



Manufacturer: Lumens Digital Optics Inc.
 Model: OIP-N60D, OIP-N40E
 Device Type: Video Processing

CONTACT SUPPORT: (please fill out carefully)	
COMPANY NAME:	Lumens Digital Optics Inc.
SUPPORT CONTACT:	Lumens support team
EMAIL ADDRESS:	fae@lumens.com.tw
PHONE:	+886-35526255
ADDRESS:	5F., No. 20, Taiyuan St., Zhubei City, Hsinchu County 302082, Taiwan
NOTES:	

GENERAL INFORMATION	
SIMPLWINDOWS NAME:	Lumens OIP-N
CATEGORY:	Video Processing
VERSION:	1.0.6
SUMMARY:	This module enables IP control of the Lumens OIP-N60D, OIP-N40E through the TCP/IP http protocol.
GENERAL NOTES:	IP control of the Lumens OIP-N series, by CGI command.
CRESTRON HARDWARE REQUIRED:	1. Crestron 3-Series/4-Series Controller 2. LAN port x1
SETUP OF CRESTRON HARDWARE:	TCP/IP/ HTTP IP address : OIP-N IP address Port : 80
VENDOR FIRMWARE:	1.28 or above
VENDOR SETUP:	N/A
CABLE DIAGRAM:	<p style="text-align: center;">■ TCP</p> Connect the CAT-5e (or greater) cable to RJ-45 port of Device.



Manufacturer: Lumens Digital Optics Inc.
 Model: OIP-N60D, OIP-N40E
 Device Type: Video Processing

CONTROL:		
Enter IP Address	S	Enter Encoder/Decoder IP address
Enter Username	S	Enter Encoder/Decoder username
Enter Password	S	Enter Encoder/Decoder password
Hello	D	Tally hello
Encoder/Decoder ID	D	Click Encoder/Decoder 1~3 to connect
Stream Type_NDI	D	Set Encoder Stream type to NDI HX2
Stream Type_NDI	D	Set Encoder Stream type to NDI HX3
Stream Type_RTSP	D	Set Encoder Stream type to RTSP
Stream Type_Dante AV-H	D	Set Encoder Stream type to Dante AV-H
Video Input Source_Auto	D	Set Encoder Video Input Source to Auto
Video Input Source_HDMI	D	Set Encoder Video Input Source to HDMI
Video Input Source_DP	D	Set Encoder Video Input Source to DP
Audio Out on/off	D	Enable/Disable Audio AUX
Audio Out Follow Stream	D	Set Encoder/Decoder AUXIn follow stream
Audio Out_Follow Routing	D	Set Encoder/Decoder AUXIn follow Routing
Audio Out_Follow Routing	D	Set Encoder/Decoder AUXIn follow Dante
Stream Audio on/off	D	Enable/Disable Stream Audio
Stream Audio_Audio In	D	Set Audio Stream input source to HDMI in



Manufacturer: Lumens Digital Optics Inc.
 Model: OIP-N60D, OIP-N40E
 Device Type: Video Processing

Stream Audio_UAC In	D	Set Audio Stream input source to UAC in
Stream Audio Out Follow Stream	D	Set Encoder/Decoder Stream Audio out follow Stream
Stream Audio Out Follow Dante	D	Set Encoder/Decoder Stream Audio out follow Dante
Stream Audio Out Follow Routing	D	Set Encoder/Decoder Stream Audio out follow Routing
HDMI Audio on/off	D	Enable/Disable HDMI Audio
HDMI Audio Out Follow Stream	D	Set Encoder/Decoder HDMI Audio out follow Stream
HDMI Audio Out Follow Dante	D	Set Encoder/Decoder HDMI Audio out follow Dante
HDMI Audio Out Follow Routing	D	Set Encoder/Decoder HDMI Audio out follow Routing
Audio_Stream_In_HDMI	D	Set Encoder Audio Stream in to HDMI in
Audio_Stream_In_Audio in	D	Set Encoder Audio Stream in to Audio in
Audio_Stream_In_UAC	D	Set Encoder Audio Stream in to UAC in
Audio In_Volume	A	Adjust Encoder/Decoder Audio Line in level
Audio Out_Volume	A	Adjust Encoder/Decoder Audio Line out level
HDMI Audio Out_Volume	A	Adjust Encoder/Decoder HDMI Audio Line out level
Audio_Stream_In_Volume	A	Enter Audio Stream_in level
Apply	D	Apply setting
Set Video Out Type	D	Set Decoder Output resolution 0: By pass 1: Native EDID 2: 4K@60 3: 4K@59.94 4: 4K@50 5: 4K@30



Manufacturer: Lumens Digital Optics Inc.
 Model: OIP-N60D, OIP-N40E
 Device Type: Video Processing

		6: 4K@29.97 7: 4K@25 8: 1080P@60 9: 1080P@59.94 10: 1080P@50 11: 1080P@30 12: 1080P@29.97 13: 1080P@25 16: 720P@60 17: 720P@59.94 18: 720P@50 19: 720P@30 20: 720P@29.97 21: 720P@25
USB Extender on/off	D	Enable/Disable Encoder USB Extender
Source Switch_Extender	D	Extender Source select to 1-3
Virtual USB Output on/off	D	Enable/Disable Decoder Virtual USB Output
Source Switch_Virtual USB	D	Virtual USB Source select to 1-3
Virtual UAC Output_Off	D	Disable Encoder/Decoder Virtual UAC Output
Virtual UAC Output_Follow Stream	D	Set Encoder/Decoder Virtual UAC Output follow stream
Virtual UAC Output_Follow Dante	D	Set Encoder/Decoder Virtual UAC Output follow Dante
Virtual UAC Output_Follow Routing	D	Set Encoder/Decoder Virtual UAC Output follow Routing
Set layout as off	D	Set layout as off
Set layout as PIP	D	Set layout as PIP
Set layout as PBP	D	Set layout as PBP
Select Main Window	D	Select source as Main Window



Manufacturer: Lumens Digital Optics Inc.
 Model: OIP-N60D, OIP-N40E
 Device Type: Video Processing

Select Sub Window	D	Select source as Sub window
Fit the Window	D	Set Source 1 \ 2 fit the Window
Full Screen	D	Set Source 1 \ 2 full Screen
Source Position Upper Left	D	Set Source 2 Position to Upper Left
Source Position Upper Right	D	Set Source 2 Position to Upper Right
Source Position Lower Left	D	Set Source 2 Position to Lower Left
Source Position Lower Right	D	Set Source 2 Position to Lower Right
Source size_Small	D	Set Source 2 to small size
Source size_Normal	D	Set Source 2 to normal size
Source size_Large	D	Set Source 2 to large size
Source Switch	A	Switch source list on Decoder
Reboot	D	Encoder/Decoder Reboot
Factory Reset	D	Encoder/Decoder Factory Reset

FEEDBACK: (*examples below)

Stream Type Inquiry	D	Get Encoder Stream Type
Video Input Inquiry	D	Get Encoder Video Input Source Type
Stream In Inquiry	D	Get Stream in Type
Audio Stream Inquiry	D	Get Audio Stream status
Audio Out Source Inquiry	D	Get Audio Out Source status
Audio Out Inquiry	D	Get Audio AUX status
Audio in_Inquiry	A	Get Line in Volume
Audio Out_Inquiry	A	Get Line out Volume



Manufacturer: Lumens Digital Optics Inc.
 Model: OIP-N60D, OIP-N40E
 Device Type: Video Processing

Virtual USB Output_Inquiry	D	Get Virtual USB output status
Virtual UAC Output_Inquiry	D	Get Virtual UAC output status
Video Out_Inquiry	D	Get Video Output setting status
Audio Out Follow_Inquiry	D	Get Audio Out Follow status
HDMI Audio Out_Inquiry	D	Get HDMI Audio Out status
HDMI Audio Out Follow_Inquiry	D	Get HDMI Audio Out Follow status
HDMI Audio_Inquiry	D	Get HDMI Audio Out Volume
USB Extender Info_Inquiry	D	Get USB Extender Info
Layout Info_Inquiry	D	Get Decoder Layout Info
Source 1 Aspect Ratio Info_Inquiry	D	Get Source 1 Aspect Ratio Info
Source 2 Aspect Ratio Info_Inquiry	D	Get Source 2 Aspect Ratio Info
Source 2 Layout Selection Info_Inquiry	D	Get Source 2 Layout Selection Info
Source 2 Size Selection Info_Inquiry	D	Get Source 2 Size Selection Info
OIP SW Version_Inquiry	S	Get OIP SW Version
Device name_Inquiry	S	Get Device name

PARAMETERS:		
OIP-N Encoder/Decoder IP Address	S	IP address of the OIP-N Encoder/Decoder being controlled.
Username	S	Username when authentication method is Digest or Basic
Password	S	Password when authentication method is Digest or Basic



Manufacturer: Lumens Digital Optics Inc.
Model: OIP-N60D, OIP-N40E
Device Type: Video Processing

TESTING:	
OPS USED FOR TESTING:	RMC4 : 2.8000.00003
SIMPL WINDOWS USED FOR TESTING:	4.2500.04
DEVICE DB USED FOR TESTING:	200.285.001.00
CRES DB USED FOR TESTING:	219.05.001.00
SYMBOL LIBRARY USED FOR TESTING:	1193
SAMPLE PROGRAM:	Crestron_OIP-N_Xpanel.c3p
REVISION HISTORY:	V1.0.6– Initial Release