Internal Document

Operational Manual

Version 2.0

for

KENJI KJ-8501

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Contents

1 Indicator

The light will be on after 3 minutes after the device connect to power supply.

1.1 RUN Indicator (Red Light)

Action	Indication
Disarming	On
Arming	Flash
Communication	Off

1.2 GSM Indicator (Blue Light)

Action	Indication
Good signal	Flash
Weak / without signal	Off
Communication	Fast flash

1.3 GPS Indicator (Green Light)

Action	Indication
GPS location valid	On

GPS location invalid	Flash
Without GPS installed	Off

2 System Administration Setting

2.1 SMS Command Setting

In order to setup the system configuration, administrator have to use administration password that is. 123456.

2.1.1 Setup Terminal Unique Number

Administrator need to assign a unique terminal number to each terminal range from (000001 – 999999)

SMS format: I123456S800000

Character	Content	Meaning
I	123456	Administrator password
S	800000	Range (000001 to 999999)

e.g Set Terminal ID = 800100, I123456S800100

SMS Reply format: I1223456S800100A911111B922222C00000

Character	Content	Meaning
I	123456	End user password
S	800100	Set terminal ID
A	9111111	Driver phone number
B	9222222	2nd phone number for SOS alert
C	0000000	Reserve

2.1.2 GPRS Setting

2.1.2.1 Setup IP and port command

SMS format: I123456ZIPXXX*XXX*XXX*XXX*XXXX

Character	Content	Meaning
I	123456	Administrator password
ZIP	XXX*XXX*XXX*XXX*XXX	IP follow by Port number

e.g set IP = 202.100.2.1 and port = 9001, I123456ZIP202*100*2*1*9001

SMS Reply format: IP202*100*2*1*9001

Character	Content	Meaning
IP	202*100*2*1*9001	IP address and Port number

2.1.2.2 Setup APN command

SMS format: I123456ZAPN*y*xxxxx

Character	Content	Meaning
I	123456	Administrator password
y	1 or 2	1 = TCP/IP 2 = UDP
xxxxx	*SGPRS	APN (should be BLOCK letters)

e.g set APN = sgprs and use TCP/IP, I123456ZAPN*1*SGPRS

SMS Reply format: APN*1*SGPRS

Character	Content	Meaning
APN	*1*SGPRS	APN with TCP/IP

2.1.2.3 Setup GPRS Report time command (system default 60 seconds)

SMS format: I123456ZGTIME0xx (set reporting period in seconds)

Character	Content	Meaning
I	123456	Administrator password

xx	5-55	From 5 seconds to 55 seconds

SMS format: I123456ZGTIMExx (set reporting period in minutes)

Character	Content	Meaning
I	123456	Administrator password
xx	1-60	From 1 to 60 minutes

2.1.3 Server SMS Setting

2.1.3.1 Setup Server SMS number

SMS format: I123456D94444444

Character	Content	Meaning
I	123456	Administrator password
D	9444444	Server SMS number

e.g set Server SMS number = 944444, I123456D9444444

2.1.3.2 Setup Report Time Interval command for SMS reply

SMS format: I123456ZTIMExxxx

Character	Content	Meaning
I	123456	Administrator password
ZTIME	1-7200	Minutes

e.g set SMS reply time period = 10 minutes, I123456ZTIME10

SMS Reply format: SMS Reply period, 10 minutes

3 Communication Protocol

3.1 Introduction

- Device will connect to the server if GPRS setting is set.
- If GPRS signal is not good enough or connection failure, device will retry connection every 3 minutes until three times failure continually. After three times failure the device will stop for 10 minutes for another retry.
- Device will stop the GPRS connection every hour and reconnect to the server.

3.2 Data Format

C000123，MFFFFFF，OFFFF，IFFFF，D235959，A，N2505.5344，E12133.9181，T1851.8，H359.9，Y010305，G24＊2B <CR><LF>

Detail：

＞	Start Code	Content
C 000123	Device ID	000000～999999
M FFFFFF	24 alarm code 000000-FFFFFF Every bit for alarm code status 1=ON，0=OFF	F 01 Door Open, 02 Shock, 03 SOS Press, 04 Engine Start F 05 Battery no enough, 06 Engine cut, 07 Car move, 08 Reporting activated F 09 Temporary disable, 10 Light shock, 11 Heavy shock, 12 Alarm activated F 13 Device remove from vehicle, 14 Alarm on, 15 Alarm off, 16 Reserve F 17 – 20 reserve F 21 – 24 reserve

O FFFF	Hardware output status 0000-FFFF	Up to 16 output signal 1111 1111 1111 1111, every bit represent one control status，1=ON，0=OFF (0)DOWN
I FFFF	Hardware input status 0000-FFFF	Up to 16 input signgal 1111 1111 1111 1111, very bit represent one control status，1=ON，0=OFF (0)SOS,(1)ACC,(2)DOOR,(3)SHOCK,(4)BRAKE,(5)LOW
D 235959	Time	UTC time，（hhmmss）
A	Location status	A = Good，V = Bad
N 2505.5344	Lat	N=North，S=South，lat = 25 degree 05.5344 minutes
E 12133.9181	Long	E=East，W=West，long = 121 degree 33.9181 minutes
T 1851.8	Speed	0.0 to 1851.8 knots
H 359.9	heading	000.0 to 359.9 degree
Y 010305	Date	（ddmmyy）
G 24	No. Satellite received	00 to 24 Satellite
* 2B	.Check sum	Checksum (XOR all data between “>” and “*” exclusive)