JT702/JT705

Smart E-Lock Communication Protocol

V1.0

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Preface

This document lists all the commands supported. The format of listed command shall not be changed. The time mentioned in this document shall be GMT.

1 Protocol Introduction

1.1 Data types

The data types used are shown as tab 1-1：

DATA TYPE	Descriptions &Requirements
BYTE	Unsigned single-byte integer(byte,8 bits)
WORD	Unsigned double-byte integer(word,16bits)
DWORD	Unsigned four-byte integer(double word, 32 bits)
BYTE[n]	n bytes
BCD[n]	8421 code， n bytes
STRING	GBK code. (If no data, set null)

Tab 1-1

1.2 Transmission rule

The protocol uses the network byte sequence of the big-endian to transfer byte and double byte

Agreement as follows:

BYTE transmission: the transmission of a byte stream；

WORD transmission: first pass transport eight bits, then the low eight；

Double byte transmission: first transport the high 24 bits, second the high 16 bits, then transfer the high eight, finally the low eight.

1.3 Structure of protocol

1.3.1 Type Of Protocol

The routine GPS tracking data is uploaded with binary format
The command is with format ASCII

1.3.2 Protocol structure of data with binary format

Binary type data, the structure is shown as below tab 1-2:

Message header(7E)	Basic information of message	Message content	Checking code(xor 8)	Message ending(7E)

Tab 1-2

1.3.2.1 Basic information of message

Basic information of message is shown as tab 1-3.

START BYTE	FIELD	DATA TYPE	EXPLANATION
0	Command type	WORD	e.g.: 0x5501，high order is English word, and low order is numbers
2	Message attribute	WORD	Structure of message body attribute is shown in tab 1-4
4	Device ID	BCD[6]	Device ID number, 12 bits
10	Serial number	BYTE	Sent in order, accumulated from 0

Tab 1-3

Structure of message attribute is shown as tab 1-4:

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Confirm reply	Version of protocol					Length of message content									

Tab 1-4

Instruction of message attribute

TYPE	Description and Requirements
Version of protocol	Version of protocol 0～31
Confirm reply	1 means server need to acknowledge with general reply. 0 means no need to reply

Tab 1-5

1.3.2.2 Escape of message header and ending.

It takes 0x7e as the message header and ending. If there is case 0x7e in basic message, content, checking code, It need to be escaped, the rule and definition shown as below:

0x7e ←→0x7d is followed with 0x02； e.g.: (basic message, content, checking code) if there is 0x7e,it is escaped by 0x7d 0x02

0x7d ←→0x7d is followed 0x01. E.g. (basic message, content, checking code) there is 0x7d, it need to be escaped with 0x7dx01.

The process of ESC rule shown as below:

Send message: generating the message content to be sent→calculate(basic information of message, message content)checking code→ Escape the 0x7e,0x7d in the basic information of message, content, checking code→ sent**.**

Receive message: receive message→restore the escape character in message (basic information, content, checking code), escape 0x7d, 0x02 to 0x7e, escape 0x7d 0x01 to 0x7d→ verify checking code→ analysis of message content.

Remark: in message attribute, the content length is the length of message content, not the content length after escaping.

E.g.:

The sending data packet with basic information and content are: 0x30 0x7e 0x08 0x7d 0x55. After generating data content for sending: 0x7e 0x30 0x7d 0x02 0x08 0x7d 0x01 0x55 0x6e 0x7e (0x6e is basic information, content, 0x30 0x7e 0x08 0x7d 0x5 is xor checking code)

1.3.2.3 checking code(xor8)

Check code is start from message header ,XOR of the followed one byte in sequence, till the last byte before check code, Taken up one byte.

1.3.3 Structure of ASCII command

1.3.3.1 Format of ASCII command as below:

Message header	"("
Message separator	","
Command word	e.g."BASE"
Message separator	","
Command serial number	e.g."3"
Message separator	","
Command	e.g."1,0,3" , etc

content	
Message ending	")"

1.3.3.2 Character escape

If there is case which is the same character with data head or ending “(”, ”)”, and ”,” , it need to escape. Escape rule: If there is character for escaping, need add 0x3D firstly. Then, Xor this character with 0x3D(“=”).

e.g.: If there is case “(”is in data content, add 0x3D first. Then, Xor “(”and”=”, means: 0x28 XOR 0x3D = 0x15

Below is the comparison table:

No.	Escape character (ASCII)	HEX	Character after escaping
1	(	0x28	0x3D 0x15
2	)	0x29	0x3D 0x14
3	,	0x2C	0x3D 0x11
4	=	0x3D	0x3D 0x00

2.Instruction GPS data uploaded with binary

2.1 Heartbeat packet (0x4001)

Message ID	@01
Message example	**7E 40 01 00 00 12 34 56 78 90 11 01 C9 7E**
Message precondition	NONE
Parameter explanation	Upload positively, network connected
Function explanation	NONE
Replied message	NONE
Replied message explanation	NONE

2.2 General acknowledge by system (0x4401)

Message ID	D01

Message example	**7E 44 01 00 03 12 34 56 78 90 11 01 *55 01 00* 9A 7E**
Message precondition	NONE
Parameter explanation	***55 01*** **related message ID of device** ***00*** 0：success/confirm 1：message is wrong；
Function explanation	General acknowledge by system, shown (Instruction of message attribute, tab 1-5)
Replied message	NONE
Replied message explanation	NONE

2.3 Positioning data(0x5501/0x5502)

Message ID	0x5501 / 0x5502
Message example	**7E 55 01 00 28 70 01 60 81 80 00 01 10 06 27 08 04 53 22 33 28 80 11 35 55 60 2E** **05 00 31 01 00 00 00 06 08 00 00 10 93 14 35 01 00 02 00 03 00 03 01 00 05 1B 7E**
Message precondition	NONE
Parameter explanation	Upload automatically, please refer positioning data format explanation
Function explanation	NONE
Replied message	NONE
Replied message explanation	NONE

2.3.1 Positioning data format explanation

NO.	Message structure	Structure Name	Value(HEX)	Byte	Description
1	Protocol header		7E	1	Protocol head is fixed with 7E
2	General information of the message	Message ID	5501	2	Positioning data ID, 0x5501 real time data, 0x5502 blind area data
3		Message Attribute	0028	2	Message general content length 35 bytes （0x23） fixed, there are 5 byte available for extend data when above 35 bytes
4		ID number	700160818000	6	Device's ID number, BCD code
5		Serial No.	01	1	The Serial number of this message, range 0~255

6	Message Content	Date	270610	3	Daymonth, 270610 means June 10, 2010, BCD code
7		Time	080453	3	Hourminutesecond, World time standard, here means: 08:04:53. BCD code
8		latitude	22332880	4	2233.2880, defined as format DDMM.MMMM, BCD code
9		longitude	113555602	4.5	11355.5602, defined as format DDDMM.MMMM, BCD code
10		Bit indicator	E	0.5	The bit at far right is BIT0, the bit at far left is BIT3 BIT3, 1 means positioning by LBS, 0 means positioning by GPS BIT2, 1 means east longitude, 0 means west longitude BIT1, 1 means north latitude, 0 means south latitude BIT0, 1 means positioning with GPS, 0 means not positioning with GPS
11		Speed	05	1	5 nautical mile/hour, convert to kilometer is 5 *1.85 = 9.25km/hour
12		Direction	00	1	0x98 = 152, times 2 = 304, means the direction is 304.
13		GSM signal	31	1	GSM signal value, 0 means GSM module is at off mode; in working mode, the value will be 1 even though signal is 0
14		GPS satellite	01	1	GPS satellite number, minimum 3, 0 means GPS module is off; in working mode, the value will be 1 even though signal is 0
		Mileage	00000006	4	Mileage counting (Unit: KM)
		Power status	08	1	0～100 means battery power level, eg 8%（unit: 0～100%）, 0xFF means the device is not with battery.
			AA		AA means charging.
			AB		AB means powered by power supply
15		CELL ID	00001093	4	CELL ID Cell identification code, 2G 2byte, add 0 in front if not complete, 3G 4 bytes.
16		LAC ID	1435	2	LAC location code
17		**Status and alarm bit**	**01 0002 0003**	5	**The first byte 01 means product type, different product has different status definition, need to analyze separately, 00 means disabled.** The 2nd 3rd byte is status, the 4th 5th byte is alarm bit, please refer “2.3.2 status and alarm bit”.
18	Extend data, Can be null	Extended ID	00	1	Extend message ID, can be omitted, it can be tell at message property, the length above 35 bytes（0x23）comes with extended data, otherwise it don’t have extended data.
		Extended length	03	1	Length is adjustable
		Extended content	**01 0005**	3	Data content
19	Check code		42	1	XOR check code, check code is the 2nd byte started from protocol head to Xor next byte, till the byte before check code
20	Protocol ending		7E	1	Protocol end is 7E, fixed

2.3.2 Status and Alarm bit (01 0002 0003)

The 1st byte indicates type, different type represents different model (The type in extended status and here is the same, needs to be revised at the same time), The description for status and alarm is different, the 2nd 3rd byte indicates status bit, the 4th, 5th byte indicates alarm bit.

Type	Name	0002 status description, the far right bit is BIT0	0003 alarm description, the far right bit is BIT0
01	JTR100	BIT15, BIT14, these two bit indicates the working mode change, Work to sleep is 1, sleep to work is 2 BIT0,	BIT15, BIT14, BIT13, BIT0, external low power alarm bit, 1 indicate low power, 0 indicate normal
02	GP4000	BIT15, BIT14, ... BIT1, BIT0, ACC	BIT15, BIT14, ... BIT1, BIT0, external low power alarm bit, 1 indicate low power, 0 indicate normal
03	JT70_ 2/5/6	BIT15, BIT14, these two bit indicates the working mode change, Work to sleep is 1, sleep to work is 2 BIT7, BIT6, BIT5, lock status, 1 open, 0 lock BIT4, Electronic lock status, 1 unlock, 0 lock BIT3, front cover status, 1 damaged, 0 normal BIT2, SIM card lid status, 1 lid opened, 2 closed normal BIT1, low battery alarm, when the battery level less than 20%, 1 to notify, till the battery level higher than 20%, 0 means normal BIT0,	BIT15, BIT7, BIT6, BIT5, BIT4, BIT3, battery low power to sleep alarm, when the battery level is less than set value, it will fall asleep and can only be waken up by PA0 BIT2, when the vibration reach the set value, 1 is to alarm once, 0 indicates normal BIT1, when enter low power working mode the value is 1, 0 means normal BIT0,
Type	Name	0002 Status bit explanation, the bit in the far right is BIT0	0003 alarm bit explanation, the bit in the far right is BIT0

2.4 Extended data list

2.4.1 E-lock data(11)

<table>
<tr><th>ID</th><th>length</th><th>Extended content</th><th>byte</th><th colspan="3">Description</th></tr>
<tr><td rowspan="20">0B</td><td rowspan="20">01
Or
09
Or
0A
Or
11</td><td rowspan="20">01

88888888(ASCIIcode)

02

No configure or configured with BM22L2 (ASCII code)</td><td rowspan="20">1

8

1

6
=
16
+2
=18</td><td rowspan="16">01
Alarm event</td><td rowspan="4"></td><td>1 indicate remote fixed password, 2 indicate remote dynamic password</td></tr>
<tr><td>3 indicate dynamic password on site (Bluetooth or WIFI)APP。</td></tr>
<tr><td>4 indicate dynamic password on site from keyboard</td></tr>
<tr><td>5xxx。</td></tr>
<tr><td rowspan="4"></td><td>6 indicate wrong remote fixed password</td></tr>
<tr><td>7 indicate wrong remote dynamic password</td></tr>
<tr><td>8 indicate wrong dynamic password from on site (Bluetooth or WIFI)APP。</td></tr>
<tr><td>9 indicate wrong dynamic password from keyboard, 10xxx。</td></tr>
<tr><td rowspan="11"></td><td>11 indicate unlock overtime alert “3.16.2 to activate this alert”.</td></tr>
<tr><td>12 Abnormal unlock alarm, abnormal unlock alarm, the lock has been opened abnormally, (Eg JT702 cable is cut)</td></tr>
<tr><td>13 lock remind (When the device unlocked and the cable didn’t pull out in 30 seconds, it will make noise to remind and then lock automatically).</td></tr>
<tr><td>14 SIM card lid open alarm, the lid open when the device is in locking status will be considered abnormal open.</td></tr>
<tr><td>15 Front cover tamper alarm, when the front cover damaged, the alarm will be generated. (For JT705 and JT706).</td></tr>
<tr><td>16 Unlock failed, the device cannot be unlocked, and not positioning.</td></tr>
<tr><td>17 Unlock failed, the device cannot be unlocked outside set geofence.</td></tr>
<tr><td>18 The electromagnet control is abnormal</td></tr>
<tr><td>19 The secondary board communication is abnormal</td></tr>
<tr><td>20\21\22\23 When the tilt angle in front back left right more than 45 degree and holds for 3 seconds, the tilting alarm will be triggered.</td></tr>
<tr><td>Note: other working status doesn’t come with the following parameters.</td></tr>
<tr><td colspan="3">88888888：Normal unlock fixed or dynamic password, abnormal unlocking fixed or dynamic password.</td></tr>
<tr><td rowspan="2">02：Carry on the unlock</td><td>This parameter is only available when the password input correctly and unlocked</td></tr>
<tr><td>1 indicate unlock normally: The geofence area unlock</td></tr>
</table>

				command	function is not activated.
					2 indicate unlock normally; The geofence area unlock function activated, the device is unlocked inside the set Geofence.
					3 indicate unlock normally: the geofence area unlock function is activated, unlock remotely and the device is not positioning.
				Vehicle information: vehicle information displays only when the device unlocked successfully. If not the vehicle information not filled, will be displayed with 0 or not displaying. Here the vehicle was filled with 6 byte plate number ***BM22L2***。	
Eg. 1	0B010B: indicate unlocked and didn't plug cable to lock				
Eg. 2	0B0907***3838383838383837***： indicate wrong dynamic password, tried to open remotely.				
Eg 3	0B0A02***38383838383838***01： Indicate unlock normally by remote dynamic password, the geofence area unlock function is not activated, the vehicle information is not completed.				
Eg 4	0B1002***38383838383838***01424D32324C32： Indicate unlock normally with dynamic password remotely, the Geofence area unlock function is not activated, the vehicle information is ***BM22L2***。				

2.4.2 Gyro sensor 3-axis data(12)

ID	length	Extended content	Byte	Description
0C	06	xxxx	2	Plus 180 degree, minus 180 degree
		yyyy	2	Plus 90 degree, minus 90 degree
		zzzz	2	Plus 180 degree, minus 180 degree
When the device is put on stand up, Y is 90 degree, when Y is less than 90 degree, it means the device is tilting, the tilting directly is judged by X value, X value from -180~-90 is tilting to the right, value from -90~-0 is tilting to the front, value from 0~90 is tilting to the left, value from 90~180 is tilting to back.				

2.5 Alarm data uploading format(GPRS)

Alarm uploading format	(700160818000,1,001,***ALARM,xx,20111018123849,A,-2256.4025,-11324.2329,5,152,xx,xx)***
Parameter explanation	***ALARM:*** Alarm symbol, indicate the message received is an alarm.
	xx： alarm type, eg IO, FUEL, please refer 《 ASCII code command list》
	20111018123849： The time alarm triggered, in the order of year month day hour minute second
	A,-2256.4025,-11324.2329：A Positioning symbol, indicate the device is positioning. A indicate positioning, V indicate no positioning; latitude is displayed by the format of DDMM.MMMM, longitude is displayed by the format of DDDMM.MMMM.
	5：Speed: 5 indicate 5 nautical mile/hour, convert to Kilometer is 5 *1.85 = 9.25 km/h
	152: direction: 152 indicate direction, times 2 is 304, means the direction is 304 degree.
	xx,xx：alarm content, different alarm comes with different content, please refer alarm content and explanation form different external devices.

2.6 System confirms that the alarm received

Alarm confirms format	(700160818000,1,001,***ALARM,1)***
Parameter explanation	***ALARM***：Alarm symbol, indicate that it is the alarm message
	1：confirmed

2.7 Open/Close the uploading channel for General SMS alarm (97)

Command	(700160818000,1,001,ALARM,97,***1,1,2,3,4,5,6***)		
Function	Open/close the uploading channel for General SMS alarm		
Precondition	NONE		
Command parameter explanation	Set parameter: ***1,1,2,3,4,5,6***		
	1：1 is to set, 0 is to query (700160818000,1,001,ALARM,97,***0,2***)。		
	1 ： Alarm type	1	Vibration alarm upload setting
		2	Low power alarm upload setting
		3	Enter Geofence alarm
		4	Out geofence alarm
		5	Alarm for Overspeed in geofence
		6	Alarm for overtime parking in geofence
		7	Overspeed alarm
		8	
		98	Indidate all the alarms above are activated, but the alarm channel is the same.
	2：Alarm channel: SMS channel, VIP number1, 0 is close, 1 is open, default is close		
	3：Alarm channel: SMS channel, VIP number2, 0 is close, 1 is open, default is close		
	4：Alarm channel: SMS channel, VIP number3, 0 is close, 1 is open, default is close		
	5：Alarm channel: SMS channel, VIP number4, 0 is close, 1 is open, default is close		
	6：Alarm channel: SMS channel, VIP number5, 0 is close, 1 is open, default is close		
Related function explanation	The channel set to 1, the corresponding VIP number will receive SMS alarm if triggered.		
Replied message	(700160818000,1,001,ALARM,97,***1,1,1,0,0,0***)		
Explanation for replied message	Replied message parameter: ***1,1,1,0,0,0:*** same as above.		

2.8 SMS data format(SMS)

Alarm uploading format	***700170518000,06-06 17:53:56,xx,xxxx,GPS: 4,GSM: 23,Speed: 40km/h,Direction: 120, Battery: 10%***
	http://maps.google.com/?q=22.549737N,114.076685E

<table>
<tr><td rowspan="10">Parameter explanation</td><td colspan="5">700170518000： Device ID number or set name, user can name the device by command “LANG”, Eg William, The serial number for rename from SMS is 1</td></tr>
<tr><td colspan="5">06-06 17:53:56: Alarm triggered time, format is monthdayhourminutesecond</td></tr>
<tr><td colspan="5">xx,: ：SMS or Alarm type, different alarm has different type and content, please refer the SMS content and explanation of different external devices for detail.</td></tr>
<tr><td colspan="5">Xxxx,：Alarm content, different alarm has different content, please refer the SMS content and explanation of different external devices for detail.</td></tr>
<tr><td colspan="5">GPS: 4,：GPS satellite number, 0 means the GPS module is off; in working mode, the GPS will be 1 even if the signal is 0.</td></tr>
<tr><td colspan="5">GSM: 23,：GSM signal value, 0 means the GSM module is off; in working mode, the GSM value will be 1 even if the signal is 0</td></tr>
<tr><td colspan="2">Speed: 40km/H,</td><td colspan="2">Speed: 40km/H,</td><td>The serial number is 27 for SMS change</td></tr>
<tr><td colspan="2">Direction: 120,</td><td colspan="2">Direction: 120,</td><td>The serial number is 28 for SMS change</td></tr>
<tr><td rowspan="3">Power supply status</td><td>Battery level</td><td>Battery: 10%</td><td>Battery: 10%</td><td>The serial number is 12 for SMS change</td></tr>
<tr><td>Charging</td><td>Charging</td><td>Charging</td><td>The serial number is 29 for SMS change</td></tr>
<tr><td>External power supply</td><td>EX Power</td><td>External power supply</td><td>The serial number is 11 for SMS change</td></tr>
<tr><td colspan="5">http://maps.google.com/?q=22.549737N,114.076685E：GPS location connection, latitude is with format DD.dddddd, Logitude is with format DDD.dddddd.</td></tr>
</table>

2.8.1 General message content

<table>
<tr><td colspan="7">Product model：General message content</td></tr>
<tr><td>No.</td><td>Name</td><td colspan="4">Message content</td><td>SMS Modification Serial Number</td></tr>
<tr><td>1</td><td>SMS or alarm type</td><td colspan="2">General alarm information</td><td>Alarm,</td><td>Alarm，</td><td>26</td></tr>
<tr><td rowspan="5">2</td><td rowspan="5">Alarm event</td><td>1</td><td>Vibration alarm</td><td>Vibrate,</td><td>Vibrate,</td><td>37</td></tr>
<tr><td rowspan="2">2</td><td rowspan="2">Low Battery alarm</td><td>Low Battery,</td><td>Low Battery,</td><td>38</td></tr>
<tr><td colspan="3">There is no low power operating mode of the electricity value, according to the general 10% of the value of electricity generated, set by the set value 5~60%. "3.2.21 query/Setup work mode management"</td></tr>
<tr><td rowspan="3">3</td><td rowspan="3">Enter Geo fence alarm</td><td>GeoFence IN,</td><td>GeoFence IN,</td><td>40</td></tr>
<tr><td>ID: 1,</td><td>ID: 1,</td><td>Geo fence ID</td></tr>
<tr><td>Abc,</td><td>Abc,</td><td>Geo fence Name</td></tr>
</table>

				Round,	***Round,***	2.9.1.1 Geo fence type
		4	Exit Geo fence alarm	***GeoFence OUT,***	***GeoFence OUT,***	41
				ID: 1,	***ID: 1,***	Geo fence ID
				Abc,	***Abc,***	Geo fence Name
				Round,	***Round,***	2.9.1.1 Geo fence type
		5	Over-speed in geo fence	***GeoFence Over Speed,***	***GeoFence Over Speed,***	42
				ID: 1,	***ID: 1,***	Geo fence ID
				Abc,	***Abc,***	Geo fence Name
				Round,	***Round,***	2.9.1.1 Geo fence type
		6	Over time in geo fence	***GeoFence Over Time,***	***GeoFence Over Time,***	43
			Parking alarm	***ID: 1,***	***ID: 1,***	Geo fence ID
				Abc,	***Abc,***	Geo fence Name
				Round,	***Round,***	2.9.1.1 Geo fence type
				Time: 40m,	***Time: 40m,***	Over time duration 39
		7	Over-speed alarm	***Over Speed,***	***Over Speed,***	48
		8				
		9				
		10				
		11				
		12				

2.8.1.1 Geo fence type

English	***Chinese***	SMS Modification Serial Number
Round,	***圆型,***	44
Rectangle,	***矩型,***	45
Polygon,	***多边型,***	46
Route,	***路线,***	47

2.8.2 JT70_2/5/6 Query real-time location information message content

Product model：JT70_2/5/6			
No.	Name	Message content	SMS Modification Serial Number

1	SMS or alarm type	Query real-time location information message content	***Base***	***基本信息,***	2
2	Alarm content ***1***	Lock status	***Lock Closed,***	***锁关闭,***	33
			Lock Open,	***锁打开,***	34
3	Alarm content ***2***				

3.ASCII Commands Instructions

3.1 BASE Commands

3.1.1 Query firmware basic information

Sending command	(700160818000,1,001,BASE,1)		
Commands function	Query firmware version		
Commands precondition	None		
Commands parameters instruction	None		
Related function instruction	Return the following information: 1. Terminal version 2. Terminal ID alias 3. GSM module version 4. SIM card's CCID 5. GSM module's IMEI No. 6. GSM network information		
Return expected result	(700160818000,1,001,BASE,1,1,***20150418_G300,0,BeiHuan,1137B03SIM900M64_ST_MMS, 898600421911302725 49,012207005620932,460,00,4243,6877***)		
		For example	Explain
		20150418_G300	Current terminal version.
		0,BeiHuan	0 means English，1 means other language's Unicode，ASCII code said: Alarm 62A5 8B66 Upload is 8 bytes. Named: BeiHuan.
		1137B03SIM900M64_ST_MMS	GSM module version
		898600421911302725 49	SIM card's CCID
		012207005620932	GSM module's IMEI No.
		460,00,4243,6877	network information: **460** is the Country Code of Mobile，

			that is MCC information, this is China； **00** Telecom operator Network number, MNC information (China Mobile is 00, Unicom is 01)； **4243** Base Station number cell ID information； **6877** Place region code LAC information. CELL ID and LAC are hexadecimal, that is 4243 to decimal 16963.
Return parameter instruction	See above table.		

3.1.2 Time service (Sync GMT Time)

Sending command	(700160818000,1,001,BASE,2,***20111018123820***)
Commands function	Terminal automatically requests timing (sync GMT time), note: not local time.
Commands precondition	None
Commands parameters instruction	Set parameter：***20111018123820*** Set the time: Year Month And Day hour minute second, the resolution is: 2011-10-18 12:38:20.
Related function instruction	1. When the equipment time is less than "2010-01-01 00:00:00", the system automatically timing. 2. If the (RTC) failure, the device will be sent "time" to request the system automatically time, 2 times a day, the device sends the request time instruction (700160818000,1,001,base,2,time), the system after receiving this instruction, send "send instructions" in the content.
Return expected result	(700160818000,1,001,BASE,2,***20111018123820***)
Return parameter instruction	Return parameter：***20111018123820*** Set time: The same setting parameter as above.

3.1.3 Restart the device remotely (Hardware support is valid)

Sending command	(700160818000,1,001,BASE,3)
Commands function	Restart the device remotely.
Commands precondition	None
Commands parameters instruction	None
Related function	Unable to connect the configuration line or upgrade line when restarting, after receiving the remote reboot Device command, delay about 10 seconds to reboot. Device reboot Successful upload

instruction	**(700160818000,1,001,BASE,3,RESET)**
Return expected result	(700160818000,1,001,BASE,3)
Return parameter instruction	None

3.1.4 Factory Reset

Send Commands	(700160818000,1,001,BASE,4,1)
Commands FunctionCommand Function	Back to Factory Setting
Pre-condition Pre-condition	None
Parameter Descriptions Parameter Descriptions	Set the parameter：***1***
	1： Types of Factory Setting 1 All set as factory setting; 2 Apart from master IP and Slave IP, the rest all set as factory setting. 3 Apart from master IP, Slave IP and VIP number, the rest all set as factory setting.
Relevant Function Descriptions Relevant function descriptions	None
Results Expected to Return Results expected to return	(700160818000,1,001,BASE,4,1)
Descriptions of Returned Parameters Parameters Returned	See above

3.1.5 Query real-time location information

Sending command	(700160818000,1,001,BASE,5)
Commands function	Get real-time location information reply to send command by SMS Noted：the function only for VIP1, not for VIP2-5
Commands	If SMS sends this command, the terminal SIM card is required to have short message function.

precondition	
Commands parameters instruction	None
Related function instruction	If send command by a VIP number, it will return msg to the VIP number. If do no have any VIP number and send command by one number, it will return msg to the the number and the number will be VIP1 number automaticlly.
Return expected result	Please see the reply message“2.8.x Query real-time location information message content”；
Return parameter instruction	same as above.

3.1.6 Query/Set upload interval and sleep timed wake interval

Sending command	(700160818000,1,001,BASE,6,***1,60,30***)
Commands function	Query/Set upload interval and sleep timed wake interval
Commands precondition	None
Commands parameters instruction	Setting parameter：***1,60,30***
	1 command function: 0 means query, if 0, then the parameters can be null, such as (700160818000,1,001,base,6,0). 1 means set.
	60 upload interval, in seconds, the upload data content see "2.3 Positioning Data" .This value defaults to 60 seconds. The minimum value is 5, and the maximum value is 43200 (12 hours).
	30，Hibernation automatic wake interval, unit minutes, 30 minutes by default, set to 0 cancel sleep function, range 10-1440
Related function instruction	None
Return expected result	(700160818000,1,001,BASE,6,***60,30***)
Return parameter instruction	Return parameters：***60,30:*** The same setting parameter as above.

3.1.7 Query/Set Terminal’s Sleep Mode

Send Commands	(700160818000,1,001,BASE,7,***1,1***)
Commands Function	Query/Set Sleep Mode

Pre-condition	Sleep mode is supported.
Parameter Descriptions	Set the parameter：1,1
	1 Function 0 means “query”. The parameter behind can be ignored if it is 0. eg,(700160818000,1,001,BASE,7,0) 1 means “set”
	1 Sleep Mode: 0 --Normal sleep mode’s any interruption can be waken up by RTC. 1 means SMS and Call can wake up based on mode 0.
Relevant Function Descriptions	Only JT705 is supported to wake up by SMS/Call
Results Expected to Return	(700160818000,1,001,BASE,7***,1***)
Descriptions of Returned Parameters	Parameter returned 1 Same as above

3.1.8 Set/query Time difference

Sending command	(700160818000,1,001,BASE,8,***1,480***)
Commands function	Setting/Querying the time difference between terminal location and international standards
Commands precondition	If there is time difference between the user and international standard, this command should be set. After the time difference is configured, the terminal will process the alarm information and convert it to local time and send it again.
Commands parameters instruction	***1*** command function: 0 means query, the following parameter can be null, (700160818000,1,001,base,8,0) 1 means set.
	480 time difference. The time difference between Beijing time and standard time is 8 hours, which is 480 minutes.，value range 13*60 与-12*60，default ***480***
Related function instruction	None
Return expected result	(700160818000,1,001,BASE,8,***480***)
Return parameter instruction	Return parameters：***480*** Time difference Set：The same setting parameter as above.

3.1.9 Query/Set VIP number

Sending command	(700160818000,1,001,BASE,9,1***,8613998765432,0,0,0,0***)
Commands function	Query/Set VIP number
Commands precondition	None
Commands parameters instruction	Setting parameters：1***,8613998765432,0,0,0,0***
	1 command function: 0 means query, the following parameters can be null, such as (700160818000,1,001,base,9,0) 1 means set.
	8613998765432,0,0,0,0 Monitor mobile phone Number: Supports up to 5 mobile phone numbers.
Related function instruction	Without setting the number, the terminal will automatically set the first number that successfully sends the command message to VIP 1.
Return expected result	(700160818000,1,001,BASE,9,***8613998765432,0,0,0,0***)
Return parameter instruction	Return parameters：***8613998765432,0,0,0,0:*** The same setting parameter as above.

3.1.10 Query/Set Master&Slave IP address and port number、APN、username and password

Sending command	(700160818000,1,001,BASE,10,***1,211.154.112.98,1088,211.154.112.99,1088,CMNET,abc,123456***)
Commands function	Query/Set Master&Slave IP address and port number, APN and username and password
Commands precondition	None
Commands parameters instruction	Set parameter: ***1,211.154.112.98,1088,211.154.112.99,1088,CMNET,abc,123456***
	1 command function： 0 means query, the following parameters can be ignored, such as: (700160818000,1,001,BASE,10,0) 1 means setting. (700160818000,1,001,BASE,10,1,211.154.112.98,1088,211.154.112.99,1088,CMNET,abc,123456) 2 means dual cards , 2nd card APN configure (700160818000,1,001,BASE,10,***2,CMNET,abc,123456***) 3 means dual card, 2nd card APN query (700160818000,1,001,BASE,10,3) The unset items can be placed directly in null, such as: never to set up slave IP and port、username and password:(700160818000,1,001,BASE,10,1,211.154.112.98,1088,,,CMNET,,)
	211.154.112.98 IP address：GPRS data upload server address，Note: The front is the main IP, followed by sub IP.
	1088 port number： Server port number， Note: The front is the Master IP, followed by Slave IP.
	CMNET APN Name: cannot exceed 32 bytes.
	abc,123456 Username and password: No more than 20 bytes.

Related function instruction	When Master IP is set, the terminal reply command immediately reconnects to the newly Master IP. When Master IP cannot be connected, the terminal will automatically query whether Slave IP is set or not. If there is a setting, then the Slave IP will be connected.
Return expected result	(700160818000,1,001,BASE,10***,211.154.112.98,1088,211.154.112.98,1088,CMNET,abc,123456)***
Return parameter instruction	Return parameters： ***211.154.112.98,1088,211.154.112.98,1088,CMNET,abc,123456***: The same setting parameter as above.

3.1.11 Query/Set Management of Work Mode

Send Commands	(700160818000,1,001,BASE,21,***1,5,15,1,10,3,1,10,2***)	
Commands Function		
Pre-condition	***None***	
Parameter Descriptions	Set parameter：***1,5,15,1,10,3,1,10,2***	
	1: Command function: 0 means “query”. And the parameters behind can be ignored, eg, (700160818000,1,001,BASE,21,0) 1 means “set”	
	5：Under the tracking mode(normal mode), upload interval can be changed **which is accelerated upload frequency.**	This parameter is accelerated upload frequency, which is shorter than the normal one. This parameter will be activated by vibration or ACC. This value can not be 0 and is valid at least after 5. Real-time GPS data will be uploaded in accordance with this interval if it detects vibration or ACC. The normal upload interval is 10 seconds. And upload interval will be 5 seconds if it detects vibration or open ACC.(Min value is 5; Max value is 43200 (12hours）)
		Activates: Vibration or open ACC. It prioritizes to normal upload interval and is valid as it is less than value of normal upload interval.
	15 ： Under the tracking mode(normal mode), upload interval can be changed **which is decelerated upload frequency.**	This parameter is on the contrary to the above one, which is decelerated upload interval and it enjoys higher priority to the above one. The normal upload interval is 10 seconds . And this decelerated upload interval should be at least after 15 seconds and it can be 0.(Min value is 15; Max 43200(12hours))
		Activates: Later than normal upload interval. It has the highest priority and it can be put into use while configuring.
		Eg, It is not applied for this function under unlocking status for JT705,which can be customized.
		Notes: This parameter needs customization to activate
	1: Low battery work mode	1 means to enter into low battery work mode. 1 is default mode. Vibration work mode will be closed and other waking sources can work. Only one piece of information will be uploaded after waking up. Then, it will fall asleep.
		2 means to enter into low battery mode. 2: Vibration wake up mode will be closed, Other wake-ups can wake up normally. After wake-up, only one data is

		saved and hibernation occurs. The resulting data is only saved and not uploaded, and real-time data upload is disabled.
	10: Low battery work mode	10 means that when the battery power level is lower than or equal to 10%, it enters the low-power operation mode, the default is 0. The low-power operation mode is off. If the value is not 0, the value is greater than the value of the low-power sleep mode. Otherwise, this function is invalid, and 5~50% is valid. Greater than low sleep mode.
		This value is the low power alarm judgment value. If the value is 0, the low power alarm is judged by the conventional 10%.
	3: *Wake-up work*	3 means to send the first job for 3 minutes after wake-up, valid for 2 to 20 minutes, and work up to 20 minutes.
		This parameter is 0 means that after wake-up only one piece of data is uploaded and it enters hibernation. If the network fails to work for up to 10 minutes, the default parameter is 10 minutes and it takes 10 minutes to go to sleep.
		The effect of this parameter is also related to the following wake-up source parameters and the battery power (when the battery power wakes up in low-power mode, only one data upload is generated). Different wake-up sources can flexibly select different wake-up time modes.
	1： Wake-up source	One byte can be configured with 8 external wake-up sources. When the corresponding wake-up source bit is 1, the wake-up works according to the above wake-up time, otherwise it is 0. After the default wake-up call, only one data upload is performed and the device enters hibernation.
		bit0： PA0, it work by the above wake-up time when it is 1
		Bit 1: RTC , it work by the above wake-up time when it is 1
		Bit 2: SMS or Call, it work by the above wake-up time when it is 1
		Bit3：xxx，
		Bit4：xxx，
		Bit5：xxx，
	10:No vibration enters the sleep time: 5 to 60 minutes, 10 means no vibration enters sleep for 10 minutes. The default is 10 minutes.	
	2：Low-power sleep mode: 2~15%, 2 means that when the battery power falls below 2% and enters hibernation, it can only wake up by PAO (charge). The default is 5% power to enter the hibernation protection battery.	
Relevant Function Descriptions	Instruction related to the working mode: "3.2.6 Query/Set Up Upload Interval and Sleep Automatic Wake-up Interval" "3.2.7 Query/Set Terminal Sleep Mode" "3.2.18 Query/Set External Power Supply Low-Voltage Operation Mode" 3.2. 22 Query/Set Sleep Timer Wake-up Management	
	Wake-up work time is related to whether the data has been sent out. If data is not sent out, up to 10 minutes will work.	
Results Expected to Return	(700160818000,1,001,BASE,21***,5,15,1,10,3,1,10,2***)	
Descriptions of Returned Parameters	Return parameters: **5,15,1,10,3,1,10,2**: Same as above	

3.2 Geo-fence Commands Collections

3.2.1 Query/Set Geo-fence Control Management

Send Commands	(700160818000,1,001,GFCE,1,***1,2,3,4,5***)	
Commands Function	Query/Set Geo-fence Control Management	
Pre-condition	None	
Parameter Descriptions	*Setting parameters:* ***1,2,3,4,5***	
	1: Operating mode: 1 means that setting the electronic fence switch takes effect. 0 means that the query electronic fence switch is in effect (700160818000,1,001,GFCE,1,0). 2 Query all types of electronic fences, the terminal can support up to set how many fence IDs.	
	2: Round area	Mode 1/0: Set the fence switch to take effect, 1 is valid, 0 is invalid, and the default 0 is invalid.
		Mode 2: Query how many fence IDs can be set for the current terminal support, 64 for regular circles and rectangles, 10 for polygons and routes, and more custom than custom ones.
	3：rectangular area	Same as above
	4 ： Polygonal area	Same as above
	5：Route	Same as above
Relevant Function Descriptions	In use, open and close the electronic enclosure work as required.	
Results Expected to Return	(700160818000,1,001,GFCE,1***,2,64,64,10,10***) Mode 2	
	(700160818000,1,001,GFCE,1***,1,0,0,0***) Mode 1/0	
Descriptions of Returned Parameters	Return parameters: **1,2,3,4,5**: Same as above.	

3.2.2 Query/set rectangular area

Send Commands	(700160818000,1,001,GFCE,3,***1,2,Abc,1,2,3,40,5,22567892,113567892,22567893,113567893***)
Commands Function	Query/set rectangular area
Pre-condition	NONE

Parameter Descriptions	*Setting parameter* ***:1,2,Abc,1,2,3,40,5,22567892,113567892,22567893,113567893***
	1: Operation mode: 1 means setting, 0 means query (700160818000,1,001,GFCE,3,0,2). 2 means to clear a single rectangular area, and 3 means to clear all rectangular areas.
	2: Rectangular area ID: 1~n, how much can be saved by the "Electronic fence control management" command, different products The number of storage is different, the regular is 64, the ID number is 0 fence is invalid.
	Abc: rectangular area name: 15 bytes, English letters A-Z a-z.
	1: Whether to close the GSM communication module: 0 Normal, 1 communication zone is closed in the area.
	2: In or out zone or alarm: 0 no alarm, 1 zone alarm, 2 zone alarm, 3 zone alarm.
	3：Overtime alarm in the fence: 3 means 3 minutes, 5 to 1440 minutes, up to 24 hours.
	40：Speed: The unit is kilometers (km/h). 0 is invalid and valid within 5 to 100 kilometers. The speed of configuration is alarmed in the fence.
	5：Speeding duration: The unit is seconds (s), valid within 3 to 20 seconds. Adjust the time according to the rectangle size.
	22567892：Top-left latitude: The latitude value in degrees multiplied by the 6th power of 10 to the nearest one millionth of a degree.
	113567892：The diameter of the upper left point: the value of the degree in degrees multiplied by the 6th power of 10, accurate to one millionth of a degree.
	22567893：Bottom-right point latitude: The latitude value in degrees multiplied by the 6th power of 10, accurate to one millionth of a degree.
	113567893：Right-lower diameter: The value of the degree in degrees multiplied by the 6th power of 10, accurate to one millionth of a degree.
Relevant Function Descriptions	Rectangular area fences are valid only when positioned. Whether to turn off the GSM communication module is 0, the entry and exit area or the alarm is 0, the speed is 0, these three items are 0 fencing function meaningless.
Results Expected to Return	(700160818000,1,001,GFCE,3***,1,2,Abc,1,2,3,40,5,22567892,113567892,22567893,113567893***)
Descriptions of Returned Parameters	Return parameters: **1,2,Abc,1,2,3,40,5,22567892,113567892,22567893,113567893**:

3.2.3 (GPRS) Geo-fence Alarm Introduction

Alarm Upload Format	Refer To《2.5 Alarm data uploading format(GPRS)》《2.6 System confirms that the alarm received》。 (700160818000,1,001,***ALARM,GFCE,20111018123849,A,-2256.4025,-11324.2329,5,152,1,4,ABC,1,35)***
Alarm Types	Alarm type: ***GFCE***
Alarm Details	Alarm content: ***1,4,10,100***
	1：Fence type: 1 indicates a circular area, 2 indicates a rectangular area, 3 indicates a polygonal area, and 4 indicates a route.
	4：Fence ID: Round area 1~64, rectangular area 1~64, polygon area 1~10, route 1~10.
	ABC：Fence Name: 15 bytes, English letters A-Z a-z.
	1：Fence alarm type: 1 into the fence alarm, 2 out of the fence alarm, 3 speed warning within the fence,

	4 overtime within the fence.
	35：static information within the fence: 1/2 access to the fence alarm (here indicates the GSM module switch state 0 is normal, 1 close the GSM module).3 Speeding alarm in the fence (indicating the current speed here), 4 overtime alarm in the fence (here indicates the current time).

3.3 G-sensor Commands Collections

3.3.1 Query/set vibration alarm and wake up value

Send Commands	(700160818000,1,001,GSENS,2,***1,500,126***)
Commands Function	Query/set vibration alarm and wake up value
Pre-condition	None
Parameter Descriptions	Set Parameter：***1,500,126***
	1: Operation mode, 1 means setting, 0 means query
	500: Vibration alarm value: The valid range is 500 to 8000, the unit is mg. The default is 0 to turn off the vibration alarm function.
	126: Vibration wake-up value: The default is 126, the valid range is 63 to 504, the unit is mg, invalid value is 0, and the vibration wake-up function is disabled.
Relevant Function Descriptions	The vibration alarm value is a multiple of 63.
Results Expected to Return	(700160818000,1,001,GSENS,1,***500,126***)
Descriptions of Returned Parameters	Return parameters: **500,126**: Same as above.

3.4 Intelligent E-Lock Commands Instructions

3.4.1 Query/Set E-Lock data uploading mode

Sending command	(700160818000,1,001,ELOCK,1,***1,1***)
Commands function	Query/Set E-Lock data uploading mode
Commands precondition	None
Commands parameters	Set parameter：***1,1***
	1: Mode of operation: 1 means set, 0 means query (700160818000,1,001,ELOCK,1,0)
	1: E-lock data upload mode, 1 means that the E-Lock data alone in the alarm mode upload,

instruction	the default 0 means that the electronic lock data in an expanded form added in real-time data upload.
Related function instruction	Need electronic lock data upload alone configuration is 1, the default value is 0 does not open, electronic lock data in the form of extension in real-time data upload, **the alarm data is generated by the state change of the electronic lock.**
	If the configuration is 1, electronic lock data to configure the upload interval upload alone, and close to extend the form plus electronic lock in real-time data upload data, electronic lock data upload in the form of a alarm upload alone, first deposit, and ensure that the data is not lost.
	Upload the electronic lock data in an expanded form, upload it by triggering, save and post it, ensure the data is not lost.
Return expected result	(700160818000,1,001,ELOCK,1,***1***)
Return parameter instruction	Return parameter：***1***: The same as above.

3.4.2 Set/query Non-locking alarm reminding time interval

Sending command	(700160818000,1,001,ELOCK,2,***1,200***)
Commands function	Set/query NON-locking alarm reminding time interval
Commands precondition	Non
Commands parameters instruction	Set parameter：***1,200***
	1: operate model：1 means set，0 means query (700160818000,1,001,ELOCK,2,0)
	200：reminding time，Value range: 60 to 600 seconds. When the device is unlocking, after this preset time interval, will trigger Non-locking alarm. If the value is 0, it means the function is deactivated.
Related function instruction	The alarm data is uploaded with GPS data, the content is refer to alarm or extended data format.
Return expected result	(700160818000,1,001,ELOCK,2,***200***)
Return parameter instruction	Return parameter：***200***: the same as above。

3.4.3 The device upload dynamic password to platform

Platform reply command	(700160818000,1,001,ELOCK,3,***123456***)
Commands	The device upload dynamic password to platform

function	
Commands precondition	Non
Commands parameters instruction	Set parameter：***123456***
	123456：dynamic password. **The password is 6 digit with number 0-6.**
Related function instruction	The device generate and upload dynamic password to platform in case of locking, the platform reply with the same password, the device receive the platform reply command, then the new password is activated and old password is deactivated. If the dynamic password is not modified successfully due to network, the old password is still valid.
	Dynamic password support Bluetooth unlocking onsite by mobile phone APP
Device upload	(700160818000,1,001,ELOCK,3***,123456***
Parameters instruction	Return parameter：***123456***: dynamic password。

3.4.4 Set/modify static password to unlock device remotely

Sending command	(700160818000,1,001,ELOCK,4,***12#ase,888888***)
Commands function	Set/modify static password to unlock device remotely
Commands precondition	Non
Commands parameters instruction	Set parameter：***12#ase,888888***
	12#ase: means new password，password consist of 6 digit with number A-Z a-z 0-9.
	888888：means old password, defaulted password is 666666 for device.
Related function instruction	Authorized password.
Return expected result	(700160818000,1,001,ELOCK,4,***1***)
Return parameter instruction	Return parameter：***1***: means password modification success or failure，1 means success，0 means failure.

3.4.5 Unlock by static or dynamic password

Sending command	(700160818000,1,001,ELOCK,5,***1,888888***)
Commands function	Unlock by static or dynamic password
Commands precondition	Non
Commands parameters	Set parameter：***1,888888***
	1: password type：1 means static password，2 means dynamic password

instruction	***888888***:	Static password consist of 6 digit with number A-Z a-z 0-9.
		Dynamic password is 6 digit with number 0-6 for the device.
Related function instruction	Static password is operated only by platform, not operated by keypad or Bluetooth in APP	
	Dynamic password is operated by platform, keypad and Bluetooth in APP	
Return expected result	(700160818000,1,001,ELOCK,5,***255***) ***255*** means the repeat unlock command	
	(700160818000,1,001,ELOCK,5,***0***)	
Return expected result	Return parameter：***0***: means password correct, if the value is greater than 0, it means password wrong, it means the times of the password wrong.	

3.4.6 Set/query binding information between device and vehicle（APP）

Sending command	(700160818000,1,001,ELOCK,6,***1,BM22L2***)	
Commands function	Set/query binding information between device and vehicle	
Commands precondition	Non	
Commands parameters instruction	Set parameter：***1,BM22L2***	
	1: operate model	Platform to device：1 means set, 0 means query (700160818000,1,001,ELOCK,6,***0***).
		APP to platform：2 means APP upload to platform 4 means APP query binding information in platform (700160818000,1,001,ELOCK,6,***4***)。
	BM22L2：means vehicle No, it consist of 6 digit with number A-Z a-z 0-9. The defaulted value is 0, it means it is activated.	
Related function instruction	This command has two functions	
	1. Platform send to device. If the device is set with this information, it will upload in locking data. If it is not set, it will be 00.	
	2. APP upload to platform, the binding information is submitted by APP uploading.	
	Note: binding information can be and cannot be send to device, if it is send to device, the binding information will upload in locking data.	
Return expected result	(700160818000,1,001,ELOCK,6,***BM22L2***)	
Return parameter instruction	Return parameter：***BM22L2***: the same as above.	

3.4.7 Set/query unlocking not allowed beyond GEO-FENCE

Sending command	(700160818000,1,001,ELOCK,7,***1,1,2,3,4***)
Commands function	Set/query unlocking not allowed beyond GEO-FENCE, GEO-FENCE is just rectangle.
	If two or more GEO-FENCE ID is set, the model of GEO-FENCE ID will be covered at last setting. that is mean all GEO-FENCE only can have one model configured

Commands precondition	GEO-FENCE is valid only if the ID is set.	
Commands parameters instruction	Set parameter：***1,1,2,3,4***	
	1: operate model： 1 means set, 0 means query (700160818000,1,001,ELOCK,7,***0***)。	
	1:	1 means to unlock in GEO-FENCE with precondition the device must be located successfully.
		2 means to unlock in GEO-FENCE when the device is located successfully. If the device is located successfully, it can be unlocked by static password or dynamic password remotely.
		0 means the function is not activated, the defaulted is 0.
	2：GEO-FENCE ID number, the range is 1-64. GEO-FENCE is just rectangle.	
	3,4：GEO-FENCE ID, the range is 1-64，3,4 means the device is only unlocked in GEO-FENCE 3 and 表 GEO-FENCE 4.	
Related function instruction	Set unlocking not allowed beyond GEO-FENCE, the device is only unlocked in GEO-FENCE. The function is not activated as defaulted.	
Return expected result	(700160818000,1,001,ELOCK,7***,1,2,3,4***)	
Return parameter instruction	Return parameter： ***1,2,3,4***: the same as above.	

3.4.8 Query firmware version for Bluetooth PCB firmware

Sending command	(700160818000,1,001,ELOCK,8)
Commands function	Query firmware version for Bluetooth PCB firmware
Commands precondition	Non
Commands parameters instruction	Non
Related function instruction	Non
Return expected result	(700160818000,1,001,ELOCK,8***,20170616***)
Return parameter instruction	Return parameter： ***20170616***: Bluetooth PCB firmware version.

3.4.9 Enable/Disable Power Switch

Sending command	(700160818000,1,001,ELOCK,9,***1,1***)
Commands function	Enable/Disable Power Switch
Commands precondition	Need the device hardware to support.
Commands parameters instruction	Set parameter：***1,1***
	1：operate model：1 means set, 0 means query (700160818000,1,001,ELOCK,9,***0***)。
	1：Enable/Disable Power Switch：0: means Disable Power Switch, 1 means enable Power switch. The value is defaulted to 1.
Related function instruction	If it is set to 0, the device is still powered even if power switch is off.
Return expected result	(700160818000,1,001,ELOCK,9***,1***)
Return parameter instruction	Return parameter：***1***: the same as above.

3.4.10 Platform send unlocking password to user by SMS or APP

Sending command	(700160818000,1,001,ELOCK,10,***1,888888***)	
Commands function	Platform send unlocking password to user by SMS or APP	
Commands precondition	**The communication between platform and user works well.**	
Commands parameters instruction	Set parameter：***1,888888***	
	1: password type：1 means static password，2 means dynamic password. **0 means APP ask platform for unlocking password.**	
	888888: unlocking password	Static password consist of 6 digit with number A-Z a-z 0-9.
		Dynamic password is 6 digit with number 0-6 for the device.
Related function instruction	If platform receive inquiry **(700160818000,1,001,ELOCK,9,*0*) from APP, platform will send he unlocking password to user by SMS or APP.**	
Return expected result	No need to reply	
Return parameter instruction	Non	

3.4.11 Alarm uploading switch by SMS

Sending command	(700160818000,1,001,ELOCK,11,***1,1,1,1,1,1,1***)		
Commands function	Alarm uploading switch by SMS		
Commands precondition	Non		
Commands parameters instruction	Set parameter：***1,1,1,1,1,1,1***		
	1：operate model：1 means set, 0 means query (700160818000,1,001,ELOCK,11,***0,2***)。		
	1 ： alarm type	1	Abnormal unlocking
		2	Non-locking over time
		3	Back cover open
		4	Top cover open, just for JT705 and JT706
		5	
		98	All alarm are activated.
	1：Alarm by SMS to VIP NO 1, 0 means closed, 1 means open, defaulted is 0.		
	1：Alarm by SMS to VIP NO 2, 0 means closed, 1 means open, defaulted is 0.		
	1：Alarm by SMS to VIP NO 3, 0 means closed, 1 means open, defaulted is 0.		
	1：Alarm by SMS to VIP NO 4, 0 means closed, 1 means open, defaulted is 0.		
	1：Alarm by SMS to VIP NO 5, 0 means closed, 1 means open, defaulted is 0.		
Related function instruction	The VIP NO will receive the alarm by SMS if it is activated.		
Return expected result	(700160818000,1,001,ELOCK,11,***1,1,1,0,0,0***)		
Return parameter instruction	Return parameter：***1,1,1,0,0,0:*** same as above.		

3.4.12 E-Lock alarm data content and instruction (SMS)

Alarm uploading format: refer to <<2.8 message data format (SMS)>>						
Item	Name	Message content: ***ELOCK Alarm,Battery: 95%,Vibrate,Lock Closed***				Message modification
1	Alarm type	E-Lock alarm information		***ELOCK Alarm,***		30
2	Alarm content ***1***	Alarm event	1	***Abnormal Unlock,***		31
			2	***Unlock OverTime,***		32
			3	***Back Cover Open,***		35
			44	***UP Cover Open,***	***JUST SUIT FOR*** JT705 and JT706	36
3	Alarm content ***2***	Lock status		***Locked,***		33
				Unlocked,		34