Tello SDK

1.3.0.0

1. OVERVIEW

The Tello SDK connects to the aircraft through a Wi-Fi UDP port, allowing users to control the

drone with text commands. Click here to download the Tello3.py file.

2. ARCHITECTURE

Use Wi-Fi to establish communication between Tello and PC, Mac or Mobile device

Send Command & Receive Response

      Tello IP: 192.168.10.1 UDP PORT:8889 <<- ->> PC/Mac/Mobile

      Remark1: Set up a UDP client on PC, Mac or Mobile device to send and receive message from Tello via the same port.

      Remark2: Send "command" command to Tello via UDP PORT 8889 to initiate Tello's SDK mode, before sending all other commands.

Receive Tello State

      Tello IP: 192.168.10.1 ->> PC/Mac/Mobile UDP Server: 0.0.0.0 UDP PORT:8890

      Remark3: Set up a UDP server on PC, Mac or Mobile device and listen the message from IP 0.0.0.0 via UDP PORT 8890. Do Remark2 to start receiving state data if you haven't.

Receive Tello Video Stream

      Tello IP: 192.168.10.1 ->> PC/Mac/Mobile UDP Server: 0.0.0.0 UDP PORT:11111

      Remark4: Set up a UDP server on PC, Mac or Mobile device and listen the message from IP 0.0.0.0 via UDP PORT 11111.

      Remark5: Do Remark2 if you haven't. Then send "streamon" command to Tello via UDP PORT 8889 to start the streaming.

3. TELLO COMMAND TYPES AND RESULTS

This SDK includes three basic command types.

• Control Commands (xxx)

- returns "ok" if the command is executed successfully

- returns "error" or an informative result code if unsuccessful

• Read Commands (xxx?)

- 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

4. TELLO COMMANDS

Control Commands

Command	Description	Possible Response
command	entry SDK mode	ok error

Command	Description	Possible Response
takeoff	Tello auto takeoff	ok error

Command	Description	Possible Response
land	Tello auto land	ok error

Command	Description	Possible Response
streamon	Set video stream on	ok error

Command	Description	Possible Response
streamoff	Set video stream off	ok error

Command	Description	Possible Response
emergency	Stop all motors immediately	ok error

Command	Description	Possible Response
up x	Tello fly up with distance x cm x: 20-500	ok error

Command	Description	Possible Response
down x	Tello fly down with distance x cm x: 20-500	ok error

Command	Description	Possible Response
left x	Tello fly left with distance x cm x: 20-500	ok error

Command	Description	Possible Response
right x	Tello fly right with distance x cm x: 20-500	ok error

Command	Description	Possible Response
forward x	Tello fly forward with distance x cm x: 20-500	ok error

Command	Description	Possible Response
back x	Tello fly back with distance x cm x: 20-500	ok error

Command	Description	Possible Response
cw x	Tello rotate x degree clockwise x: 1-3600	ok error