Revised Protocol

New Server Settings Command is *setip*192*168*1*1*8080*
eg IP 192.168.1.1
eg Port 8080

1.Upload Content (Device to Server)

1.1 Registration Content (ZC01)
(013632651491,ZC01,040613, 040137,123456,008613800000000)
or(013632651491,ZC01, 040613, 040137,123456,008613800000000,
008613800000001,…, 00861380000000N)

"("   stands for packet start
"013632651491" stands for tracker ID
" ZC01"   stands for data command
"040613"   stands for data, 04/June/2013
"040137"   stands for time, 04:01:37, UTC time
"123456"   Password
"008613800000000"   Master number

"008613800000001"   Bounded number 1
"…"   …
"008613800000003 "   Bounded number 3

")"   stands for packet end

1.2 LLC format: (BP05)
(013632651491,BP05,040613,A,2234.0297N,11405.9101E,
000.0,040137,178.48)

"("   stands for packet start
"013632651491" stands for tracker ID
"BP05"   stands for data command
"040613"   stands for data, 04/June/2013
"A"   stands for GPS valid data,

"V"stands for GPS invalid data
"2234.0297"   stands for latitude, format is ddmm.mmmm
"N"   stands for north,
"S"stands for south
"11405.9101"   stands for longitude, format is dddmm.mmmm
"E"   stands for east,
"W"stands for west
"000.0"   stands for speed, unit is km/h
"040137"   stands for time, 04:01:37, UTC time
"178.48"   stands for direction
")"   stands for packet end

1.3Heartbeat Packet (ZC02)
(013632651491,ZC02, 040613, 040137)

"("   stands for packet start
"013632651491" stands for tracker ID
" ZC02"   stands for data command
"040613"   stands for data, 04/June/2013
"040137"   stands for time, 04:01:37, UTC time
")"   stands for packet end

1.4 Return SMS (ZC03)
(013632651491,ZC03, 040613, 040137,$…$)

"("   stands for packet start
"013632651491" stands for tracker ID
" ZC03"   stands for data command
"040613"   stands for date, 04/June/2013
"040137"   stands for time, 04:01:37, UTC time
"$…$"   stands for return content
    ")"   stands for packet end

   Example
   Online sending SMS *about* to device number, server will receive return
   content as follows
   (013632651491,ZC03,040613,040137,$Notice: Device's serial number:
   013632651491.Software version: V2.000,2013/06/03 17:10.$)

1.5 Power On (ZC04)

(013632651491,ZC04,040613,040137)

"("   stands for packet start
"013632651491" stands for tracker ID
" ZC04"   stands for power on status
"040613"   stands for date, 04/June/2013
"040137"   stands for time, 04:01:37, UTC time
")"   stands for packet end

1.6 Check format: (ZC07)

(013632651491,ZC07,040613,A,2234.0297N,11405.9101E,
000.0,040137,178.48)

"("   stands for packet start
"013632651491" stands for tracker ID
" ZC07"   stands for check data command
"040613"   stands for date, 04/June/2013
"A"   stands for GPS valid data
"V"stand for GPS invalid data
"2234.0297"   stands for latitude, format is ddmm.mmmm
"N"   stands for north
"S"   stands for south
"11405.9101" stands for longitude, format is dddmm.mmmm
"E"   stands for east
"W"stands for west
"000.0"   stands for speed, unit is km/h
"040137"   stands for time, 04:01:37, UTC time
"178.48"   stands for direction
")"   stands for packet end

1.7 Motion Alert with Location: (ZC11)

(013632651491,ZC11,040613,A,2234.0297N,11405.9101E,
000.0,040137,178.48)

"("   stands for packet start
"013632651491" stands for tracker ID

" ZC07"   stands for motion alert command
"040613"   stands for date, 04/June/2013
"A"   stands for GPS valid data
"V"stand for GPS invalid data
"2234.0297"   stands for latitude, format is ddmm.mmmm
"N"   stands for north
"S"   stands for south
"11405.9101"   stands for longitude, format is dddmm.mmmm
"E"   stands for east
 "W"stands for west
"000.0"   stands for speed, unit is km/h
"040137"   stands for time, 04:01:37, UTC time
"178.48"   stands for direction
")"   stands for packet end

1.8 Low Battery Alert with Location: (ZC12)

(013632651491, ZC12,040613,A,2234.0297N,11405.9101E,
000.0,040137,178.48)

"("   stands for packet start
"013632651491" stands for tracker ID
" ZC12"   stands for low battery alert command
"040613"   stands for date, 04/June/2013
"A"   stands for GPS valid data
"V"   stands for GPS invalid data
"2234.0297"   stands for latitude, format is ddmm.mmmm
"N"   stands for north
"S"   stands for south
"11405.9101"   stands for longitude, format is dddmm.mmmm
"E"   stands for east
 "W"   stands for west
"000.0"   stands for speed, unit is km/h
"040137"   stands for time, 04:01:37, UTC time
"178.48"   stands for direction
")"   stands for packet end

1.9 Power Cut Alert with Location: (ZC13)

(013632651491, ZC13,040613,A,2234.0297N,11405.9101E, 000.0,040137,178.48)

"("   stands for packet start
"013632651491" stands for tracker ID
" ZC12"   stands for low battery alert command
"040613"   stands for date, 04/June/2013
"A"   stands for GPS validdata
"V"stand for GPS invalid data
"2234.0297"   stands for latitude, format is ddmm.mmmm
"N"   stands for north
"S"   stands for south
"11405.9101"   stands for longitude, format is dddmm.mmmm
"E"   stands for east
 "W"stands for west
"000.0"   stands for speed, unit is km/h
"040137"   stands for time, 04:01:37, UTC time
"178.48"   stands for direction
")"   stands for packet end

1.10 Dismounting Alert with Location: (ZC17)

(013632651491, ZC17,040613,A,2234.0297N,11405.9101E, 000.0,040137,178.48)

"("   stands for packet start
"013632651491" stands for tracker ID
" ZC17"   stands for low battery alert command
"040613"   stands for date, 04/June/2013
"A"   stands for GPS valid data
"V"   stand for GPS invalid data
"2234.0297"   stands for latitude, format is ddmm.mmmm
"N"   stands for north
"S"   stands for south
"11405.9101"   stands for longitude, format is dddmm.mmmm
"E"   stands for east
 "W"   stands for west
"000.0"   stands for speed, unit is km/h
"040137"   stands for time, 04:01:37, UTC time
"178.48"   stands for direction
")"   stands for packet end

1.11 Battery Level(ZC20)

(013632651491, ZC20,040613,040137,6,42,112,0)

"("   stands for packet start
"013632651491" stands for tracker ID
" ZC20"   stands for battery level command
"040613"   stands for data, 04/June/2013
"040137"   stands for time, 04:01:37, UTC time
"6"   stands for battery level, range is 0-6 ,
255 refers to invalid rate
"421"   stands for battery voltage, eg 4.21V ,
65535 refers to invalid rate
"112"   stands for battery input voltage, eg11.2V ,
65535 refers to invalid rate
"0"   stands for not installed(0) or installed(1),
255 refers to invalid rate
")"   stands for packet end

2. Return Content (Server to Device)

1. Upload succeeded
   ok
2. SMS process on Server

(1) Operate command only, without sending acknowledge. [begin]sms1,
alertoff,*routetrackoff*, [end]
(2) Send acknowledge to server after operating command.
[begin]sms2, *about* , *locate*, [end]
(3)Send acknowledge to master number after operating
   command[begin]sms3, *about* , *alertoff*,*locatemap*, [end]

3. Command syntax

3.1 Device will return SMS to master phone number by sending command as follow format:
*check*1*

3.2 Device will send the response via gprs channel.
status@GPRS*

Note: This is incorporated into every current SMS command.