Tello Commands

Commands

Control Commands (xxx)

- returns "ok" if the command is executed successfully
- returns "error" or an informative result code if unsuccessful

Read Commands

• returns the current value of the sub-parameter(s).

Set Command (xxx a) will attempt to set a new sub-parameter value(s)

- returns "ok" if the command is executed successfully
- · returns "error" or an informative result code if unsuccessful

Command	Description	Response
command	Enter SDK mode	ok / error
takeoff	Auto takeoff	ok / error
land	Auto land	ok / error
streamon	Turn video stream on	ok / error
streamoff	Turn video stream off	ok / error
emergency	Stop all motors immediately	ok / error
up x	Fly uptime by x cm (range: 20-500)	ok / error
down x	Fly down by x cm (range: 20-500)	ok / error
left x	Fly left by x cm (range: 20-500)	ok / error
right x	Fly right by x cm (range: 20-500)	ok / error
forward x	Fly forward by x cm (range: 20-500)	ok / error
back x	Fly back by x cm (range: 20-500)	ok / error
CW X	Rotate clockwise by x degrees (range: 1-3600)	ok / error
CCW X	Rotate counterclockwise by x degrees (range: 1-3600)	ok / error
flip x	Perform flip in direction \mathbf{x} (I: left, r: right, f: forward, b: back)	ok / error
go x y z speed	Fly to position (x, y, z) at a specific speed (range: 10-100 cm/s)	ok / error
curve x1 y1 z1 x2 y2 z2 speed	Fly in a curve defined by two coordinates and speed (range: 10-60 cm/s)	ok / error

Command	Description	Response
speed x	Set flight speed to x cm/s (range: 10-100)	ok / error
rc a b c d	Send RC control via four channels (a : left/right, b : forward/backward, c : up/down, d : yaw)	ok / error
wifi ssid pass	Set Wi-Fi SSID and password	ok / error
speed?	Get current speed (cm/s)	Speed (1-100)
battery?	Get current battery percentage	Battery (0-100%)
time?	Get current flight time (seconds)	Time (seconds)
height?	Get current height (cm)	Height (cm)
temp?	Get current temperature (°C)	Temperature (°C)
attitude?	Get IMU attitude data (pitch, roll, yaw)	Attitude (pitch, roll, yaw)
baro?	Get barometer value (m)	Barometer (m)
acceleration?	Get IMU angular acceleration data (x, y, z)	Acceleration (x, y, z)
tof?	Get distance from Time of Flight sensor (cm)	Distance (30- 1000 cm)
wifi?	Get Wi-Fi signal-to-noise ratio (SNR)	SNR

Tello State Strings

Data Tello will send while flying.

Example:

"pitch:%d;roll:%d;yaw:%d;vgx:%d;vgy%d;vgz:%d;templ:%d;temph:%d;tof:%d;h:%d;bat:%d;baro: %.2f;time:%d;agx:%.2f;agy:%.2f;agz:%.2f;\r\n"

Data Parameter	Description	Unit/Format
pitch	The drone's forward/backward tilt angle	Degrees
roll	The drone's sideways tilt angle	Degrees
yaw	The drone's rotation around its vertical axis	Degrees
vgx	The drone's velocity along the x-axis	cm/s
vgy	The drone's velocity along the y-axis	cm/s
vgz	The drone's velocity along the z-axis	cm/s
templ	The lowest recorded temperature of the drone	°C (Celsius)
temph	The highest recorded temperature of the drone	°C (Celsius)
tof	Distance from the Time of Flight (TOF) sensor, typically altitude	cm
h	The current height of the drone	cm

Data Parameter	Description	Unit/Format
bat	The current battery percentage	% (0-100)
baro	Barometer reading, providing altitude based on atmospheric pressure	m (meters)
time	Total time the drone's motors have been running	seconds
agx	Angular acceleration along the x-axis	0.001g (g- force)
agy	Angular acceleration along the y-axis	0.001g (g- force)
agz	Angular acceleration along the z-axis	0.001g (g- force)