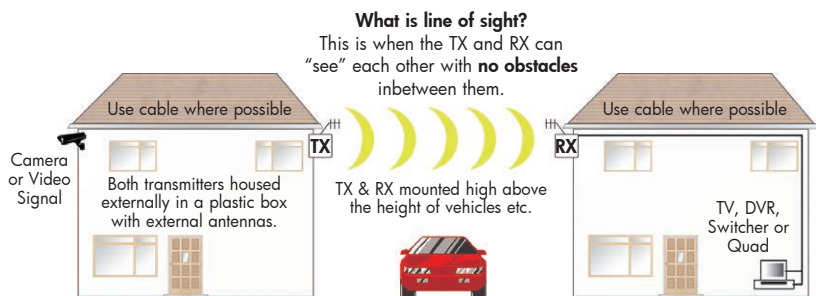


figure 2

In some instances where you can not achieve a clear line of sight, you may need to fit a more powerful antenna than those supplied free with the kit. A range of both internal and external models are available and shown later in this manual. Whilst different models are available to suit different installations, please note the same model of antenna must be fitted at both TX & RX ends.

Once connected, the RX unit will overlay a signal strength bar on the transmitted picture. This is a useful indicator if you will be inputting the transmitted signal to a device other than a monitor as whilst a monitor will display a signal strength as low as 0.7V p-p, devices such as DVRs, quads and switchers require a stronger signal of 1V p-p to display an image.

## Our Recommended System Design...



The TX is mounted in an external weatherproof box and only has to send its signal “line of sight” through air. There is little to attenuate the signal and good results should be achieved. The external antenna in the receiver helps “pull-in” the signal from the transmitter.



# VideoMitter™ Lite Instructions

The diagram below shows how three sets of VideoMitters can provide a wirefree connection to another piece of equipment. It is recommended up to 4 pairs per site can be utilised providing superior digital image quality from that of analogue transmission equipment. Whilst transmission distances can be affected due to the building construction, extra video gain can be produced using an improved antenna detailed later in these instructions. As previously stated ensure the groups of receivers and the groups of transmitters are installed at least 1 metre apart.



## Installation Tips

When using the units externally, a line of sight will always achieve the best results. Line of sight means the units can visibly see each other without any obstructions. Remember whatever is in the way of the line of sight between the two units will attenuate the signal. A building, people, hills or a mound of earth for example will reduce the overall range at which a good picture quality is attainable. You can often get good or near lines of sight, by taking your power and video signals to the ends of facing buildings using cabling and then transmitting between the two buildings (rather than through them) using the TX & RX. If you are going to put the units in external enclosures make sure the enclosures are the plastic/ABS type, as these will allow the radiated signal to pass through them. Better still, put the transmitter and receiver in the box and put an

external antenna outside the box. Whatever you do you must not put the receiving or transmitting antenna in a metallic box as this will adversely affect the products and their performance.

This also means that you must not put either device in a metallic CCTV housing.

Mount the units at a reasonable height. If you mount both units at over 2.5 metres indoors, people walking around will not get in the line of sight of the two units and attenuate the signal.

Similarly when using the units externally, mount them above the height of any passing cars and lorries, which could drastically attenuate the signal.

Note that metal objects can completely screen a wireless signal, so avoid metal gates and do not install in a metal cage such as a lorry or lift, unless you are able to position an extension antenna on the outside. Also be aware that the closer an obstacle to the transmitter, the weaker the signal will be.

Therefore it is not advisable to place the transmitter directly behind a wall. Whilst the VideoMitter may work indoors through walls and office constructions, there are no easy ways of confirming this, so use the signal strength bar and attach a pair of antenna to improve transmission quality if necessary. Ensure that if fitting multiple transmitters and receivers, that the transmitters are more than 1m apart.

## General Information

The VideoMitter transmitter and receiver are a new generation of digital equipment, that convert an analogue signal to digital format and transmit it to the receiver wirelessly, where the receiver decodes the video back into an analogue output. The analogue output can then be taken to the DVR or monitor.

The advantage of using digital is that you get 100% interference free video quality. As digital signals are binary codes of 1's and 0's, providing the video signal can be detected, you should be able to get a high quality, interference free video signal.

# VideoMitter™ Lite Instructions

These transmitters work over the 2.4GHz band and are paired to a receiver to provide security and signal quality. The pairing selects a random ID code from an extensive ID range and is shared only by the transmitter and receiver pair. Therefore the wireless video signal cannot be received by any receiver other than its own. It should therefore only be necessary to rerun the pairing procedure if either the transmitter or receiver has to be replaced.

Unlike analogue transmitters, the VideoMitter has no dipswitches for selecting transmission bands in the 2.4GHz range. It uses an automatic channel hopping feature to select a clear usable channel and this channel may change frequently dependent on the traffic detected on the channel band. Therefore spurious use by other equipment e.g WiFi, will trigger the unit to search for another available channel seamlessly. The channel hopping facility also allows a number of paired VideoMitters to be installed at the same location. The total number of channels that can operate at one site is a maximum of 20. Note that this number is dependent on other traffic density so the number may be less.

Always ensure that the transmitter and receiver have line of sight. Any obstacles will have an effect on the video signal. Line of sight means that there are no materials between the transmitter and receiver, only air. Placing units behind glass is not line of sight. Metal can completely block a transmission, whereas non-metallic obstacles will introduce a certain amount of signal attenuation. Providing this attenuation does not corrupt the digital transmission, the results should always be very good. Note that dense material close to the transmitter will have the greatest effect.

Increasing signal gain can be accomplished by fitting an improved antenna. These are described in more detail, later in this instruction manual. Without line of sight, no guarantee can be given on transmission distance.

## Troubleshooting



**Q.1 I cannot pair the Transmitter and Receiver. I keep getting a "No Video Signal" displayed.**

**A.1** *If no video signal is displayed but the Link LEDs are permanently lit on both the Transmitter and Receiver, the units are paired. The No Video Signal is displayed if the units are setup without a video input. Ensure a video or camera signal is connected to the TX input.*

**Q.2 The monitor displays a static picture.**

**A.2** *The video stream is no longer being transmitted. Check that the power led on the Transmitter is permanently lit. If not check the power supply is delivering 12v DC.*

**Q.3 I am getting No Video Signal or the video stream is very slow.**

**A.3** *If the distance is within range but you do not have line of sight, then the problem may be due to obstacles screening the video signal. Metal is the main substance that can completely screen a wireless signal, therefore avoid completely metal constructions. Metal gates, plasterboard lined with aluminium sheeting, metal cages or vehicle cabs or lorries etc can also screen the video signal. As the VideoMitter pack will either provide good video quality or nothing at all, you can either move the equipment to provide line of sight, use an external antenna and extension lead that will allow line of sight or you can try a more powerful antenna. You will find that thick brick or stone wall constructions will reduce signal strength and the closer they are to the transmitter the greater their effect.*

**Q.4 When the Transmitter or Receiver is first connected to power, the Link LED lights then extinguishes and then after 4 seconds after both units have been powered, they both show a permanent Link LED light on.**

# VideoMitter™ Lite Instructions

## Troubleshooting

**A.4** Although the LED is labelled as a Link LED, it has two functions. The initial illumination tells you that the unit has detected power and when the Link LED finally displays a permanent LED light on both units, it tells you that the units are paired and are able to transmit and receive.

**Q.5** In order to reduce costs, can one pair be used to transmit the output from a DVR that has 16 cameras connected to it?

**A.5** Yes this will transmit whatever the DVR is outputting.

**Q.6** No power light on the Transmitter or Receiver.

**A.6** This could mean that there is no power to the Transmitter or Receiver. They are not paired. Check that the power light comes on when power is applied. Check the same at the transmitter.

**Q.7** No power light on the Receiver but Transmitter power light is on.

**A.7** If using multiple transmitters and receivers at a site, ensure that the receivers are at least 1m apart.

**Q.8** The customer has reported that the picture from the MITKIT-LITE appears to have frozen like it has locked up, what is wrong?

**A.8** It is because the receiver and transmitter can not connect to each other this can be caused by one or more of the following combinations. The cure is nearly always good line of sight AND directional antennas. Main causes of freezing or lock up A- The distance between the two is too far, site conditions will reduce range, see page 2. To help remedy this you need to bring them closer together and/or use directional antenna, or B - There are multiple pairs of MITKIT-LITE on the same site and they are interfering with each other, to remedy this move adjacent TX units & adjacent

RX units to be at least 1m apart and also use directional antennas, or C - There are other transmission devices on the site, again the use of direction antennas will help.

Symptom	Power lights	Reason
No Video Signal	OFF	Not Paired
No Video Signal	ON	No Video at TX
Slow or Static Image	ON	Poor Signal Strength
Static Image	<b>TX LED OFF RX LED ON Unit not pairing</b>	RX too close to another RX. <b>Keep 1 metre apart</b>
Static Image	<b>TX LED ON RX LED OFF Unit Not Pairing</b>	TX too close to another TX. <b>Keep 1 metre apart.</b>

## Tip

Remember, different sites will produce different results.

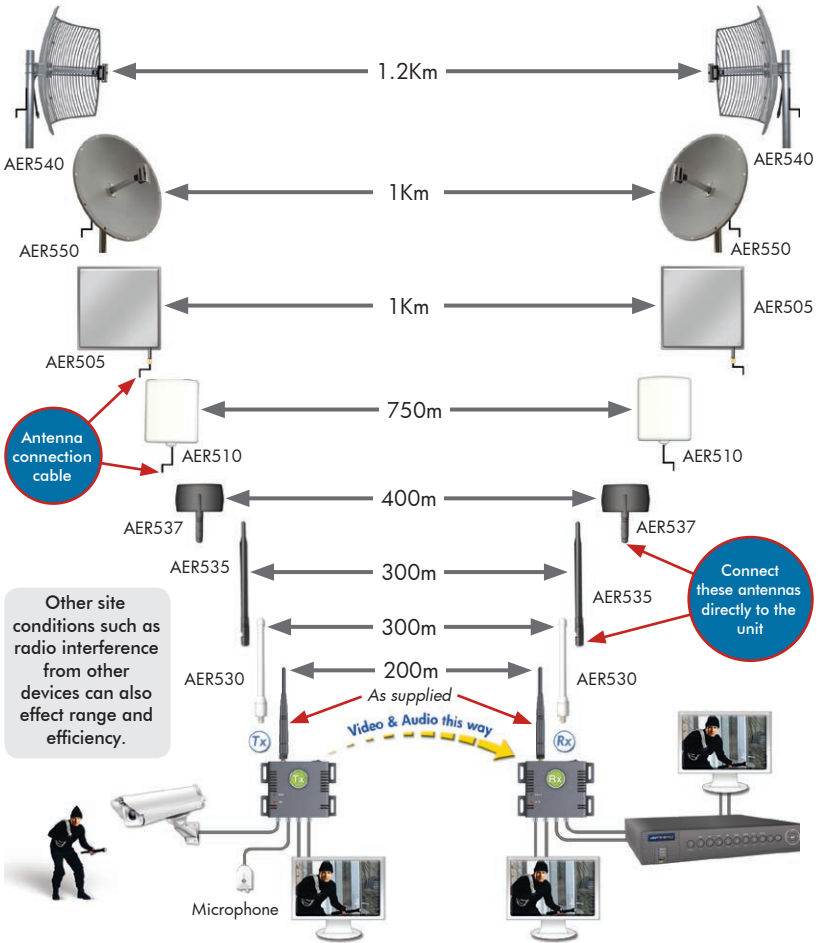
Microwave signals are reflected by metallic objects and also absorbed by water, that's how microwave ovens work, they heat the water in the food to make it hot and the metal casing of the oven keeps the microwave signal inside!

This means anything on a site that contains water can reduce the signal and transmission distance, similarly metal can reflect or block the signal. Where the signal has been reduced and the VideoMitters performance affected you will need to use additional antennas to help "boost" the range. Directional antennas always work best.

To solve installation problems you need to read these instructions from cover to cover and apply the advice contained within them.

# VideoMitter™ Lite Antennas

Line of sight\* distance achievable with optional antennas



Other site conditions such as radio interference from other devices can also effect range and efficiency.

Connect these antennas directly to the unit

\*Line of sight means no physical obstacles and the antennas can actually see each other.

Available models for both internal & external applications.

## Replacement Antennas

The antennas that are supplied with the transceivers are specified to work up to 200 metres with line of sight. If you need to extend this range up to 1.2km, or if you do not have line of sight, then you can try a set of antennas from our omni-directional or semi-directional antenna range.

The next pages show antennas available for both internal and external use as well as other appropriate accessories.

# VideoMitter™ Lite Instructions

## Internal Semi-Directional Antenna - Direct Connection

code: **AER537**



Connect antenna directly to unit

**Specification**  
 IP54 Rating - Indoor or sheltered Outdoor  
 Antenna - RP SMA Female  
 Gain 14 dB  
 (Max unobstructed TX 750m)  
 Vertical beam - 30 degrees  
 Horizontal Beam - 30 degrees  
 Polarisation - Vertical  
 Impedance 50 Ohms  
 Frequency 2400-2500Mhz  
 Size - 109.6(L) x 90.9(W)

This antenna design offers a beam spread of around 30° for good semi-directional performance.

- ✓ Fit to the Tx and Rx
- ✓ Up to 400m Range
- ✓ IP54 Rating
- ✓ RP SMA Female

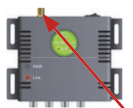
**NO CABLE REQUIRED  
 FITS DIRECT TO UNIT**

ORDER CODE  
**AER537**

## Internal Omni-Directional Antenna - Direct Connection

code: **AER535**

Connect antenna directly to unit



(unit not included)

**Specification**  
 IP65 Rating - Indoor or Outdoor  
 Antenna - RP SMA Female  
 Gain 5 dB (Max unobstructed 300m)  
 Vertical beam - 25 degrees  
 Horizontal Beam - Omni-Directional  
 Polarisation - Vertical  
 Impedance 50 Ohms  
 Frequency 2400-2480Mhz  
 Size - 400mm(L)

This antenna allows the TX & RX to be enclosed in a small external enclosure with this antenna mounted on top of the box for a professional look.

- ✓ Fit to the Tx and Rx
- ✓ Up to 300m Range
- ✓ IP65 Rating
- ✓ RP SMA Female

**NO CABLE REQUIRED  
 FITS DIRECT TO UNIT**

ORDER CODE  
**AER535**

## Medium Gain Omni-Directional Antenna

code: **AER530**

**Tip**

You will need a connection cable (as below) in order to connect these optional antennas to the VideoMitter.



This antenna allows the TX & RX to be enclosed in a small external enclosure with this antenna mounted on top of the box for a professional look.

- ✓ Fit to the Tx and Rx
- ✓ IP65 Rating
- ✓ Up to 300m Range
- ✓ Female N Connector

ORDER CODE  
**AER530**

**Requires cable on pg14 for connection**

**Specification**  
 IP65 Rating - Indoor or Outdoor  
 Connector N Female  
 Gain 6 dB (Max unobstructed 300m)  
 Vertical beam - 25 degrees  
 Horizontal Beam - Omni-Directional  
 Polarisation - Vertical  
 Impedance 50 Ohms  
 Frequency 2400-2480Mhz  
 Size - 330mm long (max)

## High Gain Semi-Directional Flat Wall Mount Antenna

code: **AER510**



Nice modern design that offers a beam spread of around 30° for good semi-directional performance and ease of mounting.

- ✓ Fit to the Tx and Rx
- ✓ IP54 Rating
- ✓ Up to 750m Range
- ✓ Female N Connector

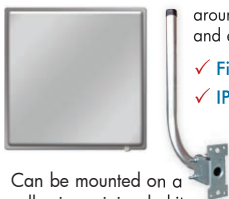
ORDER CODE  
**AER510**

**Requires cable on pg14 for connection**

**Specification**  
 IP54 Rating -  
 Indoor or Sheltered Outdoor  
 Connector N Female  
 Gain 14 dB  
 (Max unobstructed TX 750m)  
 Vertical beam - 30 degrees  
 Horizontal Beam - 30 degrees  
 Polarisation - Vertical  
 Impedance 50 Ohms  
 Frequency 2400-2500Mhz  
 Size - 230 x 200 x 50mm

## High Gain Semi-Directional Pole Mount Antenna

code: **AER505**



Nice modern design that offers a beam spread of around 22° for good semi-directional performance and ease of mounting on a pole or mast.

- ✓ Fit to the Tx and Rx
- ✓ Up to 1Km Range
- ✓ IP65 Rating
- ✓ Female N Connector

ORDER CODE	DESCRIPTION
AER505	Antenna
AER500	Pole Kit

**Requires cable on pg14 for connection**

**Specification**  
 IP65 Rating - Indoor or Outdoor  
 Connector N Female  
 Gain 18 dB  
 (Max unobstructed TX 1Km)  
 Vertical beam - 22 degrees  
 Horizontal Beam - 22 degrees  
 Polarisation - Vertical  
 Impedance 50 Ohms  
 Frequency 2400-2480Mhz  
 Size - 330 x 330 x 65mm

Can be mounted on a wall using mini pole kit.  
 Order code: **AER500 >>>**

# VideoMitter™ Lite Accessories/Spares

## High Gain Directional Parabolic Pole Mount Antenna

code:AER540



Grid design parabolic antenna for a highly directive signal.

- ✓ Fit to the Tx and Rx
- ✓ Up to 1.2Km Range
- ✓ IP65 Rating for External use
- ✓ Female N Connector

0.6m x 1m

Great for long distances!

ORDER CODE  
AER540

Requires cable below for connection

Specification
IP65 Rating - Indoor or Outdoor
Connector N Female
Gain 24 dB
(Max unobstructed TX 1.2Km)
Vertical Beam - 14 degrees
Horizontal Beam - 10 degrees
Polarisation - Vertical or Horizontal
Impedance 50 Ohms
Frequency 2400-2483Mhz
Size: 1000 x 600 x 480mm

## High Gain Directional Parabolic Pole Mount Antenna

code:AER550



High gain parabolic dish antenna provides a focussed directional signal. Aluminium build in an attractive compact design measuring only 440mm diameter.

- ✓ Fit to the Tx and Rx
- ✓ Up to 1Km Range
- ✓ IP65 Rating for External use
- ✓ Female N Connector

Dia 440mm

Small Diameter!

ORDER CODE  
AER550

Requires cable below for connection

Specification
IP65 Rating - Indoor or Outdoor
Connector N Female
Gain 18.5 dB
(Max unobstructed TX 1Km)
Vertical Beam - 21 degrees
Horizontal Beam - 21 degrees
Polarisation - Vertical or Horizontal
Impedance 50 Ohms
Frequency 2400-2483Mhz
Dish Diameter 440 x Depth 360 mm

## Antenna Extension Cables



RP SMA FEMALE

Fit to the VideoMitter

N MALE  
Fit to the antenna

Extension cables to connect the Tx and Rx to the external antennas above.

- ✓ Fit to the Tx and Rx
- ✓ 4 Available Lengths

ORDER CODE	DESCRIPTION
CON902	0.2m Long
CON910	1m Long
CON912	2m Long
CON915	5m Long

## Spare 12V Power Supply



High quality low cost plug in PSU 500mA 12V DC, ideal to use with VideoMitters.

- ✓ Power the Tx and Rx
- ✓ Fully Regulated

ORDER CODE  
POW150

NB:  
MIT200 TX draws 200mA  
MIT250 RX draws 150mA

## Weatherproof Enclosure



Box enclosure with lugs for fitting the Tx and Rx externally, rated IP65 comes in ivory ABS build.

(190 x 190 x 70mm)

ORDER CODE  
BOX420

- ✓ IP65 Rating
- ✓ Ivory ABS Build

## Spare Parts for Tx and Rx VideoMitters



CON003



CON006



VID150



VID152



VID155

ORDER CODE	DESCRIPTION
VID150	Phono to BNC 1.2m
VID152	Phono to Phono 1.2m
VID155	Phono to Phono Socket 5m
CON003	Phono to BNC Converter
CON006	BNC to Phono Converter

Lost or misplaced a lead from your VideoMitter Kit?

Other products that may interest you

[www.VoiceOFF.com](http://www.VoiceOFF.com)

## VoiceOFF MK2

Now with

RS232 Input triggers up  
to **9999** sounds!!



plus  
**20** alarm inputs trigger  
**20** user recordable warnings!

The new **VoiceOff MK2** is an alarm activated voice or sound warning unit that has 20 separate alarm inputs to trigger up to 20 different sound recording files and with the new added feature of an RS232 input can trigger up to 9999 sounds!!!

Alarm activations can be triggered from an internal or external PIR, break beam detectors, panic button, keyfob or from a DVR detecting video motion in a camera's footage.

Voice warning messages can be downloaded or recorded yourself in a MP3 format onto a removable SD card stored in the VoiceOff unit and used to deter intruders or even welcome visitors. Similarly sound files such as a police siren or dog barking can be used to deter unwanted visitors in vulnerable areas.

When used in conjunction with the alienDVR range, the **VoiceOff** can be activated remotely over the internet when a suspicious sighting has been made.

Specification
20 x Alarm Inputs
Speaker output 8W 80 ohms
SD card compatible (supplied)
MP3 file compatible
8-18V AC/ DC
12V DC 120mA Standby
200mA max
(depending on volume)
Wall Mounting Fixing Lugs
Ivory ABS Housing, Rated IP65
Max Size: H234 x W188 x D85
(inc. gland/speaker)

ORDER CODE	DESCRIPTION
VOX200	VoiceOff Unit

### Features

- ✓ Accepts up to 20 alarm inputs
- ✓ Powerful 10 Watt Output
- ✓ Voice & sound files stored on a removable SD card
- ✓ Can be activated automatically using alarm inputs
- ✓ Can be used as a talkback amp with DVRs
- ✓ RS232 connection to PC or DVR
- ✓ Stores & plays 9999 sounds
- ✓ Voice & sound files available from [www.voiceoff.com](http://www.voiceoff.com) or scan the QR code

**VoiceOFF**.com



Use the VoiceOff for...





# VideoMitter™ Lite Instructions

## VideoMitter

— outperforms others —

visit: [www.VideoMitter.com](http://www.VideoMitter.com)

Or scan the QR  
code with your  
phone to take you  
to the website!



### Technical Specification

Model	MIT160 - TX	MIT170 - RX
Operating Frequency	2.400GHz - 2.4835GHz	
Transmission Channels	20 (recommended maximum 4 pairs per site)	
Operational Range	Up to 200 metres line of sight with antenna supplied	
Channel Hopping	FHSS employed to frequently switch channels	
Transmission Options	Video - Audio (Mono)	
ID Pairing	TX and RX are paired with a random ID code	
Power	12v DC	
Current Drawn	235mA	260mA
Power Supply Recommended	12v DC 500mA regulated per unit	
Video Connections	Phono Input x 1 Phono Output x 1	Phono Output x 2
Audio Connections	Phono Inputs x 1 Phono Outputs x 1	Phono Outputs x 2
Antenna Connection	RP SMA Female	
Unit Size Overall	115mm x 80mm x 25mm	



WEE/CG0783SS

This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste. For treatment, recovery and recycling please return this unit to your trade supplier or local designated collection point as defined by your local council.

Licence Exempt - EN300440  
Short range digital data transmission using frequency hopping modulation.

All specifications are approximate. VideoMitter.com reserves the right to change any product specifications or features without notice. Whilst every effort is made to ensure that these instructions are complete and accurate, VideoMitter.com cannot be held responsible in any way for any losses, no matter how they arise, from errors or omissions in these instructions, or the performance or non-performance of the equipment that these instructions refer to.