AMX

Operation/Reference Guide

AMXUSBLAN

USB LAN Driver

(v2.2.1.5 or higher)

Touch Panel Interface

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AMXUSBLAN Driver

Overview

Modero touch panels support communication with a PC (acting as a Virtual Master) via USB. This communication type is used to upgrade firmware (via the NetLinx Studio software application) and upload new touch panel pages (via the TPDesign4 software application). USB connectivity was introduced within both the MVP-Series of wireless panels and the CV7 video panels.

The 12-, 15- and 17-inch Modero panels (1200V, 1200VG, 1500VG, and 1700VG) further broaden the use of USB connectivity to a target Virtual Master.

What you'll need to begin:

- CC-USB programming cable
- PC (acting as a Virtual Master)
- USB-compatible Modero touch panel

For a personal computer to establish a connection to a Modero panel via USB, the target computer must have the appropriate AMX USB driver installed. Typically this installation is bundled into the setup program of the NetLinx Studio and/or TPDesign4 software applications. This driver is scheduled to be packaged with the next release of the aforementioned AMX software applications; but at this time, it is being distributed as a stand-alone executable for use with all current USB-compatible Modero panels.

- Note that the USB driver packaged within this executable is meant to be installed only after the latest NetLinx Studio and TPD4 applications have already been installed onto your PC.
- This USB driver is more current than the driver installed as part of those AMX applications.

This guide takes you step-by-step through the installation of the AMX USBLAN software driver.

Installing the AMX USBLAN Software Driver

1. Navigate to **www.amx.com > Tech Center > Application Files** and download the executable (EXE) file.

2. Launch the **AMX USBLAN v5.02.08.exe** file by double-clicking the file.

3. The driver will prompt for a language.

   In the *Installer Language* dialog, select your desired language and click the **OK** button (FIG. 1).

FIG. 1 Installer Language dialog

4. Read the *License Agreement* and if you agree, click the **I Agree** button (FIG. 2).

FIG. 2 License Agreement

> *If you select **CANCEL**, the driver will not install and the installation process will terminate.*
>
> **NOTE**

5. The application then prompts you to select the installation folder in the *Choose Install Location* dialog (FIG. 3). This is the folder on your hard drive where the program will store all these related files.
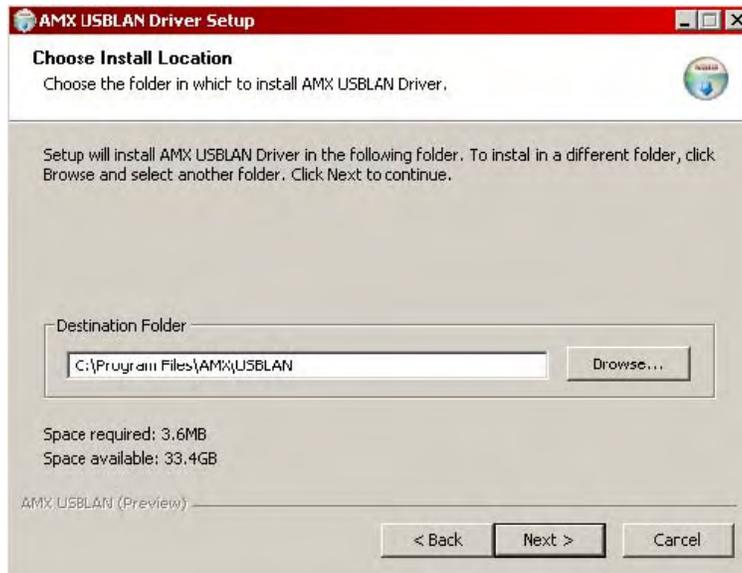
FIG. 3 Choose Install Location dialog

- The default is **C:\PROGRAM FILES\AMX\USBLAN**.
- If a different folder is desired select **Browse** and choose the location where you would like the files installed.
- It is recommended that the default location be used for this installation.

Once done, click the **Next** button.

6. From within the *Choose Components* dialog choose the features you wish to install (FIG. 4).
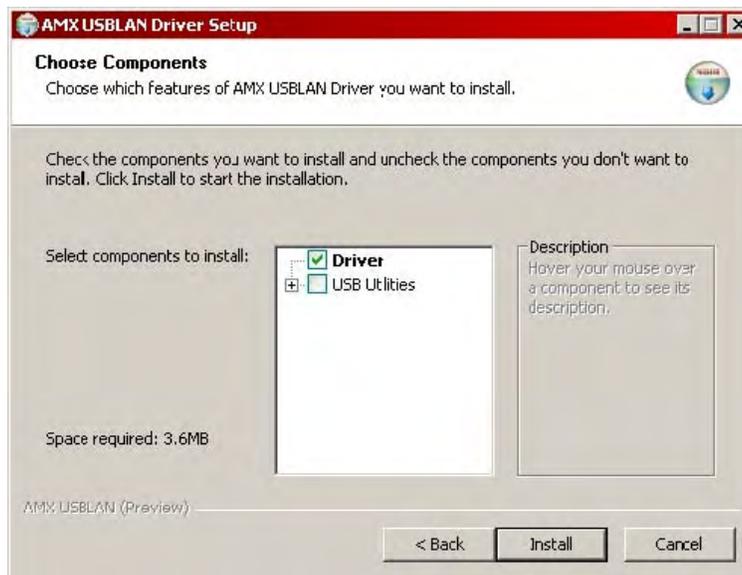
FIG. 4 Choose Components dialog

- The **Driver** option is selected by default, and is the only item required.
- Click the **Install** button to continue with the installation.

7. Once the driver installation begins it may encounter cases where a previous version of some files already exist. This can occur if you have previously installed the latest release versions of NetLinx Studio v2.3 and TPDesign4 v2.4.

If you are prompted to replace **AXBLAN.INF** select **Yes** (FIG. 5).
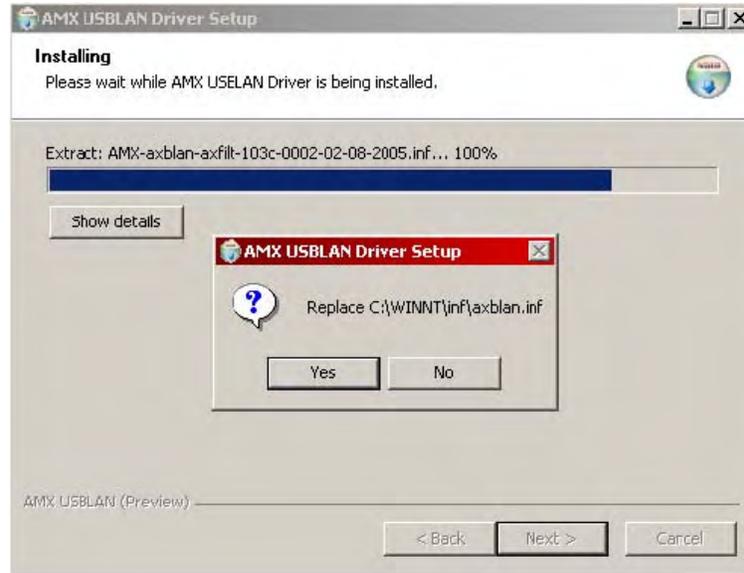
FIG. 5 Replace AXBLAN.INF

8. When prompted to install the "**Checked driver**" select **No** (FIG. 6).

FIG. 6 Do Not Install The "Checked Driver"

9. Once the driver installation begins it may encounter cases where a previous version of some files already exist. This can occur if you have previously installed the latest release versions of NetLinx Studio v2.3 and TPDesign4 v2.4.

If you are prompted to replace **AXBLAN. SYS** select **Yes** (FIG. 7).
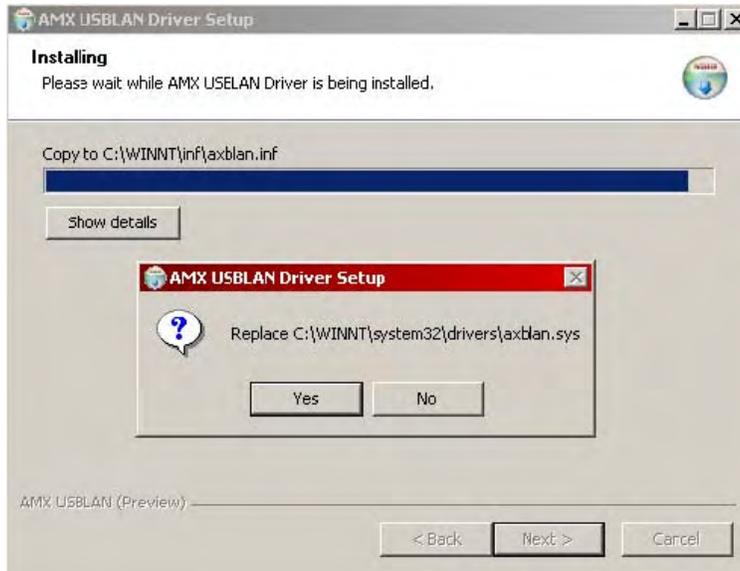
FIG. 7 Replace AXBLAN. SYS

10. Once the driver installation begins it may encounter cases where a previous version of some files already exist. This can occur if you have previously installed the latest release versions of NetLinx Studio v2.3 and TPDesign4 v2.4.

If you are prompted to replace **AXFILT. SYS** select **Yes** (FIG. 8).
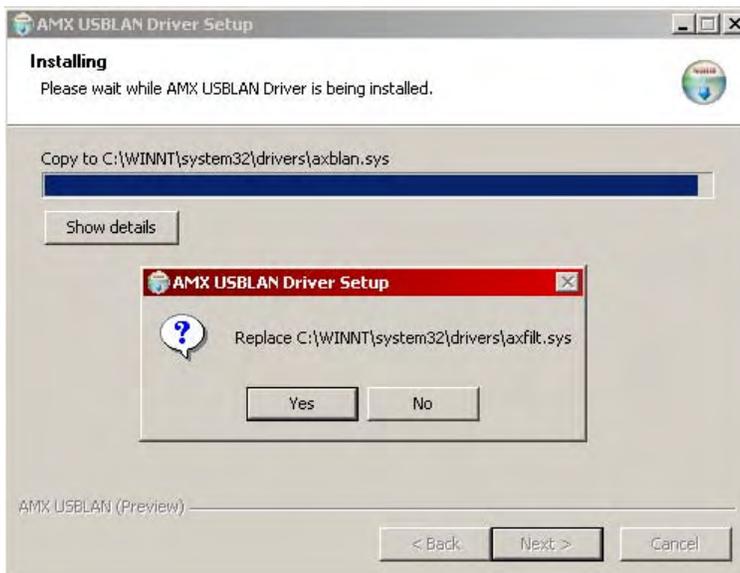
FIG. 8 Replace AXFILT. SYS

11. For machines running Windows 2000, click the **Next** button when installation is complete (FIG. 9).
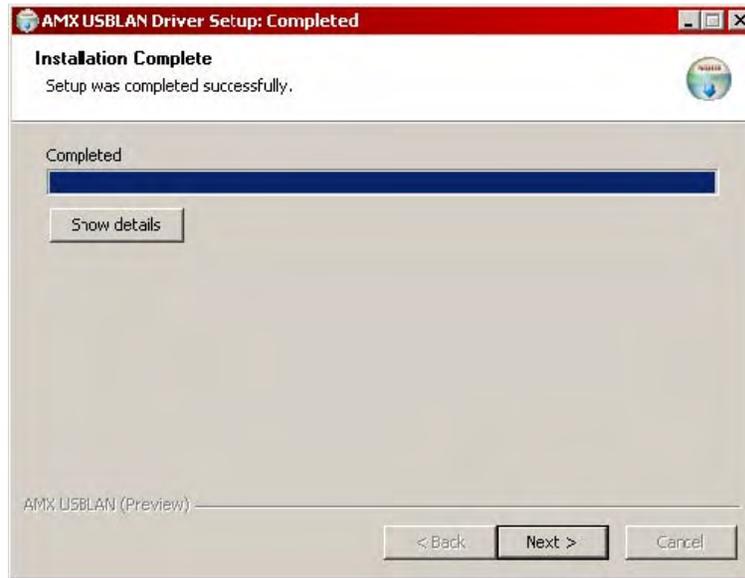
FIG. 9 Installation Complete

For Windows XP machines the setup program will ask if you would like to create a restore point. This is a method Windows uses to revert back to a known good state of the system if problems occur after installation.

It is always a good idea to create restore points prior to installing new software.

This option is not displayed on Windows 2000 machines.

Click the **NEXT** button when done.

12. At the end of installation select the **Finish** button (FIG. 10).

FIG. 10 Select The Finish Button

Connecting a Touch Panel via USB

Overview

The first time each AMX touch panel is connected to the PC via USB it will be detected as a new hardware device and the USBLAN driver will be associated with it. Each time thereafter the panel is "recognized" as a USBLAN device and the association to the driver is done in the background. When the panel is detected for the first time some user intervention is required during the association between panel and driver.

1. After the installation of the USB driver has been completed navigate to the System Connection page on the touch panel and toggle the Type field until the choice cycles to USB.

    Press the **Back** button and press the on-screen **Reboot** button to save your changes and restart the panel with the new USB communication setting.

2. After the panel boots and displays the first panel page insert the mini-USB connector into the panel's Program Port.

    This process begins the communication from the panel to the PC. It's a kind of "Hi I'm here, recognize me".

3. The computer will recognize the panel as a new **AMX USB Device** (FIG. 11).
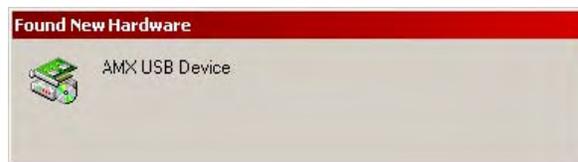
FIG. 11 Found New Hardware dialog

Further, the computer recognizes the panel as an **AMX USB** device that is connected via a **LAN LINK** and begins the association between device and driver (FIG. 12).

FIG. 12 Installing New Hardware dialog

The driver does not contain a Microsoft digital signature and Windows will inform you of such.

4. Click **Yes** when told that a digital signature was not found (FIG. 13).

FIG. 13 Digital Signature Not Found dialog

The association between driver and device is now complete.

- Each time the same touch panel is connected to the computer the driver is automatically loaded.

- Each time a different touch panel is connected to the computer, the previous procedures will need to be repeated.

The previous version of the AMX USBLAN driver (used for the MVP and CV7 panels) showed a USB connection icon in the system tray when a panel was connected. The new version of the driver does not do this.

To View Your Current AMX USB Device Connections

1. Navigate to **START > CONTROL PANEL > SYSTEM**.

   In the *System Properties* dialog, click the **Hardware** tab and select **Device Manager.**

   - In the *Device Manager* dialog, the **AMX USBLAN** device appears under **Network Adapters** and has a name such as **AMX USB LAN LINK #2** (FIG. 14) .
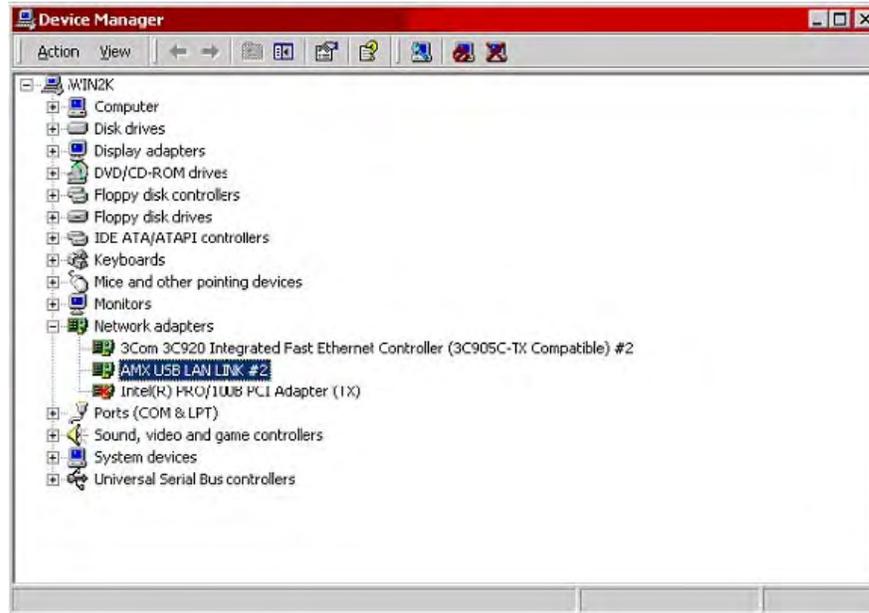
FIG. 14 Device Manager dialog

   - The number changes depending on which panel is currently connected.

Uninstalling the AMXUSBLAN Driver

Overview

Sometimes it may be necessary to uninstall the AMXUSBLAN driver from the PC, to remove the association between the touch panel and the USBLAN driver.

In most cases this would be a troubleshooting method. If Windows has become confused about driver associations, uninstalling the AMXUSBLAN driver from the PC could help resolve the problem.

To Remove Panel/Driver Associations

1. Navigate to **Start > Control Panel > System**.

2. In the **System Properties** dialog, click the **Hardware** tab and select the **Device Manager**.

   In Device Manager, all AMX USBLAN devices should appear under Network Adapters and have a name such as **AMX USB LAN LINK #2**.
   This number changes based which panel is currently connected.

3. To remove one of the devices from the system, right-click on the device you wish to remove and from the context menu, select **Uninstall** (FIG. 15).
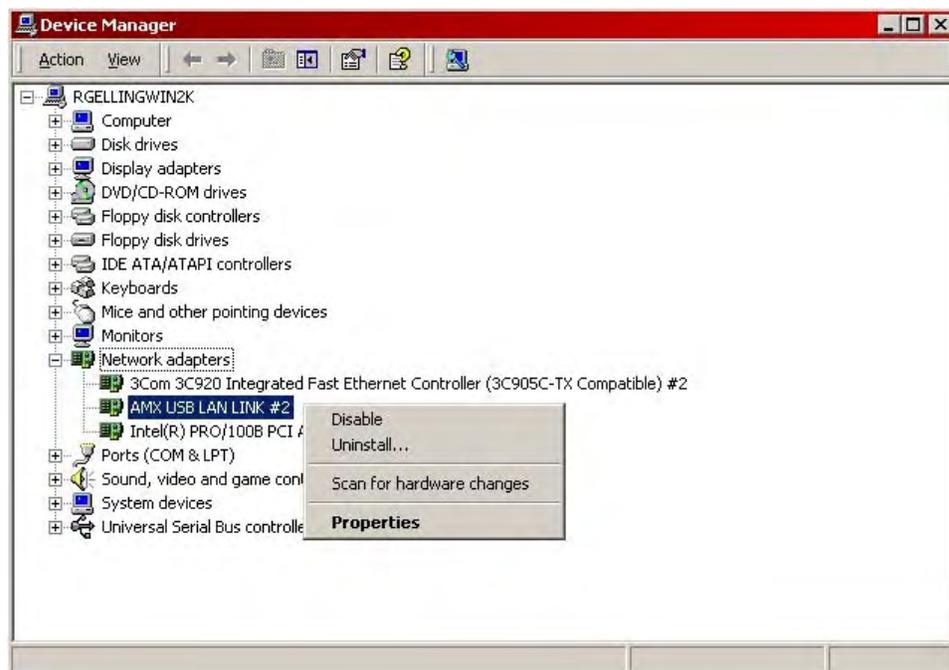
FIG. 15 Device Manager dialog

4. Click **OK** once the system prompts you to confirm the removal of the device (FIG. 16).

FIG. 16 Confirm Device Removal dialog

Once the system completes the removal of the device, the Device Manager dialog will refresh and the device will no longer appear.

The next time this device is connected to the computer it will appear as a new hardware device and will need to be associated again with the driver.

See the Connecting a Touch Panel via USB section on page 9 for details.

- It may be necessary to perform this uninstall procedure for every AMX USB device in the list if you are unsure which one you need to remove.

- Refer to your related Modero panel's instruction manual for more detailed information about the firmware setup procedures related to USB as a connection type.

Troubleshooting

Overview

If, after having installed the latest AMXUSBLAN driver and connecting the panel to the PC via USB, you do not see the green USB icon in your Windows Taskbar, there will be no communication to the panel. This is typically due to issues relating to the installation of the driver.

If after following the instructions in this guide, you cannot communicate with the target touch panel, verify that the correct version of the AMXUSBLAN driver has been installed on your PC:

Verify The Version of the AMXUSBLAN Driver

On the PC that AMXUSBLAN was installed on:

1. Go to **Start > Settings > Control Panel > System** to open the *System Properties* dialog.

2. Open the **Hardware** tab and select **Device Manager** to open the *Device Manager* dialog.

3. Click the plus-sign next to **Network Adapters** to expand the view. You should see an entry named "**AMX USB LAN LINK #3"** in the list of *Network Adapters*.

4. Double-click on **AMX USB LAN LINK #3** to open the *Properties* dialog for this driver.

5. Open the *Driver* tab and check the *Driver Version*.

   It should read: **2.2.1.5**.

If any other version is indicated (for example **1.0.0.0**), you'll need to manually update the driver in order to use AMXUSBLAN on this PC.

Manually Install the AMXUSBLAN Driver

To manually install the AMXUSBLAN driver:

1. Click **Update Driver** to open the *Hardware Update Wizard* dialog.

   If you are prompted to use Windows Update to search for this software, select **No**.

2. Click **Next** to proceed to the next dialog in the Wizard.

3. Select **Install From a List or Specific Location (Advanced)**, and click **Next** to proceed.

4. Select the **Don't search, I will choose the driver to install** option, and click **Next** to proceed.

5. Click **Browse** to locate and select the directory containing AMXUSBLAN driver version 2.2.1.5.

   By default, the driver is located within the following directory:
   C:\ Program Files\AMX\USBLAN

6. Select the USBLAN driver from the list of *Network Adapters*.

   The correct file name is:
   AMX-axblan-axfilt-10s-0002-02-01-05.inf

7. Click **Next** to install the driver.

8. Click **Finish** to exit the *Hardware Update Wizard*.

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