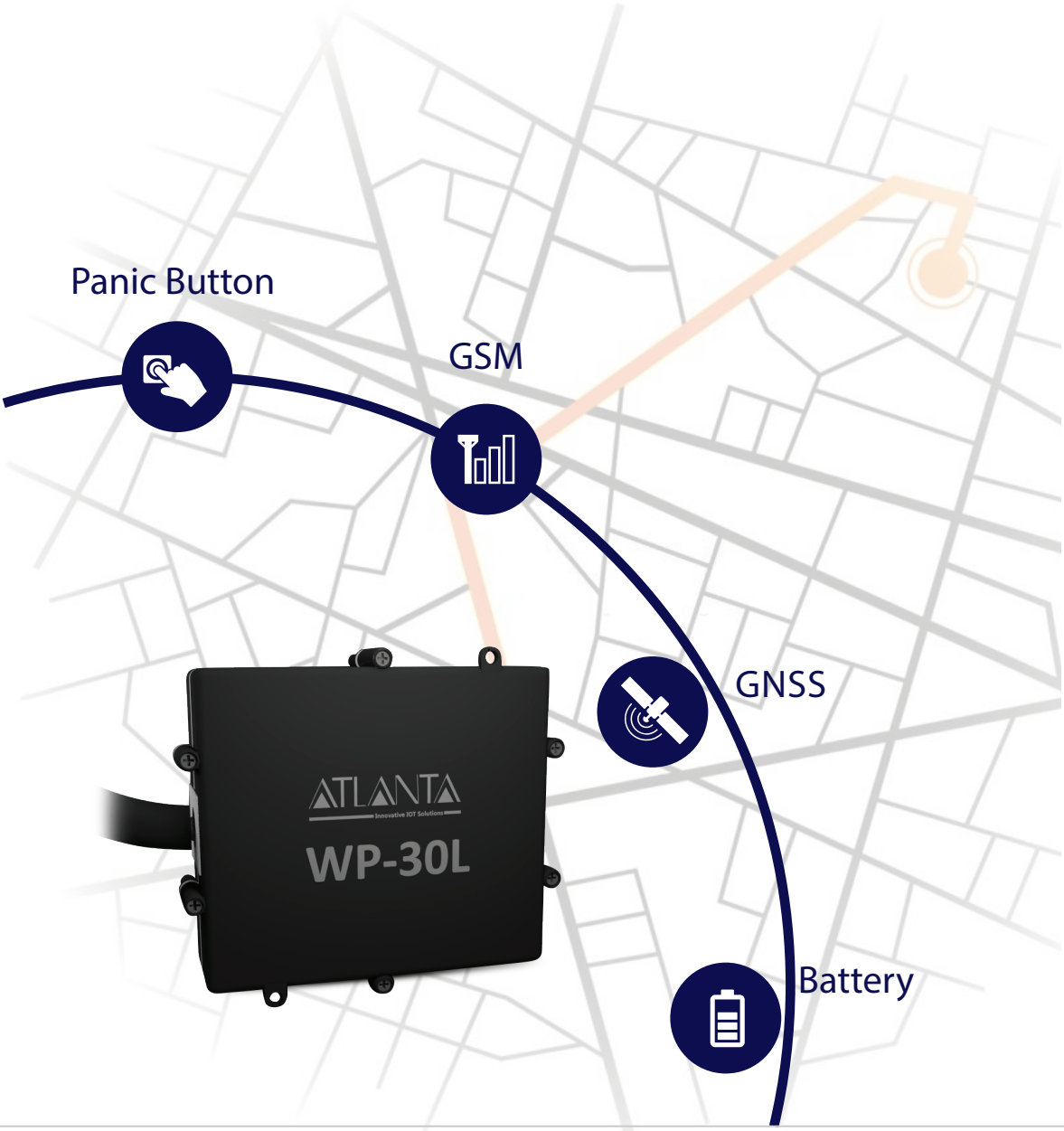
WP-30L

VEHICLE TRACKING DEVICE

USER MANUAL



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INTRODUCTION

Dear Customer,

Congratulations on being the owner of this product which has been designed and manufactured to the highest automotive standards utilizing the latest technology for total reliability.

*Vehicle tracker device "**WP30L"** is a new remote vehicle security system with a host of comfort features. The **"WP30L"** enables you to communicate directly with your vehicle. Locate and/or immobilize the vehicle in real-time if the vehicle is lost or robbed. The "WP30L" is designed and certified as per AIS140 standards.*

Please read this manual to get the full benefit of the system. We suggest you keep this manual at a secure place. It will be easier for you to find the information in the event of emergency to locate your vehicle at any unknown place, through remote control system. Hope you derive as much pleasure in using it, as we have derived from developing it.

Yours Truly,

Atlanta Systems Pvt.Ltd.

PRECAUTIONS/AWARENESS:

The GSM functionalities are dependent on the Network coverage.

Only GSM SIM card (postpaid/prepaid) can be used.

The credit balance of the SIM card cannot be zero. And also pay special attention on the expiry date of GPRS package, SMS Package and mobile connection validity in case for prepaid SIM card.

Do not remove SIM while the TRACKAR is in power-on condition.

Please make sure that your SMS command spelling and password are correct.

Note: Availability of location name is dependent on mobile service provider. If the service provider is giving the name of locality in cell info display, the device will also show name of locality.
*Please note that "**ARM MODE**" commands will immediately bring the vehicle to a sudden halt. Hence, we strongly recommend that these commands should not be used when vehicle is moving, as sudden stop may result in some misshape.*

HARDWARE DESCRIPTION:

a. Power Requirement: 8V to 40V
b. Normal operation temperature: -30°C to +80 °C
c. Restricted operation temperature: Above -40°C and below +85 °C(w/o battery)
d. Restricted operation temperature: Above -30°C and below +75 °C(with battery)
e. Storage temperature: -45°C to +90°C

LED INDICATIONS

GREEN - Blinks at interval of around 3 Secs, once the unit acquires acellular (GSM) signal. If this light is continuously blinking checkfor proper installation of the VTS and be sure the GPRS data is active.

YELLOW- Turns solid once the unit acquires a GPS signal. If this light is not blinking verify proper VTS mounting and that the "SKY VIEWING" isf acing the sky.

Note: When the VTS is installed, it can take up to 20minutes for the GPS to acquire its position after initial power-up.

BLUE - Blinks once the device starts sending data to server.

RED - Power indication

Note:- After all of the lights are solid turn the vehicle off, then turn it back on and verify the installation.

SMS COMMANDS DESCRIPTION:

Password based commands

The WP30Lwill accept command from any number if the password is provided correctly. The device would check the password in every command and respond to the command only if the password is correct. The password is four digit numbers. The users can change the password of their device.***(Default Password is 6906)***

Example:- The command format will be

Command<password>

The default password is 6906 which can be changed at future (only 4 digits numbers***)***

So the command to get IMEI number would be

IMEI<6906>

Change device password

- **PW::1234;*<password>*** **-** This command is used to change the password. After this command the password will be **1234, *default password is 6906***

Store Device ID

- **DNS::12345;*<password>*** -This command is used to set the device ID, the maximum length of device ID would be 15 digits. Here after the device will replace the IMEI number with this ID in protocol.

Getting SMS alert from Device

- **SYSSTARTZ::+919876543210;*<password>***
  This command is used to register the device with Subscriber number. Now device will send Alerts to the number **+919876543210**. Confirmation message "SYSTEM START HAS BEEN ACTIVATED" will be received.

- **SYSSTOPZ*<password>***
  This command is used to stop the system with Subscriber number. (Now a new number can be registered to the device).

- **CAD::x;*<password>*** ----Command to enable/disable common alerts like Main power and SOS. Deviec would send these alerts only after enabling them.
  Where x=0 for enabling the alerts and x=1 for disabling the alerts

Note :- For all alerts like IGNITION, DOOR, SOS, MAINPOWER,....etc. Corresponding wiring should be done with vehicle as per connection details.

Immobilize the vehicle

- **ARM<*password*>** -Device will start monitoring the vehicle. It will start sensing the doors& ignition, cut the ignition of the vehicle and confirmation massage "ARM MODE HAS BEEN ACTIVATED" will be received.

- **DISARM<*password*>** The Device will stop monitoring the vehicle. It will stop sensing the doors, Start the ignition and fuel of the vehicle and conformation massage "ARM MODE HAS BEEN DEACTIVATED" will be received.

- **GOUTON<*password*>** -This command will turn ON the general output.

- **GOUTOFF<*password*>** - This command will turn ON the general output.

- **GOUT1ON<*password*>** -This command will turn ON the general output-1.
- **GOUT1OFF<*password*>** -This command will turn OFF the general output-1.
- **GOUT2ON<*password*>** -This command will turn ON the general output-2.
- **GOUT2OFF<*password*>** -This command will turn OFF the general output-2.

Note:- 1. Relay connection must be done to use the output functions
2. IGN and DOOR sense would be enabled on ARM command.

To Port the Device to server

To port the device to a server, following settings like network APN, server details and data sending interval should be configured to the device

To save configuration

- **#config::APN::username::password;<*password*>**

– This command is used to configure your GPRS account.
APN (access point name) which is used to get to the GPRS gateway provided by network operator.
Username: for your GPRS account, username is provided by your network operator or else put ABC.
Password: for your GPRS account, username is provided by your by network operator or else put ABC.
Response:
"GPRS configured successfully:"
"GPRS APN: XXX"
"GPRS USER NAME: XXX"
"GPRS PASSWORD: XXX"

- **#config?*<password>***

  - This command replies with GPRS APN, User Name and Password already saved.
  Response:
  i)GPRS APN: XXX
  GPRS USERNAME: XXX
  GPRS PASSWORD: XXX
  ii) No GPRS_APN, Usr_nm, Pwd stored

To set reporting interval :

- **WEBSTART<**www**D/H/M/S>,<xxxD/H/M/S>,<yyyD/H/M/S>,<**zzz**D/H/M/S><*password*>**

Command to set the tracking interval. and you will get confirmation SMS and then start sending data to our web server.

xxx means digits from 0-9
D means DAYS (the system will accept from 1 to 365 days, it will reject less than 1 day or more than 365 days)
H means HOURS (the system will accept from 1 to 24 hours, it will reject less than 1 hour or more than 24 hours)
M means MINUTES (the system will accept from 1 to 60 minutes, it will reject less than 1 minute or more than 60 minutes)
S means Seconds (the system will accept from 1 to 60 seconds)

Where www stands for IGN ON interval, xxx stands for IGN OFF interval, yyy stands for MAIN POWER OFF interval and zzz stands for Panic mode interval .

Example – when we send this command WEBSTART010S,030S,002M,005S<6906> the device will start sending the data to our web server at IGN_ON interval of 10 Seconds, IGN_OFF interval of 30 Seconds, MAIN_POWER_OFF interval of 2 Minutes and Panic mode interval of 5 Seconds.

To Stop live tracking on internet

- **WEBSTOPZ*<password>*** ---Command to stop the web based tracking.
  Response:
  Data Sending to WEB Stopped

To port the device to server

Command to port the Device to the required server (with IP and PORT)

- **#serverchange::IP::PORT;<password>**

  Command to port the device to a server

  Example:-
  #serverchange::196.168.175.12::20000;<6906>,
  this command would point Device to the server with IP=196.168.175.12 and Port= 20000.

Command to port the Device to the second server (To start data sending to dual IP)

- **#serverchange1::IP::PORT;<password>**
  Command to port the device to second server

  Example:-
  #serverchange1::196.168.175.12::20000;<6906>,
  this command would point Device to the server with IP=196.168.175.12 and Port= 20000.

Command for fall back SMS service

- **#SMSSERVER::- -;<*password*> -** This command is used to remove the saved number from the device.
- **#SMSSERVER? <*password*>** This command is used to enquire the set control center number for fall back SMS commands on the FARE meter.
- **#SMSSERVER::XXXXXXXXXX; <*password*> ---**This command is used to set a number for SMS commanding on the device. Here XXXXXXXXX stands for control center mobile number.

Commands for harsh event

- **HT::HA::HB::angle;** This command is used to set threshold angle for sensing harsh turn,harsh braking and harsh acceleration
- **HT?** This command is used to enquire the set angle
- **HT--;** This command is used to remove a set angle threshold from the device

Commands for HEALTH PACKET

- **HPI::XXX;<*password*> --** This command is used to set the time interval for sending health packet to the server. Where XXX stands for time in minutes.
- **HPI? <*password*> --** This command is used to enquire the set time interval for health packet
- **HPI- -<*password*> ---** This command is used to remove a set time interval for health packet

Commands for EMERGENCY PACKET

- **EST? <*password*> ----** This command is used to enquire the set time interval after which the emergency alert is released if not done so from server side.
- **EST::XXX; <*password*> --** This command is used to the set time interval after which the emergency alert is released if not done so from server side. Where XXX is duration in MINUTES.
- **EST- -<*password*> --** This command is used to remove a set time interval.
- **PANICRLS<*password*>** --This command is used to remove the panic state. This command would be accepted from master number or server in which the device is sending data.

Commands for OVERSPEED ALERT

- **SPEED? <*password*> ---** This command is used to enquire the set speed threshold for over speeding
- **SPEED::--; <*password*> ---** This command is used to remove the set speed threshold for over speeding
- **SPEED::XXX**; **<*password*> --** This command is used to set speed threshold for over speeding. Here XXX stands for speed in KMPH

Commands for SLEEP TIME

- **SLT? <*password*> --** This command is used to enquire the set time interval after which the device will go into sleep mode.
- **SLT<*password*> ----** This command is used to remove the set time interval after which the device will go into sleep mode
- **SLT::XXX; <*password*> --** This command is used to set the data sending interval during SLEEP mode. Here XXX stands for time in minutes.

Commands to configure the Vehicle ID

- **VID? <*password*> ---** This command is used to enquire the set Vehicle ID
- **VID::- -; <*password*> ---** This command is used to remove the set Vehicle ID.
- **VID::XXXXXX; <*password*> --** This command is used to set Vehicel ID. Here XXX stands for Vehicle ID

Some General commands

- **RESET<*password*>**
  This command brings thedeviceon factory defaults, the subscriber name and all other stored information is deleted from Device. Conformation message "SYSTEM RESET COMPLETE" will be received.

- **IMEI<*password*> -**TRACKAR will display International Mobile Equipment Identity Number (15 Digits).

- **FE<*password*> ---**Command to erase the memory data
  To get GPS data for one time

- "**GETGPS***<password>*" to the device.

  Response:

  The device will send back:

  If the GPS satellites are unreachable, you will receive "GPS NOT FOUND"

  If the GPS satellites are reachable, you will receive

  Lat: XXX (It will tell you the latitude of the location)
  Long: XXX (It will tell you the longitude of the location)
  Speed: XXX (It will tell you the speed of the vehicle in KPH)
  Date: XXX (It will tell you the date of this particular data)
  Time: XXX (It will tell you the time of this particular data in IST)
  IMEI: XXX(It will tell you International Mobile Equipment Identity Number)
  Web link to view location(It will show you the location on map)*

  To observe the exact location on Google map for a corresponding LAT – LONG, open www.maps.google .com, in the search bar enters the latitude and longitude coordinates separated with a comma (,). It will show you the location.

- **SLEEPON***<password>*:

  By default sleep mode is on. Sleep mode is used to deactivate data sending on GPRS when the vehicle is ona stand still for a particular time. As soon as the Vehicle starts moving again the tracking will start and sending data again. This mode is provided to save battery when the Vehicle is in stand still

  Response:

  Sleep on GPRS activated

- **SLEEPOFF***<password>*:

  This command is used to disable SLEEPON mode

  Response:

  Sleep on GPRS De-activated

- **SLEEP?***<password>*

  To check whether the unit is IN SLEEP OR NOT.

- **SYSSTATUS***<password>*

  Response:

GSM_ON – XXXM/H/D	GSM_OFF
GPRS_ON – XXXM/H/D/S	GPRS_OFF
Test Mode	**Customer Mode**
Door(S) Open	Door(S) Closed
Ign_ON	Ign_OFF
VC_ON	VC_OFF
ARM	DISARM
Sleep_ON	Sleep_OFF
Fuel:c	Fuel:N.C.

SIP: 01.11.12.13

- **GSENSE*<password>*** -This command is used to check the condition of vehicle(whether IN MOTION OR NOT) and status of tracker (whether IN SLEEP OR NOT).

  Response:

  GSENSOR WORKING- UNIT IS IN (NOT IN) MOTION AND IT IS NOT IN(/IN) SLEEP MODE

- **SETODO::12345;*<password>* --** This command is used to calibrate the odometer where 12345 is the present odometer reading.

  Response:

  Odometer set to: 12345.00

- **SETODO?*<password>*** --- This command is used to get/read the present accelerometer reading of vehicle.

  Response:

  Odometer reading:: 12345.00

WORKING OF EMERGENCY ALERT

The device is having an emergency button to generate the emergency alerts. The vehicle may have one or more emergency button for passengers. Every button is having an LED for indication and four wires for connections. Two wires for power and two wires for emergency button connectivity as in wiring diagram. The status of the LED is as follows

ON ➔ Normal IGN ON
OFF➔ Normal IGN OFF
Blinks➔ Emergency mode button pressed.

The device will send emergency alert to the server on pressing the emergency button. The emergency mode should be cleared either by command from server to clear the mode or it will be cleared after the preset emergency duration in the device.

The command to clear the emergency state is **PANICRLS*<password>***

There is an SMS fall back facility during the emergency state, where the device will send alert on configured mobile number if GPRS is not working or available.

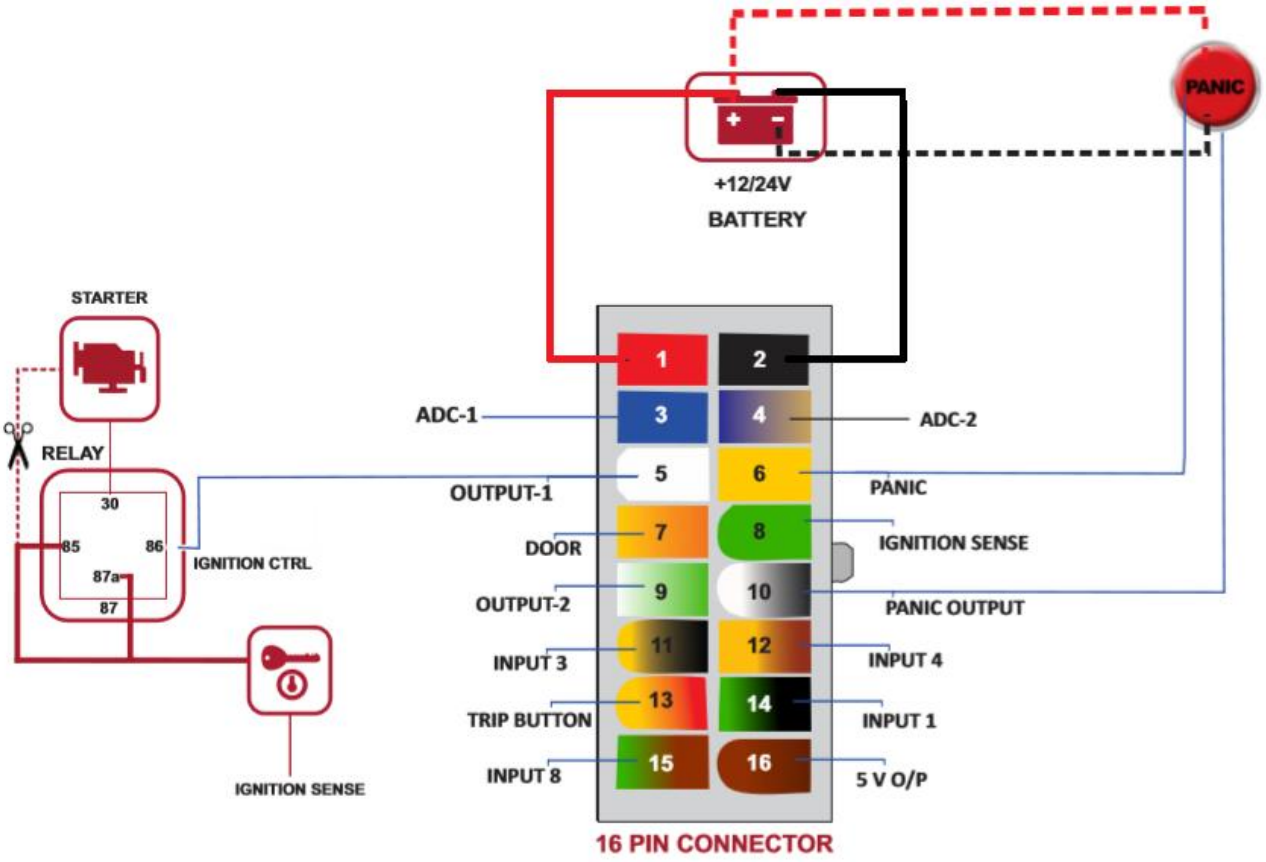
TROUBLE SHOOTING:

Observation	Problem	Solution
RED LED OFF	Device is not getting external power	Check the external battery connection and fuse
GREEN LED is blinking continuously	No GSM Signal	Check for proper installation of the SIM card, GSM antenna (For VTS with external antenna) and unit.
YELLOW LED is not blinking	No GPS Signal	Verify proper installation of unit; verify that the VTS has a clear view of the sky, with the proper side up facing the sky; GPS antenna connection (For VTS with external antenna); check SLEEP status in GPRSSTSTUS command
No reply from TRACKAR	SIM/PASSWORD issue	Check SMS balance in SIM; check the password and the command is correct
Immobilizer Not working	RELAY/IGNITION Sense issue	Check IGNITION sense is connected properly; Check whether the relay rating
Device not updating on web	Server/APN setting, GPS issue	Check APN, server details, GPS validity, WTON, Protocol etc. in GPRSSTATUS reply
CC blank in GPRSSTATUS	Network name issue	Enable auto configuration; If network using is other than Airtel,Aircel, IDEA & Vodafone, save the APN using #CCM command
CF is not zero	Server connection issue	Check server setting, check whether the port is open or not at server
SGDC not Zero	SIM GPRS issue	Activate GPRS on SIM card
SF is not zero	SIM data issue	Check GPRS data on SIM card

GPRSSTATUS

This command is used to get the complete status of the device, and the command format is **GPRSSTATUS<6906>.**

Description of the reply

Entries	Description	Remark
CN:	Current network operator	
WT	Webtracking ON/OFF	WTOFF for OFF and WTON for ON
CT	Tracking mode	CT-contineous tracking, FT for fast tracking
SOFF	Sleep status	SOFF for SLEEPOFF and SON for SLEEPON
SGDC	GPRS availability on SIM card	
MUC0	Internal memory data count	
CC	Current configuration	Currently using APN
IP	Server address	Currently using Server details
PD	PDP Deact error	Network error, occurs normally if APN is wrong
OFN	Out of GSM network	
CF	Connection fail with server	
SF	Data sending fail	
SS	GSM Signal strength	Should be >10 for proper GPRS
GPS	GPS availability	A= available, V= void
GMS	GMT shift	For setting time region, default IST
P	Protocol	P0= protocol 0, P1= protocol 1

WIRING DIAGRAM