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ISSI LC-1S API

API based on UDP Protocol, port 1337/UDP.

1. Commands

**Action**: Get controller f/w version
**Command**: “ver” (hex: 766572)
**Returns**: “ISSI LC-1S=1.x.y (s/n:19xxx)”

**Action**: Change controller IP address to 192.168.1.2
**Command**: “ChangeIP=192.168.1.2” (hex: 4368616e676549503d3139322e3136382e312e32)
**Returns**: “IPchanged”

**Action**: Get current motors values
**Command**: “Current” (hex: 43757272656e74)
**Returns**: “Current=XXX,YYY,ZZZ” Where XXX – zoom position value, YYY- focus position value, ZZZ – iris position value.

**Action**: Move Zoom Narrow during X ms
**Command**: “ZoomN=X”
**Returns**: “Zoom=Y”, where Y – current value of Zoom motor
**Action:** Move Zoom Wide during X ms  
**Command:** “ZoomW=X”  
**Returns:** “Zoom=Y”, where Y – current value of Zoom motor

**Action:** Move Focus Far during X ms  
**Command:** “FocusF=X”  
**Returns:** “Focus=Y”, where Y – current value of Focus motor

**Action:** Move Focus Near during X ms  
**Command:** “FocusN=X”  
**Returns:** “Focus=Y”, where Y – current value of Focus motor

**Action:** Move Iris Open during X ms  
**Command:** “IrisO=X”  
**Returns:** “Iris=Y”, where Y – current value of Iris motor

**Action:** Move Iris Close during X ms  
**Command:** “IrisC=X”  
**Returns:** “Iris=Y”, where Y – current value of Iris motor

**Action:** Set zoom motor value to X  
**Command:** “setZoom=X”  
**Returns:** “zoomDone”, it may take a while to position the motors.

**Action:** Set focus motor value to X  
**Command:** “setFocus=X”  
**Returns:** “focusDone”, it may take a while to position the motors.

**Action:** Set iris motor value to X
**Command**: "setIris=X"

**Returns**: “irisDone”, it may take a while to position the motors.

**Action**: Stop all motors (during setFocus, setIris or setZoom)

**Command**: “setStop”

**Returns**: same as for ‘Current” command

**Action**: Motors limits detection (for all tree motors)

**Command**: “FindLimits”

**Returns**: in separate packets: “zoomMax=XXX”, “irisMax=XXX”, “focusMax=XXX”

**Action**: Set Iris mode - Motorized Iris(X=2), DC Iris(X=1) iris or Video Iris(X=0).

**Command**: “setIrisMode=X”

**Returns**: “mode=X”

**Action**: Move DC Iris to close

**Command**: “DIrisC=X”

**Returns**: “DIrisC=OK”, DC Iris lenses have no potentiometer, there is no feedback with actual position. Where X is a midpoint, please see manual.

**Action**: Move DC Iris to open

**Command**: “DIrisO=X”

**Returns**: “DIrisO=OK”, DC Iris lenses have no potentiometer, there is no feedback with actual position. Where X is a midpoint, please see manual.

**Action**: Move DC Iris to close faster

**Command**: “DIrisCX2=X”
Returns: “DIrisCX2=OK”, DC Iris lenses have no potentiometer, there is no feedback with actual position. Where X is a midpoint, please see manual.

Action: Move DC Iris to open faster
Command: “DIrisOX2=X”
Returns: “DIrisOX2=OK”, DC Iris lenses have no potentiometer, there is no feedback with actual position. Where X is a midpoint, please see manual.

Action: Move Video Iris to close
Command: “VIrisC=X”
Returns: “VIrisC=OK”, DC Iris lenses have no potentiometer, there is no feedback with actual position. Where X is a midpoint, please see manual.

Action: Move Video Iris to open
Command: “VIrisO=X”
Returns: “VIrisO=OK”, DC Iris lenses have no potentiometer, there is no feedback with actual position. Where X is a midpoint, please see manual.

Action: Move Video Iris to close faster
Command: “VIrisCX2=X”
Returns: “VIrisCX2=OK”, DC Iris lenses have no potentiometer, there is no feedback with actual position. Where X is a midpoint, please see manual.

Action: Move Video Iris to open faster
Command: “VIrisOX2=X”
Returns: “VIrisOX2=OK”, DC Iris lenses have no potentiometer, there is no feedback with actual position. Where X is a midpoint, please see manual.

Action: Set nickname for LC (stored in LC memory)
Command: “setNAME=XXXXXXXX” where XXXXXXX is 7-symbols name
Returns: no answer

Action: Get nickname for LC (stored in LC memory)
Command: “getNAME”
Answer: “NAME=XXXXXX”

2. Examples

Python

import socket
import time

# LC2 IP address
UDP_IP = "192.168.2.251"
UDP_PORT = 1337

print ("ISSI :: LC-1S Python Script Example\n")

# Command list
MESSAGES = ["ver", "IrisMode=2", "Current"]

# UDP socket
sock = socket.socket(socket.AF_INET, socket.SOCK_DGRAM) # UDP
sock.setblocking(0)
sock.settimeout(0.05)
counter = 0

# Loop on command list
for i in range(len(MESSAGES)): # LC2 command loop
print ("#",i+1,"Sent: ", MESSAGES[i])
start = time.time()
sock.sendto(MESSAGES[i].encode(), (UDP_IP, UDP_PORT))
try:
    while True:
        data, addr = sock.recvfrom(1024)
        if not data: break
        print("Received:", data)
        end = time.time()
        print(end - start, " seconds")
except socket.error:
    print("")
    print("")
time.sleep(0.15)
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