

## Appendix

### ISSI LC-1S :: API v.3.0.1

Based on UDP protocol, 1337/UDP port is used for communication.

**Action:** Get controller f/w version

**Command:** "ver" (hex: 766572)

**Answer:** "ISSI LC-1s=3.0.1 (s/n:19001)"

**Action:** Change controller IP address to 192.168.1.2

**Command:** "ChangelP=192.168.1.2"

(hex: 4368616e676549503d3139322e3136382e312e32)

**Answer:** no answer, controller will set IP and restart

**Action:** Get current motors values

**Command:** "Current" (hex: 43757272656e74)

**Answer:** "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"

**Answer:** "Zoom=Y", where Y – current value of Zoom motor

**Action:** Move Zoom Wide during X ms

**Command:** "ZoomW=X"

**Answer:** "Zoom=Y", where Y – current value of Zoom motor

**Action:** Move Focus Far during X ms

**Command:** "FocusF=X"

**Answer:** "Focus=Y", where Y – current value of Focus motor

**Action:** Move Focus Near during X ms

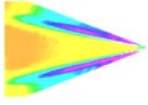
**Command:** "FocusN=X"

**Answer:** "Focus=Y", where Y – current value of Focus motor

**Action:** Move Iris Open during X ms

**Command:** "IrisO=X"

**Answer:** "Iris=Y", where Y – current value of Iris motor



**Action:** Move Iris Close during X ms

**Command:** "IrisC=X"

**Answer:** "Iris=Y", where Y – current value of Iris motor

**Action:** Set zoom motor value to X

**Command:** "setZoom=X"

**Answer:** "zoomDone", it may take a while to position the motors.

**Action:** Set focus motor value to X

**Command:** "setFocus=X"

**Answer:** "focusDone", it may take a while to position the motors.

**Action:** Set iris motor value to X

**Command:** "setIris=X"

**Answer:** "irisDone", it may take a while to position the motors.

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

**Command:** "setStop"

**Answer:** same as for 'Current' command

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

**Command:** "FindLimits"

**Answer:** 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"

**Answer:** "mode=X"

**Action:** Move DC Iris to close

**Command:** "DIrisC=X"

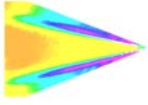
**Answer:** "DIrisC=OK", DC Iris lenses has no potentiometer, there is no feedback with actual position.

**Action:** Move DC Iris to open

**Command:** "DIrisO=X"

**Answer:** "DIrisO=OK", DC Iris lenses has no potentiometer, there is no feedback with actual position.

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



**Command:** "DIrisCX2=X"

**Answer:** "DIrisCX2=OK", DC Iris lenses has no potentiometer, there is no feedback with actual position.

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

**Command:** "DIrisOX2=X"

**Answer:** "DIrisOX2=OK", DC Iris lenses has no potentiometer, there is no feedback with actual position.

**Action:** Move Video Iris to close

**Command:** "VIrisC=X"

**Answer:** "VIrisC=OK", DC Iris lenses has no potentiometer, there is no feedback with actual position.

**Action:** Move Video Iris to open

**Command:** "VIrisO=X"

**Answer:** "VIrisO=OK", DC Iris lenses has no potentiometer, there is no feedback with actual position.

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

**Command:** "VIrisCX2=X"

**Answer:** "VIrisCX2=OK", DC Iris lenses has no potentiometer, there is no feedback with actual position.

**Action:** Move Video Iris to open faster

**Command:** "VIrisOX2=X"

**Answer:** "VIrisOX2=OK", DC Iris lenses has no potentiometer, there is no feedback with actual position.

**Action:** Set nickname for LC (stored in LC memory)

**Command:** "setNAME=XXXXXXX" where XXXXXXX is 7-symbols name

**Answer:** no answer

**Action:** Get nickname for LC (stored in LC memory)

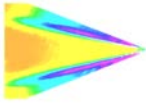
**Command:** "getName" **Answer:**

**Answer:** "NAME=XXXXXXX"

**Action:** Change controller IP address to 192.168.1.2

**Command:** "ChangeIP=192.168.1.2"

**Answer:** "IPchanged" need restart to apply changes



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### Python3 Example Script – LC-1S Send Command

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```
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("")
    time.sleep(0.15)
```

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