

Mictrack Communication Protocol

For MT909 V1.0



1. Heartbeat Data Format:

*<Head>,<ID>,<V6>,<UTC time>,<GPS status>,<Latitude>,<N/S Indicator>,<Longitude>,<E/W Indicator>,<Speed>,<Direction>,<Date>,<Vehicle status><MCC>,<MNC>,<LAC>,<CI>,<ICCID#>

For example:

*HQ,8168000008,V6,043602,A,2234.9273,N,11354.3980,E,000.06,000,100715,FBFFBBFF,460,00,10342,4283,89860481192280028063#

2. The parameter description

Parameter	Example	Description
Head	HQ	
ID	8168000008	Vehicle ID
V6		
UTC Time	043602	hhmmss
GPS status	A	A=valid,V=invalid
Latitude	2234.9273	ddmm.mmmm
N/S Indicator	N	N=north or S=south
Longitude	11402.1399	dddmm.mmmm
E/W Indicator	E	E=east or W=west
Speed	000.06	
Direction	000	
Date	100715	DDMMYY
Vehicle status	FBFFBBFF	Four bytes, means the status of vehicle and alarm. Use ASCII character for 16 hexadecimal (detail please see Appendix).
MCC	460	Mobile Country Code
MNC	00	Mobile Network Code
LAC	10342	Location Area Code
CI	4283	Cell Tower Identity
ICCID	89860481192280028063	ICCID of SIM Card

2. Normal Data Format:**For example:**

2420180000060616562609180000000049000000000C000000FFFFBBFF0000000001CC0028661100182866128617286612871501

Parameter	Example	Description
00	\$	Record Head (0X24)
01		Vehicle ID
02		

03	8168000008	
04		
05		
06	043204	UTC Time, hhmmss
07		
08		
09	100715	Date, DDMMYY
0A		
0B		
0C	22349273	Latitude, ddmm.mmmm
0D		
0E		
0F		
10	F6	Backup Battery Power. when it is less than 7%, add F in front, and fix a word if it is greater than or equal to 7% according to actual
11	113543980E	dddmm.mmmm
12		last Byte (sequence number 0x15)
13		mean:
14		bit7654, The last bit of Longitude
15		bit3, 1: East Longitude, 0: West Longitude bit2, 1: North Latitude, 0: South Latitude bit1, 1: A, 0: V bit0, No Define
16	014028	Speed, Direction
17		(0x014028 : Speed 014 Section ,
18		Direction 028)
19-1C	0xFFFFFBFF	vehicle status. The vehicle status and user-defined alarm status expressed in binary. The same as the heartbeat data format.
1D~20	0x00000000	Save
21~22	0x01cc	mcc
23	0x00	mnc
24~25	0x2688	lac
26~27	0x10bb	Cell id
28	0x1E	rx
29~2A	0x2866	lac

2B~2C	0x1286	Cell id
2D	0x17	rx
2E~2F	0x2866	LAC
30~31	0x1287	Cell ID
32	0x15	rx
33~38	...	bssid
39	0x3A	rsssi
3A~3F	...	bssid
40	0x40	rsssi
41~46	...	bssid
47	0x46	rsssi
48	00	Record Number

3. Appendix:

Vehicle Status

Item	Save		Status of the Vehicle Assembly		Internal Status of the Car		Alarm Status	
	The first byte		The second byte		The Third byte		The fourth byte	
0	1	Save	1	save	1	Save	1	Save
1	1	Save	1	Shake Alarm	1	Geo-fence	1	Light sensor report
2	1	Supplementary Data	1	Save	0	Save	1	Over Speed
3	1	Save	1	save	1	Save	1	save
4	1	Save	1	Save	1	Save	1	save
5	1	Save	1	Save	1	Save	1	save
6	1	Save	1	Save	1	Save	1	Low battery alert
7	1	Save	1	Save	1	save	1	Save

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mictrack

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