# **Powervision LAN Troubleshooting**

**Revision** C

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If you are having trouble connecting to the display from Powervision (the load button is not active) go through the steps in this manual to identify and correct the problem. These examples are from Windows 7, other versions may use slightly different terminology and different screens.

**NOTE**: The Monoprice USB Adapters are no longer supported for the imX35 Platform of displays in Powervision 2.9 Patch 4. If using patch 4 (2.9.23044) or newer versions of Powervision you must use the Plugable Brand of adapter. See section 8 for details.

1) OS Revision Mismatch – Start by creating a full install and loading it on the display using a FLASH drive. This will prove out the USB adapter cable and USB port and set the displays OS and APP to the same revision level as the version of Powervision in use.



2) Auto Detection - Verify Powervision has Hardware Connection Checking started in the about box.



- 3) Conflicting IP Addresses Verify no other devices on your corporate LAN share the same IP addresses. For the following test unplug the Powervision LAN components from your PC.
  - a) Open up the Windows Command Prompt, this is found in Start menu Accessories



b) Ping the Powervision Gateway IP address – you should get no reply



c) Ping the display IP address – you should get no reply



d) If you receive a reply on any of these addresses that device will interfere with the computers communication with the display. Use an alternate IP address for the Powervision LAN, a popular second choice is: Gateway 172.16.0.1, display 172.16.0.2. You will need to adjust the LAN settings accordingly and also the default settings in Powervision.

### 4) Missing USB/Ethernet Adapter drivers – (ASIX driver)

- a) Plug in the one USB/Ethernet adapter into the PC.
- b) Open the Window Device Manager from the control panel
- c) If the driver is not installed there will be a listing for a unknown device otherwise under Network Adapters you will see the ASIX Fast USB to Ethernet Adapter.



d) If the driver is missing go to the ASIX web site and install the driver from this link: http://asix.com.tw/download.php?sub=driverdetail&PItemID=97

The following are the driver details you will see in the adapter properties after Windows installs it.

ASIX AX88772A USB2.0 to Fast Ethernet Adapter Properties		
	General Advanced Driver Details Power Management	
	ASIX AX88772A USB2.0 to Fast Ethernet Adapter	
	Driver Provider: ASIX	
	Driver Date: 6/1/2011	
	Driver Version: 3.14.3.6	
	Digital Signer: Microsoft Windows Hardware Compatibility Publisher	
	Driver Details To view details about the driver files.	
	Ugdate Driver To update the driver software for this device.	
	Roll Back Driver If the device fails after updating the driver, roll back to the previously installed driver.	
	Disable Disables the selected device.	
	Uninstall To uninstall the driver (Advanced).	
L	OK Cancel	

#### 5) Incorrect IP Settings

a) Once the drivers are properly installed and the adapters are plugged you should see a Local Area Connection 2 in your "Network Sharing Center" window from your control panel.



b) Click on Local Area Connection 2 then Properites then highlight Internet Protocol Version 4 then click on the Properties button to set the IP addresses.

Local Area Connection 2 S	tatus 💌	Local Area Connection
General		Networking Sharing
Connection IPv4 Connectivity: IPv6 Connectivity: Media State: Duration: Speed: Details	No network access No network access Enabled 05:43:11 100.0 Mbps	Connect using: ASIX AX88772A U This connection uses the Client for Microse Gos Packet Sch File and Printer S File and Printer S
ActivitySent	— Neceived	<ul> <li>✓ <u>internet Protoco</u></li> <li>✓ ⊥ Link-Layer Topo</li> <li>✓ ⊥ Link-Layer Topo</li> <li>✓ ⊥ Link-Layer Topo</li> <li>Install</li> </ul>
Packets:	274 0 ble Diagnose	Description Transmission Control P wide area network prot across diverse intercor
	Close	



c) Set the IP addresses as shown then close all the windows

Internet Protocol Version 4 (TCP/IPv4)	Properties ? X		
General			
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.			
Obtain an IP address automaticall	у		
• Use the following IP address:			
IP address:	192.168.0.1		
Subnet mask:	255 . 255 . 255 . 0		
Default gateway:	· · ·		
Obtain DNS server address autom	natically		
• Us <u>e</u> the following DNS server add	resses:		
Preferred DNS server:			
Alternate DNS server:	• • •		
Vaļidate settings upon exit	Ad <u>v</u> anced		
	OK Cancel		

d) Pull up the Windows command prompt and ping the Powervision gateway at 192.168.0.1 to verify it is connected. You should get the following reply.

Command Prompt	
F:\>ping 192.168.0.1	<b>^</b>
Pinging 192.168.0.1 with 32 bytes of data: Reply from 192.168.0.1: bytes=32 time<1ms TTL=128 Reply from 192.168.0.1: bytes=32 time<1ms TTL=128 Reply from 192.168.0.1: bytes=32 time<1ms TTL=128 Reply from 192.168.0.1: bytes=32 time<1ms TTL=128	
Ping statistics for 192.168.0.1:	
Approximate round trip times in milli-seconds: Minimum = Oms, Maximum = Oms, Average = Oms	Ŧ
۲. III.	

e) Next plug in the display and power cycle, then wait a few minutes for windows to connect. Ping the display at 192.168.0.2, you should receive the following reply if the display is communicating.

Command Prompt	
F:\>ping 192.168.0.2	^
Pinging 192.168.0.2 with 32 bytes of data: Reply from 192.168.0.2: bytes=32 time=2ms TTL=255 Reply from 192.168.0.2: bytes=32 time=1ms TTL=255 Reply from 192.168.0.2: bytes=32 time=1ms TTL=255 Reply from 192.168.0.2: bytes=32 time=2ms TTL=255	
Ping statistics for 192.168.0.2: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 1ms, Maximum = 2ms, Average = 1ms	Ŧ

- f) The ping commands are receiving a reply the Powervision LAN is completely functional and the load button on Powervision should be active.
- 6) Windows Firewall verify the firewall allows communication between the Powervision application and the outside world via the LAN on PORT 1999. Temporarily turn the Firewall off and test the LAN.

#### 7) Miscellaneous –

a) VPN Client – verify a VPN client connection is not trying to automatically logon to a network using the Powervision LAN once Windows makes it available to the system.

## 8) Compatible USB/Ethernet Adapters –

As of Powervision 2.9 Patch 4 only the **Plugable Brand of Ethernet adapter Model USB2-E100** is compatible with the iMX35 displays. The Monoprice adapter will continue to work with the M2 platform of displays. The Pluggable adapter must have the following specifications and have the device & Manufacturers ID as shown in the device manager.

plugable	System Résourcemente - Persource 2004/z or tester PC 64/48 PA/L or more - Available Life poe			
USB 2.0 Ether	met Adapter 10/100Mbps			
Features <ul> <li>Easily use USB port to connect to a wired network</li> <li>Fast Ethernet speeds - Equipped with diagnostic LEDs</li> </ul>				
Installation				
Windows 10, 8.1: D     Mac OS <sup>6</sup> X: Support     (For other versions bail     Linux: Support built     Chromebook™ and     For a comple     plugable	Inverse pre-installed t built-in to most OS X 10.7 systems ok to 10.5 and PowerPC, use driver mini-CD) i-in to kernel 2.6.35 and later certain Android <sup>111</sup> devices: Support built-in ale list of other operating systems, visit e.com/products/usb2-e100/drivers			
SPECIFICATIO	NS ASIX AX88772A Chipset			
Network Standards	IEEE 802.3 (10Base-T) and 802.3u (100Base-TX)			
Data	Full 10/100 Ethernet performance over USB 2.0			
LED Indicators	Link and Activity LEDs			
Power	USB powered - no external power required			

a) Go to the device manager and select the ASIX Network Adapter

Full Duplex/Half Duplex | 10BaseT, 100BaseTX

Network Interface

**Operating Systems** 

Female RJ45 jack supporting Auto MDIX

Windows XP+, Mac OS X 10.5+, Linux 2.6.9+, Nintendo<sup>®</sup> Wil<sup>™</sup>, Nintendo Wil U<sup>™</sup>, Chromebook

🚔 Device Manager	x
<u>File Action View H</u> elp	
IDE ATA/ATAPI controllers	
⊳ · Æ Keyboards	
Mice and other pointing devices	
⊳	
Network adapters	=
ASIX AX88772 USB2.0 to Fast Ethernet Adapter #2	
Intel(R) 82579LM Gigabit Network Connection	
Ports (COM & LPT)	-
1 1 mm -	

b) In the device properties select the "Details" tab then in the "Property" dropdown list select Hardware lds. The value should be 0B95 7720.

ASIX AX88772 USB2.0 to Fast Ethernet Adapter #2 Properties	x
General Advanced Driver Details Power Management	
ASIX AX88772 USB2.0 to Fast Ethernet Adapter #2	
Property	
Hardware Ids	-
Value	
USB\VID_0B95&PID_7720&REV_0001	
USB\VID_0B95&PID_7720	