

SMS Commands to Support 4G Device

SMS commands are extended from tracking server to communication and configure the 4G device. These commands are implemented by short message service (SMS) sent from the mobile phone to the SIM card inserted into the 4G device. It means the 4G device's SIM has to be enabled with SMS, and the 4G device firmware will decode and execute the command.

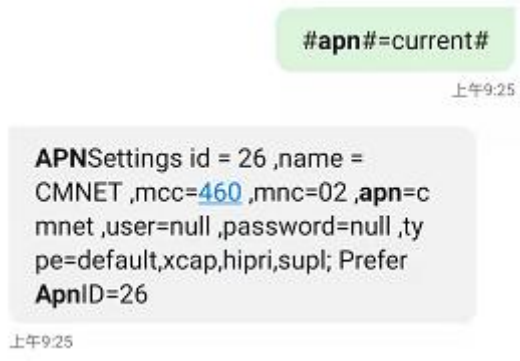
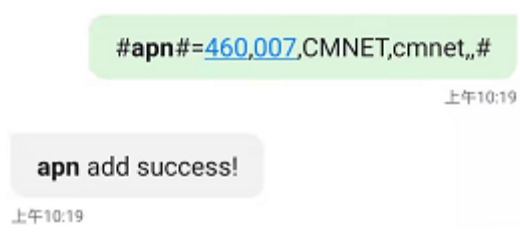
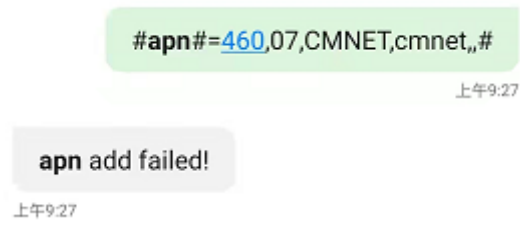
The command format, such as #command#, #command#=parameters, or #command:parameters, is used to set up the command sent to the 4G device, and then the device will execute the command. Every mobile phone could send out the commands with its SIM card.

1. Reviewing the Device Status

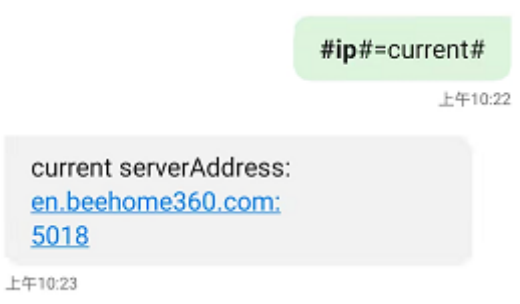
Command format	Description	Example
#status#	The watch sim is supposed to reply with IMEI # and watch firmware version.	<div>#status#</div> <div>傍晚5:37</div> <div>IMEI=357653050858849 SW:V901 C42F-I005I005-US-P1-V0. 3.38.20210913.115824 Battery:019%</div> <div>傍晚5:41</div> <div>IMEI=357653050858849 SW:V901 C42F-I005I005-US-P1-V0. 3.38.20210913.115824 Battery:019%</div>
#deviceinfo#	The watch sim is supposed to reply with information, such as working mode, time cycle to locate the device, the last time to locate the device, etc..	<div>#deviceinfo#</div> <div>下午4:39</div> <div>Firmware C42F-I005I005-US-P1-V0. 3.38.20210913.115824 Protocol V901 IMEI 357653050858963 2021/09/18,16:39:28 Network 4G[lte signal dbm =-99,level=3] He</div> <div>下午4:39</div> <div>artbeat[P1 112.74.138.18:5018,true, 5] Bat096,4037 charged false,Step1333 Location[M8,C600s,TWiFi, 20210918163900,BTInfalse] PPG[C0m] Temp[C0s]</div>

	Contents of reply SMS	Description
	Firmware C42F-I005I005-US-P1-V0.3.38.20210913.115824	The version of device firmware
	Protocol V901	The version of communication protocol implemented to the watch
	IMEI 357653050858963	IMEI No. assigned to the watch.
	2021/09/18,16:39:28	The time point to reply the command.
	Network 4G [lte signal dbm =-99,level=3]	The current network is 4G, the signal level of 4G is 3 (The best signal level is 5).
	Heartbeat [P1 112.74.138.18:5018,true,5]	The server IP for uploading the heartbeat values. The value "true" means successful network connection. The value "5" means heartbeat uploading interval is 5 minutes.
	Bat096,4037 charged false, Step1333	Battery level and pedometer value The value "096" means the battery level is 96%. The value "4037" means the voltage value is 4.037v. The value "1333" means the pedometer is 1333 steps.
	Location[M8,C600s,TWiFi,20210918163900,BTInfalse]	The value "M8" means the device is working in tracking mode 8.The The value "C600s" means location data uploading interval is 600 seconds. TWiFi means the tracking way of last location is WiFi The value "20210918163900" is location time of the last location.It is 2021-09-18 16:39:00. BTInfalse is undefined for 4G device
	PPG[C0m] PPG[C5,P64,H108,L70,T31.00,TA35.55,20200225230645]	Heart rate detection interval C0m means the device don't support heart rate detection The value "C5" means the heart reat uploading interval is 5 mins, The value "P64" means the value of heart rate is 64, The value "H108" means the high pressure of blood pressure is 108, The value "L70" means the low pressure of blood pressure is 70, The value "T31.00" means the wrist temperature is 31.00 degrees Celsius, The value "TA35.55" means the body temperature is 35.55 degrees Celsius, The value " 20200225230645" means the heart rate and temperature data detection time is 2020-02-25 23:06:45.
	Temp[C0s] Temp[C3600s]	Temperature detection interval The value "C0s" means the device don't support body temperature detection. The value "C3600s" means the temperature data uploading interval is 3600 seconds.

2. Setting up APN

Command format	Description	Example
#apn#=reset#	Reset the APN configuration to default value	
#apn#=current#	To check what is the existing APN saved in device firmware.	 <p>#apn#=current#</p> <p>上午9:25</p> <p>APNSettings id = 26 ,name = CMNET ,mcc=460 ,mnc=02 ,apn=cmnet ,user=null ,password=null ,type=default,xcap,hipri,supl; Prefer ApnID=26</p> <p>上午9:25</p>
#apn#=MCC,MNC,ApnName,apn,user,password#	<p>Configure and enable a new APN parameter,or enable a existing APN parameter which is already in the firmware.</p> <p>The MCCMNC must be three digit. Fill the two digits with 0 in the hundreds</p>	 <p>#apn#=460,007,CMNET,cmnet,,#</p> <p>上午10:19</p> <p>apn add success!</p> <p>上午10:19</p> <p>Failure example of MNC only two digits.</p>  <p>#apn#=460,07,CMNET,cmnet,,#</p> <p>上午9:27</p> <p>apn add failed!</p> <p>上午9:27</p>

3. IP Setting up Server IP

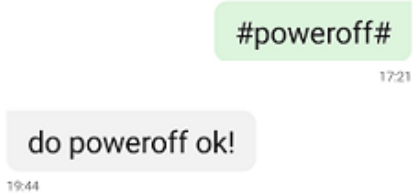
Command format	Description	Example
#ip#=reset#	To reset the server IP as factory settings.	
#ip#=current#	To check the existing server IP saved in watch firmware.	 <p>#ip#=current#</p> <p>上午10:22</p> <p>current serverAddress: en.beehome360.com: 5018</p> <p>上午10:23</p>

#ip#=192.168.0.1:8080#	To set up server IP and port, support domain name.	<p>#ip#=en.beehome360.com:5018#</p> <p>晚上9:05</p> <p>#ip#=en.beehome360.com:5018# success!</p> <p>下午2:46</p>
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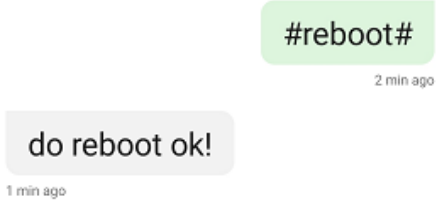
4. Setting up WiFi

Command format	Description	Example
#wifictl#=current	To check the WiFi settings.	<p>#wifictl#=current</p> <p>中午11:43</p> <p>Current Wifi Setting SSID TOTOLINK_B29D04, WiFiPassword Top12345qwert!</p> <p>中午11:43</p>
#wifictl#=reset	To remove existing WiFi settings.	
#wifictl#=switch	#wifictl#=switch,1 #wifictl#=switch,0	<p>#wifictl#=switch,1</p> <p>下午3:55</p> <p>WiFi Switch On !</p> <p>下午3:55</p>
#wifictl#=connect,SSID,password,encryptType	To set up the WiFi connection parameters. It need enable WiFi with command #wifictl#=switch,1,then configure the Wifi by sending this command. Otherwise, Wifi will not be executed. SSID means the WiFi name, password means the WiFi password, encrypt Type means the way to encrypt the WiFi connection.	<p>#wifictl#=switch,1</p> <p>下午3:55</p> <p>WiFi Switch On !</p> <p>下午3:55</p> <p>#wifictl#=connect,TOTOLINK_B29D04,Top12345qwert,aes</p> <p>下午3:55</p> <p>set and connect to Wifi SSID TOTOLINK_B29D04, WiFiPassword Top12345qwert, encryptType aes!</p> <p>下午3:56</p>

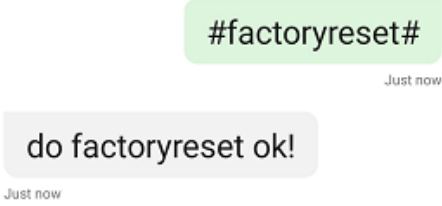
5. To Power off the Watch

Command format	Description	Example
#poweroff#	To power OFF the device remotely. The device will reply OK SMS then execute the command.	 <p>The example shows a green bubble with the command #poweroff# and a timestamp of 17:21. Below it is a grey bubble with the response 'do poweroff ok!' and a timestamp of 19:44.</p>

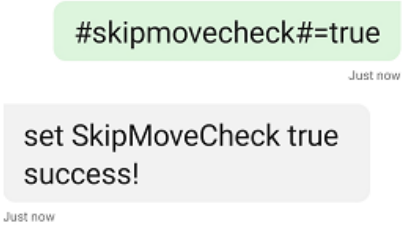
6. To Reboot the Watch

Command format	Description	Example
#reboot#	To restart the device remotely. The device will reply OK SMS then execute the command.	 <p>The example shows a green bubble with the command #reboot# and a timestamp of 2 min ago. Below it is a grey bubble with the response 'do reboot ok!' and a timestamp of 1 min ago.</p>

7. To Reset the Watch as Factory Settings

Command format	Description	Example
#factoryreset#	To reset all parameters to factory default value remotely. The device will reply OK SMS then execute the command.	 <p>The example shows a green bubble with the command #factoryreset# and a timestamp of Just now. Below it is a grey bubble with the response 'do factoryreset ok!' and a timestamp of Just now.</p>

8. To configure the motion state detection for Wifi location

Command format	Description	Example
#skipmovecheck#=current	Check the current motion detection status.	
#skipmovecheck#=true	To disable the sleep mode. The device will always upload location no matter what the motion state (Sleep mode) is.	 <p>The example shows a green bubble with the command #skipmovecheck#=true and a timestamp of Just now. Below it is a grey bubble with the response 'set SkipMoveCheck true success!' and a timestamp of Just now.</p>
#skipmovecheck#=false	To enable the sleep mode. The device will not upload any location in standing state. It will start to upload location when the Acceleration value change.	