AIM

ARMSTRONG'S INTELLIGENT MONITORING SYSTEMS

AIM TECHNICAL MANUAL

AIM-1450WL WIRELESS

PATENT PENDING

See page 9 for Activation Instructions

AIM-1450WL WIRELESS

ABOUT YOUR AIM NOTIFICATION SYSTEM

Your AIM 1450WL is designed for use on constructions sites, boats, trailers, RV's, Cottages or anywhere the use of a traditional security system is not possible. The AIM unit is an independent system that does not require phone lines or hardwired AC Power. AIM utilizes a self-contained battery power source allowing you to place the AIM unit where it will be most effective. The special design of this unit will run for long periods of time without recharging the battery and can be installed with a solar panel giving AIM unlimited run time. Activity Notification uses the Rogers GSM cellular network, which reports data direct to your monitoring station.

TESTING

To ensure that your system continues to function as intended, you must test your system weekly. If your system does not function properly, call your installation company for service.

MONITORING

This system is capable of transmitting alarms, trouble, daily test with voltage reading, arming & disarming and emergency information over the GSM Rogers Cellular Network to a monitoring station. If you inadvertently initiate an alarm, immediately call the monitoring station to prevent an unnecessary response.

GENERAL SYSTEM OPERATION

Your AIM 1450WL communicates to your monitoring station by utilizing the Rogers GSM cellular network. AIM comes complete with a wireless keypad for arming and disarming. Our unique low voltage system draws very little current allowing extended battery life or unlimited power in solar panel applications. The AIM series works in conjunction with the Visonic powercode line of peripherals, so AIM can be custom designed for your application.

IMPORTANT NOTICE

A security system cannot prevent emergencies. It is only intended to alert you and – if included – your monitoring station of an emergency situation. Security systems are generally very reliable but they may not work under all conditions and they are not a substitute for prudent security practices of life and property insurance. Your security system should be installed and serviced by qualified security professionals who should instruct you on the level of protection that has been provided and on system operations.

TABLE OF CONTENTS:

CONTACT INFORMATION:

Technical support: 1-877-246-7129 or Aim@armcom.ca

Billing inquiries: 1-800-986-0000 or aimadmin@armcom.ca

Activation Form: Fax 1-506-339-5195

All other inquires: 1-877-246-7129

www.aimalert.com

PROGRAMMING / INSTALLATION OF AIM 1450WL

Your AIM system comes completely programmed.

Simply install AIM by following these easy steps

Step 1	Complete and send the enclosed **ACTIVATION FORM** – this will ensure the radio is fully activated and programmed to your monitoring station prior to installation.
Step 2	Before mounting the unit it is recommended that you test the GSM radio to ensure there is coverage.
Step 3	Power up the system install 2-7amp AH batteries, secured with the battery straps provided
Step 4	Turn the system off with keypad provided, See page 7 for keypad wiring and instructions.
Step 5	Install solar panel or 16Vac if unit is a permanent install
Step 6	Install devices, see page 8 for approved list of devices
Step 7	Set jumper 1 to on if using zone 1 delay
Step 8	Set jumper 2 to on if using on board relay for a siren install
Step 9	Arm system and test all zones, remembering the swinger shutdown when testing on page 6

POWER REQUIREMENTS 1450WL

The unit has a built in regulator for 16v A/C and D/C so the battery will not overcharge. The unit will run on battery only or with 16v A/C transformer and or solar or automobile power.

Solar panel requirements: 12v 5 watt minimum, AIM voltage test are read at the solar side before regulator. Eg sunny day 16.2v or cloudy day 12.7v

ZONE PROGRAMMING FOR AIM-1450WL

Z1 N/O	If jumper is on J1 Zone 1 is a delay zone
Z2 N/O	
Z3 N/O	
Z4 N/O	
Z5 N/O	
Z6 N/O	
Z7 N/O	

POWER SIDE

12V- IN	Solar or Automobile Power Input
12V+ IN	Solar or Automobile Power Input
BATT -	Battery 12V INPUT
BATT +	Battery 12V INPUT
COM	Relay 2AMP rated
NO	Relay 2AMP rated
UPLINK+	**Not Used**
GRD	Used for keyswitch ON/OFF
ON/OFF	**Not Used**
BUZZ-	Negative side of buzzer 100MA MAX draw
12V+	LED status
LED-	LED status LED terminals have built in resistor, LED can be direct
16VAC	16V transformer

JUMPER SETTINGS

Note: jumpers are located below connector to radio, middle of board, above blue tab

J1 ON	Zone 1 is exit delay
J2 ON	Will not trip relay on alarm
J3 OFF	Wireless keypad and zone 8 is a N/O zone
J4	**Not used**

ARMING THE SYSTEM

AIM 1450WL comes with a Visonic MCM-140 keypad. System default code is “1111”. To arm (on) system enter “1111” followed by the * key. Yellow LED in keypad will be steady or flashing. To disarm enter “1111” followed by the * key. Yellow LED will not be illuminated and system is now disarmed (off).

SIGNALS

AIM board is hard coded for the following:

- Daily test signal with current voltage reading
- Unit will not send any signals during the power up process which takes approximately 30 seconds.
- Once activated the unit will send an activation signal and a test signal.
- Exit and entry delay (if used) is preset for 45 seconds.
- The unit sends restores.
- The unit sends arming/disarming signals to station.

- Board has swinger shutdown programmed (3 alarms per zone per hour, then system will reset)
- In case of cellular signal loss the unit will stay awake for a maximum of 4 minutes trying to send data. If unable to send then the unit will shut down for 30 minutes before trying again (this cycle is repeated 5 times). If the unit is still unsuccessful to transmit a signal it will buffer the alarm and send with the next transmission.
- When activated the unit will awake the radio and transmit to the monitoring station.
- AIM reports in Contact ID format and includes the battery voltage in every test code. An example of the contact ID format a test code is E602128. The E602 represent the test code and the voltage is the last 3 numbers. Making the voltage reading is 12.8. The test signal reports during regular business hours.

AIM LED STATUS 1450WL

LED flashing slow	System armed
LED flashing fast	System reported to monitoring station and waiting for acknowledgment
LED solid	System reporting
LED off	System disarmed

ADDITIONAL WIRELESS KEYPAD OR KEYFOB (limit 4) AND PROGRAMMING:

Visonic wireless keypad or key fob will take 2 positions on the wireless board (Z1 and Z2).

Step 1	Power up the AIM unit
Step 2	Remove the white cover on the Visonic wireless receiver (2 tabs, 1 screw on bottom of unit)
Step 3	Place other detectors away as devices can be easily read by another zone
Step 4	Set dip switch 1 to on
Step 5	Set dip switch 8 to on
Step 6	Push the tamper button (right bottom corner) 1 time. The red light on the wireless board will then blink. Each zone holds 4 devices. Solid red light indicates there is a device in that slot. By pushing the tamper again the red light will flash in slot 2 of that zone. There are 4 slots per zone. To delete a devise short the 2 pins marked "clear" together, once this is done the red light will be solid. It will now start to blink and the device in that section will be deleted.
Step 7	On the keypad enter the away button and the code "1111" (for the keyfob press the lock button). The LED will go solid and the wireless board will chime. Now put dip switch 8 and dip switch 1 to the off position
Step 8	Set dip switch 2 to on
Step 9	Set dip switch 8 to on
Step 10	Push tamper button on main board until the red light on the wireless board starts to blink then press off and "1111" on the wireless keypad, or the unlock button on the key fob. The red LED will go solid and the wireless unit will chime.
Step 11	Put dip switch 8 off and dip switch 2 to off
Step 12	Place the Visonic cover back on
Step 13	Test the keypad

PROGRAMMING KEYPAD

Default master code on the MCM-140 wireless keypad is “1111” and user must push the command first eg. (OFF 1111) or (AWAY 1111)

Each AIM unit can have 4 arming devices in total, either keypad or key-fob or combination.

TO CHANGE MASTER CODE

1111 1 XXXX
Ex to change code to 5555 from default of 1111
1111 1 5555 # master code is now 5555
See Visonic programming sheet included with system for more details

ADDING WIRELESS DEVICES

Step 1	Turn off the unit with keypad or key fob
Step 2	Remove the white cover on the Visonic wireless receiver (2 tabs and 1 screw on bottom of unit)
Step 3	Place other detectors away as devises can easily be read by another zone
Step 4	Set desired zone dip switch to ON [see settings below]
Step 5	Turn dip switch 8 to ON
Step 6	Push tamper button on main wireless board until red light on the wireless board starts to blink (each zone holds 4 devices when red light is on solid there is a device in that slot, pushing the tamper again so the red light flashes is slot 2 of that zone, there are 4 slots per zone)
Step 7	Install battery or push tamper button on new device to be added. The LED will go solid and the wireless board will chime.
Step 8	Put dip switch 8 off and dip switch selected in step 4 to OFF
Step 9	Place the Visonic cover back on
Step 10	Test new device

AIM Zone	VISONIC	Dip Settings On
Zone 1	Output 3 (MCR-308)	1 & 2
Zone 2	Output 4 (MCR-308)	3
Zone 3	Output 1 (MCX-8)	1 & 3
Zone 4	Output 2 (MCX-8)	2 & 3
Zone 8	Is arming zone and is listed under adding keypad and keyfobs	

For further information see the Visonic programming sheet for more details.

CONNECTING UNIT TO AIM'S NOTIFICATION CENTRE:

Please follow the steps listed below:

1. Connecting Unit to AIM's Notification Centre:

1. In order to activate the unit to the notification centre the enclosed Activation Form **MUST** be faxed to 1-506-339-5195 or emailed to aim@armcom.ca

2. Once the Activation Form is received for processing testing can begin within 24 hours of activation.

4. To test the notification process, turn system on and verify with your monitoring station that the signal was received

5. If you do not receive the initial activation signal within 5 minutes call your monitoring centre to start the trouble shooting process.

   If the notification center has not received this signal this indicates poor or no GSM cell coverage in the area you have located the AIM product. Therefore the AIM product must be relocated to a position/area with GSM cell coverage. (Hint: try placing the AIM in a higher location for better coverage or an external high gain antenna maybe required).

LIMITED WARRANTY

All Armstrong's Intelligent Monitoring Ltd. (AIM) products are warranted to be free from defects in materials or workmanship for one year from the date of purchase. Within this period, AIM. will, at its sole option, repair or replace any components which fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost. This warranty does not cover failures due to abuse, misuse, accident or unauthorized alterations or repairs.

THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY LIABILITY ARISING UNDER ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, STATUTORY OR OTHERWISE. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, WHICH MAY VARY FROM STATE/PROVINCE TO STATE/PROVINCE.

IN NO EVENT SHALL ARMSTRONG'S INTELLIGENT MONITORING BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT. SOME STATES DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

AIM retains the exclusive right to repair or replace the product or offer a full refund of the purchase price at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.

See page 11 for **Procedure for Claims Under Limited Warranties**

Procedure for Claims Under Limited Warranties

To obtain warranty service, an original or copy of the sales receipt from the original retailer is required. Online auction confirmations are not accepted for warranty verification, and AIM will not replace missing components from any package purchased through an online auction. AIM retains the exclusive right to either repair or replace the unit with a "newly-overhauled" (NOH) unit or new unit at its sole discretion. The same policy shall apply to software.

Please complete these two easy steps:

STEP 1: Contact AIM Technical Support to receive an RMA number.

E-mail AIM Technical Support Specialists to describe the problem you are experiencing and request a Return Material Authorization (RMA) tracking number. In addition to your original sales receipt, you will need to provide the unit's serial number (if available), your return shipping address, and a daytime telephone number.

E-mail: aim@armcom.ca

STEP 2: Ship the unit, along with the RMA number, to Armstrong's Intelligent Monitoring Ltd.

Once you have received the RMA number, securely package the unit and ship it (insured) to the following address:

Armstrong's Intelligent Monitoring Ltd.
380 Salmon River Mouth Road.
RMA Number: (insert your RMA number here - see above)
Coal Creek, NB, Canada E4A 2T7

TOLL FREE: 1-877-AIM-7129

PHONE: (506) 339-1083

New Brunswick - Head Office

380 Salmon River Mouth Road

Coal Creek, NB, Canada E4A 2T7

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