USER MANUAL
L-100

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MANUAL VERSION # L-100_V0.1

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ATLANTA SYSTEMS VEHICLE TRACKER UNIT

PACKAGING CONTENTS:

Unpack the **L-100** Box carefully, in the package you may find:

1. L-100 Tracking Device
2. Wiring harness
3. Fuse
4. Relay with socket *
5. Panic button*
6. Usermanual

Note- Some of the accessories shown above are optional and need to purchase separately

Features

1. High sensitive GPS chipset.

2. Combination of GPS, GSM/GPRS wireless network.

3. Durable and highly reliable GPS tracker.

4. Easy to install or hide in the vehicle to perform tracking.

5. Ideal application for vehicle tracking and equipment/assets monitoring.

6. External DC power supply.

7. Configuration can be done via SMS and GPRS commands.

8. Real-time GSM/GPS location monitoring on SMS and website.

9. Vehicle control with Immobilization.

10. Generation of reports on web-site in html/xls format. Reports include drive/stop summary, Performance (based on speed), Detail (with time, date, latitude, longitude, speed).

11. Replay and analysis of trip logs.

12. Add on users with customized access to web accounts

13. A/C sense.

14. Vehicle control function (Ignition off/on) can be started /stopped by the user.

15. Easy installation and easy SMS commands.

16. If wrong SMS command sent by the user then, L-100 will delete SMS and send "SMS NOT ACCEPTED" to user mobile number.

17. User would get a google map link on mobile with Latitude /longitude.

18. Over The Air (OTA) software updation.

19. GUI for configuration through PC

20. Panic Button can be used to generate SMS in case of emergency.*

   *Note: - This function will work if you have additionally purchased the Panic Button Kit.

PRECAUTIONS:

While washing the engine, protect the L-100 by all suitable means from being struck directly by water jet or flow.

The GSM operations are dependents on the Network availability.

Postpaid/Prepaid SIM card can be used.

Pay special attention to the amount of remaining credit & expiry date of mobile connection in case of prepaid SIM card.

 "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 mishappenings.

HARDWARE DESCRIPTION:

   a. Power Requirement: 8V to 39V

   b. Normal operation temperature: -30°C to +80 °C

   c. Restricted operation temperature: Above -40°C and below +85 °C

   d. Storage temperature: -45°C to +90°C

   e. Humidity: 5% to 95%

INSTALLATION   PROCEDURE :-

Steps:-

- Set up the required wiring as per the wiring diagram using the Harness and Fuse provided in the package.

- Insert SIM card in to the SIM Slot, make sure that the mobile number is recorded
- Turn ON the Switch to start the device.(Inserting SIM will turn ON the switch)

  Indicators started showing if the internal battery is charged.
  Note:- Inserting SIM card will switch ON the device so remove the SIM card if the device is not fitted to vehicle to save internal battery.
- Connect the device to the wired harness and wait for Indicators.
- Within 10 to 40 seconds the unit will begin to work and acquire the GSM signal as well as the GPS signals. The GSM indicator (**GREEN LED**) will flash when the unit has received the GSM signal.
- Once the GPS signal has received. The GSP indicator (**BLUE LED**) starts blinking.
- Both the indicators would be ON if no signal available.
- **RED LED**- Indicates the battery charging, if LED is ON means Battery charging, OFF means battery FULL
- Use SMS commands to configure and start tracking.

LED Indication

- RED : Battery charging indication, ON→ Battery charging, Blinking → Battery charged.
- GREEN : GSM indication, ON→ out of network, Blinking at every sec.→ GSM signal available.
- BLUE : GPS indication, ON→ GPS NOT FIX, Blinking at every sec.→GPS FIX

SMS commands and Web Tracking

- The Device can be controlled through SMS and GPRS commands
- L-100 would accept SMS commands from any mobile number if the password is correct.
- L-100 can accept command on GPRS from the connected server
- L-100 can send data at set inetrvals
- L-100 can send data on any alert(I/O change)
- L-100 can send data on set distance and 30 degree angles, if enabled

SMS COMMANDS DESCRIPTION:

L-100 would accept commands from any number if the password provided is correct. The password is a four digit number. The users can change the password of their device. L-100 would reply to all commands send by user.

Example:- The command format would be
>   **Command<password>**
>   The password would be a 4 digit number and ***default password is 6906,***
>   So the command to get FIRMWARE VERSION would be

>   **VERSION<6906>**

Note:- the brackets (< , >) are must in the command

SMS COMMANDS DESCRIPTION:

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

  Eg: PW::12345;<6906>

IMMOBILIZER

- **ARM<*password*>** **-** L-100 will start monitoring the vehicle. It will start sensing the ignition and Door, cut the ignition of the vehicle and confirmation massage "ARM MODE HAS BEEN ACTIVATED" will be received.

- **DISARM<*password*>** **-** L-100 will stop monitoring the vehicle. It will stop sensing the inputs, Start the ignition and fuel of the vehicle a conformation massage "ARM MODE HAS BEEN DEACTIVATED" will be received.

APN 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 by network operator or else leave it blank.
  Password: for your GPRS account, password is provided by your by network operator or else leave it blank.
  Eg . For idea command would be **#CONFIG::internet::::;<6906>**

- **#CONFIG?<*password*>** - This command replies with GPRS APN, User Name and Password already saved.
  Response:
  i) APN: XXX,(GPRS USERNAME:)XXX,(GPRS PASSWORD)XXX

PPI CONFIGURATION

- To start live tracking on internet :

  Send "**WEBSTART<xxx/H/M/S><*password*>**" to L-100, L-100 will send confirmation SMS and then start sending data to our web server.

    - xxx means digits from 001-999
    - H means HOURS,M means MINUTES,S means Seconds

 Example – when we send the command WEBSTART002M<6906>, L-100 will start sending the data to web server at 2 minutes interval.

   Send "**WEBSTART<xxx/H/M/S>,<yyy/H/M/S><*password*>**" to L-100, L-100 will send confirmation SMS and then start sending data to our web server at different intervals depending on IGNITION status. Where **xxx** is the interval during IGNITION ON and **yyy** is the interval during IGNITION OFF

    - xxx means digits from 001-999
    - H means HOURS,M means MINUTES,S means Seconds

 Example – when we send the command WEBSTART030S,002M<6906>, L-100 will start sending the data to web server at 30 seconds interval during IGNITION ON and 2 minutes interval during IGNITION OFF.

ENABLE DISTANCE BASED TRACKING

- **DBT<xxxM/K><*password*>**" to L-100, device will send confirmation SMS and then start sending data to web server after as soon as covering the set distance and on deviation of 530 degree from the normal course.

    - xxx means digits from 001-999
    - M means METERS, K means KILOMETERS

 Example – when we send the command DBT5OOM<6906>, L-100 will start sending the data to web server at every 500 meters and on deviation of 30 degree from the normal course..

- **SDBT<*password*>** **:-**this command will stop the distance and angle based tracking

TCP SERVER SETTINGS

To port the device to a SERVER

Command to port the L-100 to the first server (with IP and PORT)

#SERVERCHANGE::IP::PORT;<password>

Example:-
    #SERVERCHANGE::196.168.175.12::20000;<6906>, this command would point
    L-100 to the server with IP=196.168.175.12 and Port= 20000.

To port the device to Second SERVER

Command to port the L-100 to the first server (with IP and PORT)

#SERVERCHANGE1::IP::PORT;<password>

Example:-
    #SERVERCHANGE1::196.168.175.12::20345;<6906>, this command would point
    L-100 to the server with IP=196.168.175.12 and Port= 20345. Now L100 would send data to two
different servers

To remove the second SERVER

Command to remove second server settings from L-100

#SERVERCHANGE::--;<password>

To get GPS data for one time in SMS

Send "**GETGPS<*password*>**" to L-100

Response:
L-100 will send:
-     If the GPS satellites are unreachable, you will receive "GPS NOT FOUND"
-     If the GPS satellites are reachable, you will receive

        Web link to view location (It will show you the location on map)*

        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)

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.

• **GMS::xxxxx;<*password*>**
Command to set the GMT drift value, xxxxx stands for values in minutes.

Diagnosis commands

• **SYSSTATUS<*password*>**

Response:

Main power status	MPON	MPOFF
Ignition status	IGNON	IGNOFF
Immobilizer status	ARM	DISARM
A/C status	A/C ON	A/C OFF
DOOR status	DOOR OPEN	DOOR CLOSED
Reserved low sense input	LS LOW(R)	LS HIGH®
No meaning	DBON	
Reserved Field	DIPOFF	
Odometer(KM)	0.00	
On board temp.	25.6	
Battery Voltage(internal)	4.0	

GPRSSTATUS<*password*>

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	
DBTON/ OFF	Distance based tracking	Set distance would e shown here with DBTON
SOFF	Sleep status	SOFF for SLEEPOFF and SON for SLEEPON
SS	GSM Signal strength	Should be >10 for proper GPRS comm..
CC	Current configuration	Currently using APN,UN,PWD
IP	Server address	Currently using Server details(IP,PORT)
WTI	Webtracking interval	Web tracking interval
ID	Device ID	15 Char Device ID(shows only if enabled)
GPS	GPS availability	A= available, V= void
SF	Data sending fail	Shows two fields if duel IP enabled
CF	Connection fail with server	Shows two fields if duel IP enabled
MU	Internal memory unsent data count	Shows two fields if duel IP enabled
PD	PDP Deact error	Network error occurs normally if APN is wrong
GMS	GMT shift	330 for india
LHC	Location hit count per day	Customized, client specific
P:X	Protocol	0=DIMTS, 1=ATL(Shows two fields if duel IP enabled)

Analog input

ADCSTART<*password*>   ----*command to start the ADC*
ADCSTOP<*password*>   ----*Command to stop the ADC*

SMS Alerts 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. Also the tracker would answer to calls from this number.

✓ **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*>**
This command is use to enable and disable the Common alerts. Common alerts
Includes A/C, Door, Overspeeding.
X=1 to disable the common alerts and X=0 to enable common alerts

✓ **IAD::X;<*password*>**
   This command is use to enable and disable the IGNITION alerts.
   X=1 to disable the IGNITION alerts and X=0 to enable IGNITION alerts

✓ **SOS::X;<*password*>**
   This command is use to enable and disable the SOS alerts.
   X=1 to disable the SOS alerts and X=0 to enable SOS alerts

✓ **MAD::X;<*password*>**
   This command is use to enable and disable the MAIN POWER alerts.
   X=1 to disable the MAIN POWER alerts and X=0 to enable MAIN POWER
   alerts

✓ **LFD::X;<*password*>**
   This command is use to enable and disable the LOCATION NAME FETCHING.
   X=1 to disable the LOCATION and X=0 to enable lOCATION NAME

✓ **BP::XX;<*password*>**
   This command is use to enable internal battery percentage to get LOW BATTERY alerts.
   XX = is the battery level from 00 to 99
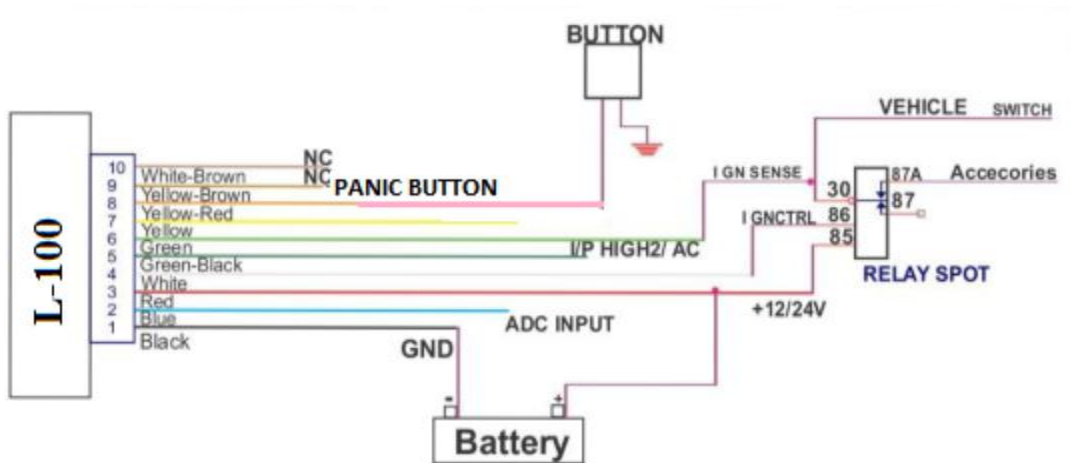   BP?<6906> is the command to read the set value

To Configure the Odometer

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

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

Note: Some commands are applicable for selected models only

WIRING DIAGRAM

TROUBLE SHOOTING:

S.NO	SCENARIO IN GENERAL	TROUBLE SHOOTING
1.	No LED indication	• Check SIM card position • Check the Harness wiring
2.	GREEN LED not blinking at 1 sec. interval	• Check SIM card validity • Check SIM security settings(No PIN reccomended)
3.	BLUE LED not blinking	• Check the side marked as "THIS SIDE UP" is facing sky. • Keep the device in open space for 2-3 minutes for GPS fix.
4.	SMS not accepted : "WRONG COMMAND"	There may be some spelling mistake in the command or the command may be invalid. Please recheck the command phrase and resend.
5.	No response from L-100:	• Check your balance in case of Pre Paid connection. • Check the network status. (No or weak network connection could be the reason) • Resend the desired commands again. • Reset the L-100. • Check the password
6.	SMS is not Delivered:	Please check the network status.
7.	"NO DATA" from device	• Check GPRS availability of SIM card • Check server settings • Check "GPRSSTATUS" for various settings
8.	I/O status not Proper/ not getting Alerts	• Check harness wiring • Register the controlling number.