

RAMV OPERATING Instructions

Your RAMV is a very powerful device that can track, monitor and provide remote control from any cellular phone. In order to make it as accessible and as simple to use as possible, we have provisioned RAMV at the factory to perform the more common functions "out of the box". It has many capabilities that we do not mention here, so contact us for any special requirements. First follow the separately provided instructions for the installation of the RAMV into your craft.

Use Condition:

Your RAMV is placed in a fixed condition, say monitoring site.

Loading SIMCARD

If your RAMV did not ship with a SIMCARD . NOTE: YOU MUST disconnect all external power supply connections when changing SIMCARD.

Remove screws.

Make sure the Battery is disconnected.

Locate the SIMCARD holder. Gently push the silver slide toward main holder body to release. Swivel SIMCARD carrier up.

Insert an activated SIMCARD with the golden contact side facing downwards and the cut corner facing up as shown.

Hinge carrier closed. Slide silver slide back away from main body to lock.

Next, take the small white plug from standby battery and slide it into the power socket. This only goes in one way. Do NOT force.

You are now ready to load the phone numbers. Test with just one cellphone first, then load others later as required.

Set up your phone to send a text message (SMS) **TO the phone number issued with the SIMCARD** that you just loaded into RAMV. The SIMCARD phone number will have been issued along with the SIM card by the network provider. The first message you must send RAMV is your cell phone number. Send the following text message::

ADDPHONEn<>88888888<>+(country code)(area code)(your cellphone number) (n is ph 1 to ph 4.)

eg : ADDPHONE3 88888888 +121234567899 (This is loaded as ph # 3)

Spaces are indicated by <>. Don't insert any spaces in the phone number itself. The eight 8's are a factory password that you should change later.

Now send this off RAMV should respond with a confirmation message. If no response is received within about 3 minutes, it means it either did not receive the message or there was a syntax error in the command.

If this worked, you can close the unit up again carefully.

ADDING PHONE NUMBERS

You can store up to four phone numbers. Add them using

ADDPHONEn<>PASSWORD<>+(country code)(area code)(your cellphone number)

eg : `ADDPHONE3 88888888 +121234567899` (this is loaded as Ph. # 3)

LOADING the SIMCARD PHONE NUMBER

Most SIMCARDS do not have a phone number stored internally, so you need to load the number assigned to the SIMCARD by the network provider. Do this by sending RAMV the following command:

`DEVPH<>+(country code)(area code)(SIMCARD phone number)`

eg: `DEVPH +121234567899`

If you don't add the Device Phone number, RAMV will still work, but the TIME will not be updated from the network

LIST REGISTERED PHONES

To check the four recipient phone numbers stored in RAMV. Send the following command:

`GETPHONE`

REMOVING a PHONE NUMBER

Send the following text to your RAMV

`REMOVEPHONE n <>PASSWORD<> +(country code)(area code)(phone number)` (n is ph # 1 to 4)

eg: `REMOVEPHONE2 <>88888888 +12141234567899` (this removes ph # stored as #2)

To change a number, you can load the new number over the old using `ADDPHONE`. If there is no room left, RAMV will advise with a message.

CHANGING PASSWORD

To change the password, send RAMV the following text message;

`PASSWORD<>OLD password<>NEW password`

eg: `PASSWORD 88888888 12345678`

SETTING and USING the GEO-FENCE

From your cellphone, send RAMV the following Geo-Fence command:

'SET'

It will respond with a confirmation SMS that it has a new HOME location for the geo-fence.

That's all.... RAMV will now send a transgression report if it moves outside the geo-fence radius.

Nothing other than external alarms will be sent while within the new Geo-fence zone. It will of course be monitoring any bilge levels or security devices all the time. You can at any time send commands and receive

information while in either Geo-fence "guard" mode, or after a fence transgression, when in "Tracking" mode (when the SET command has been issued).

After the initial transgression, RAMV will send a position report every 5 minutes. You can program RAMV differently, to send other automatic position reports either based on time since the last position (FIX) or distance from the last Fix, or BOTH. At any time you can request an immediate position report by sending:

'FIX'

This will respond with a current fix. If the GPS receiver is already On and tracking satellites, RAMV will show (NEW) for the fix. If it is not warmed up, it will send a report showing ' (OLD) ', while it searches the sky for satellites and a NEW fix.

Note that the Geo-fence 'SET' command will respond with the new HOME LOCATION and a series of parameters like:

02:08 RAMV GFE (Home) (NEW) Co 17, Sp 0 Kts, R= 200; GD= 0 GT= 5; MGF; ttp://maps.google/.....

Where R is the geofence radius (m), GD=, the distance between reports and GT=, the time between reports, after a fence transgression

The factory defaults the Geo-fence radius to 200 meters, and sets up a time-based report for every 5 minutes after the Geo-fence is transgressed. If the monitored asset does not move more than a factory-set 50 meters from the previous reported position, it does not send a new report. It assumes the asset is stationary. The five minute report is all that is sent until you program it otherwise.

You can change these factory presets with the following commands:

'RAD<> xxxx' where xxx is the new geo-fence RADIUS in meters. The <> signifies a single space. Factory default is 200 m. Minimum is 100meters. eg; RAD 1000

'DIST <> xxxx' where xxxx is the new Distance between reports AFTER a Geo-fence transgression. Factory default is 0 m (no report) . Minimum is 200 meters. eg: DIST 500

'TIME <> xxx' where xxx is the Time in minutes between reports AFTER a geo-fence transgression. Factory default and Minimum is 5 minutes. eg: TIM 20

When RAMV sends a position Fix, it delivers the Course (co) in degrees (True); Speed (Sp) in knots; the geo-fence 'DIST' parameter(GD) in meters; The geo-fence 'TIM' parameter (GT) in minutes; MGF which is the highest alert geo-fence monitoring mode and lastly a hyperlink to Google Map that contains the Latitude and Longitude in a degrees and decimal degrees.

Cursor your internet enabled smart phone browser over the hyperlink and click to see the current position displayed on Google Map. You can copy the link straight onto Google Earth if running on a PC, or use Bluetooth to transfer the hyperlink from your cellphone to your PC, where you can click on the hyperlink and view the position on a map.

To Disable the GEO-FENCE function, send the command "NOSET".

OTHER COMMANDS

"FIX" will respond with the immediate GPS Fix. If the GPS is OFF when this is issued, it may take several minutes to lock a satellite solution and deliver a fix.

"GETSIG" will respond with the GSM 1 to 5 bar measurement and a SSI signal strength Indicator. The GPS will show the number of satellites being tracked and fixes obtained. You need at least 3 Satellites for a fix.

"INFO" Will respond with the RAMV backup battery %, boat battery Voltage, and temperatures-Ambient, Maximum recorded and Minimum recorded since last reset command ('TEMPR').

"NOFIX" turns OFF the GPS receiver and saves power. Send this to terminate location based services.

"TAMPER" activates the tamper sensing. The Factory sets RAMV into Tamper mode when shipped.

"NOTAMPER" Disables the TAMPER sensing. Use this if working on installation and you don't want to be sent messages. Don't forget to enable it when finished.

"SIREN" activates the SIREN / STROBE(if these are installed) upon a Geo-fence transgression. These are accessories not normally supplied with RAMV. The sirens we supply will trigger on a pulse from RAMV and remain on for a period set by an internal timer in the siren. Cutting the wires to the siren will not disable it once activated.

"NOSIREN" disables the Siren and Strobe if issued before a transgression is activated. If the Siren is already activated, it will not turn it off. It will be up to the siren internal timer to time-out and reset itself. This command only stops further triggering of external alarm devices. Contact us for other programmable siren activation options.

SPECIAL COMMANDS

"REPORT xy//info" sets RAMV up to send an AUTOMATIC "INFO" report every "xy" hours.

"TEMPRESET" alone, resets the Temperature Logs to present ambient temperature.

"TEMPRESET <>F(or C)<> Max Temp// Min temp " F or C selects units, <> is a space, Max and Min temps sets the maximum and Minimum ALERT temperatures, Range is 14 F (-10 C) to 176 F (80 C).F: Fahrenheit,
C: Centigrade. Eg: TEMPRESET F 110//38

"HELP" responds with Help info on command syntax.

TEMPDEL n Temperature delay in minutes (n). Use to reduce transient alarms.
PWRDEL n Power loss alert delay in minutes (n). Use to reduce transient alarms.
ARM Activates SMS messaging (Factory default)
DISARM Disables all SMS messaging.
ASK<>code Used in USSD enabled networks to request network subscriber data like prepaid simcard balance amount. If code to get simcard dollar balance is say *120# from your cellphone, then send RAMV the code as ASK *120# and it will return the network message with this information. Does not work with voice-only services. Requires USSD service.
PLE Power Loss alert ENABLE.
PLD Power Loss alert DISABLE.
EXTVOLT ON//v.v Alarm voltage setpoint for low voltage alert. Sets value to send alarm.
Eg EXTVOLT ON//11.8 Use in conjunction with PWRDEL delay time value to avoid transient alarms. OFF/ON.
E1D n Add a Time delay of n minutes to switch n. Use to avoid transient alarms.
DATARESET Resets configuration to Factory default. Use with care. Custom changes will be lost.
CTXSO<n><space><msg> Change Switch (n) OPEN message to "msg".
CTXSC<n><space><msg> Change Switch (n)CLOSED message to "msg".

COMMAND STRINGS

RAMV will accept multiple commands in the same text message as long as they are each separated by a semi colon.

eg; GETSIG;INFO;TAMPER;SIREN;FIX

QUESTIONS and TROUBLESHOOTING

Please refer to our website for Frequently asked questions and troubleshooting guidelines.

Regarding JBP, please see as follow information

"JBP" is the equipment class code assigned by the Commission to designate Part 15 Class B Computing Device Peripherals on FCC Form 731

FCC Compliance

Section 15.21 Information to user

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

Section 15.19 Labeling requirements:

This device complies with Part 15 of the FCC Rules.

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.

Section 15.105 (b)

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.

IMPORTANT NOTE:

To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter"

NOTE:

RAM accepts no liability for the applications or uses made by its products. We recommend that you always obey local laws relating to tracking and in particular disablement of vehicles by remote control. This can be dangerous and should not be deployed on road vehicles as it can cause serious injury to others. Only activate remote engine kill when you have the vessel in sight and it is safe to do so. RAM also accept no liability for the use or misuse of its products under any circumstances, including GSM network, GPS services, or device failure, for whatever reason.

RAM also reserves the right to change the specifications, functionality and instructions of its products and accessories, at any time without notification. Thank you for purchasing your RAMV.

END.