

Shenzhen Jimi IoT Co., Ltd.

Operational Commands Manual for JC182 4G Mini Dashcam

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Change History

Version	Date	Editor(s)	Description
V1.0.0	Jun. 12, 2025	Rick, Acher	Initial release.
V1.0.1	Jul. 11, 2025	Rick	Added two commands: ASETAPN,P1# (automatic APN setting) and EVENTSET,ACD,P1# (collision event setting).
V1.0.2	Jul. 24, 2025	Rick, Acher	Deleted commands: CHECKVIDEO#, RECORDSW_SUB,1,P1#, RECORDAUDIO_SUB,1,P1# and UPDATE,P1#.
V1.0.3	Aug. 08, 2025	Acher	Updated the Dependency/Notes for the ACC,P1,P2# command.

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1. Introduction

This manual is designed to provide detailed guide on how to efficiently and accurately operate the device, covering functions such as device parameter configuration, queries, and control. Through an in-depth explanation of each command's functionality, syntax, and practical examples, this manual helps users fully leverage the device's capabilities and ensures smooth and accurate operation.

This manual is intended for:

- Developers;
- Technical support staff; and
- End users.

If you have any questions or encounter any difficulties while reading this document or during the integration, please feel free to contact your account manager. Our expert team is available to provide timely and professional support to ensure a smooth integration process.

2. Terms and Abbreviations

2.1 Terms and Their Definitions

The terms listed in the following table apply to this document.

Term	Description
Data communication link anomaly	The radio communication link is interrupted or temporarily suspended (such as during a call).
Registration	The device notifies of the platform that it has been installed in a vehicle.
Turn point reporting	The terminal sends location information when it detects the vehicle is turning. The device transmits location information when it detects a vehicle turning, based on a sampling frequency of at least 1 Hz, a heading change rate of at least 15°/s, and a minimum duration of 3 seconds.
Frame rate	It indicates how many times a graphics processor can update when processing fields and is used to measure the number of displayed frames per second (FPS).
.....

2.2 Abbreviation

The following abbreviations listed in the table apply to this document.

Abbreviation	Description
AAC	Advanced Audio Coding
ACC	Accessory (position on the ignition switch)
ADAS	Advanced Driver-Assistance Systems
ADC	Analog-to-Digital Converter
AES	Advanced Encryption Standard
AHD	Analog High Definition
AMS	Application Management Server
AP	Access Point Mode (one of the WiFi operating modes)
APK	Android Package Kit
APN	Access Point Name
BCD	Binary-Coded Decimal
COB	Client-Oriented Build
CSQ	Call Signal Quality

Abbreviation	Description
DMS	Driver Monitoring System
EMMC	Embedded Multi-Media Card
FCW	Forward Collision Warning
FDD	Frequency Division Duplex
FOTA	Firmware Over-The-Air
FPS	Frames Per Second
GNSS	Global Navigation Satellite System
GPRS	General Packet Radio Service
GPS	Global Positioning System
GSM	Global System for Mobile Communications
H.264	High Efficiency Video Coding
HID	Human Interface Device
HMW	Headway Monitoring Warning
ICCID	Integrated Circuit Card Identifier
IMEI	International Mobile Equipment Identity
IMSI	International Mobile Subscriber Identity
LBS	Location-Based Services
LDW	Lane Departure Warning
MAC	Media Access Control
Mbps	Megabits per second
PCW	Pedestrian Collision Warning
PiP	Picture-in-Picture
RAT	Radio Access Technology
RFID	Radio-Frequency Identification
SMS	Short Message Service
SSID	Service Set Identifier
STA	Station Mode (one of the WiFi operating modes)
TDD	Time Division Duplex
URL	Uniform Resource Locator
USSD	Unstructured Supplementary Service Data
WAV	Waveform Audio File Format
WCDMA	Wideband Code Division Multiple Access
ICEV	Internal Combustion Engine Vehicle
NEV	New Energy Vehicle

2.3 Command Overview

Commands for Jimi IoT devices use the following generic structure:

`SERVER, P1, P2, P3, P4#`(Example)

- **SERVER:** Command header, an identifier for the specific function or setting.
- **P1 / P2 / P3 / P4:** Parameters (a command may have one or multiple parameters, separated by commas).
- **#:** Terminator, indicating the end of the command.

NOTE: To ensure proper device operation, all parameter values must be set within the ranges specified in this manual.

This command structure is employed across several methods of communicating with a Jimi IoT device:

- Online commands (over cellular network)
- WiFiKit commands (over WiFi network)
- MicroSD card commands (via config file)

When sending commands via a serial tool like SSCOM, the command string must be prepended with a specific prefix, as follows:

- `AT^GT_CM=SERVER, P1, P2, P3, P4#`(Example)

In this format, "AT^GT_CM=" is a fixed prefix for serial commands.

NOTE: Query commands do not require any parameters.

3. Device Management

Description: This section describes commands for configuring, monitoring, maintaining, and updating Jimi IoT devices.

Included Operations: Device status queries, server configuration, APN settings, language selection, volume adjustment, WiFi connection, time synchronization, device reboot, firmware updates, etc.

NOTES

- 1) Query commands do not require any parameters.
- 2) The current settings for most commands can be queried by sending the command name (header) without any parameters. Examples:

APN#: Retrieve current APN settings of the device.

SERVER#: Retrieve current server settings of the device.

VERSION#: Retrieve current firmware versions of the device.

- 3) All commands can be sent via GPRS.

3.1 Query Camera Status of Device

STATUSVIDEO#

Retrieve current status of the device's camera, including: network connectivity, GSM status/signal strength, GNSS satellite count, ACC status, external battery voltage, time zone, camera state, and MicroSD card storage capacity.

Example(s)

Command	Reply	Remarks
STATUSVIDEO#	Network: Connected,GSM: Dial Success,GSM Signal Level: Feeble,GPS: 29,ACC: ON,Battery: 13.10v,Time Zone: UTC+08:00,On video: CHN1,Camera insertion: CHN1,TF: free:94571MB/total:121926MB,	Query current device and camera status.

3.2 Query Basic Status of Device

STATUS#

Retrieve the device's fundamental operational status, including: external/internal battery voltage, communication module status, network/GNSS status (signal strength, satellite count, etc.), ACC detection method, defense (arming) status, video module status, and LED intensity.

Example(s)

Command	Reply	Remarks
STATUS#	RETURN_TRANS_RSP:Battery:13.2V; CAPV:5.48V; SOC:Link Down;NO NETWORK; GPS:Successful positioning; SVS Used in fix:24(32); GPS Signal Level:28,38,33,23,42,34,39,36,36,41,39,35,39,38,43,37,42,36,42, 41,37,43,44,38 ACC:ON,1,1; Defense:OFF; Video:0,1; Mode:NORMAL; LED:56,50,51;	Query current setting.

3.3 Query Firmware Versions of Device

VERSION#

Retrieve firmware versions of the video and communication modules of the device.

Example(s)

Command	Reply	Remarks
VERSION#	[VERSION]C182_0_3_STD_JM_JC182_V1.1.1.69_250318.0640[M ODEM]Revision:C182_WDBP_VY_V1.1.2.5_250314.1926	Query current setting.

3.4 Query Basic Information of Device

CHECK#

Retrieve the basic configuration of the device, including: IMEI, firmware versions, server/APN settings, signal quality (CSQ), GPRS status, GPS/BDS satellite data, internal/external battery voltage readings, ACC status, SIM card details, and GPS mode.

Example(s)

Command	Reply	Remarks
CHECK#	RETURN_TRANS_RSP:IMEI:869058070000250;VERSION:C182_WDBP_VY_1_V1.2.0.9_250414.1352;[AR9150]:C182_0_3_STD_JM_JC182_V1.2.0.4_250414.1100;SERVER:1,iotHub.tracksolidpro.com,21122,1;BSERVER:0,0,0;GET IP:;APN:;;CSQ:NO SERVICE;GPRS:1;GPS[12]:26,40,34,35,44,40,40,45,24,34,42,42;BDS[12]:42,41,40,37,43,38,44,41,39,45,46,39;BAT:5.48;EXTV:16.74;ACC:ON,1,1;sensor:MiraDA215;IMSI:;ICCID:;UKPRI:1,H;GPSPMODE:3;bootcase[Start_total:9 normal_power_on:0 Wdt_or_Power:1 Unknow_reason:7 Normal_total:1 Unknow_reason:7	Query the essential device configuration.

3.5 Reboot Device

REBOOT# / RESTART# / RESET#

Example(s)

Command	Reply	Remarks
REBOOT#	<REBOOT#> SET OK	Command sent successfully.
RESTART#	<RESTART#> SET OK	Command sent successfully.
RESET#	<RESET#> SET OK	Command sent successfully.

3.6 Format MicroSD Card

FORMAT, P1#

Format the inserted MicroSD card of the device.

- Ensure the device is ACC ON during this operation. Do not reboot, power off, or remove the MicroSD card during formatting. This process may take about 1 minute to finish.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Storage to format	1: MicroSD card	

Example(s)

Command	Reply	Remarks
FORMAT,1#	<FORMAT,1#> SET OK	Command sent successfully.

3.7 Query MicroSD Card Information

CAMERA,TF#

Retrieve information about the inserted MicroSD card of the device, including available and total space.

Example(s)

Command	Reply	Remarks
CAMERA,TF#	CAMERA,TF:free:121287MB/total:121882MB	Command sent successfully.

3.8 Factory Reset

RESTORE#

Reset all device parameters and states to their factory defaults. You can use this command when a parameter exception occurs or a factory reset is needed.

CAUTION: This is an irreversible operation that will erase all custom settings and data. Please back up any important information before sending this command.

Example(s)

Command	Reply	Remarks
RESTORE#	<RESTORE#> SET OK	Command sent successfully.

3.9 Set Device Time Zone

VIDEOTIMEZONE, P1, P2, P3#

Set the time zone for the device.

- P2 and P3 are required for manual setting.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Time zone sync mode	E: East of GMT W: West of GMT AUTO/NITZ: Auto-syn (using NITZ from cellular network)	AUTO
P2	Hour offset	0–12	
P3	Minute offset	0 / 15 / 30 / 60	

Example(s)

Command	Reply	Remarks
VIDEOTIMEZONE#	VIDEOTIMEZONE,E,8,0(NITZ)	Query current time zone. The suffix "NITZ" indicates it is currently set to auto-sync.
VIDEOTIMEZONE,E,7,0#	< VIDEOTIMEZONE,E,7,0#> SET OK	Command sent successfully.
VIDEOTIMEZONE,AUTO#	< VIDEOTIMEZONE,AUTO#> SET OK	Command sent successfully. The device will auto synchronize its time zone with the base station.

3.10 Set Device Volume

VOLUME, P1#

Set the volume level of the device.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Volume level	0: Mute 1: Low (30) 2: Medium (70) 3: High (100)	3

Example(s)

Command	Reply	Remarks
VOLUME#	VOLUME,3	Query current setting.
VOLUME,1#	<VOLUME,1#> SET OK	Command sent successfully (volume set to Low).

3.11 Set WiFi Hotspot Duration

WIFIAPT, P1#

Configure how long the hotspot stays active once enabled.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	WiFi hotspot duration	-1 / 0 / 1–1440 (minutes) / ON -1: Always on (when ACC ON) 0: Disabled 1–1440: Active duration ON: Re-enable hotspot (if previously turned off)	30

Example(s)

Command	Reply	Remarks
WIFIAPT#	WIFIAPT#,30	Check current hotspot duration setting.
WIFIAPT,10#	<WIFIAPT,10#> SET OK	Setting successful.

Command	Reply	Remarks
		Set the hotspot to automatically turn off 10 minutes after being enabled (with ACC ON).
WIFIAPT,-1#	<WIFIAPT,-1#> SET OK	Setting successful. Hotspot remains active while ACC is ON.

3.12 Manually Set APN of Inserted SIM Card

Parameter(s)

APN, P1#

Set the correct APN for the inserted SIM card to enable internet access via the carrier network.

- After setting, the device's network module will restart in 10 seconds to apply the new APN.

Parameter(s)

Parameter	Meaning	Range/Format	Default
P1	APN address	Carrier-specific (consult your SIM provider)	

Example(s)

Command	Reply	Remarks
APN#	RETURN_TRANS_RSP:APN:wdata,,	Query the current APN setting. "wdata" is the APN in use.
APN,ctnet#	RETURN_TRANS_RSP:APN set OK! for the newly-set APN to take effect, the device will reboot after 10s.	Setting successful. The device will restart in 10s.

3.13 Auto-Set APN of Inserted SIM Card

ASETAPN, P1#

This command enables or disables automatic APN setting feature.

When enabled, the device reads the MCC and MNC from the inserted SIM card and attempts to find the matching APN settings from the device built-in APN list, setting the APN automatically.

The setting takes effect after device reboot.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Enable switch	ON / OFF	ON

Example(s)

Command	Reply	Remarks
ASETAPN#	RETURN_TRANS_RSP:ASETAPN:ON,Currently use APN:cmnet,,	Query current setting.
ASETAPN,OFF#	RETURN_TRANS_RSP:ASETAPN set OK! for the newly-set APN to take effect, the device will reboot after 10s.	Disable automatic APN setting feature.

3.14 Set Server Address

`SERVER, P1, P2#`

Set the server address for the telematics platform. You can configure the address using either a domain name or an IP address.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Server address (domain or IP)	Input server address	
P2	Server port	Input port number	

Example(s)

Command	Reply	Remarks
SERVER#	SERVER,iotHub.tracksolidpro.com,21122,,0,,	Query current server setting.
SERVER,iotHub-c450.jimicloud.com,21121#	<SERVER,iotHub-c450.jimicloud.com,21121#> SET OK	Set primary server with domain name and port.
SERVER,190.92.219.15,21122#	<SERVER,190.92.219.15,21122#> SET OK	Set primary server with IP and port.

4. Location Tracking

Description: This set of commands is related to the device's positioning and tracking capabilities.

Included Operations: Live location acquisition, geofence setup, location data upload mode configuration, initial mileage setup, etc.

4.1 Configure Location Packet Upload Interval (Vehicle in Motion)

`TIMER, P1#`

Set the interval for uploading location packets when the vehicle under tracking is in motion.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Upload interval	1–600 (seconds) To set a value below 5, the SF,OFF# command must be sent first for the setting to take effect.	10

Example(s)

Command	Reply	Remarks
TIMER#	10	Query current location packet upload interval.
TIMER,60#	<TIMER,60#> SET OK	Command sent successfully (set the location packet upload interval when in motion to 60 seconds).

4.2 Set Turning Angle to Trigger Additional Positioning

`ANGLEREP, P1#`

Set the turning angle threshold that, when reached, triggers an immediate upload of a location packet.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Cornering angle threshold	10–180 (degrees)	30

Example(s)

Command	Reply	Remarks
ANGLEREP#	30	Query current turning angle threshold.
ANGLEREP,45#	<ANGLEREP,45#> SET OK	Command sent successfully (when the turning angle reaches 45° when cornering, the device immediately uploads a location packet to the server).

5. Video Recording

Description: This set of commands is related to the device's video functions, including start/stop recording, resolution modification, and media file properties configuration.

Included Operations: Recording activation/deactivation, quality optimization, watermark settings, photo resolution configuration, etc.

5.1 Enable Snapshot

SNAP#

Manually activate the device to capture a snapshot of the live feed with alarm data.

Example(s)

Command	Reply	Remarks
SNAP#	SNAP SET OK	Command sent successfully.

5.2 Set Time-Lapse Recording Parameters

TLR, P1, P2, P3#

Enable or disable time-lapse recording function of the device after ignition off and set the recording duration when enabled.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Function switch	OFF / ON OFF: Disable time-lapse recording ON: Enable time-lapse recording after ACC OFF	OFF
P2	Recording duration (the device will stop recording and enter sleep mode after this duration)	10–720 (minutes)	30
P3	Stop voltage	110–330 (unit: 0.1V) The device checks the voltage every second; if the voltage is less than or equal to this value for 10 consecutive seconds, recording stops.	120

NOTE: Parameters P2 and P3 function as an OR condition. The time-lapse recording will stop as soon as either condition is met.

Example(s)

Command	Reply	Remarks
TLR#	TLR,OFF,30,120	Query current setting.
TLR,ON,30,120#	<TLR,ON,30,120#> SET OK	Command sent successfully. Enable time-lapse recording for 30 minutes with a stop voltage of 12.0V.
TLR,OFF#	<TLR,OFF#> SET OK	Disable time-lapse recording.

5.3 Enable Main Stream Storage

RECORDSW,1,P1

Enable or disable the storage of main video stream to the MicroSD card.

Take effect after a device reboot.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Function switch	ON / OFF	ON

Example(s)

Command	Reply	Remarks
RECORDSW,1#	RECORDSW,1#,ON	Query current setting.
RECORDSW,1,OFF#	<RECORDSW,1,OFF#> SET OK	Disable command sent successfully. The device will not save the main stream after reboot.
RECORDSW,1,ON#	<RECORDSW,1,ON#> SET OK	Enable command sent successfully. The device will save the main stream after reboot.

5.4 Enable Audio for Main Stream

`RECORDAUDIO,1,P1#`

Enable or disable audio recording for main stream video stored on MicroSD card.

Take effect after a device reboot.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Function switch	ON / OFF	ON

Example(s)

Command	Reply	Remarks
RECORDAUDIO,1#	RECORDAUDIO,1#,ON	Query current setting.
RECORDAUDIO,1,OFF#	<RECORDAUDIO,1,OFF#> SET OK	Disable command sent successfully. Audio will not be recorded after reboot.
RECORDAUDIO,1,ON#	<RECORDAUDIO,1,ON#> SET OK	Enable command sent successfully. Audio will be recorded after reboot.

5.5 Configure Video Watermark Speed Unit

`MILE,P1#`

Change the unit of speed displayed on the video watermark.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Speed unit	0: KM/H 1: MPH	0

Example(s)

Command	Reply	Remarks
MILE#	MILE#,0	Query current speed unit used in the video watermark.
MILE,1#	<MILE,1#> SET OK	Command sent successfully (set the video watermark's speed unit to MPH).



6. Event Management

Description: This set of commands manage how the device responds to and processes specific events.

Included Operations: Set event trigger conditions, voice prompt, alert reporting method, etc.

6.1 Configure Overspeed Event

`EVENTSET,AOSD,P1,P2#`

By turning on this feature, an overspeed event is triggered when the speed of the vehicle under tracking goes above a given speed (P1) for a given amount of time (P2).

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Function switch & speed threshold	60–255 (km/h) OFF: Disabled	OFF
P2	Duration above P1 to trigger event	5–600 (seconds)	0

Example(s)

Command	Reply	Remarks
EVENTSET,AOSD#	EVENTSET,AOSD#,OFF,0	Query current setting. Overspeed event disabled.
EVENTSET,AOSD,120,6#	<EVENTSET,AOSD,120,6#> SET OK	Command sent successfully. Set the overspeed event to trigger when the vehicle speed goes above 120km/h or higher for 6s.

6.2 Configure Parking Vibration Event

`EVENTSET,AVD,P1,P2,P3,P4#`

When the device in ACC OFF state detects the vibration counts detected within a given duration (P2) reaching a given threshold (P3), it wakes up its video module to enter recording-ready mode. If the device is still ACC OFF within the next P4 seconds, a parking vibration event is triggered and a video recording is taken.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Sensitivity level & function switch	OFF / 1 / 2 / 3 / 4 / 5 OFF: Disabled (ignore subsequent parameters) NOTE: A lower value indicates higher sensitivity.	3
P2	Detection time	1–300 (seconds)	10
P3	Vibration count threshold	1–20 (times)	3
P4	Confirmation delay (if no ACC-ON incident occurs within this delay, a vibration event is triggered)	10–60 (seconds)	30

Example(s)

Command	Reply	Remarks
EVENTSET,AVD#	RETURN_TRANS_RSP:AVD:3,10,3,30	Query current setting.
EVENTSET,AVD,OFF#	RETURN_TRANS_RSP:EVENTSET set OK!	Disable command sent successfully.
EVENTSET,AVD,2,15,5,25#	RETURN_TRANS_RSP:EVENTSET set OK!	Command sent successfully. Set the event to pre-trigger if 5 vibrations are detected in 15s and trigger a vibration event if the ignition remains OFF for the next 25s.

6.3 Configure Low Vehicle Battery Event

`EVENTSET,AEPLV,P1,P2,P3#`

Once configured, a low vehicle battery event is triggered if the external supply voltage drops below a set low threshold (P1) and remains there for a given period (P3). The event status is cleared once the voltage recovers to the recovery threshold (P2) or higher and remains there for a given period (P3).

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Low voltage threshold	10–360 (unit: 0.1V)	112
P2	Normal voltage threshold	10–360 (unit: 0.1V)	120
P3	Detection time	1–300 (seconds)	10

Example(s)

Command	Reply	Remarks
EVENTSET,AEPLV#	RETURN_TRANS_RSP:AEPLV: 11.2V,12.0V,10	Query current setting.
EVENTSET,AEPLV,120,125,30#	RETURN_TRANS_RSP:EVENT SET set OK!	Command sent successfully (set the low threshold to 12.0V and the recovery threshold to 12.5V, with a detection duration of 30 seconds.)

6.4 Configure Collision Event

`EVENTSET,ACD,P1#`

This command configures an event that triggers when a significant physical impact is detected by the built-in accelerometer while the vehicle is in motion and exceeds a given threshold.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Impact sensitivity level	OFF / 0–255 OFF: Disable collision detection	120

PARAM	Meaning	Range/Format	Default
		NOTE: A lower value indicates higher sensitivity.	

Example(s)

Command	Reply	Remarks
EVENTSET,ACD#	RETURN_TRANS_RSP:ACD: 120,0,15,6,70,90,0	Query current collision detection settings.
EVENTSET,ACD,OFF#	RETURN_TRANS_RSP:OK	Disable collision detection event.
EVENTSET,ACD,80#	RETURN_TRANS_RSP:OK	Command sent successfully (impact sensitivity level set to "80").

Important Note on Query Response:

The query command "EVENTSET,ACD#" returns multiple comma-separated values (e.g., RETURN_TRANS_RSP:ACD:120,0,15,6,70,90,0). Only the first value (120 in this example) is valid and represents the current impact sensitivity setting (P1). All subsequent values in the response string are legacy parameters and should be ignored.

7. Device Control

Description: This set of commands is used to directly operate and control the device.

Included Operations: Modify device settings, enable/disable functions, task execute specific tasks, etc.

7.1 Configure Warning Light Mode

LIGHT,P1#

Enable or disable the warning light and configure its operational mode once enabled.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Light status	ON / OFF / FLICKER / 10 / 30 / 60 <ul style="list-style-type: none"> ON: Solid on until ACC OFF or a LIGHT,OFF# command. OFF: Turn off warning light. FLICKER: Flash until an ACC status change, a vibration alert (pre-trigger or formal trigger), or a LIGHT,OFF# command. 10: Flash for 10s 30: Flash for 30s 60: Flash for 60s 	OFF

Example(s)

Command	Reply	Remarks
LIGHT,ON#	<LIGHT,ON#> SET OK	Turn the warning light on (solid).
LIGHT,OFF#	<LIGHT,OFF#> SET OK	Turn the warning light off.
LIGHT,FLICKER#	<LIGHT,FLICKER#> SET OK	Set the warning light mode to "FLICKER" mode.
LIGHT,10#	<LIGHT,10#> SET OK	Set the warning light to flash for 10s.

7.2 Configure ACC Detection Method

`ACC, P1, P2#`

Set the method for detecting the vehicle's ignition (ACC) status, specifically:

- **Hard ACC:** The device directly reads the vehicle's ignition signal via a physical connection to the ACC circuit.
- **Virtual ACC:** The device simulates the ACC status using algorithms based on data from its internal sensors, without a physical connection to the ACC wire.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Function switch	ON (fixed)	ON
P2	ACC detection method	0 / 1 / 4 <ul style="list-style-type: none"> • 0: Hard ACC (line detection) ON: B+, GND, and ACC wires active OFF: Only B+ and GND wires active • 1: Virtual ACC (ICEV, ADC) ON: Voltage (>13V for 3s) OFF: Voltage (<12.8V for 180s) + Speed (=0) • 4: Virtual ACC (NEV, G-sensor + GNSS) ON: Vibration detected + Angle reaching set threshold / GPS speed (> 0 km/h) OFF: G-sensor (XYZ changes below a threshold for 5 minutes) + GPS speed (= 0 km/h for at least 2 minutes) 	1

Dependency/Notes

After setting the ACC detection method to "Virtual ACC" (ICEV, ADC), use the `ACCV, P1, P2, P3, P4#` command to configure the specific voltage thresholds to ensure accurate status detection.

Example(s)

Command	Reply	Remarks
ACC#	RETURN_TRANS_RSP:ACC:ON,1	Query the current ACC detection method.
ACC,ON,4#	RETURN_TRANS_RSP:ACC set OK!	Set the ACC detection method to "4" [Virtual ACC (NEV)].

7.3 Configure Virtual ACC Voltage Thresholds

`ACCV, P1, P2, P3, P4#`

Set the voltage thresholds used to determine the ACC status when in virtual ACC mode.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	ACC ON voltage threshold (voltage should remain above this threshold during P2 duration to register as ACC ON)	90–360 (unit: 0.1V)	130
P2	ACC ON confirmation time (during this time window, the voltage should remain at or above the P1 to register as ACC ON)	1–300 (seconds)	3
P3	ACC OFF voltage threshold (voltage should remain below this threshold during P4 duration to register as ACC OFF)	90–360 (unit: 0.1V)	128
P4	ACC OFF confirmation time (during this time window, the voltage should remain below P3 to register as ACC OFF)	1–300 (seconds)	180

Dependency/Notes

This command is only effective after setting the ACC detection method to "Virtual ACC" using

`ACC, P1, P2#`.

Example(s)

Command	Reply	Remarks
<code>ACCV#</code>	<code>RETURN_TRANS_RSP:ACCV: 130,3,128,180</code>	Query current settings.
<code>ACCV,280,5,129,120#</code>	<code>RETURN_TRANS_RSP:ACCV set OK!</code>	Setting successful. After setting, if the voltage reaches 28V and remains there for more than 5s, the vehicle is registered as ACC ON; if the voltage drops below 12.9V and remains there for more than 120s, the vehicle is registered as ACC OFF.

7.4 Log Upload to Server

`LOG,1,P1#`

Configure the server to receive device logs.

Parameter(s)

PARAM	Meaning	Range/Format	Default
P1	Server address	Input the full URL path to receive log files	

Example(s)

Command	Reply	Remarks
LOG,1,http://183.238.245.122:1115/upload	869058070002678-20250612-181146.log	Command sent successfully. The device returns the filename of the log and uploads it to this path: http://183.238.245.122:1115/upload.