



EziTrak[®]
security & tracking systems

nano mobile



USER MANUAL

EziTrak[®] Nano Mobile v1.0.3

For EziTrak[®] Nano Mobile: Model ETNM01

Self-Monitored GPS/GSM Personnel Monitoring System



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1.0 General Information

Congratulations on selecting the **EziTrak® Nano Mobile** Personnel Monitoring System. This system is one of the most sophisticated systems of its kind on the market today. As such, the information contained in this user manual is very comprehensive to allow you to use the full functions of this system as required. It is recommended that this document be read thoroughly to avoid false alarms or not being informed of alarm or emergency events.

EziTrak® Nano Mobile is a low cost high performance Personnel Monitoring System providing;

- GPS Tracking via the website, www.ezitrak.com.au
- Instant notification of EVENTS by SMS
- PANIC/MARKER Button detection Event
- MAN DOWN detection Event
- GPS Data rates UP TO 1Hz
- Street Address Function
- Standalone SMS positioning & event Function
- Registration required to the EziTrak® GPRS Server (additional costs apply)

The EziTrak® Nano Mobile system uses the GSM Cellular Mobile Phone Network for communication and Satellite co-ordinates (GPS = Global Positioning System) for precise position, time and speed information. Employing both these technologies gives the EziTrak® Nano Mobile the broadest coverage capabilities.

All EziTrak® Nano Mobile Functions and Phone Numbers can be easily Setup by sending the system simple SMS text Messages.

The EziTrak® Nano Mobile will operate in any country with compatible GSM Network and SIM Cards.

The EziTrak® Nano Mobile requires a GSM SIM Card with Voice and SMS Phone Number. You are responsible to ensure the SIM card inside the unit has sufficient credit for the system to operate as described in this document.

Without credit, the SIM card cannot send an SMS to alert you in any emergency. The SIM Card must be GPRS enabled if online tracking is needed.

Signal Strength & Availability

Full functionality is best achieved in areas where both good GSM Network Service and GPS satellite broadcast signal can be received. Wide, open outdoor areas are ideal for the GPS satellite receiver. GPS receivers can suffer interference from transmitting devices which may cause dropouts in GPS coverage but this is generally uncommon and more likely in large commercial centres. The EziTrak® Nano Mobile must have BOTH GSM and GPS services available to function.

GSM Network coverage is provided by your local mobile phone service provider. Limitations in coverage, access or services provided by the GSM service provided may affect the good operation of our system in the same way a mobile cell phone would dropout. These issues are beyond the control of the device or Rojone as the manufacturer. Poor GSM service may result in poor communication with the EziTrak® Nano Mobile system or may result in incomplete black-box down loads, or corrupted data. This may be more prevalent when data is transferred over long distances eg: Interstate down load requests. Unfortunately we are unable to control the GSM network capacity or service issue; it may be worth considering changing to another carrier who provides a better service in the area where the device is mostly used.

Surveillance Laws

Depending on the intended use of this device, you may need to advise the driver that the vehicle is fitted with a tracking system. This typically applies for business or work place applications; please be sure to check your relevant state, province or country government legislation, laws or surveillance or privacy act for appropriate action for your application and area.

Installation Health Check

Installation of the EziTrak® Nano Mobile Personnel Monitoring System is simple and easy. Place the unit into its cradle, switch the unit OFF, connect the USB charger and charge until the RED charger LED is extinguished.

Once charged, install the SIM Card into the slot provided.

SIM PIN must be Cleared (See Below)

NOTE: The unit has an auto-APN function, but new APNs may not be supported. APNs can be manually set up by the user.

Place the unit outside with a clear view of the sky and turn the unit ON.

The BLUE LED will turn ON and begin Flashing once the unit has connected to the internet and the GPS has Position LOCK. At this point the unit is functioning.

For a first time setup with a generic SIM card:

This will prevent the unit attempting to connect to the internet BEFORE the unit is setup;

1. Insert the SIM Card.
2. Turn the Unit ON.
3. After a couple of minutes send the following commands to the unit via SMS text, OR via the EziTrak® Nano Mobile USB Utility software.

1234.GPRS.APN.telstra.internet	for Telstra
1234.GPRS.APN.vfinternet.au	for Vodafone
1234.GPRS.APN.internet	for Optus
1234.GPRS.APN.busintpub	for Optus business
1234.GPRS.APN.busintprv	for Optus private

4. Turn the unit OFF and then ON again to begin normal operation.

SIM Card Check – IMPORTANT

Ensure the device has the **SIM PIN** cleared, any messaging services are disabled and no spam SMS's are requested. Ensure your SIM Card is GPRS enabled with your Network Service Provider for online tracking.

Your service agreement with your Service Provider may request credit card information to ensure that your SIM is automatically topped up with credit to ensure your system has the capacity to communicate as specified.

Again we cannot stress enough – ***please ensure that your SIM has sufficient credits at all times, otherwise the system will not function as specified.***

GPRS Registration

Your EziTrak® Nano Mobile is capable of connecting to the INTERNET using the GPRS Network over GSM. This simply means that you can Monitor your Personnel over the Internet.

To use the Internet based service, you must ...

1. Register your details with the EziTrak® GPRS Server.
2. Pay the Yearly Registration Fee.
3. Ensure your EziTrak® Nano Mobile SIM card is GPRS Enabled.

Registration will require you to provide us with your personal details as well as a user created username and password to access your units on our website. A unit/vehicle name and SIM phone number will also be requested to complete the registration process.

NOTE: Regarding standalone SMS position usage – Please ensure you are aware that SMS is NOT a priority service on the carrier networks. SMS can be delayed and may not be reliable.

Change of Function and Service

Please note that ALL unit functions as well as default settings and services provided by Rojone may change without notice.



2.0 Unit Description



Kit Contents

- | | |
|----------------------|---|
| 1. Unit | 5. Wall USB Power Charger |
| 2. Windscreen Cradle | 6. Car USB Power Charger |
| 3. Belt Cradle | 7. USB Stick with Manuals & Software
(not shown) |
| 4. Mini USB Cable | |

The EziTrak® Nano Mobile unit has an ON/OFF Switch, USB Charger Port, SIM Card Slot, LED Viewing Window and a red Panic/Marker Button. The EziTrak® Nano Mobile unit has 2 cradle options including a Belt Clip and a Vehicle Windscreen Mount.

Unit Features and Functions

GPS TRACKING

Map position update rates from Once Per Second (1Hz) to Once Per 255 Seconds (4.25 Minutes) programmable in 1 Second Steps. Note: Updates less than 10 seconds only on special request.

STANDALONE MODE

The unit can run in standalone mode where the unit is not connected to the server via GPRS. The unit can be configured to automatically send its position periodically or by request from a phone call or SMS.

NOTE: MANDOWN and PANIC/MARKER functions are still available via SMS. Make sure the unit is configured correctly before using this feature.

PANIC/MARKER BUTTON

The red Panic/Marker button can be used to mark a position on the map and/or send an SMS with latitude and longitude or street address.

NOTE: Street Address feature only works when online.

MAN DOWN ALARM

The unit can detect its own orientation. This feature allows the unit to send out an alarm if the User is laying down in a horizontal position. An alarm SMS can be sent to any programmed phone number. This SMS will contain ID, Status, Street Address, plus Date and Time. The unit also sends out the Emergency Event to the Website.

VEHICLE MODE

The unit can be optioned up with a Car Charger. This Charger plugs into the vehicle cigarette lighter and provides Charge Power and IGNITION Status to the unit. Ignition ON and OFF is sent to the server and used in the REPORTING to show each individual journey. In Vehicle Mode the use of Low Data Rates and Power Saving methods are necessary to ensure continuous use as much as possible. Some out of vehicle charging may still be necessary depending on use.

PERSONAL MODE

The unit can be removed from the Vehicle Cradle and placed in the Belt Cradle for Personnel Tracking. The unit uses VIBRATION Detection to determine when it is MOVING or STATIONARY. This Event information is sent to the Server to show individual journeys.

STREET ADDRESS LOCATION

The unit can provide standalone location information to ANY mobile phone. To locate a unit simply use a mobile phone to dial the phone number of any tracking unit and then hang up. The unit will return an SMS to the incoming caller containing the current Street Address and Status of the unit.

BLACKBOX RECORDER

The unit can record GPS and Event information to an internal Black Box in case there is no network signal present. The Black Box Recorder provides the server with Email Data to compile Journey Reports.

LED DISPLAY

The unit has an LED display window which indicates that the unit is functioning correctly as well as the state of battery charging.

BATTERY LIFE

The life of the battery under full charge is dependant on the rate of data being sent. Slow data rates will provide extended battery life.

How To Use

PERSONAL USE

It is important to realise that the human body is detrimental to good performance of the GPS receiver as the GPS antenna up close to the body is shadowed significantly by the body's tissue and water content. Turning your body in various directions will block the signal from satellites located behind the person. As a person turns the GPS receiver will lose some signals and also reacquire others suddenly coming into view so relative accuracy is generally degraded when the unit is worn hard up against the body. The unit has been optimised to work best when mounted on the persons belt or hip, generally best in the front.

SIM CARD

Before switching the unit ON, insert a SIM Card into the slot provided. The SIM Card should have a Data Plan for Internet Access, typically 150 Mbytes per month depending on usage. The unit software has Automatic Network Detect. See Appendix A for a list of Network Service Providers and their APN's.

POWER SWITCH

For Personal Use simply turn the Power Switch ON or OFF when required. When used in a Vehicle, turn the Power Switch to the OFF Position and Plug in the Car Charger. The vehicle's ignition will then Start and Stop the Unit automatically.

LED INDICATOR

The unit has an LED display window which indicates that the unit is functioning correctly as well as the state of battery charging. When the unit is functioning correctly the blue LED will flash.

CONNECTION STRATEGY

The Unit will try to stay connected to the Internet at all times. If it becomes disconnected it will attempt to reconnect every 120 seconds. BUT if GPRS.MOVING CONNECTION has been programmed, then the unit will NOT use the Timer and only reconnect when the unit is moving. This is a power saving feature.

STANDALONE MODE

The unit will either perform a recurring event automatically, such as a periodic SMS every 2 minutes, OR wait for an SMS or phone call to return a position.

If the unit's Panic/Marker button is pressed, or the MANDOWN event is triggered, an SMS will be sent to the remote number alerting of the event.



3.0 Specifications

NOTE: All specifications are subject to change without notice.

SIZE	111 x 60 x 16 mm
WEIGHT	100 gms
BATTERY LIFE	Typically 10 hours @ 60 second updates
GPS UPDATE RATES	Once per Second (1Hz Update Rate) to once per 255 Seconds Default Update Rate 120 Seconds User selectable to 10 Seconds <u>NOTE:</u> Special request for 1Hz available
3D ACCELEROMETER	+/- 2,4 or 8 g, 3D X,Y, Z Axis
MAN DOWN ALARM	User settable angle and Trigger Delay
PANIC/MARKER BUTTON	Panic Alarm via GPRS and SMS also available
MODEM	2G Network



4.0 Website

The EziTrak® Nano Mobile can be sent commands from the website when it is connected. These commands are primarily used to change the Position (GPS) UPDATE Rate of the unit to the website. These commands are also used to change Unit settings such as the NAME or PIN Number.

USB Utility

The EziTrak® Nano Mobile can also be configured by the USB Utility software program. This program can be used for the following tasks:

- Set up & configure single units.
- Create batch setting files to upload same settings to multiple units at once.
- Download black box information, as well as debug info, for unit maintenance.
- Install new firmware, which can be downloaded from the Downloads page of the EziTrak® website.

For more information, please consult the USB Utility manual.



5.0 Command Structure

All commands can be sent to the unit via SMS, GPRS or USB.

1. SMS command

SMS Commands must be preceded by the PIN.

EXAMPLES: 1234.PIN.54321
54321.NAME.My Name

2. GPRS or USB command

All commands can be sent to the unit using GPRS (over the internet) or via the USB Port.
No PIN is necessary when using GPRS or the USB Port.

EXAMPLES: SET.PIN.54321
SET.NAME.My Name



6.0 Command Set

The following commands can be used to alter the settings and the behaviour of any unit. Commands can be sent to any unit using the Website or via SMS Text or via the Mini B USB Port using the Utility provided by Rojone. Commands are listed in alphabetical group order. Parameter values in **RED** are the DEFAULT SETTINGS.

NOTE: Commands that do not have a Default Setting are COMMANDS ONLY as they do not have a user settable parameter.

ACCELEROMETER and MAN DOWN

ACCEL.ON/OFF	ON	
ACCEL.RANGE.2G/4G	2G	
ACCEL.PERCENT.x	2	Percent
ACCEL.SDELAY.x	15	Seconds
ACCEL.MDELAY.x	3	Seconds
ACCEL.DDELAY.x	3	Seconds
ACCEL.UDELAY.x	4	Seconds
ACCEL.ANGLEX.x	0	Degrees (Not Used)
ACCEL.ANGLEY.x	0	Degrees
ACCEL.ANGLEZ.x	0	Degrees (Not Used)
ACCEL?		
ACCEL.DEFAULT		

AT COMMANDS

These commands are for factory debugging only.

BLACKBOX

BLACKBOX.ON/OFF **ON**
BLACKBOX.CLEAR
BLACKBOX.DAYS.ALL/MON/TUE/WED/THU/FRI/SAT/SUN **ALL**
BLACKBOX.RATE.x **5** Seconds
BLACKBOX.FULL.x **20** Percent
BLACKBOX.GET.ALL
BLACKBOX.GET.x
BLACKBOX.RECORD.MRMC/SRMC/EVENT/DEBUG/ALL **ALL**
BLACKBOX?
BLACKBOX.DEFAULT

BUZZER

BUZZER.ON/OFF **ON**
BUZZER.GPRSON.x **2** Short Beeps
BUZZER.GPRSOFF.x **2** Long Beeps
BUZZER.GPSLOCK.x **3** Short Beeps
BUZZER.GPSUNLOCK.x **3** Long Beeps
BUZZER.LOWBAT.x **1** Short and Long Beeps
BUZZER?
BUZZER.DEFAULT

EMAIL

EMAIL.AUTO.ON/OFF **ON**
EMAIL.BLACKBOX
EMAIL?
EMAIL.DEFAULT

GEO

GEO.LEARNPOSITION.x.r.M/KM

GEO.SETHOMEBASE

GEO.SETPOSITION.x.lat,lon,R.M/KM

GEO.ENTRY.ON/OFF **OFF**

GEO.EXIT.ON/OFF **OFF**

GEO.GETPOSITION.x(0-5)

GEO.SMS.ON/OFF **OFF**

GEO.SMS.phonenumber **blank**

GEO?

GEO.DEFAULT

GPRS

GPRS.ON/OFF **ON**

GPRS.GETSETTINGS

GPRS.USERNAME.username **blank**

GPRS.PASSWORD.password **blank**

GPRS.APN.x **telstra.internet**

GPRS.AUTO APN.ON/OFF **ON**

GPRS.CONNECT

GPRS.CLOSE

GPRS.DISCONNECT

GPRS.EXIT

GPRS.RESTART

GPRS.RECONNECTTIMER.x **10 Seconds**

GPRS.MOVINGCONNECT.ON/OFF **OFF**

GPRS.RMCMOVING.x **120 Seconds**

GPRS.RMCSTATIONARY.x **120 Seconds**

GPRS.AUTOCONNECT.ON/OFF **ON**

GPRS?

GPRS.DEFAULT

GPS

GPS.ON/OFF	ON
GPS.FORMAT.DMS/DDM/DD.NSEW/MATH	DMS.NSEW
GPS.LOCKTIMER.ON/OFF	OFF
GPS.LOCKTIMER.x	0 Seconds
GPS.MODE.CAR/PEDESTRIAN	CAR
GPS.ONLINE/OFFLINE	
GPS.RMC	
GPS.RESTART	
GPS.SIGNALWATCHDOG.ON/OFF	ON
GPS.SIGNALWATCHDOGTIMER.x	60 Seconds
GPS.SIGNALWATCHDOGUNLOCK.ON/OFF	ON
GPS.SIGNALWATCHDOGFIX.1/2/3 (No Fix/2D/3D)	3
GPS.SIGNALWATCHDOGHDOPE.x	5.0
GPS.SIGNALWATCHDOGVDOPE.x	5.0
GPS.SIGNALWATCHDOGPSDOPE.x	5.0
GPS.SIGNALWATCHDOGSATS.x	3
GPS?	
GPS.DEFAULT	

INFORMATION

INFO.ALL
INFO.ADDRESS
INFO.BATTERY
INFO.EZ
INFO.EZRMIC
INFO.HOMEBASE
INFO.LASTPOSITION
INFO.LOG
INFO.POSITION

INFO.POWER
INFO.RMC
INFO.SETTINGS
INFO.SMS.phonenumber.text
INFO.STATUS
INFO.VERSION

LOG

LOG.ON/OFF **OFF**
LOG.CLEAR
LOG.GET
LOG.INFO
LOG.RESET
LOG.START.[yy]yy/mm/dd,hh:mm:ss
LOG.END.[yy]yy/mm/dd,hh:mm:ss
LOG.ENGINEHOUR.x **0** Hours
LOG.ODOMETER.x **0** Hours
LOG.SERVICEHOUR.x **0** Hours
LOG.TRIGGERHOUR.x **0** Hours
LOG?
LOG.DEFAULT

MAN DOWN ALARM

MDA.ON/OFF **ON**
MDA.AUTORESET.ON/OFF **OFF**
MDA.CLEAR
MDA.SMS.ON/OFF **OFF**
MDA.SMS.phonenumber **blank**
MDA.TIMER.x (Auto Reset Timer) **60** Seconds
MDA?
MDA.DEFAULT

MODE

MODE.CAR.ON/OFF	OFF
MODE.CAR.DELAY.x	5 Minutes
MODE.IDLE.ON/OFF	OFF
MODE?	
MODE.DEFAULT	

PANIC/MARKER BUTTON

PANIC.ON/OFF	ON
PANIC.DELAY.x	1 Second
PANIC.SMS.ON/OFF	OFF
PANIC.SMS.phonenumber	blank
PANIC?	
PANIC.DEFAULT	

SET Command

SET.ID.x	1	
SET.MEASURE.KILOMETRES/MILES/NAUTICALMILES		Kilometres
SET.PANIC/MARKER	PANIC	
SET.NAME.x	XXX	
SET.PIN.x	1234	
SET?		
SET.DEFAULT		

TEST Command

These commands are for factory debugging only.

TIME Command

TIME.LOCAL

TIME.ZONE.[+/-]x **10**

TIME.DLS.ON/OFF **OFF**

TIME.DLS.START.x,END.y

TIME.DLS.CLEAR

TIME?

TIME.DEFAULT

Australian Daylight Savings settings from 2011 to 2013

Sunday 2 October 2011 to 1 April 2012

TIME.DLS.START.10/02,END.04/01

Sunday 7 October 2012 to 7 April 2013

TIME.DLS.START.10/07,END.04/07

Sunday 6 October 2013 to 6 April 2014

TIME.DLS.START.10/06,END.04/06

General Commands

RAW RMC

POSITION

EXIT

GPSONLINE

GPSOFFLINE

GETALLSETTINGS



7.0 Detailed Command Set

The following commands can be used to alter the settings and the behaviour of any unit. Commands can be sent to any unit using the Website or via SMS Text or via the Mini B USB Port using the Utility provided by Rojone. Commands are listed in alphabetical group order. Parameter values in **RED** are the DEFAULT SETTINGS.

NOTE: *Commands that do not have a Default Setting are COMMANDS ONLY as they do not have a user settable parameter.*

ACCELEROMETER and MAN DOWN

ACCEL.ON/OFF **ON**

This command is used to Enable and Disable the onboard 3D Accelerometer. It is recommended to always have this function ON as it is required internally.

ACCEL.RANGE.2G/4G **2G**

This command is used to SET the Maximum Full Scale Range of the onboard 3D Accelerometer. It is recommended to always have this function set to 2G.

ACCEL.PERCENT.x **2 **Percent****

This command is used to SET the sensitivity of the Accelerometer to MOVEMENT. The trigger threshold is a Percentage of the Maximum Full Scale Range. NOTE: 2 percent is HIGHLY sensitive as the Trigger Threshold is then 2% of 2G = 0.04 G required to detect Movement.

ACCEL.SDELAY.x **15 **Seconds****

This command is used to SET the STATIONARY Delay Timer. The unit will begin counting when it Stops moving. If the unit remains UNDER the Trigger Threshold for the SDELAY Time in seconds, it will send a STATIONARY Event to the server.

ACCEL.MDELAY.x **3 **Seconds****

This command is used to SET the MOVING Delay Timer. The unit will begin counting when it Starts moving. If the unit remains OVER the Trigger Threshold for the MDELAY Time in seconds, it will send a MOVING Event to the server.

ACCEL.DDELAY.x 3 Seconds

This command is used to SET the MAN DOWN Delay Timer. The unit will begin counting when it Detects the unit is at a larger angle than the “Y” Angle Threshold. If the unit remains at an angle Larger than the Threshold for the DDELAY Time in seconds, it will send a MAN DOWN Event to the server, when Enabled, See MDA – Man Down Alarm.

ACCEL.UDELAY.x 4 Seconds

This command is used to SET the MAN UP Delay Timer. The unit will begin counting when it Detects the unit is at a Lower angle than the “Y” Angle Threshold. If the unit remains at an angle Lower than the Threshold for the UDELAY Time in seconds it will send a MAN UP Event to the server, when Enabled, See MDA – Man Down Alarm.

ACCEL.ANGLEY.x 0 Degrees

This command is used to SET the Man DOWN / UP Trigger Angle. When the unit is standing upright as it would be when worn using the Belt Cradle, then this is defined to be at an angle of ZERO Degrees (0°). When the unit is laying down as it would be when you lay the unit down on a table or desk, then this angle is defined as NINETY Degrees (90°). When the unit is upside down, then this is defined to be at an angle of ONE HUNDRED AND EIGHTY Degrees (180°).

The full range of the Angle setting is 0 to 180 Degrees in 1 Degree Steps.

ACCEL.ANGLEX.x 0 Degrees (Not Used)

This command is NOT USED for any function at this time.

ACCEL.ANGLEZ.x 0 Degrees (Not Used)

This command is NOT USED for any function at this time.

ACCEL?

This command simply requests the unit to send all of its current Accelerometer settings to the Website.

ACCEL.DEFAULT

This command simply resets all Accelerometer settings to factory defaults.

AT COMMANDS

AT Commands are Technical commands and are NOT accessible by the general User.

BLACKBOX

BLACKBOX.ON/OFF **ON**

This command is used to Enable and Disable the Blackbox Recorder. It recommended to always have this function ON as it is required internally. The Blackbox is a Circular Buffer so the oldest data is overwritten by the newest data. The device is designed to Email ALL data before it ever gets overwritten anyway. But the possibility is that when the unit is out of Cellular Range, and over a very long period of time the blackbox may completely fill up and old data may be overwritten, effectively losing this old data.

BLACKBOX.CLEAR

This command is used to CLEAR the contents of the Blackbox Recorder. This command is rarely used as the unit manages the blackbox itself and there is NO need to manually Clear the data.

BLACKBOX.DAYS.ALL/MON/TUE/WED/THU/FRI/SAT/SUN **ALL**

This command is used to SET which days the blackbox will record data. It recommended to always have this function SET to ALL so data is recorded always.

BLACKBOX.RATE.x **5** Seconds

This command SETS the frequency that data is saved to the blackbox. The default value of 5 Seconds implies that the units GPS location is saved every 5 seconds. The range of values is from 0 to 255 seconds.

BLACKBOX.FULL.x **20** Percent

This command SETS the Threshold at which the blackbox data is emailed to the Website for generating Reports. The percentage is specified as that portion of memory available internally for the blackbox. Setting this value to a low percentage ensures the blackbox is unlikely to ever overwrite old data. The range of values is 0 to 100%.

BLACKBOX.GET.ALL

This command is used to Download ALL the contents of the blackbox.

NOTE: *The blackbox is an Automatic system and there is NO need to manually download data.*

BLACKBOX.GET.x

This command is used to Download x% of the blackbox.

NOTE: *The blackbox is an Automatic system and there is NO need to manually download data.*

BLACKBOX.RECORD.MRMC/SRMC/EVENT/DEBUG/ALL ALL

This command is used to LIMIT the strings recorded into the blackbox. The default is to record ALL types of strings including GPS, Moving and Stationary as well as general Event strings and Debug strings. Turning OFF the Event and Debug strings would effectively provide more memory space for GPS strings. As the blackbox system is Automatic, this is generally not necessary.

BLACKBOX?

This command simply requests the unit to send all of its current blackbox settings to the Website.

BLACKBOX.DEFAULT

This command simply resets all blackbox settings to factory defaults.

BUZZER

BUZZER.ON/OFF ON

This command is used to Enable and Disable the onboard BUZZER.

BUZZER.GPRSON.x 2 Short Beeps

This command SETS the number of Short Beeps when the GPS is turned ON.

BUZZER.GPRSOFF.x 2 Long Beeps

This command SETS the number of Long Beeps when the GPS is turned OFF.

BUZZER.GPSLOCK.x 3 Short Beeps

This command SETS the number of Short Beeps when the GPS attains LOCK.

BUZZER.GPSUNLOCK.x 3 Long Beeps

This command SETS the number of Long Beeps when the GPS loses LOCK.

BUZZER.LOWBAT.x 1 Short and Long Beeps

This command SETS the number of Short and Long Beeps when Low Battery is detected.

BUZZER?

This command simply requests the unit to send all of its current Buzzer settings to the Website.

BUZZER.DEFAULT

This command simply resets all Buzzer settings to factory defaults.

EMAIL

EMAIL.AUTO.ON/OFF **ON**

This command is used to Enable and Disable the Automatic EMAIL system used by the Blackbox Recorder. It is recommended to always have this function ON as it is required internally.

EMAIL.BLACKBOX

This is a Manual command which forces the blackbox to Email its contents to the website immediately. Normally the Email system is fully Automatic. Note the Email is sent immediately, although it may take some time before the email arrives at the Server and is processed into a written report. Depending on the various circumstances, this may be several hours or more.

EMAIL?

This command simply requests the unit to send all of its current Email settings to the Website.

EMAIL.DEFAULT

This command simply resets all Email settings to factory defaults.

GEO FENCES

GEO.LEARNPOSITION.x.r.M/KM

This command is used to TELL the unit to LEARN its current position as a GEO Fence. This GEO Fence is an Imaginary CIRCULAR fence around its current location. If either Geo Entry or Geo Exit functions are turned ON then the unit will report the Event of the unit Crossing this imaginary fence, either on Entry or on Exit, to the Website OR via SMS to a specified phone number. The unit can LEARN up to 5 GEO Fences which are indexed by the Variable, x. So the range of x is 0 to 4. As well as providing an Index number, it is necessary to specify the Radius of the GEO Fence using the variable, r. The range of r can be 0 to 1000 M (Metres), OR it can be 0 to 1000 KM (Kilometres).

NOTE: There are only 5 indexes available which means a maximum of 5 GEO Fences can be created using either the LEARNPOSITION or SETPOSITION commands.

GEO.SETHOMEBASE

This command SETS the Homebase for the unit. This is a Fixed GEO Point which the unit will LEARN its current Position as its Homebase. This homebase could be a house or a depot, whatever you choose. Simply send the command to the unit when it is located at its homebase and is ON and connected to the Website. The unit will then LEARN its current position as its homebase point. The unit can then report its location RELATIVE to its

homebase point using the command, INFO.HOMEBASE at any time. The unit will return its location relative to its homebase as example "10.3 Kilometres North of Homebase".

GEO.SETPOSITION.x.lat,lon,R.M/KM

This command is used to TELL the unit to LEARN a GIVEN position as a GEO Fence. This GEO Fence is an Imaginary CIRCULAR fence around the Longitude and Latitude Coordinates provided in the command. If either Geo Entry or Geo Exit functions are turned ON then the unit will report the Event of the unit Crossing this imaginary fence, either on Entry or on Exit, to the Website OR via SMS to a specified phone number. The unit can LEARN up to 5 GEO Fences which are indexed by the Variable, x. So the range of x is 0 to 4. As well as providing an Index number, it is necessary to specify the Radius of the GEO Fence using the variable, r. The range of r can be 0 to 1000 M (Metres), OR it can be 0 to 1000 KM (Kilometres).

NOTE: There are only 5 indexes available which means a maximum of 5 GEO Fences can be created using either the LEARNPOSITION or SETPOSITION commands.

GEO.ENTRY.ON/OFF OFF

This command Enables and Disables the Geo ENTRY Function. When enabled, the unit will report Geo ENTRY Events to the Website or via SMS.

GEO.EXIT.ON/OFF OFF

This command Enables and Disables the Geo EXIT Function. When enabled, the unit will report Geo EXIT Events to the Website or via SMS.

GEO.GETPOSITION.x(0-5)

This command is used to return ALL settings for a particular GEO Fence which is indexed by the value x.

GEO.SMS.ON/OFF OFF

This command Enables and Disables the GEO SMS function which sends an SMS when a GEO Fence Event has occurred.

GEO.SMS.phonenumber blank

This command SETS the SMS Phone number for the GEO Fence Event. This number need to be for a Mobile Handset capable of receiving an SMS Text message.

GEO?

This command simply requests the unit to send all of its current GEO Fence settings to the Website.

GEO.DEFAULT

This command simply resets all GEO Fence settings to factory defaults.

GPRS

GPRS.ON/OFF **ON**

This command is used to Enable and Disable the GPRS Function. It is recommended to always have this function ON as it is required internally.

GPRS.GETSETTINGS

GPRS.USERNAME.username **blank**

GPRS.PASSWORD.password **blank**

GPRS.APN.x **telstra.internet**

GPRS.AUTO APN.ON/OFF **ON**

GPRS.CONNECT

GPRS.CLOSE

GPRS.DISCONNECT

GPRS.EXIT

GPRS.RESTART

GPRS.RECONNECTTIMER.x **10** Seconds

GPRS.MOVINGCONNECT.ON/OFF **OFF**

GPRS.RMCMOVING.x **120** Seconds

GPRS.RMCSTATIONARY.x **120** Seconds

GPRS.AUTOCONNECT.ON/OFF **ON**

GPRS?

GPRS.DEFAULT

GPS

GPS.ON/OFF

ON

This command is used to Enable and Disable the onboard GPS Receiver. It is recommended to always have this function ON as it is required internally.

GPS.FORMAT.DMS/DDM/DD.NSEW/MATH

DMS.NSEW

GPS.LOCKTIMER.ON/OFF

OFF

GPS.LOCKTIMER.x

0 Seconds

GPS.MODE.CAR/PEDESTRIAN

CAR

GPS.ONLINE/OFFLINE

GPS.RMC

GPS.RESTART

GPS.SIGNALWATCHDOG.ON/OFF

ON

GPS.SIGNALWATCHDOGTIMER.x

60 Seconds

GPS.SIGNALWATCHDOGUNLOCK.ON/OFF

ON

GPS.SIGNALWATCHDOGFIX.1/2/3 (No Fix/2D/3D)

3

GPS.SIGNALWATCHDOGHDOPE.x

5.0

GPS.SIGNALWATCHDOGVDOPE.x

5.0

GPS.SIGNALWATCHDOGPSDOPE.x

5.0

GPS.SIGNALWATCHDOGSATS.x

3

GPS?

GPS.DEFAULT

INFORMATION

INFO.ALL
INFO.ADDRESS
INFO.BATTERY
INFO.EZ
INFO.EZRMC
INFO.HOMEBASE
INFO.LASTPOSITION
INFO.LOG
INFO.POSITION
INFO.POWER
INFO.RMC
INFO.SETTINGS
INFO.SMS.phonenumber.text
INFO.STATUS
INFO.VERSION

LOG

LOG.ON/OFF **OFF**

This command is used to Enable and Disable the LOG Function

LOG.CLEAR

LOG.GET

LOG.INFO

LOG.RESET

LOG.START.[yy]yy/mm/dd,hh:mm:ss

LOG.END.[yy]yy/mm/dd,hh:mm:ss

LOG.ENGINEHOUR.x **0** Hours

LOG.ODOMETER.x **0** Hours

LOG.SERVICEHOUR.x **0** Hours

LOG.TRIGGERHOUR.x **0** Hours

LOG?

LOG.DEFAULT

MAN DOWN ALARM

MDA.ON/OFF **ON**

This command is used to Enable and Disable the MAN DOWN Function.

MDA.AUTORESET.ON/OFF **OFF**

MDA.CLEAR

MDA.SMS.ON/OFF **OFF**

MDA.SMS.phonenumber **blank**

MDA.TIMER.x (Auto Reset Timer) **60** Seconds

MDA?

MDA.DEFAULT

MODE

MODE.CAR.ON/OFF **OFF**

This command is used to Enable and Disable the CAR MODE Function

MODE.CAR.DELAY.x **5** Minutes

MODE.IDLE.ON/OFF **OFF**

This command is used to Enable and Disable the IDLE MODE Function

MODE?

MODE.DEFAULT

PANIC/MARKER BUTTON

PANIC.ON/OFF **ON**

PANIC.DELAY.x **1** Second

PANIC.SMS.ON/OFF **OFF**

PANIC.SMS.phonenumber **blank**

PANIC?

PANIC.DEFAULT

SET Command

SET.ID.x	1	
SET.MEASURE.KILOMETRES/MILES/NAUTICALMILES		Kilometres
SET.PANIC/MARKER	PANIC	
SET.NAME.x	XXX	
SET.PIN.x	1234	
SET?		
SET.DEFAULT		

TEST Command

These commands are for factory debugging only.

TIME Command

TIME.LOCAL

TIME.ZONE.[+/-]x **10**

TIME.DLS.ON/OFF **OFF**

TIME.DLS.START.x,END.y

TIME.DLS.CLEAR

TIME?

TIME.DEFAULT

Australian Daylight Savings settings from 2011 to 2014

Sunday 2 October 2011 to 1 April 2012

TIME.DLS.START.10/02,END.04/01

Sunday 7 October 2012 to 7 April 2013

TIME.DLS.START.10/07,END.04/07

Sunday 6 October 2013 to 6 April 2014

TIME.DLS.START.10/06,END.04/06

General Commands

RAW RMC

POSITION

EXIT

GPSONLINE

GPSOFFLINE

GETALLSETTINGS



Appendix A – Network APN List

Access Point Name

The command to set the APN is:

GPRS.APN.telstra.internet

You may find the correct APN for your carrier in the list below.

NOTE: Generally no username or password is needed with Australian carriers unless otherwise specified.

Telstra **telstra.internet**

Bigpond **telstra.bigpond**

NOTE: Username and Password required

Vodafone **vfinternet.au**

Optus **internet**

Optus **busintpub**

Optus **busintprv**

3 – Post-Paid **3netaccess**

3 – Pre-Paid **3services**

Beagle **splns357**

BLiNK (after 04/08/09) **splns888a1**

BLiNK (prior to 04/08/09) **connect**

Crazy John's & GRL **purtona.net**

Dodo – Post-Paid **WirelessBroadband**

Dodo – Pre-Paid **DODOLNS1**

Escape Net **splns357**

Exetel (Optus Based) **exetel1**

Exetel (Vodafone Based) **vfinternet.au**

Highway1 **35714**

Internode (after 26/08/09) **internode**

Internode (prior to 26/08/09).....	splns333a1
iPrimus.....	primuslms1
Optus – Post-Paid	connect
recently (e.g. 11/2010 for Samsung Galaxy Tab)	connectCap
Optus – Month to Month BYO.....	CONNECTME
Optus – Pre-Paid	preconnect
Optus Mobile – Post-Paid/Pre-Paid	internet
Pacnet	pacnet
TPG Mobile (The APN for Optus Mobile)	internet
Virgin – Post-Paid – must use PAP authentication....	VirginBroadband
<i><u>NOTE:</u> If using with 3G router, you need to use your email Username and Password</i>	
Virgin – Pre-Paid	VirginInternet
Vodafone – Post-Paid	vfinternet.au
Vodafone – Pre-Paid	vfprepaymbb
WestNet/iiNet.....	splns555a1



Appendix B – Disclaimer

PLEASE READ CAREFULLY

This manual is provided as a guide to the typical use of the EziTrak® Nano Mobile. The EziTrak® Nano Mobile accuracy and intercept can be affected by many factors including environmental conditions, general poor signal strength, equipment failure, defects and improper handling/use. It is the user's responsibility to exercise common prudence and judgement. This device should in no way be relied upon as a substitute for such prudence and judgment. Your EziTrak® Nano Mobile is also subject to the coverage of your own Network Service Provider.

HOWEVER, ROJONE ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR ANY ACTIONS ON THE PART OF THE PURCHASER OR USER WHICH MAY RENDER THE EQUIPMENT INOPERATIVE DUE TO ANY FAILURE ON THE PART OF THE PURCHASER OR USER TO COMPLY WITH THE "USER MANUAL" AND STRICTLY IN ACCORDANCE WITH THE DIRECTIONS AND GUIDELINES NOTED THEREIN.

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IN ADDITION, ROJONE DISCLOSES THAT THE IMPROPER USE OF THE EQUIPMENT MAY CONTRAVENE PARTS OF THE LEGISLATION REFERRED TO IN THE PREVIOUS PARAGRAPH. ACCORDINGLY, ROJONE ACCEPTS ABSOLUTELY NO RESPONSIBILITY FOR USAGE WHICH MAY FALL OUTSIDE OF THE SCOPE OF THE PROPER INTENDED PURPOSE OF THE EQUIPMENT.

PURCHASERS OF THE EQUIPMENT ARE CAUTIONED TO USE THE EQUIPMENT EXERCISING DILIGENCE AND CARE AT ALL TIMES. ROJONE ACCEPTS NO RESPONSIBILITY FOR ANY FAILURE OF THE PURCHASER OR USER'S DUTY OF CARE RESULTING FROM ANY IMPROPER OR UNAUTHORISED OR WRONGFUL USE OF THE EQUIPMENT.

NO LIABILITY FOR CONSEQUENTIAL DAMAGE; IN NO EVENT ROJONE OR THEIR RESPECTIVE REPRESENTATIVES BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING DIRECT OR CONSEQUENTIAL INJURY, LOSS OR DAMAGE, OR ANY PECUNIARY LOSS) INCURRED THROUGH THE USE, OR THE INABILITY TO USE, OR IMPROPER USE OF THE EziTrak® Nano Mobile PRODUCT.

Rojone reserves the right to make design changes to any Rojone product without incurring any obligation to make the same changes to previously purchased units.



Appendix C – Warranty

Your EziTrak® is warranted for a period of 12 months against defects in material and workmanship affecting normal use EFFECTIVE FROM DATE OF PURCHASE.

Please complete the warranty card to secure your warranty guarantee and kindly retain your purchase receipt as proof of purchase, which must be presented if making a claim under the terms of this warranty.

This warranty does not cover damage, fault, failure or malfunction due to external causes, including accident, abuse, misuse, problems with electrical power, servicing not authorised by Rojone, usage and/or storage and/or installation not in accordance with product instructions, failure to perform required preventative maintenance, normal wear and tear, act of God, fire, flood, war, act of violence or any similar occurrence or any attempt by any person other than Rojone personnel or any person authorised by Rojone to adjust, repair or support the product and problems caused by use of parts and components not supplied by Rojone.

The benefits under our warranty are in addition to other rights and remedies of the purchaser under a law in relation to our goods to which the warranty relates.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Subject to the above, under the warranty during the twelve (12) month period beginning on the date of purchase, Rojone will repair or replace products returned to Rojone's facility. Rojone will return the repaired or replaced products to the purchaser freight pre-paid. At Rojone's sole discretion, Rojone may pay the purchaser the cost of replacing the products or the cost of having the products repaired.

Rojone does not give any warranty that products purchased under a contract other than a consumer contract are fit for any particular purpose.

The Rojone warranty is given in place of all excludable warranties, conditions, terms, undertakings and obligations implied by statute, common law, trade usage, course of dealing or otherwise including warranties or conditions of merchantability, fitness for purpose, satisfactory quality and/or compliance with description, all of which are excluded to the fullest extent permitted by law.

LIMITATION OF LIABILITY, DISCLAIMERS AND PRIVACY ISSUES

ROJONE WARRANTS THAT IT HAS USED ITS BEST ENDEAVOURS TO MANUFACTURE A PRODUCT FOR THE PURPOSE FOR WHICH IT IS INTENDED USING ITS KNOWLEDGE, KNOW HOW, EXPERTISE AND SKILL.

ROJONE RESERVES THE RIGHT TO MAKE DESIGN CHANGES TO ANY ROJONE PRODUCT WITHOUT ANY INCURRING ANY OBLIGATION TO MAKE THE SAME CHANGES TO PREVIOUSLY PURCHASED UNITS.

HOWEVER, ROJONE ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR ANY ACTIONS ON THE PART OF THE PURCHASER OR USER WHICH MAY RENDER THE EQUIPMENT INOPERATIVE DUE TO ANY FAILURE ON THE PART OF THE PURCHASER OR USER TO COMPLY WITH THE "USER'S MANUAL" AND STRICTLY IN ACCORDANCE WITH THE DIRECTIONS AND GUIDELINES NOTED THEREIN.

FURTHER, ROJONE ACCEPTS NO RESPONSIBILITY FOR ANY CONSEQUENTIAL EFFECTS OR BREACHES RESULTING FROM THE PURCHASER OR USER'S FAILURE TO USE THE EQUIPMENT FOR THE PURPOSE FOR WHICH IT IS INTENDED INCLUDING ANY BREACHES OF THE COMMON LAW AND ANY AND ALL LEGISLATION DEALING WITH PRIVACY AND SURVEILLANCE OF PERSONS INCLUDING EMPLOYEES AS IN EXISTENCE OR AMENDED FROM TIME TO TIME.

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EziTrak
security & tracking systems



This product is designed and manufactured in Australia.

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INTERACTIVE Personnel Monitoring System

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