



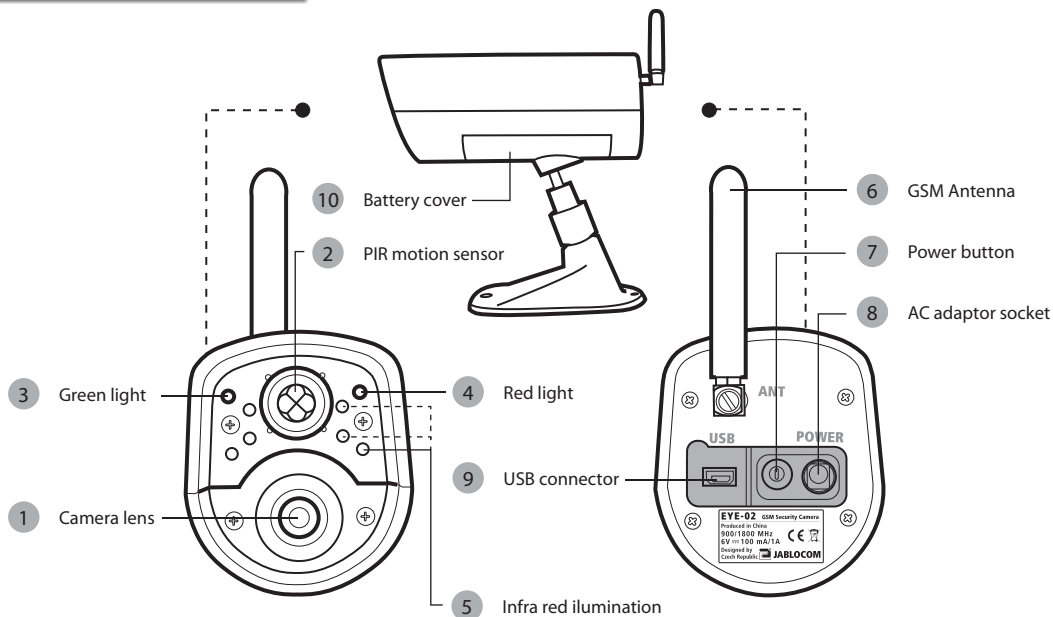
GSM Security Camera

EYE-02

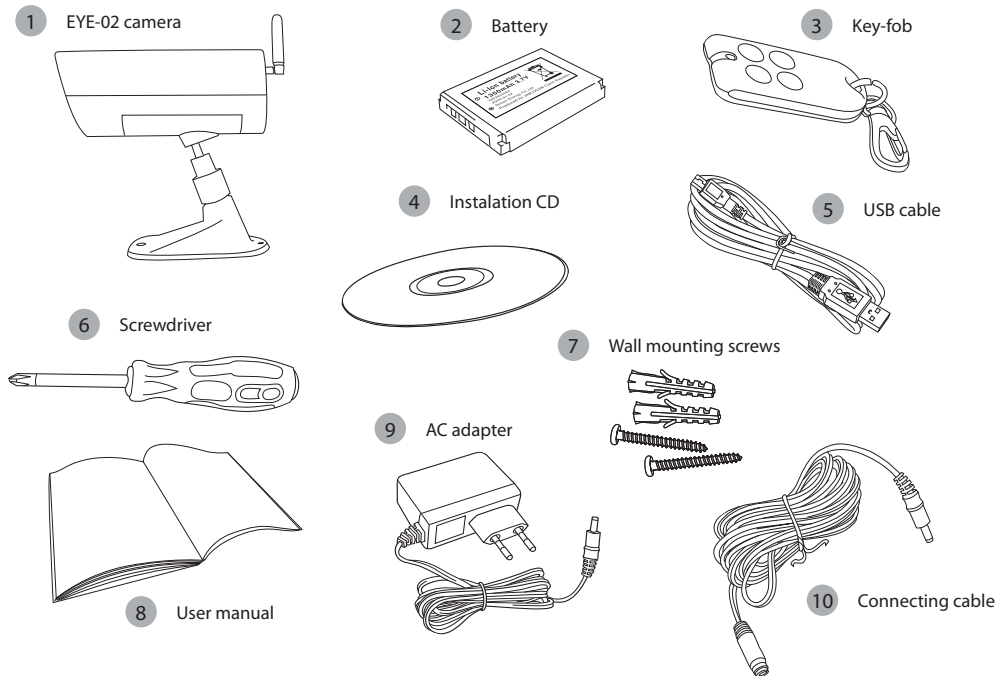
*Watch your Life
Anytime from
Anywhere*



Camera EYE-02:



Package content:



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INTRODUCTION – BASIC FEATURES

EYE-02 is a security and monitoring camera which communicates wireless via GSM network
EYE-02 integrates a group of detectors which allow the user to detect an intruder or just movement:

PIR motion detector

Sound detector

Glass-break detector

Tilt and vibration detector

Motion in picture

reflects temperature change

microphone notices a noise above a defined level

recognizes a specific sound of breaking window glass

recognizes any unwanted change in camera's position and tilt

reflects changes in picture by taking snaps regularly and

comparing them

- ❖ EYE-02 is simple to install and set-up (for DIY installation)
- ❖ EYE-02 triggers an alarm and sends an alert record via MMS, e-mail, SMS or voice call. The copies of pictures and videos might be stored on the memory card or can be stored at a web server.
- ❖ EYE-02 allows 24 hour monitoring via night view mode
- ❖ EYE-02 is compatible with a wide range of external wireless devices

GETTING STARTED

YOUR CAMERA

See the camera picture on first page of this manual.

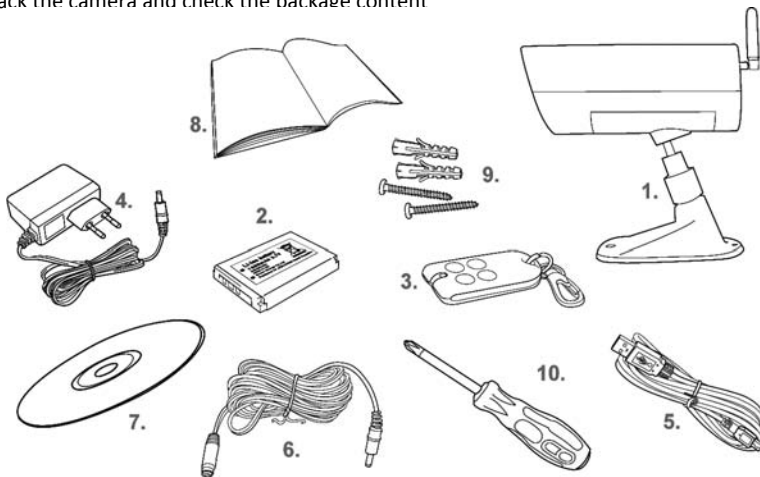
1	Camera lens	6	GSM Antenna
2	PIR motion sensor	7	Power button
3	Green light	8	AC adaptor socket
4	Red light	9	USB connector
5	Infra red illumination	10	Battery cover

CAMERA INSTALLATION

Note: Please ensure you have a SIM card provided by your GSM operator ready before you start!
If the SIM card is protected by PIN please put it into your mobile phone first and disable the PIN protection.

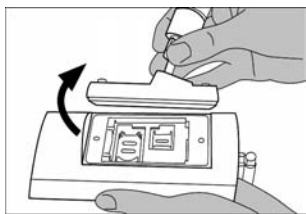
Please follow the detail instruction in QUICK GUIDE to simplify the camera installation and first use.

Unpack the camera and check the package content

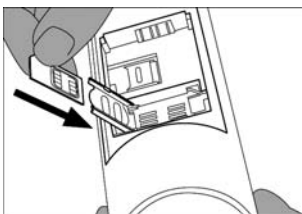


Warning: Use only batteries, chargers and enhancements approved by JABLOCOM for use with this particular model. The use of any other types may invalidate any approval or warranty, and may be dangerous.

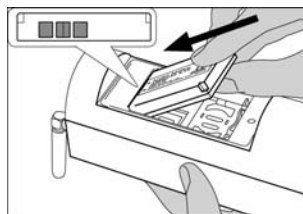
Open the camera battery cover, insert the SIM card and the battery, close the cover



Battery cover

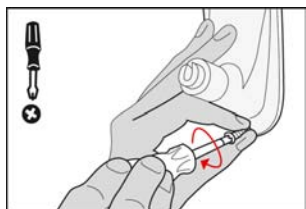


Insert SIM card

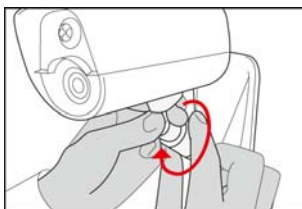


Insert battery

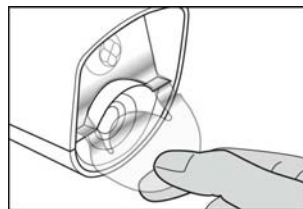
Install the camera to the selected position



Mount the camera holder firmly

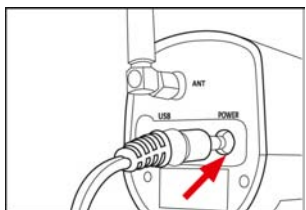


Adjust the camera position

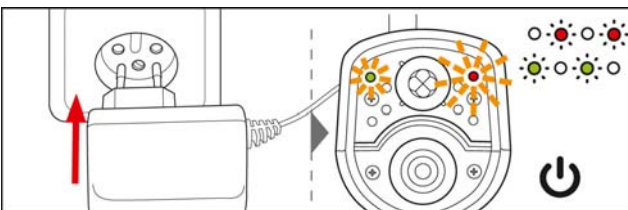


Remove lens protection

Connect the AC adaptor – camera will start up automatically



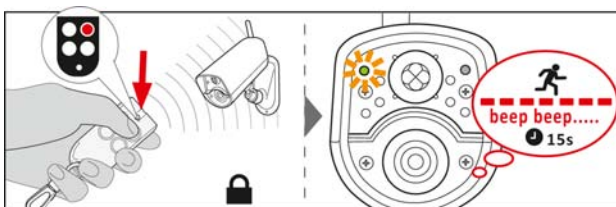
Plug the power cable to camera



Plug the power adaptor to wall, wait 10 seconds and check the camera



Call camera number from your mobile phone



Press button 1 and then button B, check the green light on camera

CAMERA FUNCTION

CAMERA MODES

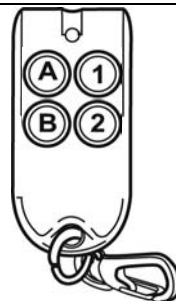
The EYE-02 camera has three main working modes: **SLEEP**, **WATCH** and **CONFIG**.

Mode	Description	Button on Remote control
SLEEP	SLEEP mode is a stand-by mode of camera. The camera doesn't detect any movement in the targeted area and the major detectors are disabled. The only active detectors are the those which protect camera itself against the unwanted manipulation by some intruder.	B
WATCH	In WATCH mode camera guards fully the targeted area, all detectors are active	A
CONFIG	CONFIG mode allows the user to change camera's settings, enroll a new external device (as remote control) to cooperate with camera or enroll a new user contacts (see more details in CONFIG mode chapter)	press and 2 together

REMOTE CONTROL




The package contains a wireless remote control (type RC-86), which can be used to switch between camera modes – see detail of each button's function in the table above.

Camera confirms a change of mode by LED lights on the front panel and also by a beep signal.

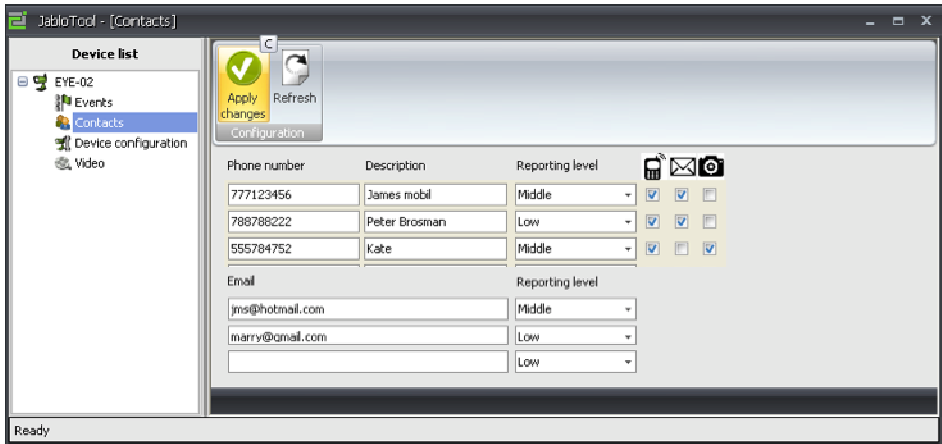


Camera mode	LED lights signaling		Sound signal	
WATCH	Lights are Off	○ ○	One long beep	
SLEEP	Green light is permanently On	● ○	Two long beeps	
CONFIG	Red and Green lights blink slowly together	● ○ ● ○ ● ○ ● ○	Three long beeps	
ENROLL	Red and Green lights swap blinks slowly	● ○ ● ○ ○ ● ○ ●	-	
ERROR	Red light is permanently On	○ ●	Four short beeps	




CONTACTS

Camera can report the events to the mobile phones (voice call , text message , MMS ) or to the e-mail addresses. Up to 10 different phone numbers and 10 e-mail addresses can be saved on the list.

The most comfortable way how to list the contacts is to use the JabloTool software on PC.



The reporting level might be selected for each contact. Three levels (High, Middle, Low) mean how many events should be reported to the contact. Low level reported user will be reported the ALARMS only, Middle level means that also some other important events will be reported to the contact.

JabloTool also offers to block some of report channels (calls , SMS , MMS ) by unticking an appropriate box in the contact line.

New contact may be also entered by an SMS command:

CONFIG CONTACT <contact> where <contact> means the phone number or e-mail address

e.g. **CONFIG CONTACT +48555789456**
CONFIG CONTACT email@hotmail.com

New phone number might be also added by calling the camera directly from a new phone number while camera is switched into **CONFIG** mode. If there are not any phones saved in a contact list (a new camera or after factory reset) the camera switches automatically to **CONFIG** mode and waits for an incoming call.

DETECTORS

Camera EYE-02 integrates a wide range of detectors. This sophisticated solution combining various types of detectors enables the user to protect the desired area from a wide range of points of view. This chapter briefly describes individual detector's principles necessary for correct setting of detection.

PIR MOTION DETECTOR (PIR)

PIR detector or a Human Body Detector is the most common type of professional security systems detectors. PIR can detect even very small changes of temperature differences in front of the camera.

MOTION-IN-PICTURE DETECTOR (MIP)

The key principle of this detector is derived from a professional surveillance camera system – DSP (digital signal processor). It permanently analyzes the scene and can detect any change in picture.

A sophisticated digital algorithm provides a very good resistance to false alarms caused by non-essential changes in pictures (getting dark, switching on the street lamps, etc).

A user can simply mask a part of a picture not to detect changes in this part (mask of street traffic) and set the sensitivity according to the size and velocity of change in picture.

As the DSP method is energy demanding, MIP is usually activated after some alert from SOUND or PIR detector.

NOISE DETECTOR (SOUND)

Noise detector uses a microphone to check the surrounding for any sound above the preset level.

Sensitive electronic filtering can detect the air pressure changes – this principle allows detection of door or window opening at a long distance.

GLASS-BREAK DETECTOR (GBS)

Glass-break detector uses digital analysis of sound from the microphone and is able to detect a characteristic sound of breaking a window up to 9 meters away.

The Door-Opening-Detection is a special type of detection which use the acoustic signal filtering. It allows to detect the infrasonic wave (pressure wave) caused by door or window opening.

GBS sensor might be used for indoor installation only.

TILT A VIBRATION DETECTOR (TILT)

Built-in tilt and vibration detector can detect an unwanted manipulation with the camera, e.g. stealing the camera body or changing camera position.

As a vibration detector is very sensitive it should not be use for outdoor installation to prevent the false alarms caused by a blow of wind.

Note: The detectors are optimized to application in rooms with max dimension up-to 10meters.

PROFILES

Camera offers fast and simple setting of all necessary detector parameters by selecting one of predefined PROFILES. These profiles are well suitable for most camera applications. If necessary the profile may be further tuned by the user.

HOME

HOME profile has been designed for camera installation inside a building (house, flat, office). During WATCH mode, there are no movements of people, no blows of wind, no significant temperature changes, or loud noise etc. expected.

OUTDOOR

OUTDOOR profile fits best camera installation outside your home.

The camera significantly reduces its detectors' sensitivity in OUTDOOR as there are many possible sources which could cause a false alarm triggering (sunshine, animals, street noise, wind, ...).

Note: Although the camera housing comes with a basic water protection we strictly recommend placing the camera into a plastic cover to be protected against the rain and wind once it is installed outdoor.

GARAGE

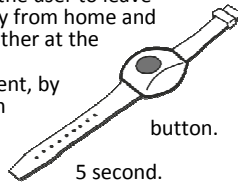
This profile is suitable for installation inside your home, similar to HOME profile. Additionally, the GARAGE profile provides a 30-second entrance delay. It allows you to open the garage or home entrance door first and switch the camera to SLEEP during this delay.

CARE

Profile CARE has been especially designed for monitoring small children and elderly or disabled people.

The camera used in CARE profile allows the user to leave their home, stay in a short distance away from home and watch their sleeping baby or ill grandmother at the same time.

The camera will be activated by movement, by sound (i.e. baby crying) or a PANIC alarm might be triggered by a personal wrist



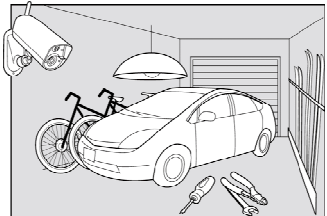
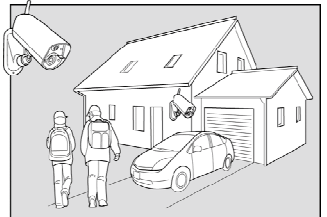
The entrance and exit delay is preset to 5 second.

Note: The internal acoustic camera signals are disabled in CARE profile. Also TILT detector is blocked to allow the camera manipulation.

SHOP

The most powerful profile is SHOP. All detectors are active in this mode, including the permanent process of "Motion in Picture" detection. This profile offers the highest quality of permanent monitoring, consequently it is the highest energy consumption profile.

This perfectly fits the places with temporary monitoring request, as shops, office corridors and reception areas.



Sensor	Parameter	HOME	OUTDOOR	GARAGE	CARE	SHOP
PIR	Active	ON	ON	ON	ON	ON
	Sensitivity	High	Low	Middle	Middle	Middle
	Analysis level	Middle	Middle	Middle	Middle	Middle
	Reaction	Instant	Alert only	60 s delay	5 s delay	30 s delay
MIP	Active	Wake at Alert	ON	Wake at Alert	Wake at Alert	ON
	Sensitivity	Middle	Low	Middle	Middle	High
	Analysis level	Low	Middle	Middle	Middle	Middle
	Reaction	Instant	Instant	60 s delay	Instant	30 s delay
GBS	Active	ON	OFF	ON	OFF	ON
	Sensitivity	Middle		Middle		Middle
	Reaction	Instant		60 s delay		Instant
SOUND	Active	ON	OFF	ON	ON	ON
	Sensitivity	Middle		Low	Middle	Low
	Analysis level	Middle		Middle	Middle	Middle
	Door detection	OFF	OFF	OFF	OFF	OFF
	Reaction	30 sec	Instant	60 s delay	Instant	Alert only
TILT	Active	ON	ON	ON	OFF	ON
	Sensitivity	Low	Low	Middle		Middle
	Analysis level	Middle	High	Middle		Middle
	Vibration sensor disabled	No	Yes	No	Yes	No
	Reaction	Instant	Alert only	Instant		Instant
Exit delay		15 sec	60 sec	60 sec	5 sec	15 sec
Post ALERT wake-up for time period		60 sec	60 sec	60 sec	60 sec	60 sec
Reports are disabled after first ALARM for		5 min	5 min	5 min	5 min	60 sec
Maximum number of reported ALARMS per one watching period		10	10	10	10	20
Save ALERT records into the event log		No	Yes	No	No	Yes
Capture slow video of PIR and MiP activity in SLEEP mode		No	No	No	No	Yes
Increase the detector sensitivity during ALERT state		No	No	No	No	No
Two independent ALERTS cause an ALARM		No	Yes	No	No	No
Green LED blinks during WATCH		No	No	No	Yes	No
Disable an acoustic signaling of camera control		No	No	No	Yes	No
Disable an acoustic signaling of exit delay		No	No	No	Yes	No

CONFIG MODE

CONFIG mode allows the user to change camera's settings, enroll a new external device (as remote control) to cooperate with Camera or enroll a new user contact.

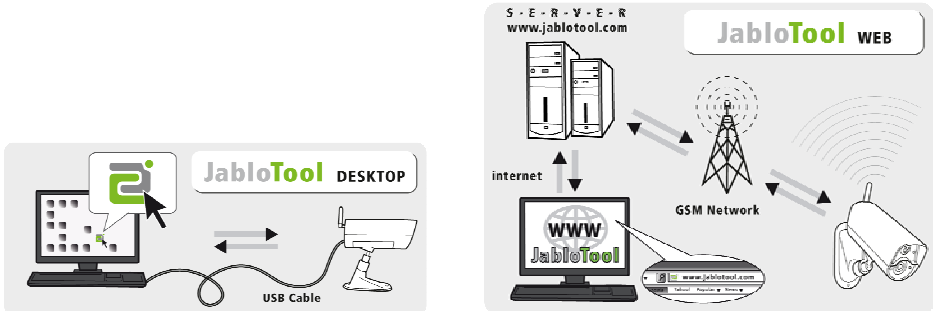
To open CONFIG mode by remote control press **1** and **2** buttons together – red and green lights start blinks slowly together.

ENROLL	In ENROLL mode camera allows to enroll new external wireless devices as remote controls, detectors, sirens, etc. Also a new contact – phone number can be enrolled in this mode by just a simple call to camera. ENROLL mode is terminated automatically after one new item has been enrolled.	2
TEST	TEST mode is a special mode to test all detectors function without causing unwanted number of alarm reports.	1
REPORT	REPORT send	press 1 and 2 buttons together for about 4 sec

Note: To protect camera safety the CONFIG mode and all its sub-modes will be closed automatically after 5 minutes timeout.

CONFIGURATION WITH PC

The most comfortable way how to set the camera parameters is using the PC computer with JabloTool software. JabloTool is available as a web service on www.jablotool.com which connects to camera through the GSM network or as a standard software to install on the PC connected with camera by USB cable (on CD or www.jabblotool.com/download).



Note: the maximal length of USB cable is usually 5 meters.

EVENT REPORTS

Every event detected by a camera is recorded into the camera memory. Such event record consists mainly of the date and time mark, detail description of the event including its source and a video record.

Example of Events history viewed by JabloTool:

The screenshot shows the JabloTool - [Events] window. On the left is a 'Device list' sidebar with icons for EYE-02, Events (selected), Contacts, Device configuration, and Video. The main area displays a table of events with columns: Time, Event, Source, Id, and Reset counter. Above the table is an 'Image size' control with buttons for 200%, 100%, and 50%. Below the table, a specific event is highlighted: Time: 16.7.2009 7:40, Event: Intruder alarm, Source: In-picture-motion detector. Below this, a video preview is shown with a timestamp of 09:07:16 07:40:45. The video shows a room with a door and a desk. At the bottom left, there is an 'Images' section with a small thumbnail. The status bar at the bottom left says 'Ready'.

Time	Event	Source	Id	Reset counter
18.7.2009 13:36:24	Camera Shut-Down	System	224	2
18.7.2009 11:51:06	Battery failure	System	223	2
16.7.2009 7:43:54	End watching	Phone	222	2
16.7.2009 7:40:45	Intruder alarm	In-picture-motion detector	221	2
16.7.2009 5:36:44	Intruder alarm	In-picture-motion detector	220	2
15.7.2009 19:20:37	Start watching	External Device	219	2
15.7.2009 19:15:58	Exit Config mode	None	218	2
15.7.2009 19:10:57	Enter Config mode	None	217	2
15.7.2009 15:09:42	Exit Config mode	USB JabloTool	216	2

Time: 16.7.2009 7:40 Event: Intruder alarm Source: In-picture-motion detector

09:07:16 07:40:45

Images: [Thumbnail]

Ready

In general, there are many types of event records. The most important are the ALARM reports which are immediately reported to the contacts from the contact list. Another type of records are the ALERT records (similar to ALARM but ALERTs are not reported to the contacts) or some technical reports (e.g. information about the AC power failure)

CALL CONTROL

Camera provides a basic control function also when called from the user's phone. When a phone saved in the contacts calls the camera, the camera answers such call and plays the basic menu navigation:

Welcome to Camera menu:

*to listen to the sound from the camera microphone press 1,
to receive an MMS with a current picture press 2,
to receive an MMS with the last alarm record press 3,
to receive the latest events history in a text message press 4,
to switch on camera into the WATCH state press 7,
to switch off camera into the SLEEP state press 9.*

The user may select the requested action by pushing the appropriate number key on the mobile phone.

NIGHT VIEW

Camera EYE-02 equipped with a Night View function which allows the user to collect pictures in infra-red spectrum (thermo-vision).

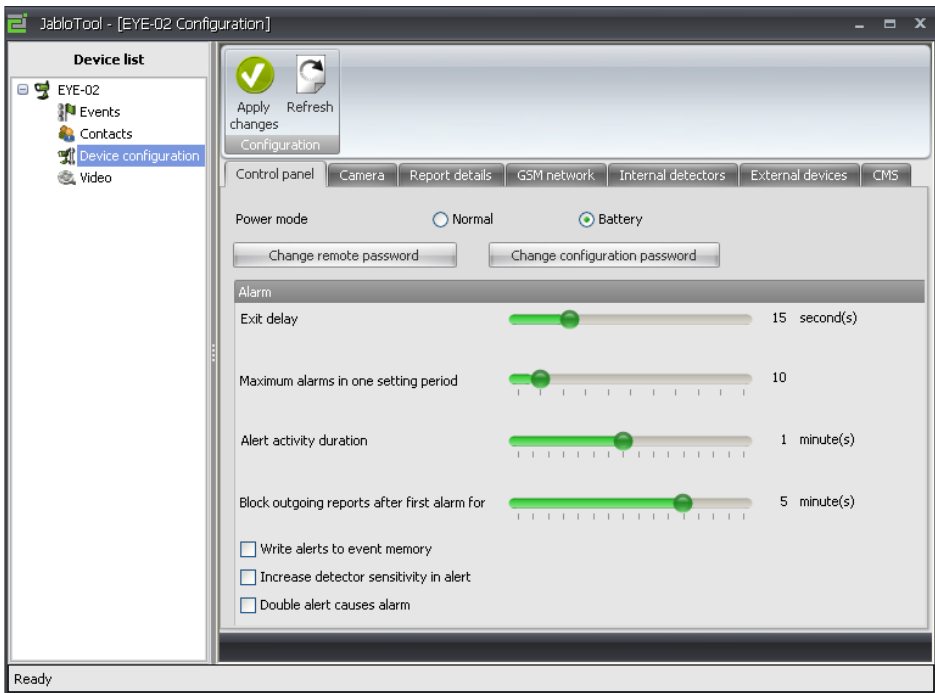
Camera has a built-in infra LED lamp which can illuminate the scene by non-visible infra light. Human eye can't see such lights but EYE-02 camera chip can collect a picture even in this spectrum. Infra lamp illumination is activated automatically if the picture taking is requested and the level of day light is too low.

Optionally, the IR lamp can be blocked in setting by the user.

BATTERY SAVING MODE

Camera has an internal backup Li-Ion battery which allows the camera to work even in case of AC power blackout. Backup battery allows the camera to run for approximately for 24hours. The individual duration of the battery may differ and depends on many factors (e.g. the selected camera profile, number of events, quality of signal, etc.)

In certain cases, e.g. when used on place where AC power isn't available , it may be requested to extend the battery operation duration. In such case you may use a special **BATTERY saving** mode. When in **BATTERY saving** mode, camera reduces dramatically its power consumption while it keeps all detectors working. A fully charged battery in **BATTERY saving** mode can supply camera for up to 5 days



CONFIGURATION

There are a few different ways how to set your camera configuration. The most efficient and user-friendly way is to control your camera via PC, either being directly connected with the camera by a USB cable or even via a remote PC using the Internet. In case you don't have an access to a PC you may change the camera setting by sending a text message from your mobile phone.

PC

Warning: Do not connect the EYE-02 to the USB on your computer until you have finished installing the software from the CD. The Latest version of JabloTool software can be downloaded at <http://www.jablocom.com/download>.

WEB

Special web application at www.jablotool.com server is provided by JABLOCOM for simple and comfortable configuration or your camera. This web page enables you to access your camera from any internet connected PC worldwide. This web application provides a similar function to USB connected PC with JabloTool software.

SMS

Basic camera functions may be operated by the commands sent as text messages to the camera. The command can be accepted only when sent from a mobile phone which is stored in the contact list. If the Remote access password or the Configuration password has been set before, each SMS must be introduced by the password.

CONTROL COMMANDS

WATCH

Switch camera On to the **WATCH** mode

SLEEP	Switch camera to the SLEEP mode
STATUS e.g.	Camera will return the SMS with status information <u>EYE02 state: Entrance delay, Time: 22/06/09 16:78:18</u>
PICTURE	Camera will return a multimedia message with short 3GP video or a five picture series of current scene in front of camera
REPORT <message type> e.g.	Camera sends a report of the latest events <message type> can be SMS or MMS . SMS is default type Camera will send an MMS with the last event record from camera history <u>REPORT MMS</u>
e.g.	<u><Remote Access Password REPORT SMS</u> SMS with text info about last event will be returned by camera
CREDIT	This command is developed specially for prepaid SIM cards. Camera will return a text message with information about current credit on your SIM card. This function is provided by your network operator and might not work correctly in some networks.
HELP	Camera will return a text message with a brief help.

CONFIG COMMANDS

CONFIG commands change the camera setting. CONFIG command must be introduced by Configuration password if set before.

CONFIG PROFILE <profile> e.g.	Profile setting, <profile> is HOME , OUTDOOR , GARAGE , SHOP or CARE <u>CONFIG PROFILE SHOP</u>
e.g.	Camera will switch to profile SHOP <u><Configuration Password> CONFIG PROFILE HOME</u> Camera will switch to profile HOME
CONFIG CONTACT e.g.	Add a new contact <u>CONFIG CONTACT MyEmail@domain.com</u>
e.g.	<u><Configuration Password> CONFIG CONTACT +420774770000</u>
CONFIG LANG <language> e.g.	Change the Camera language <u>CONFIG LANG GER</u> changes the default language to German
CONFIG DELAY <time> e.g.	Change the Exit delay timer setting, <time> is time in seconds <u>CONFIG DELAY 25</u> sets the exit delay to 25 seconds
CONFIG POWER <mode> e.g.	Change of power mode, <mode> can be NORMAL or BATTERY <u>CONFIG POWER BATTERY</u> changes power mode to BATTERY mode
CONFIG DATE e.g.	Set date and time in format YYYY-MM-DD HH:MM:SS <u>CONFIG DATE 2009-10-24 08:34:02</u>

Note: please note the <Remote Access Password> and <Configuration Password> are case sensitive. The rest of the text message command is case insensitive.

SWITCH THE CAMERA ON AND OFF

To switch the camera ON, press and hold the power button on the back panel of the camera. Keep holding button until the green light on the front panel switches on. The start-up process has started and you can release the button. The camera also starts up automatically after connected to an AC adaptor.

To switch the camera OFF, make sure that it is in **SLEEP** or **CONFIG** mode. Disconnect the power cable from camera and press and hold the power button on the back panel for 3 seconds. When the green light on the front panel switches off, the camera shuts down and you can release the button.

Note: Whenever the camera is expected to be switched off for a longer time or for transportation it is strictly recommended removing the backup battery from camera.

MICRO SD CARD

Your camera is equipped by SDmicro memory card slot providing the possibility of further extension of internal storage capacity of camera. Camera comes from production with inserted 1(2)GB memory card.

JABLOTOOL software allows you to access the SD card as a standard flash disk (EYE-02/Advance user/Mass storage device). Other camera functions are blocked during PC direct access to SD card.

Exploring SD card you may find folder structure like this:

HISTORY	<i>This folder consists the files with complete (all details) log of event history. Files are stored sequentially in format "ev00001.txt".</i>
PICTURE	<i>Archive of static JPEG files recorded at ALARMS ("p0065401.jpg")</i>
VIDEO	<i>Archive of video files recorded at ALARMS ("vid01021.avi")</i>
VOICE	<i>This folder consist the language dependent voice records for call control assistance</i>
config.ini	<i>this file consists the current configuration of EYE-02 – can be used for backup or restore of configuration.</i>

Note: More than 1000 event records can be stored on the 1GB card. If the memory card is full, the oldest record of the same type is automatically erased.

RESET TO FACTORY DEFAULTS

If you need to reset the whole camera setting to factory default values follow this guide:

WARNING: ALL USER SETTINGS AND CONTACTS WILL BE DELETED!

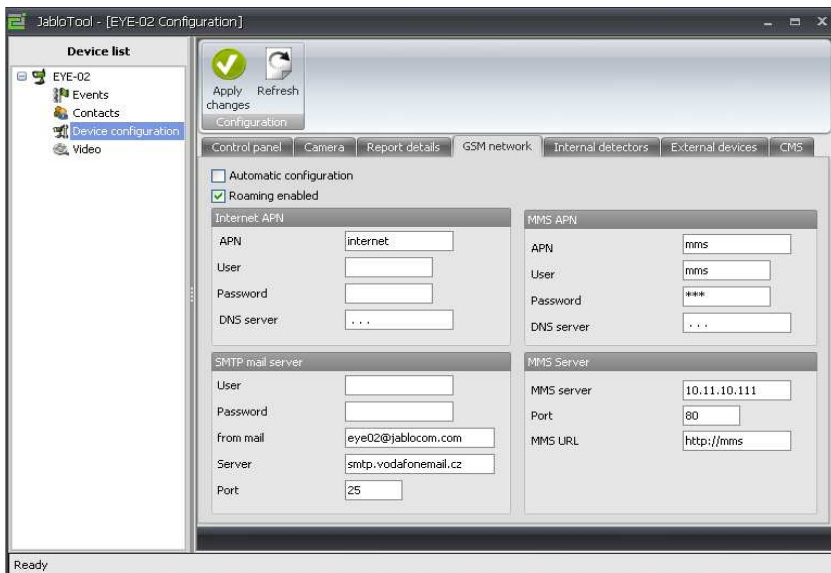
- Switch the camera off
- Press and hold the POWER button on the back panel of the camera,
- Connect the AC adaptor while holding the POWER button for another 6 seconds
- Wait until green and red lights blink together
- Release the POWER button
- All settings and external devices have been deleted – the camera is in **CONFIG** mode and waits for enrolling the remote control and basic contact setting

GSM NETWORK SETTING

Camera needs the correct setting of GSM network parameters. These parameters depend on the country where you live and the GSM network you use.

Camera can automatically adjust to correct setting for most of GSM networks. In case there are some specific settings of your GSM network which you got from you GSM network operator, you may configure it manually in JabloTool, Device configuration, tab GSM network.

Note: Please contact your GSM network operator for detail parameter setting.



VIDEO RECORD SETTING

Camera EYE-02 allows detail setting of all important parameters to collect video record under many conditions.

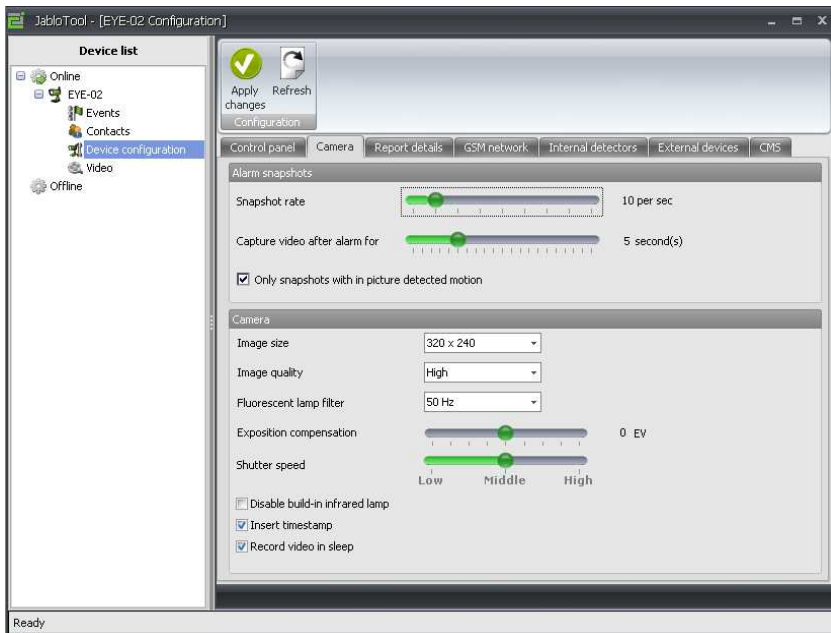


Table of Video parameters

Image size	160x120, 320x240, 640x480 pixels
Image quality	5 levels of JPEG compression
Filter fluorescent lamps	(OFF, 50Hz, 60Hz), default OFF
Brightness compensation	+/- 2EV, with step 0.5EV, default 0
Expected speed of the objects (Shutter speed)	(fast, normal, slow), default normal
After ALARM keep on recording video for	(0 sec, 5sec, 10sec ,... 2 min, 5 min, 10 min)
Snapshot rate	from 20 frames per sec, to 1 frame every 30sec

OTHER VIDEO OPTIONS

- Only save pictures when a motion is detected
- Disable build-in infrared lamp
- Capture video when PIR or MIP activity in SLEEP mode
- Send video as separate JPEG pictures – JPG pictures will be send by e-mail and MMS instead of AVI video files
- Insert date and time into picture

MONITORING

The camera can report all events from the system to Alarm Receiving Centre - ARC (also known as Central Monitoring Station).

The reports are done in accordance with international standard communication protocols for IP CID and SMS CID. Protocol setting will be done by authorized ARC service provider once you subscribe their service.

JabloTool web can also provide monitoring function for registered users. Your camera can make a copy of any event record to JabloTool. This will dramatically speed up your access to the event list and provide the backup log of events. This function is available for FREE for users who pass their registration at www.jablotool.com.

EXTERNAL WIRELESS DEVICES

Camera EYE-02 has a built-in short range radio transceiver which offers a cooperation with wide range of professional security wireless devices produced by Jablotron Alarms (www.jablotron.com). This is very simple how to extend your camera function to provide additional services as: heating control by mobile phone or panic button function for elder or disabled people. Look at the table on the last page of this manual to get short introduction about available types of wireless devices.

OUTDOOR INSTALLATION

Although the EYE-02 camera housing guarantees a basic water resistance and passes the testing, it is strictly recommended to use an additional plastic shielding when mounted outdoor. Please visit the www.jablocom.com web page to download the detail application notes about outdoor installation or usage with a solar power panel.

MAINTENANCE

The device doesn't require any special maintenance. The camera basic function should be regularly tested by TEST button at least once a month. To check correct detector functioning, it is recommended to trigger an intentional alarm by activation of different detectors from time to time. Once a year the battery capacity should be checked – see Battery information chapter.

TROUBLESHOOTING

JABLOCOM is improving the EYE-02 camera software as well as the JabloTool software continuously. If you have any trouble please visit www.jablocom.com to find the latest version of camera firmware, supporting software and detailed guide to troubleshooting.

Problem / Error message	Solution
RED light on the front camera panel blinks	<p>Your SIM card is out-of-service or blocked by a PIN code – remove the SIM card from the camera, put it into your GSM phone and try to make a call and send an SMS. If PIN protected please remove the PIN or set it to default network value.</p> <p>Your SIM card isn't placed in the SIM holder correctly, or the camera doesn't support your SIM card type. Check if the SIM card is placed in the holder correctly or contact your GSM service provider.</p> <p>Check the quality of GSM network signal directly at the place of camera installation – put there your mobile phone, wait a few seconds and read the signal strength from your phone LCD. If signal is too low you might try to replace original camera GSM antenna by some optional approved type with higher gain.</p>
Camera doesn't react to remote control button	<p>Check the battery in your remote controller/ – press a button and check if the light on your controller goes on. If not, replace the controller internal battery.</p> <p>Use PC with JabloTool software, open the ENROLL mode and press any button of your remote control to enroll it to camera</p>

If you find an incorrect camera behavior, please try to update camera firmware to the latest version – use JABLOTOOL, Configuration, Control panel, Firmware upgrade.



Warning: Use the battery and power adaptor only for its intended purpose. Never use any adaptor or battery that is damaged. Your camera may become warm during charging and during normal use. The camera is designed to be powered. The battery gradually decreases its capacity during its lifetime. To reach the optimal parameters the battery should be kept in an environment between 5°C and 35°C. Never expose the battery to temperature out of the operating temperature range -10°C to +55°C. A device with a hot or cold battery may temporarily not work, even when the battery is fully charged. A battery's performance is particularly limited in temperatures well below freezing.

TECHNICAL SPECIFICATION

Camera dimension	155x75x55 mm, 300 g
Package dimensions	300x215x75 mm, 950 g
Extended memory capacity	SD micro card slot, maximum capacity 4 GB Standard Package includes 1GB SD memory card VGA (640x480), QVGA (320x240), QQVGA (160x120) JPEG, EXIF 2.2 MJPEG
Image resolution	AB29, view angle 95°, optionally: AB20 (138°), Long AB46 (58°)
Picture format	6x Infra LED, 6x 100mW, wavelength 850nm, emitting angle 80°
Video format	MMS version 1.2 over WAP 2.0
Lens	min 100 records in an internal memory + extension to SD card
Infra reflector	-20°C to +55°C; 25 to 75 % humidity
MMS support	IP 62W
Events history	100 - 240 V AC, 50 to 60 Hz, 5 V/2 A DC
Operating temperature	Li-Ion battery, 1300 mAh
Housing protection	Quad band 850/900/1800/1900 MHz
AC power adaptor	External GSM antenna +2.5 dBi, SMA connector
Back-up battery	EDGE class 10; GPRS class 10: max. 85.6 kbps, CS1, CS2, CS3 and CS4, AGC and Noise reduction system, HR, FR, EFR and AMR audio codec
GSM system	Built-in high sensitivity omni-directional microphone with DSP processing
GSM antenna	USB port 2.0
Data connectivity	Motion-in-Picture detector
Audio parameters	PIR motion detector (IR)
Audio monitoring	Acoustic noise detector
PC connectivity	Glass break detector
Internal alarm detectors	Tilt and position detector
Short range radio	868 MHz Can be operated according to ERC REC 70-03
Remote control type	RC-86 alkaline battery type L1016 (6.0 V) Typical battery lifetime approx. 3 years (5 daily activations)
	Complies with ETSI EN 300220, EN 55022, EN 50134-2, EN 50130-4, EN 60950-1

BATTERY INFORMATION

The camera is powered by an AC adaptor and has a backup rechargeable battery. The battery provides power to the camera when AC power fails. The battery may wear out after some time period. The capacity of the battery should be tested at least once a year: disconnect the AC power adaptor and measure the time until camera announces the battery low state. Replace the battery if the time is shorter than 10 hours.

Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object such as a coin, clip or pen connects the battery contacts. Short-circuiting may damage the battery or the connecting object, it may even cause a fire. Exposing the battery to extremely cold or hot temperature will reduce the battery capacity and lifetime. Optimally, try to keep the battery at temperature between 15°C and 25°C. Device with extremely hot or cold battery may not work temporarily, even if the battery is fully charged. Battery performance is particularly limited in temperatures well below freezing.

Do not dispose the batteries into fire as they may explode. Batteries may also explode if damaged. Dispose the batteries according to local regulations – please recycle when possible and do not dispose them as household waste.

Do not dismantle or shred cells or batteries. In case of battery leak, do not allow the liquid to come in contact with the skin or eyes. In case of being contacted by such leak, flush affected place with a lot of water and seek the medical help.

WARRANTY



Hereby, JABLOCOM s.r.o., declares that this EYE-02 GSM Camera is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. Notified body mark for GSM module approval is CE0682.

The original conformity assessment document can be found at the web site www.JABLOCOM.com.

RF Exposure - Specific Absorption Rate (SAR):

This product is designed not to exceed the limits for exposure to radio waves recommended by international guidelines developed by the independent scientific organization ICNIRP and include safety margins designed to assure the protection of all persons, regardless of age and health. The guidelines use a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit for wireless devices is 2 W/kg and the highest SAR value for this camera when tested complied with this limit.

This product is in compliance with the basic restrictions as specified in the European Council Recommendation [1999 519 EC] for the measured GSM 900, GSM 1800 and GSM 1900 standards. The tests were performed according to the standard IEC 62209-2. The maximum SAR value in body worn configuration is 1.86 W/kg.

Regulatory information:

This camera is only intended for use in the country in which it was sold.



Note: Although this product doesn't contain any harmful materials we suggest that you return the product directly to the dealer or to the producer after use. Please check local regulations for disposal of electronic products.

Limited warranty:

Subject to the conditions of this Limited warranty JABLOCOM s.r.o. warrants this product to be free from defects in design, material and workmanship at the time of its original purchase by a customer and for a subsequent minimal warranty period under the national legislation in force. Should your product need warranty service, please return it to the dealer from whom it was purchased. The defects will be eliminated free of charge by repairing or, at our discretion, replacing it.

Warranty conditions:

If you wish to make a claim under the warranty, please return the Product with all accessories in the original packaging to your dealer. The warranty is valid only if the original receipt issued to the original purchaser by the dealer, specifying the date of purchase and the IMEI corresponding with the Product, is presented with the Product to be repaired or replaced. Plastic parts, cables or accessories of the Product must not be visibly damaged, the Product must not show marks of the contact with liquid, the warranty seal must not be broken and the fault must be described.

This warranty doesn't cover any failure of the Product due to misuse, including but not limited to use in other than the normal and customary manner, in accordance with instructions for use and maintenance of the Product. Nor does this warranty cover any failure of the product due to accident, modification, adjustment, improper repair or acts of God.

This warranty doesn't apply to limited-life consumable components, such as batteries or accessories. It also doesn't apply to modules of other suppliers, such as SIM cards from the GSM provider.

The warranty provided doesn't affect the consumer's statutory rights under applicable national legislation in force, or the consumer's rights against the dealer arising from their sales/purchase contract.

Under no circumstances shall JABLOCOM be responsible for any loss of data or income or any special, incidental, consequential or indirect damages howsoever caused.

As the product is under continuous development, JABLOCOM reserves the right to make changes and improvements to any of the products described in this document without prior notice.

Operations and some features are SIM card and/or network dependent.

SAFETY INSTRUCTIONS

Read these guidelines. Not following them may be dangerous and/or illegal.



You alone are responsible for how you use your device and any consequences of its use. Do not switch the device on wherever the use of a wireless device is prohibited or when it may cause interference or danger.

Small Children

Do not leave your device and its accessories within the reach of small children or allow them to play with it. They could hurt themselves or others, or could accidentally damage the device. Your device contains small parts with sharp edges that may cause an injury or which could become detached and create a choking hazard.

Some countries may regulate the security camera usage by special laws. Please study the possible law restrictions for certain country before installing the camera.



Interference

Your device contains a transmitter and a receiver. When it is ON, it receives and transmits RF energy. Care must be taken when using the device in close proximity to personal medical devices, such as pacemakers and hearing aids. All wireless devices are susceptible to interference, which could affect performance.

We (JABLOCOM) are not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Your device is designed not to exceed the limits for exposure to radio waves recommended by international guidelines. These guidelines were developed by the independent scientific organization ICNIRP and include safety margins designed to assure the protection of all persons, regardless their age and health.

NOTE: 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.



Pacemakers

Pacemaker manufacturers recommend that a minimum separation of 15 cm to be maintained between a mobile device and a pacemaker to avoid potential interference with the pacemaker. To achieve this use the device body in distance more than 15cm from your pacemaker.

Hearing Aids

People with hearing aids or other cochlear implants may experience interfering noises when using wireless devices or when one is nearby. The level of interference will depend on the type of hearing device and the distance from the interference source, increasing the separation between them may reduce the interference. You may also consult your hearing aid manufacturer to discuss alternatives.

Medical devices

Please consult your doctor and the device manufacturer to determine if operation of your device may interfere with the operation of your medical device.

Hospitals

The device isn't designed to be used in hospitals, clinics or health care facilities without a consultancy with the staff or medical equipment producers. This request is designed to prevent possible interference with sensitive medical equipment



Wireless devices can cause interference in aircraft.



Explosive environments

In locations with potentially explosive atmospheres, obey all posted signs to turn off wireless devices such as your device or other radio equipment.

Areas with potentially explosive atmospheres include fuelling areas, below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grain, dust, or metal powders.



Blasting Caps and Areas

The device isn't recommended to be used in a blasting area or in areas posted turn off "two-way radios" or "electronic devices" to avoid interfering with blasting operations. Observe restrictions, and follow all regulations and rules.



Do not attempt to disassemble your device or its accessories - only qualified personal may install or repair device equipment. If your device or its accessory has been submerged in water, punctured, or subjected to a severe fall, do not use it until you have taken it to be checked at an authorized service centre.

Always treat your device and its accessories with care and keep it in a clean and dust-free place.

Do not paint your device or its accessories.

Do not expose your device or its accessories to open flames or lit tobacco products.

Do not expose your device or its accessories to liquid, moisture or high humidity.

Do not drop, throw or try to bend your device or its accessories.

Do not use harsh chemicals, cleaning solvents, or aerosols to clean the device or its accessories.

Do not expose your device or its accessories to extreme temperatures, minimum -10 and maximum +55 degrees

Celsius.



Battery and Charger Handling & Safety

Use only JABLOCOM approved accessories and batteries. Do not connect incompatible products or accessories. Take care not to touch or allow metal objects, such as coins or key rings, to contact or short-circuit the battery terminals.

Use the battery and power adaptor only for its intended purpose. Never use any adaptor or battery that is damaged.

The device is designed to be powered from the power adaptor. The limited capacity of the backup battery should power the device for approx. 24 hours. Your device may become warm during charging and during normal use.



Remember to make backup copies of all important data.

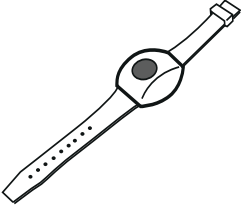


When connecting to any other device, read its users guide for detailed safety instructions.

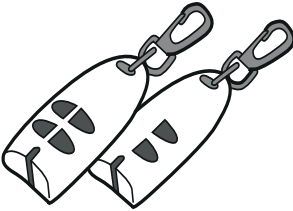
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Controllers

- 1 wireless personal wrist button



- 2 wireless key-fob



- 3 Wireless doorbell button



- 4 wireless wall button



Detectors

- 5 wireless gas leak detector



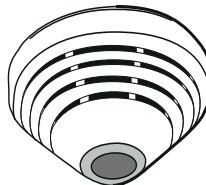
- 6 wireless door (window) opening detector



- 7 wireless motion detector

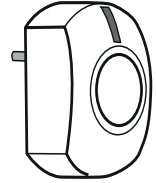


- 8 wireless smoke detector

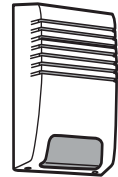


Sirens and Relays

- 9 wireless internal siren



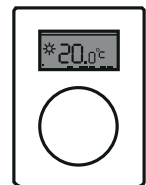
- 10 wireless outdoor siren



- 11 wireless relay



- 12 wireless thermostat



Inside parts:

1 Dual band GSM antenna

EDGE/GSM module

- Picture transfer to mobile phones via MMS or e-mail
- Data connection to monitoring servers and CMS

Short range radio

- Free band 868 MHz
- Allows cooperation with remote controllers
- Possible extension with JABLOTRON professional wireless security system

Tilt and position detector

- Protects against intruder manipulation with camera

Buzzer

- Built-in acoustic indicator

Li-Ion battery

- Provides back-up energy during electricity failure

SD memory card

- Extends memory capacity up to 4 GB

SIM holder

- For standard GSM SIM card

Microphone + digital signal processing

- Acoustic noise and voice detection, glass-break detection

Infrared reflector

- Illuminates the scene by non-visible beams for camera night vision

PIR infrared sensor

- Excellent sensitivity for human body detection

VGA camera

- CMOS chip with 2.9 mm lens

Security:

Cooperation EYE-02 with commercial Security Agency

