High End Systems, Inc.

Networking your Wholehog to your Visualizer computer

[A guide to establishing a network connection with Wholehog 3, Hog iPC, Roadhog Full Boar and Hog3PC]

This document is intended as an addition to the Visualizer Connectivity Application Instructions, which can be found online and in the Wholehog User Manual



Cat West, High End Systems Updated 2/9/2009



Setting your console as a DHCP server to network with your Visualizer computer

What you'll need in addition to the console:

- (1) Crossover ethernet cable (cat-5)
- Wholehog Visualizer Connectivity Drivers on your Computer
- Visualizer Program (ESP Vision, Wyg, MSD, Capture)

One network option (and probably the easiest) is to set your console to act as a DHCP server. That means that your console can distribute all of the TCP/IP settings needed for a successful network connection to your visualizer computer.

Important: Ensure that you are running Wholehog software Version 3.0 or greater.

Note: This document is specifically for connecting to a dedicated ESP Vision visualizer computer. If you are using a different visualizer, then the instructions in Part 3 will not apply. However, Parts 1 and 2 will be useful in setting up your console with your visualizer computer.

Part 1- Configuring your console's network settings

1. Press the SETUP key, and select CONTROL PANEL from your main toolbar (This can also be accessed from the "Start" menu).

- 2. In the Control Panel, select the NETWORK tab
- 3. Ensure that the settings are at as listed below
 - Your HogNet Adaptor should list your console's (or computer's) Ethernet port
 - Select "Use default IP settings"
 - Under DHCP / Boot Server, "Enable DHCP and Boot Server" will need to be selected
- 4. Press "OK"

Displays	-Network	CDHCP / Boot Server
Keyboard Wings MIDI Time and Date Auto Launch	Intel(R) PRO Network Connection MAC: 00:19:d2 Link State: Up Kate: 94494 Tx Packets: 54102 Rx Errors: 0 Rx Drops: 0 Tx Drops: 0 Obtain an IP address using DHCP	Enable DHCP and Boot Server Enable Boot Server only Use custom address range Address Range Start: 172.31.192.0 Address Range End: 172.31.255.254
ystem mo	Use custom IP settings IP Address: 172.31.0.1 Gateway: 172.31.0.1 Netmask: 255.255.0.0 DNS: 127.0.0.1	

Part 2- Configuring your Visualizer Computer

1. Click your computer's START Button and select "My Network Places."

2. In the new window, click "View Network Connections" from the left pane (under Network

Tasks). Alternatively, open your computer's Control Panel and select "Network Connections"

3. Locate your "Local Area Connection" and right-click on it.

4. From the drop-down menu, select "Properties."

5. In the new window that opens, select "Internet Protocol (TCP/IP)" and click "Properties." See screenshot below.

aeneral Advanced		
Connect using:		
Intel(R) PR0/10	0 VE Network Conne	Configure
This connection uses th	ne following items:	
Client for Micro	osoft Networks	1.5.5
File and Printe	r Sharing for Microsoft M	Vetworks
Install	Uninstall	Properties
Description		
Transmission Control wide area network p across diverse interc	Protocol/Internet Proto rotocol that provides co onnected networks.	ocol. The default mmunication
Show icon in notific	ation area when conne	cted
Show icon in notification Notify me when this	ation area when conner connection has limited	cted or no connectivity
Show icon in notification of the second seco	ation area when conner connection has limited	cted or no connectivity

6. Another window will open, select "Obtain an IP Address Automatically" and also "Obtain DNS address automatically." It should look like the screenshot below.

ou can get IP settings assigned is capability. Otherwise, you nee e appropriate IP settings.	automatically if your network supports ad to ask your network administrator for
Obtain an IP address autom	atically
Use the following IP address	<
IP address:	
Subnet mask:	- 16 - 19 - 19 - 19 - 19 - 19 - 19 - 19
Default gateway:	
Obtain DNS server address	automatically
Use the following DNS serve	er addresses:
Preferred DNS server:	
Alternate DNS server:	
	Advanced

7. Click OK and close all network windows.

Note: You may see an information message on your computer that says you have "Limited or No Connectivity" to the internet. This is not an error- the Wholehog 3 will not give you access to the internet.

Part 3- Launching the Visualizer

This section uses ESP Vision as the example. If you are not using ESP Vision, consult your Visualizer's manual for launching instructions.

- 1. Log into your patched showfile on your console before starting your Visualizer.
- 2. After launching ESP Vision, choose "Hog 3" as your DMX source.

Hog 3	lease select yo	ur DMX so	urce:	
nog 5	Hog 3			~

3. The visualizer will then launch, along with your connectivity driver. You can see the status of your connection in the Wholehog DP window. The process will look like these screenshots below:

1000		
- Status Status: Loc Session:	ating Wholehog Network Close	
Info: Con	necting on port 6600 Patch	
Configuration	Reconnect	
F	Port 6600	
User Num	nber 1 💌	
v2.21		
Whelehee DB (4022)		
Wholehog DP (1932)	🖾 👁 Wholehog DP (1932)	×
Wholehog DP (1932) Status	Wholehog DP (1932)	Apply
Wholehog DP (1932) Status Status: Loading Show Session: Connected	Apply Close Close Status: Status: Status: Status: Status: Status: Status: Status: Session: Connected	Apply Close
Wholehog DP (1932) Status Status: Loading Show Session: Connected Info: Loading Fixture Data	Apply Close Patch Status Status: Running Session: Connected Info: Outputs Active	Apply Close Patch
Wholehog DP (1932) Status Status: Loading Show Session: Connected Info: Loading Fixture Data Configuration	Apply Close Patch Reconnect Status Status Configuration	Apply Close Patch Reconnect
Wholehog DP (1932) Status Status: Loading Show Session: Connected Info: Loading Fixture Data Configuration Port 6600	Apply Close Patch Reconnect Configuration Port 6600	Apply Close Patch Reconnect
Wholehog DP (1932) Status Status: Loading Show Session: Connected Info: Loading Fixture Data Configuration Port 6600 User Number 1	Apply Status Close Status: Running Patch Info: Outputs Active Reconnect Configuration Port 6600 User Number Image: Number	Apply Close Patch Reconnect

Intel(R) PRC) Network Conne	ection	
MAC:	00:19:d2:4		
Link State:	Up	Link Speed:	54Mbps
Ax Packets:	84382	Tx Packets:	53988
Rx Errors:	0	Tx Errors:	0
Rx Drops:	0	Tx Drops:	0
(O30 u	ordan in oottingo		
Obtair	an IP address ustom IP settings	sing DHCP	
Obtair OUse c IP Address:	an IP address usom IP settings	Gateway:	172.31.0.1

Manually Configuring your network settings between your Wholehog and your Visualizer computer

What you'll need in addition to the console:

- (1) Crossover ethernet cable (cat-5)
- Wholehog Visualizer Connectivity Drivers on your Computer
- Visualizer Program (ESP Vision, Wyg, MSD, Capture)

These instructions will help you to manually configure compatible TCP/IP ranges on both your console and your Visualizer computer. The example below shows you one possible compatible configuration- but you may choose to use a different range.

Important: Ensure that you are running Wholehog software Version 3.0 or greater.

Note: This document is specifically for connecting to a dedicated ESP Vision visualizer computer. If you are using a different visualizer, then the instructions in Part 3 will not apply. However, Parts 1 and 2 will be useful in setting up your console with your visualizer computer.

Part 1- Configuring your Visualizer Computer

1. Click your computer's START Button and select "My Network Places."

2. In the new window, click "View Network Connections" from the left pane (under Network

Tasks). Alternatively, open your computer's Control Panel and select "Network Connections"

3. Locate your "Local Area Connection" and right-click on it.

4. From the drop-down menu, select "Properties."

5. In the new window that opens, select "Internet Protocol (TCP/IP)" and click "Properties." See screenshot below.

	DO HOOMEN			
mel(h) F	RU/IUU VE N	Network Lonne	Co	nfigure
This connection	uses the follo	owing items:		
Client I	or Microsoft N	letworks		
🗹 💻 File an	d Printer Shar	ina for Microsof	t Networks	
🗹 🍞 Interne	et Protocol (TC	(P/IP)		
		I foto a la ll		
Location II		Uninstall	Pro	operties
Install		and an and an and an		
Description				
Description Transmission wide area ne	Control Proto	col/Internet Pro	tocol. The	default
Install Description Transmission wide area ne across divers	Control Proto twork protoco e interconnec	col/Internet Pro I that provides ted networks.	tocol. The communica	default ation
Install Description Transmission wide area ne across divers	Control Proto twork protoco e interconnec	col/Internet Pro I that provides sted networks.	tocol. The communica	default ation

 Another window will open, select "Use the following IP address" with these settings: IP Address: 172.31.0.2 Subnet Mask: 255.255.0.0 Default Gateway: 172.31.0.2 It should look like the screenshot below.

e appropriate IP settings.	need to ask your network administrator for
Use the following IP addr	ess:
IP address:	172.31.0.2
Subnet mask:	255.255.0.0
Default gateway:	172.31.0.2
 Obtain DNS server addre Use the following DNS se Preferred DNS server: 	ss automatically rver addresses:

7. Click OK and close all network windows.

Note: You may see an information message on your computer that says you have "Limited or No Connectivity" to the internet. This is not an error- the console will not give you access to the internet.

Part 2- Configuring your console's network settings

1. Press the SETUP key, and select CONTROL PANEL from your main toolbar (This can also be accessed from the "Start" menu).

2. In the Control Panel, select the NETWORK tab

3. From the drop down menu, your "HogNet Adaptor" should list your console's Ethernet port. (this especially important to setup correctly when using Hog3PC on a computer with multiple network adaptors)

- 4. Select "Use Default IP settings"
- 5. Under DHCP / Boot Server, select "Enable Boot Server" only
- 6. Press "OK."

Your Control Panel should look something like this:

Intel(R) PRO Network Connection Intel (R) PRO Network Connection Intel (R) PRO Network Connection Intel (R) PRO Network Intel (R) Provide State Intel (R) PRO Network Intel (R) Provide State Intel (R) Provide State	Displays	- Network	
Network Obtain an IP address using DHCP Use custom IP settings IP Address: 172.31.0.1 Gateway: 172.31.0.1 Netmask: 255.255.0.0	Keyboard Wings MIDI Time and Date	Intel(R) PRO Network Connection MAC: 00:19:d2:4 Link State: Up Rx Packets: 84382 Tx Packets: 53988 Rx Errors: 0 Rx Drops: 0 Tx Drops: 0 Address Range Start: 172:31.128.1 Address Range End: 172:31.191.255	
IP Address: 172.31.0.1 Gateway: 172.31.0.1 Netmask: 255.255.0.0 DNS: 127.0.0.1	System Info	Obtain an IP address using DHCP Output Use custom IP settings	
		IP Address: 172.31.0.1 Gateway: 172.31.0.1 Netmask: 255.255.0.0 DNS: 127.0.0.1	

Part 3- Launching the Visualizer

This section uses ESP Vision as the example. If you are using a visualizer that is not ESP Vision, consult your Visualizer's manual for launching instructions specific to your visualizer.

- 1. Log into your patched showfile on your console before starting your Visualizer.
- 2. After launching ESP Vision, choose "Hog 3" as your DMX source.

Diassa salact your DMY	ource:
Hog 3	v.
ОК	Cancel

3. The visualizer will then launch, along with your connectivity driver. You can see the status of your connection in the Wholehog DP window. The process will look like these screenshots below:

Status Status: Locating Wholehog Network	Apply
Session:	Close
Info: Connecting on port 6600	Patch
Configuration	Reconnect
Port 6600	
User Number 1 🔽	

Status	
Status: Loading Show	Apply
Session: Connected	Close
Info: Loading Fixture Data	Patch
Configuration	Reconnec
Port 6600	
User Number 1 🗸	
2.21	
2.21 Wholehog DP (1932)	
221 Wholehog DP (1932) Status	
2.21 Wholehog DP (1932) Status Status: Running	Apply
2.21 Wholehog DP (1932) Status Status: Running Session: Connected	Apply
2.21 Wholehog DP (1932) Status Status: Running Session: Connected Info: Outputs Active	Apply Close Patch
2.21 Wholehog DP (1932) Status Status: Running Session: Connected Info: Outputs Active Configuration	Apply Close Patch Reconnec
2.21 Wholehog DP (1932) Status Status: Running Session: Connected Info: Outputs Active Configuration Port 6600	Apply Close Patch Reconnec
2.21 Wholehog DP (1932) Status Status: Running Session: Connected Info: Outputs Active Configuration Port 6600 User Number 1	Apply Close Patch Reconnec

0	Use default IP set	tings	

Notain an IP address using DHCP

Use custom IP settings

Networking your Wholehog to your Visualizer using a Router

What you'll need in addition to the console:

- (2) Non-crossover (patch) Ethernet cables
- Wholehog Visualizer Connectivity Drivers on your Computer
- Visualizer Program (ESP Vision, Wyg, MSD, Capture)

Placing a pre-configured router in the network between your console and your visualizer computer will allow the router to set compatible TCP/IP settings. Important: Ensure that you are running Wholehog software Version 3.0 or greater.

Note: This document is specifically for connecting to a dedicated ESP Vision visualizer computer. If you are using a different visualizer, then the instructions in Part 3 will not apply. However, Parts 1 and 2 will be useful in setting up your console with your visualizer computer.

Part 1- Configuring your console's network settings

1. Press the SETUP key, and select CONTROL PANEL from your main toolbar (This can also be accessed from the "Start" menu).

2. In the Control Panel, select the NETWORK tab

3. From the drop down menu, under "Adaptor Configuration," the adaptor should be configured for your console's (or computer's) Ethernet port.

4. Select "Obtain an IP address using DHCP"

- 5. Under DHCP / Boot Server, ensure that "Enable DHCP and Boot Server" is not selected.
- 6. Press "OK."

)isplays	-HogNet Adapter
Keyboard	Intel(R) PRO Network Connection
Wings MIDI Time and Date Auto Launch Network	MAC: 00:19:d2: Link State: Up Link State: Up Kx Packets: 54Mbps Rx Errors: 0 Rx Drops: 0 Tx Drops: 0 Tx Drops: 0 Vuse default IP settings Obtain an IP address using DHCP
System Info	Use custom IP settings IP Address: 192.168.1.28 Gateway: 192.168.1.1
	Netmask: 255.255.255.0 DNS: 66.75.164.89

Part 2- Configuring your Visualizer Computer

1. Click your computer's START Button and select "My Network Places."

2. In the new window, click "View Network Connections" from the left pane (under Network

Tasks). Alternatively, open your computer's Control Panel and select "Network Connections"

3. Locate your "Local Area Connection" and right-click on it.

4. From the drop-down menu, select "Properties."

5. In the new window that opens, select "Internet Protocol (TCP/IP)" and click "Properties." See screenshot below.

Connect using:		
Web Intel(P) PP0/100	VE Network Coppe	
	D VE NEWVIK CONNE	Configure
This connection uses th	ne following items:	
Client for Micro	osoft Networks	
File and Printer	r Sharing for Microsof	t Networks
Service Service Protoc	col (TCP/IP)	
	(
Install	Uninstall	Properties
Description	Uninstall	Properties
Description Transmission Control wide area network pr across diverse interc	Protocol/Internet Pro rotocol that provides o onnected networks.	tocol. The default
Install Description Transmission Control wide area network pr across diverse interc	Uninstall Protocol/Internet Pro rotocol that provides of onnected networks.	tocol. The default communication
Install Description Transmission Control wide area network pr across diverse interc Show icon in notifica Notify me when this	Protocol/Internet Pro rotocol that provides of onnected networks. ation area when conn connection has limite	tocol. The default communication ected d or no connectivity
Install Description Transmission Control wide area network pr across diverse interco Show icon in notifica Notify me when this	Protocol/Internet Pro rotocol that provides of onnected networks. ation area when conn connection has limite	Properties tocol. The default communication ected d or no connectivity

6. Another window will open, select "Obtain an IP Address Automatically" and also "Obtain DNS address automatically." It should look like the screenshot below.

ou can get IP settings assigned is capability. Otherwise, you ne e appropriate IP settings.	automatically if your network supports ed to ask your network administrator for
Obtain an IP address autor	atically
 Use the following IP addres 	s:
IP address:	
Subnet mask:	241 G G 1
Default gateway:	
Obtain DNS server address	automatically
OUse the following DNS serv	er addresses:
Preferred DNS server:	
Alternate DNS server:	
	Advanced

7. Click OK and close all network windows.

Note: You may see an information message on your computer that says you have "Limited or No Connectivity" to the internet. This is not an error- the Wholehog 3 will not give you access to the internet.

Part 3- Launching the Visualizer

This section uses ESP Vision as the example. If you are not using ESP Vision, consult your Visualizer's manual for launching instructions.

- 1. Log into your patched showfile on your console before starting your Visualizer.
- 2. After launching ESP Vision, choose "Hog 3" as your DMX source.

Hog 3	lease select you	ır DMX sour	rce:	
nog 5	Hog 3			~

3. The visualizer will then launch, along with your connectivity driver. You can see the status of your connection in the Wholehog DP window. The process will look like these screenshots below:

S whotenog UP	
Status Status: Locating W Session:	/holehog Network Close Pataba
Configuration Port 66 User Number 1	00
v2.21 Wholehog DP (1932)	Wholehog DP (1932)
Status Status: Loading Show Session: Connected Info: Loading Fixture Data	Apply Status Apply Status Apply Close Session: Connected Close Patch Info: Outputs Active Patch
Configuration Port 6600 User Number 1	Configuration Reconnect Port 6600 User Number 1
	<u></u>

Note 1: The original Roadhog does not have networking capabilities as the Full Boar does. In order to communicate with a Visualizer, you will need a DMX-to-USB device. Consult your visualizer manufacturer for more information regarding this.

Note 2: When connecting a Full Boar console to a visualizer computer, please use the "Hog-Net" Ethernet port.

Note 3: If you want to run Hog3PC and your Visualizer on the same computer, no networking will be necessary. Keep in mind that HES/FPS does not recommend running both Hog3PC and ESP Vision (or other visualizer) on the same computer. These programs can be processor heavy, so HES/FPS cannot guarantee the stability of either system if both are run simultaneously on the same computer.