



COMPLETE SETUP AND PROGRAMMING MANUAL FOR XT-IP620



A Videofied CMA/XMA/WMB Alphanumeric Keypad or Frontel TMT2 is required for programming and maintenance



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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.

Radiofrequency 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.*

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.

Basic Setup Guidelines for Installation and Programming

Pre-Setup

1) Obtain the account number and IP/Domain information from the Central Station.

System Programming and Setup

- 1) Setup and program the system in the office or in your vehicle. DO NOT MOUNT THE DEVICES. (Pages 6-15)
- 2) Add user codes and or badges after initial programming. (Pages 17-18)
- 3) Disable monitoring so that signals are not sent until you are ready to send them. (Page 19)

Deploying the System on Site

- 1) Place the panel where you want to mount it and run the Ethernet cable. In Maintenance run the ETH. STATUS test to make sure you are receiving an IP. (Page 20)
- Deploying Devices: Use your keypad to run the RF test for each device. If you get a 9/9 for your RF test on the first device, then mount it. If not, you will need to move the device to get optimal signal.* (Page 21)
- 3) Re-enable monitoring before you send signals (Page 19)
 - a. If you are currently using TMT Installer to program the system you can now take still pictures from each MotionViewer using the software. See TMT Installer Users Manual available on http://support.videofied.com
- 4) Once you have everything mounted, arm the system and trip one MotionViewer at a time. Make sure you stand in front of each MotionViewer for 10 seconds so the central station has some video to look at. (Page 24)
- 5) After you have sent signals to central station, call to verify.

The following pages will go through each one of these steps and, if you have any issues please consult the troubleshooting section Pages 26-28. If you still cannot resolve the issue, please feel free to call technical support through live support chat and ticket submission at <u>support.videofied.com</u>.

Sleeping mode and Wake-up on the CMA:

They keypad backlight will go out after 30 seconds of inactivity. When you press a button the keypad wakes up. The first touch on the pad that wakes it up will <u>not</u> be a registered command and will only wake up the keypad.

Sleeping mode and wake-up on the XMA/WMB:

The keypad backlight will go out after 30 seconds of inactivity. The first touch on the keypad will wake up the keypad and <u>will</u> register as a command to the control panel.

Introduction:

Description:

The XT-IP620 control panel is a Videofied wireless, battery operated hybrid alarm system. It is designed for residential, small business and commercial security applications. The XT-IP620 provides integrated Video Verification and features an Ethernet communication path.

The XT-IP620 has programmable inputs and outputs. XT-IP620 also features mapping where an external input can be used to generate a video clip from a MotionViewer.

Supervised Wireless Technology:

The XT-IP620, along with all Videofied devices, uses the patented S2View® - Spread Spectrum, Videofied, Interactive, AES Encrypted Wireless technology, providing optimum signal integrity and security.

The bi-directional RF communication path between all devices and the system control panel guarantees high signal reliability. Integrated antennas eliminate protruding wires or rods, which are difficult to install, unsightly to consumers and potentially troublesome if damaged.

The panel supervises every device (excluding the remote key fob) to validate current open/close state, tamper condition, serial number, date of manufacture, firmware revision, and battery status.

Туре	Specifications	Location In Manual
Audio	When a MotionViewer is installed on the system you may not have the siren sound for less than 60 seconds	Page 30
Audio If no MotionViewer is installed on the system you may not have the siren sound for less than 240 seconds		Page 30
Delays	When a MotionViewer is installed on the system the Entry delay must be 45 seconds	Page 9

In order for an installation to be UL compliant you must follow the specifications in the table below:

SETUP MANUAL FOR XT-IP620 SERIES PANEL

THIS SYSTEM REQUIRES A CMA/WMB/XMA or TMT2 INSTALLER SOFTWARE FOR PROGRAMMING

TO TRANSMIT ALARMS AND VIDEO VIA ETHERNET, THE SYSTEM REQUIRES AN EXTERNAL POWER SUPPLY WITH 4 ALKALINE BATTERIES FOR BACK-UP (PP4)

XT Initial Programming



Open the Control Panel

Using a #1 Phillips screwdriver, remove the 2 screws holding the cover on.





The cover will fold off the panel like a book with the curved side acting like the binding. The same technique is used when placing the cover back onto the unit.



Connect the RJ45 (Ethernet cable) to the panel

Plug the RJ45 cable into the Ethernet jack on the control panel. The cable can be routed back through the wire channel to make sure it does not get pinched.





Important: When the panel attempts a transmission via Ethernet a red LED will flash.





Obtaining WMB/XMA Keypad Special Characters

Keys	1 st Press	2 nd Press	3 rd Press	4 th Press	5 th Press	6 th Press	7 th Press	8 th Press	9 th Press	10 th Press	11 th Press	12 th Press	13 th Press	14 th Press
1	'Space'	1			@	\$,		?	1	;	:	u	N/A
0	+	0	-	*	#	=	/	%	&	¥	<	>	()

Obtaining CMA Keypad Special Characters

Key	1st press	2 th press	3th press	4 th press	5 th press	6 th press	7 th press	8 th press	9 th press	10 th press	11 th press
1	"space"			*	?	1			#	1	2
0		+	:=:	1	¥	Ĩ	<	>	()	0
@	@	\$	%	&	*	#					

Power Option (PP4)
4 x E95VP Alkaline D-Cell + 12v 2amp DC Class 2 power supply (not supplied)
Used for Standalone or Xtender mode where Programmable Inputs/Mapping, Programmable Outputs, Ethernet connection, or SMS will be used
E95VP Specifications: Operating Temp: 0°F to 130°F
Power Supply Requirements
Output Voltage (volts) 12

Output Voltage (volts)	12
Output Current (mA)	2000
Certifications	Class 2 (For UL Compliance)

E95VP Technical Specifications

Nominal Capacity	8900 mA hours
Nominal Voltage	1.5 V



WARNING:

1. DO NOT USE ALKALINE BATTERIES IF INSTALLING BELOW 30° F

XT-IP620 Programming















Device Installation

DCV651 – Outdoor MotionViewer / BR651 Outdoor Badge Reader

Place batteries in Device. Wait for LED to turn on. Press and release the programming button.





DCV601 – Indoor MotionViewer / ITR601 – Indoor Blind PIR

Place batteries in device. Wait for LED to turn on behind PIR lens. Press and release the programming button.





ITR601

CT601 – Door/Window Contact

Place battery into the door/window contact. Wait for LED to turn on. Press and release the programming button.





<u>RC601 – Remote Control Fob</u>

Press and hold the ON and OFF keys at the same time for 5 counts of Mississippi and release.



SE651/601 – Indoor and Outdoor Sirens

Place all batteries into the siren. Wait for the LED to turn on right above the programming button. Press and release the programming button.



Entering a Badge or Access Code for Arming/Disarming

After Initial programming has been completed, you are not able to arm and disarm the system until you enter a user code or badge (the installer code cannot arm and disarm the system). Codes can be 4-6 digits and the 4th digit must be 2 values higher or lower than any other code on the system: Example: User code 1234, next code cannot be 1235, 1236, 1233, or 1232 – These are reserved for Silent Duress and Audible Duress. The XT system can accept up to 19 Badges or Access codes in any combination.



Reserved codes	Reserved codes	Reserved codes
000000	From 9998 to 9999	All codes +1
	From 99998 to 99999	All codes +2
	From 999898 to 999999	All codes -1
	From 314157 to 314159	All codes – 2
A tota	al of 186 codes are forbidden	

Access level	Definition & rights
LVL1	Stand by level
LVL2	Restricted USER level where it is only possible to arm/disarm the system.
LVL3	USER level where it is possible to arm/disarm the system, check the event log, test the devices. Modifications of the setting are not possible at this level. User LVL3 can create LVL3 or LVL2 access codes.
LVL4	INSTALLER level where it is possible to modify the setup of the panel. The approval of a LVL3 or LVL2 is required to modify the level for LVL4. Installer LVL4 can create the first LVL3 access code only.

Configuration of Special Arming Modes:

To configure or modify a special arming mode, with the direction arrow go to the menu:

CONFIGURATION (LEVEL 4) + [YES/OK] \rightarrow ALARM MODES PROGRAMMABLE + [YES/OK] \rightarrow FULLY ARMED, SP1 and SP2 (use direction arrows to select the arming mode you want to modify + [YES/OK]).

For each arming mode, it is possible to specify how each of the 4 areas will be armed and how the system will behave during an alarm.

Areas: 1 2 3 4 press the corresponding number to change that areas arming option States: A A A A state for the respective area.

Press the [YES/OK] key after this configuration step. The system will then display what siren mode will be in effect for this special profile. Select the siren mode using the direction arrows then press [YES/OK].

А	Armed
D	Disarmed
Р	Perimeter Devices Only (devices must be programmed)
Е	External Devices Only (devices must be programmed)

Siren	Immediate triggering of all sirens
Delay beeps	Entry/Exit delay beeps, then triggering of the sirens
Silent	No Sirens, No Beeps
Without Siren	Beeps on the keypad only

How to Disable/Enable Monitoring

Disabling monitoring can be a useful tool in many situations. Before mounting devices and moving the panel to find a good communication with devices, disabling monitoring will ensure that you will have access to programming and that unnecessary signals are not sent to the monitoring station. When performing maintenance on the system disabling monitoring until the issue has been resolved will ensure that you will have access to programming throughout your troubleshooting.



ETHERNET Parameters:

To configure or modify Ethernet Parameters, go to:

CONFIGURATION (level 4) + [YES/OK] >> GENERAL PARAMETERS + [YES/OK] >> ETHERNET + [YES/OK]

- IP Parameters:
 - 1. DHCP Enable IP address is assigned by the DHCP service on the network.
 - 2. DHCP Disable IP address must be defined in Ethernet parameters. IP address will NOT be automatically obtained from DHCP service on the network.
- Constant Ethernet:
 - "Auto" Mode We recommend this mode. If main powered, the panel will be connected constantly to the local Network. In case of an alarm, the alarm will be sent in few seconds to the monitoring station. When the main power is cut, the Ethernet module will switch off after a delay (DELAY BEFORE OFF – 30 by default) in order to save battery life. In case of an alarm, the panel will at first connect to the local Network. It adds few seconds to the total process of sending an alarm.
 - 2. "ON" Mode The panel will be connected constantly to the local Network. This option will impact back-up battery life.
 - **3.** "**OFF**" **Mode** For each transmission of alarm and video, the panel will connect to the local Network.
- **PING REPLY:** Enables ping response
- **Time Out Server:** In case of disconnection to the local Network, the panel will try after that time to re-connect.
- Max Seg. Size: Size of packet sent

Codes	Action
999996	Maintenance request - Ethernet transmission
999995	Displays local IP address assigned to the control panel: If the DHCP mode is deactivated : the static local IP of the panel will be displayed (defined in the ETHERNET menu – 7)
	 If the DHCP is activated: If the panel is not in transmission then 0.0.0.0 will be displayed If the panel is in transmission (the RJ45 led will be flashing) then the dynamic IP of the panel will be displayed.
999991	Sends a test alarm to IP1 Address (Primary alarm receiver) This is a quick way to check for connectivity to the monitoring center. If there is a transmission problem the panel will terminate communication faster than in an actual alarm. The system will automatically attempt connection to IP2 Address (Backup alarm receiver) in the event that IP1 is unavailable.
999997	Displays external power supply status

How to test RF for deployment of devices

Running the RF test during the mounting of devices is key to a successful Videofied installation. This test will ensure that all devices have adequate communication with the control panel. All Videofied devices are bi-directional which allows the system to ping the device and expect a response. The number of successful responses out of 9 will be displayed on the keypad for the device you are running the test for. This is also a relative range that will change in real time as you walk further away from the control panel and back closer.



NOTE: To insure proper operation of the system you must get 9/9 with each device before mounting.

XT-IP620 Power Chart

Parameters		Values		11
		Min.	Max.	Units
Power	Voltage	9	15	VAC or VDC
	Current	2	/	A
Ref +	Voltage	3.5	16	VDC
	Current		50	mA
Arming Inputs 1&2 Prog. Inputs 1,2&3	Entry Inactive Voltage		~1.0	VDC
	Entry Active Voltage	~1.4	15	VDC
	Current	1.5	3	mA
Outputs 1&2	Switching Voltage		220VDC/250VAC	VAC or VDC
	Switching Current		4	A
	Switching Power		120	VA

Arming Input Wiring Diagram



POWERED BY POWER SUPPLY



When in the 'Arm From Host' mode the Videofied system will only arm and disarm when 9-12v is supplied and sustained. When both arming inputs are supplied voltage at the same time the Videofied Keypad display will show 'SYSTEM ARMED. When only one arming input is supplied voltage the Videofied Keypad display will show 'PART LVL #'

Arming Input 1 will arm/disarm Areas 1 & 2 Arming Input 2 will arm/disarm Areas 3 & 4

How to test to the dispatch center

Testing to the dispatch is done twice during installation. Once while you are programming the system and then again once the installation has been completely finished. Although both will use the same steps the initial test will be just confirmation using one device to verify the programming.



Note: Send 1 MotionViewer in at a time and verify with Central Station that they are getting Alarm and Video before tripping another MotionViewer. This will save time with the Central Station.

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How to mount the XT-IP620

How to Mount the Control Panel?

Fix the back casing on the wall with 3 screws (1)



Troubleshooting

Monitoring Station is not getting ANY video but is getting signals:

Good communication between the MotionViewers and the Control Panel is key to getting successful video to the monitoring station. During mounting of any device on your Videofied system you must run the Radio Range/Device Locating test to ensure that the mounting location is with-in range of the Control Panel.

- Concrete, Metal and earth are some of the largest RF inhibitors and should be taken into account when choosing mounting locations.
- When running the Radio Range/Device Locating test you should have the site as close to the same as it would be when the site is closed/no one is there, i.e. close garage doors/service doors, etc. Device locating steps can be found on Page 17.



Important Note: Videofied will only automatically download the first MotionViewer video that is taken and only if this is the primary event or reason for the panel connecting with the monitoring station. If the account is on test you will only ever get the first video downloaded. If you are only getting the events at the station and all tests above pass more than likely you are sending a preceding event (like an arming signal or door contact) which will cause the video to not auto download because the video is not the primary event.

Monitoring Station is not getting any signals:

Communication between the Control Panel and the Monitoring Station is over an Ethernet Connection.

- Go into Maintenance and run the ETH STATUS to see if you receive back an IP Address or error.
- If you receive an IP Address back you will want to contact and consult the network admin to make sure the outbound port is not being blocked (Port 1 programmed in the panel).



Panel is staying CONNECTED WITH MONITOR STATION

While the Control Panel is attempting or is connected with the Monitoring Station you will see this message when you attempt to move around on the keypad. If the system is not successful in connecting with the station it will retry the connection multiple times, locking you out of programming until it is done trying. This normally can take anywhere between 15-20 minutes.

- If you want to force the panel to disconnect you must
 - 1. Remove the batteries from the control panel
 - o 2. Secure the cover tamper of the panel
 - 3. Re-insert the batteries into the control panel and sync the keypad back by pressing the CLR and ESC/NO buttons at the same time.
 - 4. Access the Configuration menu by changing you access level to 4 and go to Configuration Monitor Station.
 - 5. In Monitoring Parameters Disable monitoring until the connection issue is resolved.

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Unable to record device or getting 'Pairing Failure' error

This usually occurs when the device still has a pairing key from a previous system or setup. To perform a pairing key override:

- 1. Remove all batteries from the device.
 - 2. Make sure your system is ready to record devices:
 - A. If learning in the keypad, press the panel's programming button. DO NOT HOLD THE PANEL'S PROGRAMMING BUTTON
 - B. If learning in additional devices, make sure the keypad reads 'Press Programming Button Of Device'
- 3. Insert a single battery into the device.
- 4. Wait 1 second for device to power up.
- 5. Press programming button of device (for keypads press 'CLR' & 'ESC/NO' keys at the same time)

For the 4-button remote keyfobs the process is slightly different:

- o 1. Press and hold the 'ON' and 'OFF' keys at the same time for 12 seconds
- o 2. Wait 1 second
- 3. Press and hold the 'ON' and 'OFF' keys at the same time for 5 seconds, you should hear 4 beeps from the keyfob.

Outdoor MotionViewer Trips All the Time:

It is important to follow these basic installation tips when mounting and aiming an outdoor MotionViewer

- o 1. Protect your assets, not the whole area.
 - Secure specific assets or clusters of assets rather than cover a large area where the range of the MotionViewer might extend beyond the assets and detect irrelevant objects.





- 2. Terminate the view of the MotionViewer.
 - Make sure to tilt the MotionViewer down 5-7° so that its top line of sight terminates into the ground. Taking into account all three elements; PIR, digital video camera, and infrared illuminators you will want to terminate the view of the MotionViewer at 40 ft. from the device.





XT-IP620 -SERIES 'AFTER INITIAL PROGRAMMING' FLOW CHART



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Addendum

1. <u>LSH20 Control Panel</u> Batteries:

Primary lithium battery LSH 20

3.6 V Primary lithium-thionyl chloride (Li-SOCl₂) High power D-size spiral cell



Cell size refer	ences	UM1 - R20 - D
Electrical characteristics		
typical values relativ	ve to cells stored for one year or less at + 30°C max.,	
Nominal capacity		13.0 Ah
at 15 mA + 20°C 2 according to curren	2.0 V cut off. The capacity restored by the cell varies t drain, temperature and cut off)	
Open circuit voltage	(at + 20°C)	3.67 V
Nominal voltage	(at 2 mA + 20°C)	3.6 V
3.0 V. The readings temperature, and the may be recommend	may vary according to the pulse characteristics, the ne cell's previous history. Fitting the cell with a capacit ed in severe conditions. Consult Saft]	ar
Maximum recomme (to maintain cell hea level of maximum cui Consult Saft)	nded continuous current ting within safe limits. Battery packs may imply lower rent and may request specific thermal protection.	1800 mA
Storage	(recommended) (for more severe conditions, consult Saft)	+ 30°C (+ 86°F) max
Operating temperature range		- 60°C/+85°C
Operation above an lower voltage readin current continuously	nbient T may lead to reduced capacity and gs at the beginning of pulses. Operation with above 1 A may restrict upper T range. Consult Saft)	(-76°F/+185°F)

2. <u>LS14500 Peripheral Batteries:</u> <u>Excludes SE601 and SE651</u>

Primary lithium battery LS 14500

3.6 V Primary lithium-thionyl chloride (Li-SOCI₂) High energy density AA-size bobbin cell



Cell size refer	ences	R6 - AA
Electrical charac	teristics	
(typical values relation	ve to cells stored for one year or less at + 30 °C m	пах.)
Nominal capacity (at 2 mA +20°C 2 according to curren	.0 V cut-off. The capacity restored by the cell varie t drain, temperature and cut-off)	2.6 Ah es
Open circuit voltage	(at + 20°C)	3.67 V
Nominal voltage	(at 0.2 mA + 20°C)	3.6 V
(280 mA/0.1 seco undischarged cells v 3.0 V. The readings temperature, and th may be recommend	1d pulses, drained every 2 mn at + 20°C from with 10 μ A base current, yield voltage readings abu may vary according to the pulse characteristics, le cell's previous history. Fitting the cell with a cap ed in severe conditions. Consult Saft)	ove the acitor
Maximum recomme (Higher currents po	nded continuous current ssible, consult Saft)	70 mA
Storage	(recommended) (for more severe conditions, consult Saft)	+30°C (+86°F) max
Operating temperatu (Operation above an lower voltage readin	ire range nbient T may lead to reduced capacity and gs at the beginning of pulses. Consult Saft)	-60°C/+85°C [-76°F/+185°F]

3. Lithium Battery Storage:

Storage

• The storage area should be clean, cool (*preferably not exceeding* + 30°C), dry and ventilated.

Warning

- Fire, explosion and burn hazard.
- Do not recharge, short circuit, crush, disassemble, heat above 125°C (257°F), incinerate, or expose contents to water.
- Do not solder directly to the cell (use tabbed cell versions instead).

4. Finding Manufacture Week and Year:

The Manufacture week and year can be found in the serial number of the device/control panel. The second sets of 4 numbers in the serial number are WWYY.

####0411######### = Which shows that this device was manufactured in the 4th week of 2011.

5. Event Log Ethernet Codes

Log Code	Meaning	
Ethernet Off	Ethernet interface is OFF	
Ethernet On	Ethernet interface is ON	
Ethernet (0)	Ethernet Error	
Ethernet (1)	No DCHP reply (after MAX DHCP RETRY)	
Ethernet (2)	No Frontel reply (after TIMEOUT SERVER)	
Ethernet (255)	Ethernet communication success	
Ethernet Lost	No Ethernet cable detected	
Ethernet Returned	Ethernet cable restored	

6. Additional System Codes

Codes	Action	
999996	Maintenance request - Ethernet transmission	
999995	Displays local IP address assigned to the control panel: If the DHCP mode is deactivated : the static local IP of the panel will be displayed (defined in the ETHERNET menu – 7)	
	 If the DHCP is activated: If the panel is not in transmission then 0.0.0.0 will be displayed If the panel is in transmission (the RJ45 led will be flashing) then the dynamic IP of the panel will be displayed. 	
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999997	Displays external power supply status	

7. Replacing Device and Control Panel batteries

When replacing batteries in the Videofied control panel or devices the battery replacement mode must be used. This will ensure that the low battery algorithm on the panel/device is properly reset and also helps keep the devices synced with the control panel.

Devices:

Access Level 4 -> Maintenance -> Replace Batteries -> Devices

The system will give you 1 minute to open any device on the system to replace the batteries. When a device is opened you will have 5 minutes to replace the batteries before the system will time out and all tampers will be active again on the system. We suggest that you start the device battery replacement for each individual device to ensure the 5 minutes does not expire and tamper signals are not sent to the monitoring station.

Control Panel:

Access Level 4 -> Maintenance -> Replace Batteries -> Panel

The system will give you 1 minute to open the panel. When the panel is opened it will give you 5 minutes to replace the batteries before the control panel tampers will be active again.

8. Checking control panel firmware version

1. All control panel labels on the box and inside of the cover will have the firmware version listed.



- 2. After completing initial programming hit the 0 key 6 times followed by YES/OK (000000 + YES) and the firmware version will be listed.
- 3. Connect the panel to TMT2 using the USB or Cellular connection. The firmware version of the control panel is listed on the main screen.

