GPS Tracker Communication Protocol

1. Summarize

This tracker connects to platform server with **TCP**. The way for connection is that device connects to the platform server forwardly. After connecting to the platform server, the tracker will pass back a enrolling message. The enrolling message contains the device's ID. If the device received the answer from the platform server, it will stop to sending enrolling message but send continuous feedback message. The continuous feedback message not contains the device ID. The platform server binds the device by connection. One connection represents a device ID. When the connection cuts off, the device will connect the platform server automatically and send out a device enrolling message. Beside, the device will send out one hand-shaking message intervals of time. The hand-shaking message contains Device ID. After receiving the handshaking answer message from the platform server, the device waits for sending the handshaking message in next period.

NOTE: After the V1.8 agreement, the equipment issued in 12-bit serial number of data packets into : 0 + 11-bit device number, so that platforms do not need to bind the device depending on the connectivity, according to each packet in the device number to tie fixed equipment, platforms dealing with them will be simpler.

1.1 Updated Version Instruction

V1.4 2008/10/23	1、Increase setting the data send intervals of ACC Switch 2、Increase the controlling of device's restarted command
V1.5 2008/11/4	1、Increase the setting Geo-fence command
V1.6 2009/9/2	1、Change some errors.
V1.7 2008/12/22	1, increase the monitoring command, refer to 3.1.16, and 3.2.16 2, increasing the setting in- border electronic fence function, refer to 3.1.14, and 3.2.14 3, increasing the set ting IP address and port information, refer to 3.1.17, and 3.2.17

	4, increasing the setting up APN information, refer to 3.1.18, and 3.2.18. 5, increasing the reading the terminal version of the message, refer to 3.1.19, and 3.2.19
V1.8 2008/12/29	1, the equipment, issued the 12-bit serial number of data packets into : 0 + 11-bit device number, the other unchanged. the 12 serial number can be any number Platform response, equipment untouched.
V1.9 2009/3/12	1, increasing the abolition of all police instructions, refer to 3.1.20, and 3.2.20 2, increasing mileage Clear instructions, refer to 3.1.21, and 3.2.21 3, increasing start upgrade instructions, refer to 3.1.22, and 3.2.22
V1.9.1 2009/5/4	1, increase mileage initialization instructions, refer to 3.1.23, and 3.2.23
V2.0 2009/8/6	1, increasing center send a short message to the dispatching screen , refer to 3.1.24, and 3.2.24 2, increasing scheduling screen send a short message to the central, reference 3.1.25 and 3.2.25 3, increase the Center-send instant advertising messages to the advertising screens, refer to 3.1.26, and 3.2.26
V2.1 2009/9/1	1, increasing data compensation instructions, refer to 3.2.27 2, increasing request photographed instructions, refer to 3.1.28, and 3.2.28 3, increasing the request to send picture data packet instructions, refer to 3.1.29, and 3.2.29

2. Message Instrument

2.1 Data Type definition

Data Type	Instruction
CHAR	Single **ASCII code character**
C_STRING	Contain **ASCII** character string. When fix digits, fill in Binary system of bank（**0x20H**）on right for lacking digit to fix a long time except for special instruction.
N_STRING	Contain the digit character string of 0.9. When fix digits, fill in ASCII code 0(Ox30H) on left for lacking digit except for special instruction.
H_STRING	Contain the digit character string of O. F. When fix digits, fill in ASCII code 0(Ox30H) on left for lacking digit except for special instruction.
HEX_STRING	Hexadecimal system character string. Such as 1, use “31” for indication. When fix digits, fill in ASCII code 0 (Ox30H) on left for lacking digit except for special instruction.
BIN	Binary system data
BYTE	8 digits without symbol integer,**0..255**

2.2 Message format

GPS Tracker exchanges the information with network gateway through data frames transmitting，using TCP protocol. Full data frames structure definition for GPRS is as following:

Head	Serial number / Time	Command	Message Body	Trail
1 byte	12 byte	4 byte	N byte (N≤1K)	1byte

Each Full data frame must contain: Head symbol, Serial Number/ Time, Command word, Message body, Trail symbol

2.3 Message field definition Y

2.3.1 Head/Trail symbol digit

Symbol digit figures the beginning and ending of the message frame. 0x28H (character “(”) as beginning symbol，and 0x29H (character “)”) as ending symbol.

2.3.2 Terminal ID

Length：12 bytes，C_STRING character

Function: This field is used to bind device, each message contains a device number, platform, device ID through binding equipment. General Device ID format is"0" + "phone number." Reference format as follows: "013,632,782,450"

2.3.3 Command word

Length：4 bytes，C_STRING character

Function： Define the type of operated message for data frame transmitting, and figures the function of data. The definition is as following,

Table 2 Message Definition

Main first types of Message	Second types of Message	Message serial NO. #	Command description	Remark
A (Down Message)	P	00	One time enquiry message 3.1.5	Device parameter message
		01	Answer handshake signal message 3.1.1	
		03	Set the terminal IP address and port 3.1.17	
		04	Set APN News 3.1.18	
		05	Device login response message 3.1.2	
		07	Read the terminal version message 3.1.19	
		11		
		12	Setting vehicle high and low limit speed 3.1.8	
		15	Monitor Command 3.1.16	
		16	Download group number 3.1.30	
		17	Request cancel group number3.1.31	
		18	Request upload group number3.1.32	
		19	Response upload group number3.1.33	
		20	Ask for the current black and white list 3.1.35	
		21	Ask for the driver on duty 3.1.37	
		22	ask for the software version of the empty taxi lamp3.1.38	

	Q	00	center send a short message to the dispatching screen3.1.24	General communication message
		01	center sends instant message to the advertising screen3.1.26	
		02	Center sends messages for cutting off the real-time advertisement to the advertising screen3.1.42	
		03	Center sends messages of increasing the conventional Advertisement to the advertising screen.3.1.43	
		04	Center sends messages for canceling all of Conventional Advertisement to the advertising screen 3.1.44	
		05	On-call certer sends messages to the driver on duty3.1.47	
		06	Center sends messages for canceling sending Conventional Advertisement to the advertising screen3.1.48	
	R	00	Same time continues feedback configure 3.1.3	Vehicle positioning Message
		01		
		03	To obtain terminal location response message3.1.15	
		05	Set ACC open sending data intervals 3.1.12	
		06	Set ACC shut sending data intervals 3.1.13	
	S	01	Answer Alarm Message 3.1.4	Answer message
		07	Answer dispatching screen to send short message to center 3.1.25	
		23	Response driver message3.1.40	
		24	Response taxi trade record3.1.41	
	T	00	Control the restarted message of the device 3.1.11	Control signal
	V	00	Circuit control signal 3.1.9	
		01	Oil control signal 3.1.10	
		02	Cancel of all alarm messages 3.1.20	
		03		
	X	00		Expandin

		01	Mileage Clear Message 3.1.21	g message
		02	Start Upgrade Message 3.1.22	
		03	Initialization message for mileage 3.1.23	
		04		
		05	Setting Geo-fence Message 3.1.14	
		06	Set up passing back messages of timing open and close oil consumption.3.1.34	
		07	Setting up passing back messages of timing open and close Temperature 3.1.45	
		08	Setting up regularly opening and closing direct communication message3.1.46	
		11	Download the software of the empty taxi lamp3.1.39	
		10	Download the file of black and white list 3.1.36	
	Y	01	Request to tanken photo message 3.1.28	Photo message
		02	Request to send picture data packet message 3.1.29	
		03	Set up intervals and times of taking timing pictures 3.1.49	
B (Up Message)	O	01	Alarm message 3.2.4	Alarm message
		02	Alarm for data offset and messages return 3.2.33	
	P	00	Handshake signal message 3.2.1	Device status message
		01	Response to reading the terminal version message 3.2.19	
		02	Answer to Setting up the terminal IP address and port 3.2.17	
		03	Answer to Setting APN message 3.2.18	
		04	Answer to Message of calling the roll. 3.2.5	
		05	login message 3.2.2	
		12	Answer vehicle high and low speed limit 3.2.8	

		16	Answer to download group numbers3.2.30	
		17	Answer to canceling group numbers3.2.31	
		18	Upload group numbers3.2.32	
		19	Passing back oil messages regularly and continuously.3.2.34	
		20	Passing back temperature messages regularly and continuously.3.2.46	
		21	Passing back direct communication message regularly and continuously 3.2.48	
		22		
		23	Upload driver message3.2.41	
		24	Upload taxi trading record3.2.42	
	R	00	Isochronous and continues feedback message 3.2.6	Vehicle positionin g message
		01	compensation Data return messages 3.2.27	
		02	Continuously passing back ending message3.2.7	
		03	Obtain terminal location information3.2.15	
		04	Dispatch screen sends a short message to the centerr 3.2.25	
		05	Answer the Setting ACC open sending data intervals 3.2.12	
		06	Answer the Setting ACC close sending data intervals 3.2.13	
		07	The LCD display screen send rob Vehicle message to the center3.2.51	
	S	04	Answer to Clearing mileage Messages 3.2.21	Answer message
		05	Answer to starting the upgrade message 3.2.22	
		06	Answer to initialization mileage message 3.2.23	

		08	Response to set up passing back the isochronal and continuous message e 3.2.3	
		09	Response to Center send an instant message to the advertising screen 3.2.26	
		10	Response to Download the file of black and white list3.2.37	
		11	Response Download the software of the empty taxi lamp （ Upgrade of the software version）3.2.40	
		20	Response monitoring command 3.2.16	
		21	Response to cancel all alarm messages 3.2.20	
		23	Answer to Center sends short messages to the dispatching screen 3.2.24	
		24	Response to Setting up opening and closing the timing feedback oil message 3.2..35	
		25	Response the current list of black and white message3.2.36	
		26	Response to ask driver on duty 3.2.38	
		27	Response to ask for the software version of the empty taxi lamp3.2.39	
		28	Response to Center send Interrupt instant message to the advertising screen 3.2.43	
		29	Response to Center sending messages for increasing Conventional Advertisement to adventising screen. 3.2.44	
		30	Response to Center send canceling all of Conventional information to the advertising screen 3.2.45	
		31	Answer to Setting up regularly opening and closing feedback Temperature message 3.2.47	
		32	Response Issue telephone message 3.2.50	

		33	Response to Center messages for canceling sending Conventional Advertisement to the advertising screen3.2.52	
	T	00	Answer the restarted message of the device 3.2.11	
	U	00	Answer the Setting Geo-fence Message 3.2.14	
	V	00	Answer to circuit control 3.2.9	Answer control sign
		01	Answer to oil control 3.2.10	
		02		
	Y	01	Answer to request photo taking messages 3.2.28	Photo message
		02	Send the picture data packet message 3.2.29	

In order to facilitate reading the agreement, the x value in 3.1.x and 3.2.x is the same as the corresponding message

2.3.4 Message body

Length：no fixed,<=1024 bytes，also can be blank。
Function：Confirm the server data message under corresponding command.

3. Command Message

3.1.Downlink Message（platform server sending）

3.1.1 Answer handshake signal message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Device number		C_STRING	12	
Command word	AP01	C_STRING	4	
Message	Message	C_STRING	3	

body	content			
Message content	HSO			
Ending identifier	)	CHAR	1	
For example：				
(013612345678**AP01**HSO) Down response handshake signal message, “13612345678” is tracker ID.				
Response	No need response			
Instruction：	This message is available to all device			

3.1.2 Device login response message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
		C_STRING	12	
Command word	AP05	C_STRING	4	
Message body	Message content	C_STRING	non	
Message content				
Ending identifier	)	CHAR	1	
For example				
（013612345678**AP05**） “13612345678” is tracker ID.				
Instruction：	This message is available to all device			

3.1.3 Same time continues feedback configure

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment		C_STRING	12	

Number				
Command word	AR00	C_STRING	4	
Message Body		C_STRING	8	
Message Content	AR00XXXXYYZZ AR00：Fixed key words XXXX：Interval for each message of continues feedback. hex。Unit: Second, 4 characters in all, H_STRING. The max is 0xFFFF seconds。When XXXX＝0,the device stops continues feedback. YYZZ：The total time for feedback, 16 advance system. Unit：YY: Hour、ZZ：Minute. 4 characters in all，H_STRING，The max is 0xFFFF，ie:255 hours 255 minutes. When YYZZ＝0, according to the time intervals, continues feedback. When both XXXX and YYZZ are not 0， it figure that feedback according to the time intervals, when it up to the total time, it automatically stop to feedback			
Ending identifier	)	CHAR	1	

For example：	
(013612345678**AR00**00140024) Down fixed time to set continues feedback. Feedback GPS data every 20 (16*1 + 4) seconds and feedback 36 (16 * 2 + 4) minutes in all. “13612345678” is tracker ID.	
Response	Device response BS08
Sending mode	Short Message, GPRS
Instruction	This message is available to economic device and navigation device. In the mode of SMS to continues feedback, if set time interval is less than the Min time interval (Set by the device manufacturer),it will continues feedback according to the Min time interval, otherwise continues feedback according to the set time. The data mode is the same as the SMS mode.

3.1.4 Answer Alarm Message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	

Equipment Number		C_STRING	12	
Command word	AS01	C_STRING	4	
Message body		C_STRING	1	
Message Content	AS01X X： The type of alarm for BO01X up alarm message.1character,16 advance system, ASCII character 0： Cut off vehicle oil　　1： Happen accident 2: Vehicle rob (SOS help)　　3： Vehicle anti-theft alarm 4： Vehicle low speed alarm　　5： Vehicle over speed alarm 6.:Alarm out of Geo-fence　　7: Movement alarm			
Ending identifier	)	CHAR	1	
For example:				
(013612345678**AS01**2) Answer the up vehicle rob police, “13612345678” is tracker ID.				
Response	No need response			
Instruction：	This message is available to all device			

3.1.5 One time enquiry message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AP00	C_STRING	4	
Message body	Message content	C_STRING	0	
Message body				
Ending identifier	)	CHAR	1	
For example:				
（013612345678**AP00**） Closed the oil.“13612345678” is tracker ID.				
Response	Device response BP04			

Instruction：	This message is available to all device

3.1.8 Setting vehicle high and low limit speed

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AP12	C_STRING	4	
Message Body	Message content	C_STRING		
Message Content	H050L030			
Ending identifier	)	CHAR	1	
For example：				
(013612345678**AP12** H050L030) Setting the up limit speed is50km/h,low limit is 30km/h.When up limit is 000,it figures cancel alarm up limit, and When down limit is 000,it figures cancel alarm down limit. Less 3 digits of the speed, full 0 on left. Alarm refer to 3.2.4 。 “13612345678” is tracker ID.				
Response	BP12			
Instruction：	This message is available to all device			

3.1.9 Circuit control signal

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment		C_STRING	12	

Number				
Command word	AV00	C_STRING	4	
Message Body	Message content	C_STRING		
Message Content	“1”or“0”, “1”figures opening circuit,“0”figures closing circuit.			
Ending identifier	)	CHAR	1	
For example：				
(013612345678**AV00** 0) Closed the circuit, “13612345678” is tracker ID.				
Response	BV00			
Instruction：	This message is available to all device			

3.1.10 Oil control single

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AV01	C_STRING	4	
Message body	Message content	C_STRING		
Message content	“1”or“0”,“1”figures opening oil，“0”figures closing oil。			
Ending identifier	)	CHAR	1	
For example：				
(013612345678**AV01** 0) Closed the oil。“13612345678” is tracker ID.				
Responds：	BV00			
Instruction：	This message is available to all device			

3.1.11 Control the restarted message of the device

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AT00	C_STRING	4	
Message body	Message Content	C_STRING		
Message content	no			
Ending identifier	)	CHAR	1	
For example				
(013612345678**AT00**) Reboot the device. “13612345678” is tracker ID.				
Response	BT00			
Instruction：	This message is available to all device			

3.1.12 Set ACC open sending data intervals

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AR05	C_STRING	4	
Message body	Message content	C_STRING		
Message content	AR05XXXX AR05：Fixed keywords XXXX：The time for sending data intervals for the ACC Open, hex. Unit：Second			
Ending identifier	)	CHAR	1	
For example				

(013612345678**AR05**0014) It sends back intervals 20 seconds when the ACC is opening. “13612345678” is tracker ID.	
Response	BR05
Instruction：	This message is available to all device

3.1.13 Set ACC close sending data intervals

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AR06	C_STRING	4	
Message body	Message content	C_STRING		
Message content	AR06XXXX AR06：Fixed keywords XXXX： The time for sending data intervals for the ACC Open, Hex. Unit：Second			
Ending identifier	)	CHAR	1	
For example				
(013612345678**AR06**003C) It sends back intervals 20 seconds when the ACC is closing. “13612345678” is tracker ID.				
Response	BR06			
Instruction：	This message is available to all device			

3.1.14 Setting Geo-fence Message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment		C_STRING	12	

Number				
Command word	AX05	C_STRING	4	
Message body	Message content	C_STRING		
Message content	AX05 N,D, Minlatitude, Maxlatitude, G, Minlongitude, Maxlongitude AX05：Fixed Keywords N：”0” 、 “1”or”2”，”0”, figures cancel outside and inside-fence, “1” figures sets outside-fence.”2”fogures inside-fence. If for canceling the Geo-fence, the back data cannot be sent . D：Standard for latitude, N, north latitude; S: south latitude. Minlatitude: lower limit for latitude, Format: DDFF.FFF, DD：latitude’s degree (00 ~ 90), FF.FFF：latitude’s cent (00.0000 ~ 59.999)， reserve three digit decimal point Maxlatitude：upper limit for latitude, Format: DDFF.FFF, DD：latitude’s degree (00 ~ 90), FF.FFF：latitude’s cent (00.0000 ~ 59.999)，reserve three digit decimal point. G：Standard for longitude, E, east longitude; W: west longitude Minlongitude: lower limit for longitude, Format: DDDFF.FFF，DDD： Longitude’s degree (000 ~ 180), FF.FFF：longitude’s cent (00.0000 ~ 59.999), reserve three digit decimal point. Maxlongitude：upper limit for longitude, Format: DDDFF.FFF，DDD： Longitude’s degree (000 ~ 180), FF.FFF：longitude’s cent (00.0000 ~ 59.999), reserve three digit decimal point.			
Ending identifier	)	CHAR	1	
For example				
(013612345678**AX051,** N,2245.318,2246.452,E,11233.232,11355.175) Set Geo-fence., lower limit for latitude is 22 degree 45．318 cent，upper limit for latitude is 22 degree 46.452 cent; lower limit for longitude is 112 degree 33.232 cent，upper limit for longitude is 113 degree 55.175 cent．“13612345678” is tracker ID.				
Response	BU00			
Instruction：	This message is available to all device			

3.1.15 To obtain the terminal location response message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AR03	C_STRING	4	
Message body	Message content	C_STRING		
Message content	Content of the message = location data length +location data Location data length ： BYTE type, a byte, less than 140 Location data ： BYTE type, length is less than 140, encoding for Unicode encoding, a character or the total number of two bytes, a maximum of 70 characters can be coded transmission. Note that is not a GB2312 encoding.			
Ending identifier	)	CHAR	1	
For example				
The request message is (013632782450**BR03**080525A2934.0133N10627.2544E000.0141830309.6200000000L200300C6） Server response messages is (081129141850**AR03** 0x72 **0x6D，0xF1，0x00，0x41，0x00，0x38，0x00，0x37，0x00，0x4A，0x00，0x35，0x00，0x38，0x4F，0x4D，0x7F，0x6E，0x4E，0x3A，0x00，0x3A，0x5E，0x7F，0x4E，0x1C，0x77，0x01，0x6D，0xF1，0x57，0x33，0x5E，0x02，0x5E，0x02，0x53，0x3A，0x6D，0xF1，0x57，0x33，0x6C，0x7D，0x8F，0x66，0x7A，0xD9，0x6B，0x63，0x53，0x57，0x00，0x32，0x00，0x2E，0x00，0x35，0x51，0x6C，0x91，0xCC，0x5D，0xE6，0x53，0xF3，0x00，0x3B，0x8D，0x5B，0x68，0x3C，0x79，0xD1，0x62，0x80，0x56，0xED，0x96，0x44，0x8F，0xD1，0x00，0x2C，0x00，0x30，0x00，0x38，0x5E，0x74，0x00，0x31，0x00，0x31，0x67，0x08，0x00，0x32，0x00，0x39，0x65，0xE5，0x00，0x31，0x00，0x34，0x65，0xF6，0x00，0x31，0x00，0x38，0x52，0x06**) Binary appear as: 28 30 38 31 31 32 39 31 34 31 38 35 30 41 52 30 33 72 6D F1 00 41 00 38 00 37 00 4A 00 35				

00 38 4F 4D 7F 6E 4E 3A 00 3A 5E 7F 4E 1C 77 01 6D F1 57 33 5E 02 5E 02 53 3A 6D F1 57 33 6C 7D 8F 66 7A D9 6B 63 53 57 00 32 00 2E 00 35 51 6C 91 CC 5D E6 53 F3 00 3B 8D 5B 68 3C 79 D1 62 80 56 ED 96 44 8F D1 00 2C 00 30 00 38 5E 74 00 31 00 31 67 08 00 32 00 39 65 E5 00 31 00 34 65 F6 00 31 00 38 52 06 29 the sent contents is "SHEN A87J58 location: Shenzhen, Guangdong Province, Shenzhen city bus station south of about 2.5 km; SEG Science and Technology Park in the vicinity, at 2:18 p.m. on November 29, 2008." If the request by the dimension is0, can return to the "Terminal does not target.".

Response	none
Instruction：	This message is available to all device

3.1.16 Monitor Command

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AP15	C_STRING	4	
Message body	Message Content	C_STRING		
Message content	AP15 + NNNN NNNN：the phone number of the equipment dials, length is not fixed.			
Ending identifier	)	CHAR	1	
Example：：				
(013612345678**AP15**13632782450) After the terminal response, it will call “13632782450”.				
Response	BS20			
Instruction：	This message is available to all device			

3.1.17 Set the terminal IP address and port

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AP03	C_STRING	4	
Message body	Message Content	C_STRING		
Message content	AAABBBCCCDDDEEEEE AAA，BBB，CCC，DDD is the IP address, EEEEE is the port.			
Ending identifier	)	CHAR	1	
Example：：				
（013612345678**AP03**22101807911000123） set the terminal IP address 221.18.79,110 port is 123				
Response	BS20			
Instruction：	This message is available to all device			

3.1.18 Set APN message

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command	AP04	C_STRING	4	

word				
Message body	Message Content	C_STRING		
Message content	Length is not fixed, based on user input required			
Ending identifier	)	CHAR	1	
Example：：				
（013612345678**AP04**CMNET） set the terminal APN to CMNET				
Response	BP03			
Instruction：	This message is available to all device			

3.1.19 Reading Terminal version message

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AP07	C_STRING	4	
Message body	Message Content	C_STRING		
Message content				
Ending identifier	)	CHAR	1	
Example：：				
（013612345678**AP07**）				

Response	BP01
Instruction：	This message is available to all device

3.1.20 Cancel of all alarm messages

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AV02	C_STRING	4	
Message body	Message Content	C_STRING		
Message content				
Ending identifier	)	CHAR	1	
Example：：				
（013612345678**AV02**）				
Response	BS21			
Instruction：	This message is available to all device			

3.1.21 Mileage Clear Message

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	

Equipment Number		C_STRING	12	
Command word	AX01	C_STRING	4	
Message body	Message Content	C_STRING		
Message content	.			
Ending identifier	)	CHAR	1	
Example：：				
（013612345678**AX01**）				
Response	BS04			
Instruction：	This message is available to all device			

3.1.22 Start to Upgrade Message

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AX02	C_STRING	4	
Message body	Message Content	C_STRING		
Message content	A.B.C.D: P A, B, C, D is the upgrading server IP address P is the upgraded server port,			

Ending identifier	)	CHAR	1	
Example：：				
(013612345678AX02116.87.12.168: 123) the upgrade server IP address is116.87.12.168, port is123. after the terminal response to connect to the update server upgrade. After the upgrade is complete, it will return to the original platform, all of the setting parameters will not change.				
Response	BS05			
Instruction：	This message is available to all device			

3.1.23 Initialization message for mileage

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AX03	C_STRING	4	
Message body	Message Content	C_STRING		
Message content	XXXXXXXX XXXXXXXX is Initialization mileage value, 8-bit 16 hex ASCII value, unit of meters.			
Ending identifier	)	CHAR	1	
Example：：				
（013612345678AX030000ABCD） set the initial mileage is A * 0x1000 + B * 0x100 + C * 0x10 + D = 43.981 km.				
Response	BS06			
Instruction：	This message is available to all device			

3.1.24 Center sends a short message to the dispatching screen

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AQ00	C_STRING	4	
Message body	Message Content	C_STRING		
Message content	L + CCC L: is content length, a byte hexadecimal value CCC: is the short message content, GB2312 encoding or standard ASCII code, 16 hex values, a two-byte characters, an ASCII one byte.			
Ending identifier	)	CHAR	1	
Example：：				
（013612345678AQ00 0x18 0x53 0x68 0x65 0x6E 0x7A 0x68 0x65 0x6E 0x20 0x48 0x6F 0x6E 0x67 0x79 0x75 0x61 0x6E 0x20 0x58 0x79 0x74 0x6F 0x6E 0x67） **0x18 is length，“0x53 0x68 0x65 0x6E 0x7A 0x68 0x65 0x6E 0x20 0x48 0x6F 0x6E 0x67 0x79 0x75 0x61 0x6E 0x20 0x58 0x79 0x74 0x6F 0x6E 0x67” is SMS content: Shenzhen Hongyuan Xintong**				
Response	BS23			
Instruction：	This message is available to all device			

3.1.25 Answer to dispatch screen sending short message to the center

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	AS07	C_STRING	4	
Message body	Message Content	C_STRING		
Message content				
Ending identifier	)	CHAR	1	
Example：：				
（013612345678AS07）				
Response	NONE			
Instruction：	This message is available to a part of device			

3.1.26 Center sends instant messages to the advertising screen

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment		C_STRING	12	

Number				
Command word	AQ01	C_STRING	4	
Message body	Message Content	C_STRING		
Message content	BBBBB + LL + CCC BBBBB: preserve 5 bytes， hexadecimal value LL: content length, two bytes, 16 hex value, high byte at the first, low byte at the post. CCC: the short message content, GB2312 encoding or standard ASCII code, 16 hex values, a two-byte characters, an ASCII 1 byte.			
Ending identifier	)	CHAR	1	
Example：：				
（**013612345678AQ01 0x00 0x00 0x00 0x00 0x00 0x00 0x18 0x53 0x68 0x65 0x6E 0x7A 0x68 0x65 0x6E 0x20 0x48 0x6F 0x6E 0x67 0x79 0x75 0x61 0x6E 0x20 0x58 0x79 0x74 0x6F 0x6E 0x67**） **0x00 0x00 0x00 0x00 0x00 Preserved 5 characters.** **0x18 is length，“0x53 0x68 0x65 0x6E 0x7A 0x68 0x65 0x6E 0x20 0x48 0x6F 0x6E 0x67 0x79 0x75 0x61 0x6E 0x20 0x58 0x79 0x74 0x6F 0x6E 0x67” is SMS content: Shenzhen Hongyuan Xintong**				
Response	BS09			
Instruction：	This message is available to a part of device			

3.1.28 Request to taken photos message

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	

Equipment Number		C_STRING	12	
Command word	AY01	C_STRING	4	
Message body	Message Content	C_STRING		
Message content	N + S + Q N: the camera number, one byte, each equipment is only installed a camera, this value is 0x00, 16 hex value S: Photo serial number, one byte, 16 hex value, the returned image data of the picture with this same serial number. Q: the picture quality, a byte, 16 hex values, values are: 0x01 Photo VGA (640x480) (General A) 0x02 Photo VGA (640x480) (good B) 0x03 Photo VGA (640x480) (well C) 0x04 Photo VGA (640x480) (good D) 0x05 Photo QVGA (320x240) (General A) 0x06 Photo QVGA (320x240) (good B) 0x07 Photo QVGA (320x240) (well C) 0x08 Photo QVGA (320x240) (good D) 0x09 Photo QQVGA (160x120) (General A) 0x0A Photo QQVGA (160x120) (good B) 0x0B Photo QQVGA (160x120) (well C) 0x0C Photo QQVGA (160x120) (good D)			
Ending identifier	)	CHAR	1	
Example：：				
（013612345678AY01 0x00 0x00 0x01） Request to the 0 camera photo, picture quality is 640*480 ,general result.				
Response	BY01			
Instruction：	This message is available to a part of device			

3.1.29 Request to send picture data packet message

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment		C_STRING	12	

Number				
Command word	AY02	C_STRING	4	
Message body	Message Content	C_STRING		
Message content	N + S + PP N: the number of the camera, one byte, each equipment is only installed a camera, this value is 0x00, 16 hex value S: Photo serial number, a byte, 16 hex value, the returned image data of the picture with this same serial number. PP: for the picture data packet number, 2 bytes, 16 hex value, the value of starting from 0x0001. Equipment automatically after finishing according to the data packets from 0x0001 to begin uploading packets. Platform center may have missed a package, or find a packet checksum error, the platform can be issued by the appropriate number of packets requested equipment resend the packet.			
Ending identifier	)	CHAR	1	
Example：：				
（013612345678AY01 0x00 0x00 0x01） request the 0 camera photo, picture quality is 640 x 480, results in general.				
Response	BY01			
Instruction：	This message is available to a part of device			

3.1.30Download group number(30 group numbers at most. From the 31st group number, it will automatic replace originally group number one)

Message Field	Field value	Type	Length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AP16	C_STRING	4	
Message body	Message Content	C_STRING		

Message Content	X + Telephone number content《the most 30 group phone》
	X：include Serial number（then have X group number）
	
	Telephone number content format（one group number total30 byte）
	{
	N + nnnnnnnn + B + bbbbbbbbbbbbbbbbbbbb
	N：name length，1 byte。
	nnnnnnnn：name content，8 byte《BG2312》or standard ASCII code，After inadequate filling 0x00。
	B：number length，1 byte。
	bbbbbbbbbbbbbbbbbbbb：group number，20byte，After inadequate filling 0x00。
	}			

Ending identifier	）	CHAR	1	

Example：	
（013612345678**AP16 0x02 0x06 0x46 0x6F 0x72 0x65 0x73 0x74 0x00 0x00 0x0B 0x31 0x33 0x31 0x36 0x34 0x37 0x30 0x39 0x36 0x35 0x37 0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x04 0xBA 0xE8 0xD4 0xB6 0x00 0x00 0x00 0x00 0x1C 0x30 0x37 0x35 0x35 0x38 0x33 0x37 0x36 0x36 0x32 0x33 0x30 0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x00**） The platform to the terminal download two group number： The first：six byte of the name（Forest）,eleven byte number（13164709657）。 The second：four byte of the name（HY），twelve byte number（075583766230）。	
Response：	BP16
Instruction：	This message is available to a part of device，

3.1.31Request to cancel group number

Message Field	Field value	Type	length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AP17	C_STRING	4	

Message body	Message content	C_STRING		
Message content	0xFF			
Ending identifier	）	CHAR	1	

Example：	
（013612345678**AP17 0xFF**）The platform to terminal request cancel all of group number	
Response：	BP17
Instruction：	This message is available to a part of device.

3.1.32 Request to upload group number

Message Field	Field value	Type	Length （byte）	Instruction
Begining identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AP18	C_STRING	4	
Message body	Message content	C_STRING		
Message content	0xFF			
Ending identifier	）	CHAR	1	

Example：	
（013612345678**AP18 0xFF**）The platform to terminal request upload all of group number.	
Response：	BP18
Instruction：	This message is available to a part of device.

3.1.33Response to upload group number

Message Field	Field value	Type	Length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AP19	C_STRING	4	
Message body		C_STRING	fixed	
Message content	Y Y：2 successful,3 Failure，1 byte。			
Ending identifier	）	CHAR	1	
Example：				
(013632782450**AP192**) 0x02 Said upload group number is success				
Reponse：	No need response			
Instruction：	This message is available to a part of device，			

3.1.34 Set up passing back messages of timing open and close oil consumption.

Message Field	Field value	Type	Length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AX06	C_STRING	4	
Message body	Message content	C_STRING		
Message content	Y Y：2:open,3: shut ， 1 byte。			
Ending	）	CHAR	1	

identifier				

Example：	
（013612345678**AX06**2） Set open	
Response：	BS24
Instruction：	This Message is available to a part of device.

3.1.35Ask for the current black and white list

Message Field	Field value	Type	Length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AP20	C_STRING	4	
Message body	Message content	BYTE		
Message content	AABBCCCC AA ： Ask for the file type of the list （HEX） 1 Ask for black list 2 Ask for white list BB ： The file type of the list (HEX) 01 Basic list (Default value， General situation only feedback basic list） 02 Add list 03 Reduce list CCCC ： Lists of file version number (BCD)			
Ending identifier	）	CHAR	1	

Example：	
（**013612345678AP2001010108**）	
Response：	BS25
Instruction：	This message is available a part of device, XIAN of the taxi program.

3.1.36Download the file of black and white list

Message Field	Field value	Type	Length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AX10	C_STRING	4	
Message body	Message content	BYTE		
Message content	ABBCCCC AA ： Ask for the file type of the list (HEX) 1 Download black list 2 Download white list BB ： The file type of the list (HEX) 01 Basic list （Default value，general situation only feedback basic list ） 02 Add list 03 Reduce list CCCC ： Lists of file version number (BCD) DD ： All frame number (HEX) EE ： Current frame number（Natural number 1,2,3,…255）(HEX) FFF…..FF ： The content of the file list (HEX)			
Ending identifier	）	CHAR	1	

Example：	
Response：	BS10
Instruction：	This message is available to a part of device，XIAN of the taxi program.

3.1.37Ask for the driver on duty.

Message Field	Field value	Type	Length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AP21	C_STRING	4	
Message body	Message content	C_STRING		

Message content	non			
Ending identifier	）	CHAR	1	

Example：	
Response：	BS26
Instruction：	This message is available to a part of device XIAN of the taxi program.

3.1.38Ask for the software version of the empty taxi lamp

Message Field	Field value	Type	Length （type）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AP22	C_STRING	4	
Message body	Message content	C_STRING		
Message content	Non			
Ending identifier	）	CHAR	1	

Example：	
Response：	BS27
Instruction：	This message is available to a part of device ， XIAN of taxi program,

3.1.39Download the software of the empty taxi lamp （Upgrade of the software version）

Message Field	Field value	Type	Length （byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AX11	C_STRING	4	
Message body	Message content	BYTE		
Message content	BBCCDDDDEEEEFFF….FF BB ： The first version number(HEX) CC ： The second version number (HEX) DDDD： All frame number (HEX) EEEE ： Current frame number (HEX) FFF….FF : Upgrade file content（64Byte for a frame）(HEX)			
Ending identifier	）	CHAR	1	

Example：	
Response：	BS11
Instruction：	This message is available to a part of device ,XIAN of TAXI program If not receive the BX11 response successful message ， must be sent again a frame.

3.1.40Response driver messages

Message Field	Field value	Type	Length （byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AS23	C_STRING	4	
Message body	Message content	BYTE		

Message content	AAAAAAAA AAAAAAAA ： Driver number (BCD)			
Ending identifier	）	CHAR	1	

Example：	
Response：	Non
Instruction：	This message is available to a part of device XIAN TAXI of program.

3.1.41 Response taxi trading record

Message Field	Field value	Type	Length （byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AS24	C_STRING	4	
Message body	Message content	BYTE		
Message content	AA AA ： 00 receiving success No 00 failure			
Ending identifier	）	CHAR	1	

Example：	
Response：	Non
Instruction：	This message is available to a part of device XIAN TAXI of program.

3.1.42 Center sends messages for cutting off the real-time advertisement to the advertising screen

Message Field	Field value	Type	Length (type)	Instruction
Beginning identifier	(	CHAR	1	
Device number		C_STRING	12	
Command word	AQ02	C_STRING	4	
Message content				
Ending identifier	)	CHAR	1	

Example:	
(013612345678AQ02)	
Response:	BS28
Instruction:	This message is available to a part of device

3.1.43 Center sends messages of increasing the conventional Advertisement to the advertising screen.

Message Field	Field Value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Device number		C_STRING	12	
Command word	AQ03	C_STRING	4	
Message body	Message content	C_STRING		
Message content	BBBBB + LL + CCC BBBBB ：The first B for “InformationID”, The back four B for reserve, 16 hex values			

	LL ：Content length，Two bytes，16 hex values，high byte at the first，low byte at the post。 CCC ：the short message content，GB2312encoding or standard ASCII code，16 hex values，a two byte characters ，a ASCII 1 byte。			
Ending identifier	）	CHAR	1	

Example： （**013612345678AQ03 0x00 0x00 0x00 0x00 0x00 0x00 0x0D** 0xC9 0xEE 0xDB 0xDA 0xBA 0xE8 0xD4 0xB6 0xD0 0xC5 0xCD 0xA8 0x38） **0x00 0x00 0x00 0x00 0x00 Preserved 5 characters**。 **0x00 0x0D is length，**“0xC9 0xEE 0xDB 0xDA 0xBA 0xE8 0xD4 0xB6 0xD0 0xC5 0xCD 0xA8 0x38”**is the short message content**“hongyuanxintong 8”	
Response：	BS29
Instruction：	This message is available to a part of device

3.1.44 Center sends messages for canceling all of Conventional Advertisement to the advertising screen.

Message Field	Field Value	Type	Length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AQ04	C_STRING	4	
Message body				
Message content				
Ending identifier	）	CHAR	1	

Example：
（**013612345678AQ04**）

Response：	BS30
Instruction：	This message is available to a part of device

3.1.45 Setting up passing back messages of timing open and close Temperature

Message Field	Field Value	Type	Length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AX07	C_STRING	4	
Message body	Message content	C_STRING		
Message content	Y Y：2OPen,3Shut，1Byte。			
Ending identifier	）	CHAR	1	

Example：	
（013612345678**AX07**2） Setting open	
Response：	BS24
Instruction：	This message is available to a part of device

3.1.46 Setting up regularly opening and closing direct communication message

Message Field	Field Value	Type	Length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command	AX08	C_STRING	4	

word				
Message body	Message content	C_STRING		
Message content	Y Y：2Open,3　Shut，1 byte。			
Ending identifier	）	CHAR	1	

Example：	
（013612345678**AX08**2） Setting open	
Response：	BS24
Instruction：	This message is available to a part of device

3.1.47On-call certer sends messages to the driver on duty

Message Field	Field Value	Type	Length（byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AQ05	C_STRING	4	
Message body	Message content	C_STRING		
Message content	B + CCCCCCCCCCCCC + D... B：State，=0x00，To empty vehicle send Vies to answer first request。 =0x01， vies to answer first success to the vehicle issued successful information。 =0x02， to other not vies to answer successful vehicle issued failure information. =0x03， to already vies to answer successful vehicle cancel the information. C: Calling order number, *13Byte* ， as call code means :Each of the on-call orders only ID D: Order content, from as call code or characters component Remarks： When state=0x01， order content including detail information and telephone，			

	Format ： ’&’+Customer telephone number+’&’+detailed order information			
Ending identifier	）	CHAR	1	

Example：	
（**013612345678AQ05 0x01 0000000000001 & 13164709657 & Near the SHENZHEN SAIGE square**）	
Response：	BS32
Instruction：	This message is available to a part of device

3.1.48 Center sends messages for canceling sending Conventional Advertisement to the advertising screen

Message Field	Field Value	Type	Length （byte）	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	AQ06	C_STRING	4	
Message content	delete total information (1 Byte)+Information ID1(1Byte)+Information ID2(1Byte)+„+Information IDn(1Byte)			
Ending identifier	）	CHAR	1	

Example：	
（**013612345678AQ060x02 0x00 0x01**） Delete total information(2)+Information ID1(0x00)+Information ID2(0x01)+„	
Response：	BS33
Instruction：	This Message is available to a part of device，

3.1.49 Set up intervals and times of taking timing pictures

Message Field	Field Value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Device number		C_STRING	12	
Command word	AY03	C_STRING	4	
		C_STRING	8	
Message content	AY03XXXXYYYY AY03: Fixed key words XXXX: Time interval for each message of continues take picture, hex。Unit: second, 4 characters in all, H_STRING, The max is 0xFFFF second。When XXXX=0 The device stops continues take picture。 YYYY: The total times for Equal time feedback, 16 advance system。4 characters is all, H_STRING, The max is 0xFFFF, When YYYY=0 According to the time intervals continues take picture。 When both XXXX and YYYY are not 0, it figure that take picture according to the time intervals when it up to total time it automatically stop to take picture.			
Ending identifier	)	CHAR	1	

Example:	
(013612345678AY03012C0024) Down fixed time to set continues take picture, 300 (0x12C)second feedback picture one time , Total feedback 36 (0x24)times.	
Response:	Terminal response BS08
Send mode:	MSM、GPRS
Instruction:	This message is available to economic device and navigation device。 In the mode of SMS to continues feedback , If set time intervals

	is less that the min time interval （Set by device manufacturer), It will continues feedback according to the Min time interval; otherwise continues feedback according to the set time 。The data mode is the same as the SMS mode.

3.2.Uplink message（The device Sending）

3.2.1 Handshake signal Message

Message Field	Field value	Type	Length (byte)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP00	C_STRING	4	
Device ID	Device ID	C_STRING	15	
Message body		C_STRING	3	
Message content	0000136123456780HSO			
Ending identifier	)	CHAR	1	
Example：：				
（013612345678**BP00**0000136123456780HSO） Up data handshaking message,。“13612345678” is tracker ID.				
Response	Center service response AP01			
Instruction：	This message is available to all device			

3.2.2 Login message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP05	C_STRING	4	
Terminal ID	Terminal ID	C_STRING	15	
Message body		C_STRING	60	
Message content	15 terminal ID ＋ GPS data			
Ending identifier	)	CHAR	1	
Example：				
(013612345678**BP05**000013612345678080524A2232.9806N11404.9355E000.1101241323.8700000000L000450AC)				
Response：	Centre service response AP05			
Instruction：	This message is available to all device			

3.2.3 Response to set up passing back the isochronal and continuous message.

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment		C_STRING	12	

Number				
Command word	BS08	C_STRING	4	
Message Body		C_STRING	8	
Message Content	BS08XXXXYYZZ BS08：Fix key words XXXX：Interval for each message of continues feedback。Unit: second，4 characters in all，H_STRING，to the max is 65535 seconds。When XXXX＝0, The device stops continues feedback YYZZ：the total time of feedback，Unit：YY：Hour、ZZ：Minute。Total of 4 bytes，16 advance system，to the max is FFFF，means 255 hours and 255 minutes。When YYZZ＝0,according to the time intervals continues feedback. When both XXXX and YYZZ are not 0，it figure that feedback according to the time intervals when it up to the total time it automatically stop to feedback.			
Ending identifier	)	CHAR	1	
Example：				
（013612345678**BS08**00050014） Return GPS data every 5 seconds，total of 20 minutes。				
Response：	No need to response			
Instruction	This message applies to economically terminals and navigational terminals。Ceaselessly return, after the mode of short message. If the interval of set time is less than the interval of minimum time（set by the terminal manufacturers），then the time of ceaselessly return according to the interval of minimum time，if not, then according to the interval of the set time。Data model and short message model are the same.			

3.2.4 Alarm message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BO01	C_STRING	4	
Message Body		C_STRING	61	
Message Content	BO01X+GPS data BO01：Fixed keywords X：Specific alarm information code，1 byte，Hexadecimal。 Alarm information： 0：Vehicle power off　　1：Accident 2：Vehicle robbery（SOS help）　3：Vehicle anti-theft and alarming 4：Lowerspeed Alert　　5：Overspeed Alert 6:Alarm when out of Geo-fence　　7: Movement Alert			
Ending identifier	)	CHAR	1	
Example：				
（013612345678**BO01**2061830A2934.0133 N10627.2544E040.0080331309.6200000000L000770AD） Alarm message and vehicle robbery。GPS data acquisition time is March 24,2008，Universal time is 6:18:30。“A” shows the data available，29 degrees,34.0133 minutes north latitude， 106 degrees 27.2544 minutes east longitude， speed is 040.0 km/h，the angle is 309.62 degrees, from due north。”L” means Total mileage, unit is meter，mileage statistic。				

Response：	Centre response AS01
Instruction	This message applies to all terminals。Send the information up to 10 times every intervals is 30 seconds， No longer to send the information after receive the platform response。

3.2.5 Answer to Message of calling the roll.

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP04	C_STRING	4	
Message Body		C_STRING	Random length	
Message Content	BP04＋GPS data BP04：fix Command Word。			
Ending identifier	)	CHAR	1	
Example				
（013612345678**BP04**080525A2934.0133N 10627.2544E000.0141830309.6200000000L00000023） Up terminal news（center response by one roll call），GPS data acquisition time is May25,2008，Universal time is 14:18:30，”A” shows the data available，29 degrees,34.0133 minutes north latitude，106 degrees 27.2544 minutes east longitude，speed is 0km/h，the angle is 309.62 degrees, from due north.。				
Response	No			
Instruction：	This message is available to all device			

3.2.6 Isochronous and continues feedback message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BR00	C_STRING	4	
Message body		C_STRING		
Message body	BR00＋GPS data			
Message content	）	CHAR	1	
Ending identifier				
Example				
(013612345678**BR00**080612A2232.9828N11404.9297E000.0022828000.00000000 00L000230AA)				
Response	No			
Instruction	This message applies to economically terminals and navigational terminals。Continuously return total time and distance， or receive the message of stop continuously return message from the center., then send the ending message to center。			

3.2.7 Continuously passing back ending message

Message Field	Message Value	Type	Length (Character)	Instruction

Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BR02	C_STRING	4	
Device ID		C_STRING	Random length	
Message body	BR02 ＋ GPS data			
Message content	)	CHAR	1	
Ending identifier				
Example：				
Response：	No			
Instruction	This message applies to economically terminals and navigational terminals。Continuously return total time and distance，or receive the message of stop continuously return message from the center., then send the ending message to center			

3.2.8 Response to set up vehicle max and min speed

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP12	C_STRING	4	

Message body	Message Content	C_STRING		
Message body	H0501L030			
Message content	)	CHAR	1	
Ending identifier				
Example：				
(013612345678**BP12** H0501L030)				
Instruction：	This message is available to all device			

3.2.9 Response to circuit Control

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command Word	BV00	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content	“1”or“0”,“1” means circuit has been opened，“0” means circuit has been closed			
Close Identifier	)	CHAR	1	
Example：				
Response：	No			
Instruction：	This message is available to all device			

3.2.10 Response to oil Control

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BV01	C_STRING	4	
Device ID	Message content	C_STRING		
Message body	“1”or“0”,“1”means oil has been opened， “0”means oil has been closed。			
Message content	)	CHAR	1	
Ending identifier				
Example：				
Response：	No			
Instruction：	This message is available to all device			

3.2.11 Answer to the restarted message of the device

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command	BT00	C_STRING	4	

word				
Message Body	Message Content	C_STRING		
Message Content	no			
Ending identifier	)	CHAR	1	
Example：				
Response：	No			
Instruction：	This message is available to all device			

3.2.12 Answer to Setting ACC open data intervals

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BR05	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content	no			
Ending identifier	)	CHAR	1	
Example：				

Response：	No
Instruction：	This message is available to all device

3.2.13 Answer to Setting　ACC close sending data intervals

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BR06	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content	no			
Ending identifier	)	CHAR	1	
Example：				
Response：	No			
Instruction：	This message is available to all device			

3.2.14 Answer to Setting Geo-fence Messages

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	

Equipment Number		C_STRING	12	
Command word	B U 0 0	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content	B U 0 0 N B U 0 0：Command N：0 or 1, “0”figures answer the canceling outside-fence. “1” figures answer setting outside-fence. “2”figures answer setting inside-fence			
Ending identifier	)	CHAR	1	
Example：				
Response：	No			
Instruction：	This message is available to all device			

3.2.15 Obtain the terminal location message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BR03	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content	BR03 + GPS data			
Ending	)	CHAR	1	

identifier				
Example：				
（013632782450**BR03**080525A2934.0133N 10627.2544E000.0141830309.6200000000L200300C6）				
Response：	AR03			
Instruction：	This message is available to all device			

3.2.16 Response to monitoring commands

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BS20	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content				
Ending identifier	)	CHAR	1	
Example：				
（013632782450**BS20**）				
Response：	No			
Instruction：	This message is available to all device			

3.2.17 Answer to Setting up the terminal IP address and port

Message	Message	Type	Length	Instruction

Field	Value		(Character)	
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP02	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content				
Ending identifier	)	CHAR	1	
Example：				
（013632782450**BP02**）				
Response：	No			
Instruction：	This message is available to all device			

3.2.18 Answer to Setting APN message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP03	C_STRING	4	
Message Body	Message Content	C_STRING		

Message Content				
Ending identifier	)	CHAR	1	
Example：				
（013632782450**BP03**）				
Response：	No			
Instruction：	This message is available to all device			

3.2.19 Response to reading the terminal version message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	B P01	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content	Is not fixed-length string, the platform only need to shown the string directly			
Ending identifier	)	CHAR	1	
Example：				
（013632782450**BP01**GPS518,DEC,22,2008）				
Response：	No			
Instruction：	This message is available to all device			

3.2.20 Response to canceling all alarm messages

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BS21	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content				
Ending identifier	)	CHAR	1	
Example：				
（013632782450**BS21**）				
Response：	No			
Instruction：	This message is available to all device			

3.2.21 Answer to Clearing mileage Messages

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command	BS04	C_STRING	4	

word				
Message Body	Message Content	C_STRING		
Message Content				
Ending identifier	)	CHAR	1	
Example：				
（013632782450**BS04**）				
Response：	No			
Instruction：	This message is available to all device			

3.2.22 Answer to starting the upgrade messages

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	B S05	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content				
Ending identifier	)	CHAR	1	
Example：				
（013632782450**BS05**） Connect to the update server upgrade after the terminal response. After the upgrade				

is complete, it will return to the original platform, all of the setting parameters will not change.	
Response：	No
Instruction：	This message is available to all device

3.2.23 Answer to Initialize mileage Message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	B S06	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content				
Ending identifier	)	CHAR	1	
Example：				
（013632782450**BS06**）				
Response：	No			
Instruction：	This message is available to all device			

3.2.24 Answer to Center sends short messages to the dispatching screen

Message	Message	Type	Length	Instruction

Field	Value		(Character)	
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BS23	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content				
Ending identifier	)	CHAR	1	
Example：				
（013632782450**BS23**）				
Response：	No			
Instruction：	This message is available to all device			

3.2.25 Dispatch screen sends a short message to the center

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BR04	C_STRING	4	
Message Body	Message Content	C_STRING		

Message Content	L + CCC L: content length, one byte hexadecimal value CCC: the short message content, UNICODE encoding, hexadecimal value			
Ending identifier	)	CHAR	1	
Example：				
（013612345678BR04 0x30 0x00 0x53 0x00 0x68 0x00 0x65 0x00 0x6E 0x00 0x7A 0x00 0x68 0x00 0x65 0x00 0x6E 0x00 0x20 0x00 0x48 0x00 0x6F 0x00 0x6E 0x00 0x67 0x00 0x79 0x00 0x75 0x00 0x61 0x00 0x6E 0x00 0x20 0x00 0x58 0x00 0x79 0x00 0x74 0x00 0x6F 0x00 0x6E 0x00 0x67） 0x30 is length，“0x00 0x53 0x00 0x68 0x00 0x65 0x00 0x6E 0x00 0x7A 0x00 0x68 0x00 0x65 0x00 0x6E 0x00 0x20 0x00 0x48 0x00 0x6F 0x00 0x6E 0x00 0x67 0x00 0x79 0x00 0x75 0x00 0x61 0x00 0x6E 0x00 0x20 0x00 0x58 0x00 0x79 0x00 0x74 0x00 0x6F 0x00 0x6E 0x00 0x67” is SMS content: Shenzhen Hongyuan Xintong				
Response：	AS07			
Instruction：	This message is available to a part of device			

3.2.26 Response to Center send an instant message to the advertising screen

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	B S09	C_STRING	4	
Message Body	Message Content	C_STRING		

Message Content	（013632782450**BS09**）			
Ending identifier	)	CHAR	1	
Example：				
Response：	No			
Instruction：	This message is available to a part of device			

3.2.27 Compensation Data Return messages

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BR01	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content	BR01＋GPS data			
Ending identifier	)	CHAR	1	
Example：				
(013632782450**BR01**080612A2232.9828N11404.9297E000.0022828000.0000000000L000230ED)				
Response：	Do not need respond			
Instruction：	This information is used to compensate breakpoints			

3.2.28 Answer to request photo taking messages

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BY01	C_STRING	4	
Message Body	Message Content	C_STRING		
Message Content	N + S + LLL N: the camera number, a byte, as the same number as the request camera. 16 hex value S: Photo serial number, one byte, hexadecimal value, as the same number as the request image . LLL: the total number bytes of the picture , 3 bytes, high byte in the former, 16 hex values.			
Ending identifier	)	CHAR	1	
Example：				
(013632782450BY01 0x00 0x00 0x00 0x10 0x33) Image length is 0x00 * 256 * 256 + 0x10 * 256 + 0x33 = 4147 bytes. If the length is 0, that is photo failure.				
Response：	Do not need respond			
Instruction：				

3.2.29 Send the picture data packets messages

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	

Equipment Number		C_STRING	12	
Command word	BY02	C_STRING	4	
Message Body	Message Content	C_STRING	Variable-length	
Message Content	N + S + LL + KK + DDD + CC N: the camera number, a byte, as the same number as the request camera. 16 hex value S: Photo serial number, one byte, hexadecimal value, as the same number as the request image. LL: packet number, 2 bytes, high byte in the former, 16 hex values, starting from 0x0001. KK: picture data content length, 2 bytes, high byte in the former, 16 hex values, the length of each packet are the same, some of the last packet of data is invalid, according to the length of the returned documents to determine. DDD: data content, CC: Checking value, two bytes, high byte in the former, 16 hex values, use of cumulative parity check mode, we start the computation from N to the end of the data content.			
Ending identifier	)	CHAR	1	
Example：				
(013632782450BY02 0x00 0x00 0x00 0xFF 0x01 0x02 0xFF ... ... 0xD9 0x03 0xD8) Camera number is 0x00, picture serial number is 0x00, the packet number is 0x00FF, data content length is 0x0102, the data content is 0xFF, ... 0xD9, check number is 0x03, 0xD8.				
Response：	Do not need respond			
Instruction：				

3.2.30Answer to downloading group numbers

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning	（	CHAR	1	

identifier				
Equipment Number		C_STRING	12	
Command word	BP16	C_STRING	4	
Message Body		C_STRING	FIX	
Message Content	Y Y：2:Succeed ,3: Fail，1:Type。			
Ending identifier	）	CHAR	1	
Example：				
(013632782450**BP162**) That means download group number successfully.				
Response：	No need response			
Instruction：	This message is available to a part of device.			

3.2.31Answer to canceling group numbers

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP17	C_STRING	4	
Message Body		C_STRING	FIX	

Message Content	Y Y：2Succeed,3:Fail，1Byte。			
Ending identifier	）	CHAR	1	
Example：				
(013632782450**BP172**) That means canceling group number successfully.				
Response：	No need response			
Instruction：	This message is available to a part of device			

3.2.32Upload group numbers

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP18	C_STRING	4	
Message Body		C_STRING	Indefinite length	

Message Content	X + Telephone number content《The most 30 group number》
	X：Include serial number（Then have X group number）
	
	Telephone number content formart:（one group number total have 30 byte）
	{
	N + nnnnnnnn + B + bbbbbbbbbbbbbbbbbbbb
	N：Name length，1byte。
	nnnnnnnn：name content，8 byte《BG2312》or standard ASCII code，after inadequate filling 0x00。
	B：number length，1byte。
	bbbbbbbbbbbbbbbbbbbb：group，20 byte，after inadequate filling 0x00。
	}			

Ending identifier	）	CHAR	1	

Example：	
（013612345678**BP18 0x02 0x06 0x46 0x6F 0x72 0x65 0x73 0x74 0x00 0x00 0x0B 0x31 0x33 0x31 0x36 0x34 0x37 0x30 0x39 0x36 0x35 0x37 0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x04 0xBA 0xE8 0xD4 0xB6 0x00 0x00 0x00 0x00 0x1C 0x30 0x37 0x35 0x35 0x38 0x33 0x37 0x36 0x36 0x32 0x33 0x30 0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x00**） The terminal to the platform download two group number.: First：Six byte of the name（Forest），Eleven byte of number（13164709657）。 Second ： four byte of the name（HONGYUAN），Twelve byte of number（075583766230）。	
Response：	AP19
Instruction：	This message is available to a part of device，

3.2.33 Alarm for data offset and messages return

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BO02	C_STRING	4	
Message Body		C_STRING	61	
Message Content	BO02X+GPS Date BO02：Fix key word X：Specific alarm information code，1 byte，16 advance system。			

	Alarm message： 0：Cut of vehicle oil　　1：vehicle anti-theft alarm 2：Vehicle rob （SOShelp） 3：Happen accident 4：Vehicle low speed alarm　5：Vehicle over speed alarm 6：Vehicle out of Geo-fence			
Ending identifier	）	CHAR	1	

Example：	
（013632782450**BO022**080524A2934.0133 N10627.2544E040.0061830309.6200000000L000770EF） Up alarm message，vehicle robbery。GPS data acquisition time is march 24 2008，Universal time is 6:18:30。“A” shows Data effectively，29 degree 34.0133 minutes north latitude，106 degree 27.2544minutes east longitude， Speed is 040.0 km/h， The angle is 309.62degree from due north。”L” means total mileage，Unit is meter，Mileage statistic.	
Response：	No need response
Instruction：	This message is available to breakpoint offset.

3.2.34 Passing back oil messages regularly and continuously.

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP19	C_STRING	4	
Message Body		C_STRING	fixed	

Message Content	BP19＋YYYYYY YYYYYY：show specific sensors resistance that oil，“ 999999”With the car's fuel consumption in representing wiring is bad, “FFFFFF”Show the fuel and terminal wiring is bad；			
Ending identifier	）	CHAR	1	

Example：
(013632782450**BP19**012A06) The first and second byte means is 16advance system Integer， The third byte means is decimal point； Example：0x01,0x2A,0x06 means 298.6；ohm (013632782450**BP19**999999) With the car's fuel consumption in representing wiring is bad； (013632782450**BP19**FFFFFF) Show the fuel and terminal wiring is bad；

Response：	No need response
Instruction：	This message is available to a part of device，

3.2.35 Response to Setting up opening and closing the timing feedback oil message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BS24	C_STRING	4	
Message Body		C_STRING	Fixed	
Message	Y			

Content	Y：2Mean successful ,3 Mean failure，1 byte。			
Ending identifier	）	CHAR	1	
Example：				
(013632782450**BP242**) That means closing timing feedback oil message successfully.				
Response：	No need response			
Instruction：	This message is available to a part of device，			

3.2.36 Respond the current black and white list message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BS25	C_STRING	4	
Message Body		BYTE	Non Fixed	
Message Content	AABBCCCCDD AA ： Ask for the file type of the list (HEX) 1 Ask for black list 2 Ask for white list BB ： The file type of the list (HEX) 01 Basic list （Default value ,General situation only feedback basic list） 02 Add list 03 Reduce list CCCC ： List of file version number (BCD) DD ： All frame number (HEX) 0 ； means terminal have no list.			
Ending identifier	）	CHAR	1	

Example：	
Response：	No need response
Instruction：	

3.2.37 Response to Download the file of black and white list

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BS10	C_STRING	4	
Message Body	Message content	BYTE		
Message Content	ABBCCCCDDEEFF AA ： Ask for the file type of the list (HEX) 1 Download black list 2 Download white list BB ： The file type of the list (HEX) 01 Basic list （Default value，General situation only feedback basic list） 02 Add list 03 Reduce list CCCC ： List of file version number(BCD) DD ： all frame number (HEX) EE ： Current frame number（Natural number1,2,3,…255）(HEX) FF ： = 0 The file list dispose successful (HEX) If not 0 means not successful			
Ending identifier	）	CHAR	1	

Example：	
Response：	non

Instruction：	This message is available to a part of device,XIAN of taxi program.

3.2.38 Response to ask for driver on duty

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BS26	C_STRING	4	
Message Body	Message content	BYTE		
Message Content	AAAAAAAA AAAAAAAA ： Driver number（BCD）			
Ending identifier	）	CHAR	1	

Example：	
Response：	non
Instruction：	This message is available to a part of device

3.2.39 Response to ask for the software version of the empty taxi lamp

Message Field	Message Value	Type	Length (Character)	Instruction

Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BS27	C_STRING	4	
Message Body	Message content	BYTE		
Message Content	AABB AA ： The first version number，（BCD） BB ： The first version number，（BCD）			
Ending identifier	）	CHAR	1	

Example：	
Response：	non
Instruction：	This message is available to a part of device，XIAN of taxi program.

3.2.40 Response to Download the software of the empty taxi lamp（Upgrade of the software version）

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BS11	C_STRING	4	
Message Body	Message content	BYTE		

Message Content	BBCCDDDDEEEEFF BB ： The first version number (HEX) CC ： The second version number (HEX) DDDD： All frame number (HEX) EEEE ： Current frame number (HEX) FF ： Upgrade state (HEX) = 0 Successful Not 0 not successful			
Ending identifier	）	CHAR	1	

Example：	
Response：	non
Instruction：	This message is available to a part of device,XIAN of taxi program

3.2.41 Upload driver message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP23	C_STRING	4	
Message Body	Message content	BYTE		
Message Content	AAAAAAAABBYYMMDDHHMMSS AAAAAAAA ： Driver card number (BCD) BB ： State （HEX） = 1 go to work = 2 get off work YY ： Year (BCD) MM ： Month (BCD) DD ： Day (BCD) HH ： Hour (BCD) MM ： Minute (BCD) SS ： Second (BCD)			

Ending identifier	)	CHAR	1	

Example：	
Response：	AS23
Instruction：	This message is available to a part of device,XIAN of taxi program.

3.2.42 Upload TAXI trading record

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	BP24	C_STRING	4	
Message Body	Message content	BYTE		
Message Content	AAAAAAAANN….NN AAAAAAAA : Driver card number（BCD） NN….NN means xian of the one-card provision how many bytes transaction records。			
Ending identifier	)	CHAR	1	

Example：	
Response：	AS24
Instruction：	This message is available to a part of device ,XIAN of taxi program.

3.2.43 Response to Center sending Interrupt instant message to the advertising screen

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Equipment Number		C_STRING	12	
Command word	B S28	C_STRING	4	
Message Body	Message content	C_STRING		
Message Content				
Ending identifier	）	CHAR	1	

Example：	
（013632782450**BS28**）	
Response：	non
Instruction：	This message is available to a part of device ，

3.2.44 Response to Center sending messages for increasing Conventional Advertisement to adventising screen.

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	

Device number		C_STRING	12	
Command word	B S29	C_STRING	4	
Message Body	Message content	C_STRING		
Message Content				
Ending identifier	)	CHAR	1	

Example：	
（013632782450**BS29**）	
Response：	non
Instruction：	This message is available to a part of device,

3.2.45 Response to Center messages for canceling all of Conventional information to the advertising screen.

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	B S30	C_STRING	4	
Message Body	Message content	C_STRING		
Message Content				
Ending	)	CHAR	1	

identifier				

Example：	
（013632782450**BS30**）	
Response：	non
Instruction：	This message is available to a part of device，

3.2.46 Passing back temperature messages regularly and continuously.

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	BP20	C_STRING	4	
Message Body		C_STRING	Fixed	
Message Content	BP20＋AB AB AB AB AB：A figure integer，B Figure decimal； 注：“AB” respectively four road temperature senor value；			
Ending identifier	）	CHAR	1	

Example：
(013632782450**BP20** 0x1C 0x05 0xFF 0x00 0xFF 0x00 0xFF 0x00) Four road temperature sensor data are below，Figure every road 2 Byte, HEX，FF 00 For initialize value（No connect temperature feeling probe） 1C 05 FF 00 FF 00 FF 00

1C 05 Meaning： 1C Integer -- 28 Degree 05 Figure decimal 0.5， 1C05 --28.5 Degree * If the temperature data greater than 80（HEX），It will figure minus .Example：8A 05 ，8A-80=0A， 0A=-10， 8A 05 Meaning is -10.5

Response：	No need response
Instruction：	This message is available to a part of device，

3.2.47 Answer to Setting up regularly opening and closing feedback Temperature message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	BS31	C_STRING	4	
Message Body		C_STRING	Fixed	
Message Content	Y Y：2Means successful ,3Means failure 1byte。			
Ending identifier	）	CHAR	1	

Example：

(013632782450**BP312**) Means shut timing feedback Temperature message successful

Response：	No need response
Instruction：	This message is available to a part of device，

3.2.48 Passing back direct communication message regularly and continuously

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Device number		C_STRING	12	
Command word	BP21	C_STRING	4	
Message Body		C_STRING	Fixed	
Message Content	BP21＋C+X,X,X,X C：The extension string group and the encoding way，ASCII or character for extension string group+ ‘1’， UNICODE code for extension string group+ ‘A’，Example：when C＝‘3’ For 2 “extension string group”、ASCII or characters code ；C＝ ‘E’ For 4 “extension string group”、UNICODE code； X：Terminal state instruction； 注：according to “，” space describe information terminals；			
Ending identifier	)	CHAR	1	

Example：	
(013632782450**BP21** C 0x7E 0xC8 0x7A 0xEF 0x6E 0x29 0x5E 0xA6 0x4E 0x8C 0x53 0x41 0x51 0x6B 0x5E 0xA6 ， 0x00 0x47 0x00 0x50 0x00 0x53 0x59 0x29 0x7E 0xBF 0x53 0xEF 0x80 0xFD 0x88 0xAB 0x52 0x07 0x65 0xAD) C ;2 “extension string group”、UNICODE code； “Terminal temperature is 28 degrees，GPS antenna may be cut off “	
Response：	No need response
Instruction：	This message is available to a part of device，

3.2.49 Response to Setting up regularly opening and closing feedback direct communication message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Device number		C_STRING	12	
Command word	BS32	C_STRING	4	
Message Body		C_STRING	Fixed	
Message Content	Y Y：2Means successful,3Means failure，1Byte。			
Ending identifier	)	CHAR	1	
Example：				
(013632782450BP322) Means shut timing feedback direct communication message successful.				
Response：	No need response			
Instruction：	This message is available to a part of device，			

3.2.50 Respond Issue telephone message

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	(	CHAR	1	
Device number		C_STRING	12	

Command word	BS32	C_STRING	4	
Message Body	Message content	C_STRING		
Message Content				
Ending identifier	)	CHAR	1	

Example：	
（013632782450**BS32**）	
Response：	non
Instruction：	This message is available to a part of device ,

3.2.51The LCD display screen sends rob Vehicle message to the center

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	BR07	C_STRING	4	
Message Body	Message content	C_STRING		
Message Content	A A：one byte 0x04---Vehicle send to centerVies to answer first order ，Only take order number; 0x05---Vehicle send to center cancel order， take the order number and why cancel content. 0x06---Vehicles send to the center success passenger， take the order number.			

Ending identifier	）	CHAR	1	

Example：	
（013632782450**BR07** 0x04）	
Response：	non
Instruction：	This message is available to a part of device ，

3.2.52 Response to Center messages for canceling sending Conventional Advertisement to the advertising screen

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	BS33	C_STRING	4	
Message Body	Message content	C_STRING		
Message Content				
Ending identifier	）	CHAR	1	

Example：
（013632782450**BS33**）

Response：	non
Instruction：	This message is available to a part of device,

3.2.53 Response to setting up intervals and times for regularly taking picture

Message Field	Message Value	Type	Length (Character)	Instruction
Beginning identifier	（	CHAR	1	
Device number		C_STRING	12	
Command word	BY03	C_STRING	4	
Message Body		C_STRING		
Message Content				
Ending identifier	）	CHAR	1	
Example：				
(013632782450**BY03**)				
Response：	Non need response			
Instruction：				

ppendix

4.1. The format definition of GPS location message

Message Field	Message Value	Type	Length (Character)	Instruction
Time	YYMMDD	N_STRING	6	Two bytes for each year/month/day

The availability of GPS data		CHAR	1	“A” or “V”. “A” means the availability of GPS data，”V” means the invalidation of GPS data.
Latitude		N_STRING	9	The unit is degree for he front two bytes， from 0～90； the unit is cent for later seven bytes。
Latitude indicator	“N” or “S”	CHAR	1	“N” means north latitude ， ”S” means south latitude
Longitude		N_STRING	10	The unit is degree for he front three bytes, from 0～180； the unit is cent for later seven bytes
Longitude indicator	“E” or “W”	CHAR	1	“E” means east longitude ， ”W” means west longitude
Speed		N_STRING	5	The unit is km/h
Time	HHMMSS	N_STRING	6	Two bytes of the year/month/day
Orientation		N_STRING	6	
IO State	1:Main power, *'0' means ont power ,'1'* **means** off power。 2:ACC, *'0'ACC close, '1'ACC open*。 3: blender, *'0' Did not.start, '1'Just turning, '2'reverse turning*。 4:Empty/heavy vehicles,*0' Did not.start, '1'Empty, '2 'Heavy*。 5:Front door,*0'Did not start, '1'open, '2 close*。 6:back door *0'Did not start, '1'open, '2'clos*	N_STRING	8	The 8 bits of IO

	e。 7: Put back to sign,*0'Did not start,'1'Put sign,'2' Refund sign。* 8: vibration,*0'Did not start,'1'vibration,'2 Not vibration。*			
Milepost		CHAR	1	"L" mean Mileage
Mile data	The total mileage. The max is 0xFFFFFFFF	H_STRING	8	Mile data，Unit: Meter