Hardware configuration in EasySIGN:

The following items will be addressed in this document:

Clicking one of the links above will guide you directly to the appropriate item.

Configuring your machine correctly within EasySIGN is no rocket science, but requires some technical knowledge. There are a few important factors to keep in mind in order to establish successful communication between your machine and your computer running the EasySIGN software. It is essential that your machine, your Windows operating system and your EasySIGN software are all set correctly.
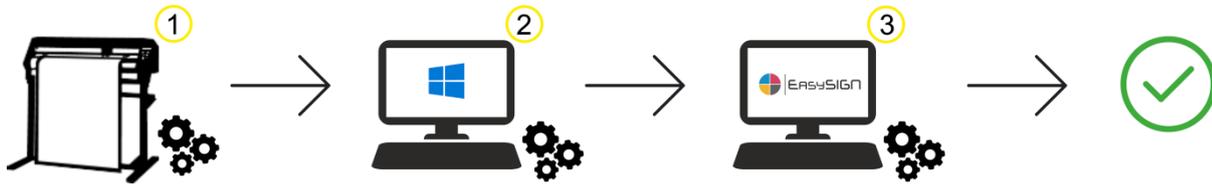
Connection type

To get started, it is important to determine the how your machine is connected to your computer. There are a few options:
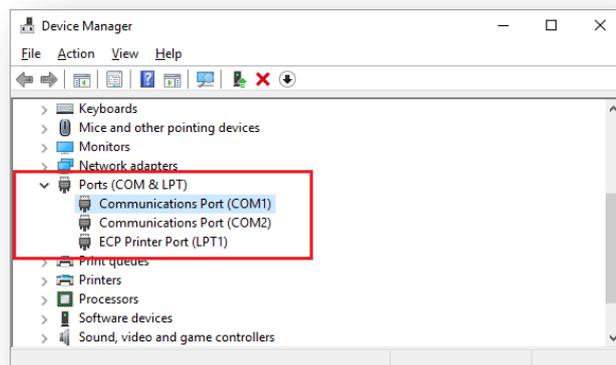
Serial (COM)
Parallel (LPT)
USB
Network

It is also important to determine the communication port that is used for connecting the machine to your computer. You can find this information in the Windows Device Manager (via Control Panel). See section Windows settings for more details. If you are unsure, please take a look at Commonly used ports.

Serial connection

Of all connection types, serial connections are most vulnerable to communication errors. This is due to the numerous port settings that need to be set correctly for successful operation.

These are:
- Baudrate
- Databits
- Parity
- Stopbits
- Protocol (or *Flow control*)

Attention:
The selected settings in the EasySIGN software <u>must</u> match the settings on your machine in order to operate correctly. Wrong settings generally result in faulty communication between the EasySIGN software and your machine or no communication at all.

Parallel connection

In contrast to Serial connections, Parallel or LPT connections are more user-friendly. There are no additional port settings required to establish successful communication. Just make sure to select the correct port from the list (LPT1, LPT2 or LPT3). When in doubt, please check the Windows Device Manager, under Ports (COM & LPT). See section Windows settings for more details.
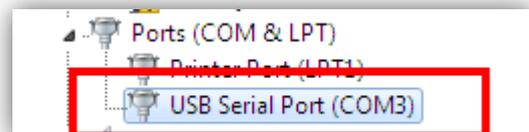
USB connection

Recent hardware is most likely equipped with at least a USB–to-USB connection. EasySIGN supports a huge number of such hardware, including all major brands available on the market.

Machines equipped with a USB connection, are supplied with a mandatory USB driver. Without installing this driver, communication using the USB port is not possible. Therefore, installing the USB driver should be done first, before configuring your machine in the EasySIGN software.
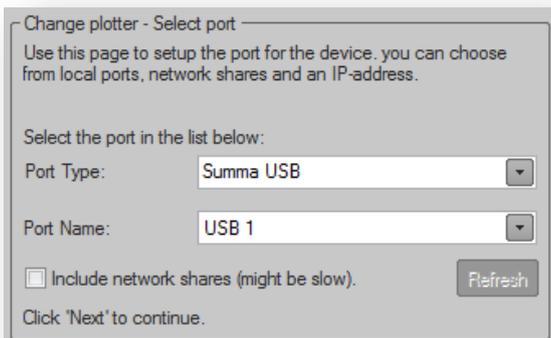
A new communication port will be created after installation of the USB driver. The name of this port varies from brand to brand, and sometimes even from product to product. In most cases, the USB port will be recognizable. Please consult your manual for the correct name.

In some cases, the supplied USB driver creates a virtual serial port. As a result, Windows displays the connection as COM1, COM2, COM3, etc.

USB–to-Serial connection

If you have a computer with only USB ports, but no serial port, you can use a USB-to-Serial adapter. Please be advised that not all USB-to-Serial adapters work correctly. Make sure to purchase only recognized brands or from trusted vendors to minimize the risk of a faulty, non-supported adapter.

When installed successfully, the communication port shows up like a virtual serial port (as described above, under section 'USB connection')

Disclaimer: Proper operation using USB-to-Serial adapters is not guaranteed.

Network connection

Some machines can communicate over a network. In this case, configuration in EasySIGN is simple. Note that the machine should already be visible in your network.

Only the IP address that is used to configure the machine in your local area network, is required to establish a connection with EasySIGN. See section Add device in EasySIGN for more information
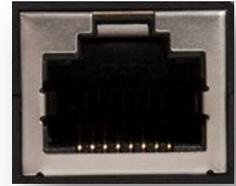
Windows settings

As explained in section Connection type, not only your machine and your EasySIGN software require proper configuration. You also need to check your device settings in Windows using the Windows Device Manager, especially with serial or USB-to-serial connections. Make sure to write down the settings used on the machine first or consult the product manual during this process.
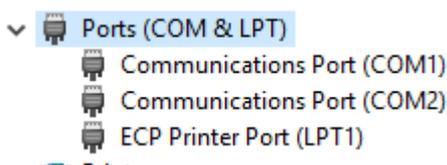
1. Press **Windows + R** to open **Run**.

2. Enter *devmgmt.msc* and press **OK**.
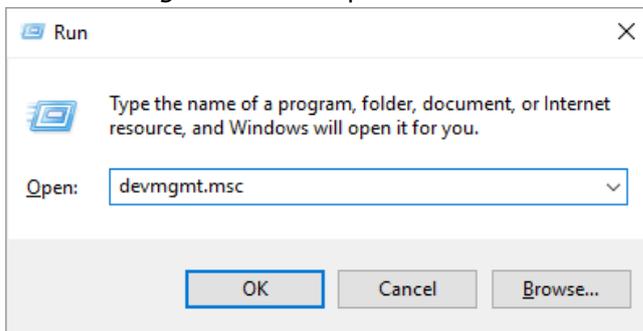
3. Double-click **Ports (COM & LPT)** to review the communication settings of the port determined.

4. Right-click the appropriate port and choose **Properties**
5. Under Port Settings you can compare these settings with the settings on your machine and make changes if needed.

**USB**

Machines connected by a USB-to-USB cable, require a USB driver to be installed. In most cases, an additional application is supplied or installed along with the USB driver, allowing you to review and configure your communication settings.

Add device in EasySIGN

After setting up your plotter and checking your Windows communication settings, the device can be added to your EasySIGN software.

1. In the EasySIGN menu bar, go to File > Device Setup > 'Add Plotter/Router' wizard.
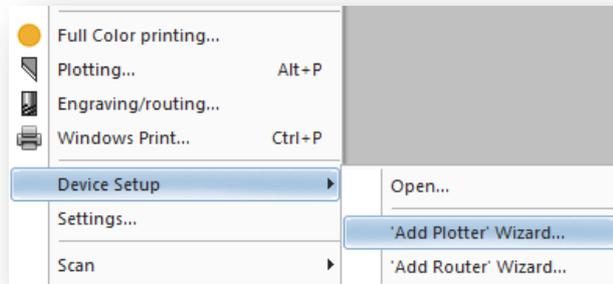

2. Select your machine from the list, click **Next**.
3. Select the communication port you determined in section Connection type
4. In case of USB connection, also select the correct port name. Click **Next**.
5. Depending on the chosen connection port, additional settings may be required.

    a. Serial connection
    Select the correct settings and click **Next** to continue.
       ! *For the correct settings, always consult your machine's manual.*

    If no manual is available, you can try the default settings for the majority of cutting plotters:
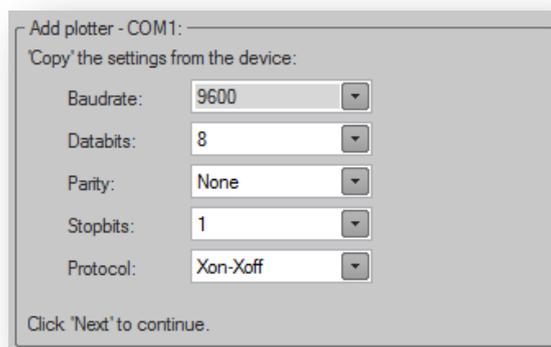
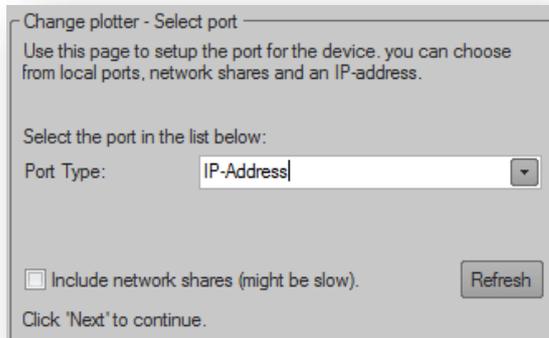   **b. Parallel connection**
    No additional settings required. Click **Finish** to save your settings and close the window.

    c. USB connection
    No additional settings required. Click **Finish** to save your settings and close the window.

d. Network connection

Choose **IP-Address** under **Port Type** and click **Next.**

Now enter your machine's IP address (for example 192.168.10.105).
Click **Test** to verify the connection and click **Finish** to complete the configuration.
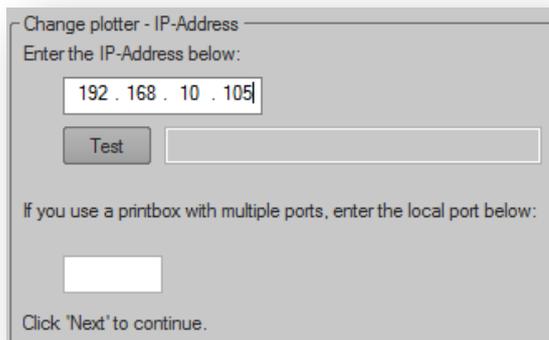
Commonly used ports

Manufacturer/Model	Port	Page size querying available
All serial port devices (RS232C)	COM1 - COMx (x>1)	Depends on cutter.
Foison	COMx (x>=1) Virtual COM port created by hardware driver, please check the Windows Device Manager for the exact value.	Depends on cutter.
GCC JaguarIV and similar models.	"GCC JaguarIV USB" This port will be automatically chosen by EasySIGN. If this is not the case, please look for a port that resembles the device name as it is listed in the Windows Device Manager.	No
Graphtec USB Cutters	"Graphtec USB" This port will be automatically chosen by EasySIGN.	Yes
Mutoh USB Cutters: **- Ultima** **- SC-PRO**	COMx (x>=1) Virtual COM port created by hardware driver, please check the Windows Device Manager for the exact value.	Yes
Roland USB Cutters **- CX-PRO**	USB00x (x>=1) This port will be automatically chosen by EasySIGN.	Yes
Summa USB Cutters	"Summa USB" This port will be automatically chosen by EasySIGN.	Yes
Not listed 1	If your device is not listed above or not working with the chosen port, please check whether there's a port name that resembles the name of the installed device in the Windows Device Manager.	No
Not listed 2	If your device is not listed above or not working with the chosen port, please check whether there's a port name that resembles the name of the installed Windows Printer.	No
Not Listed 3	If your device is not listed above or not working with the chosen port, please check whether there's a port that's called USB001 or USB00x (x>1).	No

Manufacturer/Model	Port	Page size querying available

Troubleshooting

"Port could not be opened" error

In case you receive the 'Port could not be opened' error, there is no communication available between EasySIGN and your machine for the chosen action. This can be caused by either wrong configuration of the port settings or functionality unsupported by your machine. For example, not all machines support the 'page size query' functionality. This results in an error message.

| 'Page size query' unsupported | Wrong communication settings |
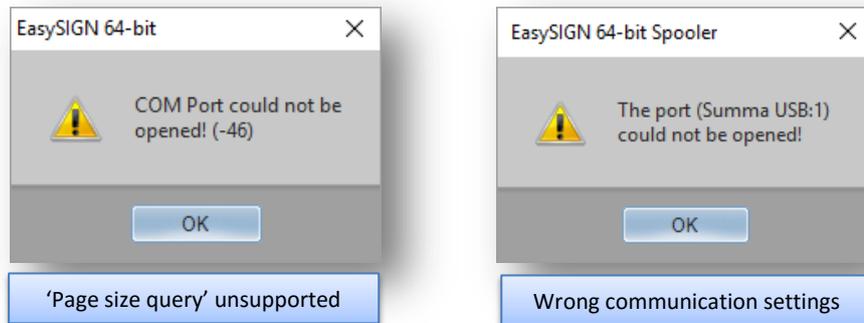
In most cases, however, the error message is related to incorrect configuration of your communication settings or a faulty USB driver. Make sure to check if the machine is connected to your computer and all settings are correct.

If all settings are correct, please connect your machine to your computer with a different cable and try again.

Random problems or errors using a serial connection

If the cutter is working, but you are encountering random problems or errors, please double-check the selected Protocol. Make sure to check both your machine and the EasySIGN software to enable correct communication.

COM port not available in EasySIGN

EasySIGN supports communication through port COM1, COM2, COM3 and COM4. Although this is more than enough for most users, you may encounter port COM5 or higher in your Windows Device Manager. This can be changed easily:

- Open **Device Manager**.
- Double-click **Ports (COM & LPT)**.
- **Right-click** the port you want to change and select **Properties**
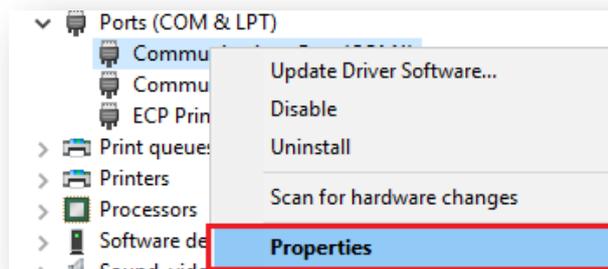
- Click on the **Port Settings** tab and click the **Advanced** button. Now select the COM port number you need from the list.
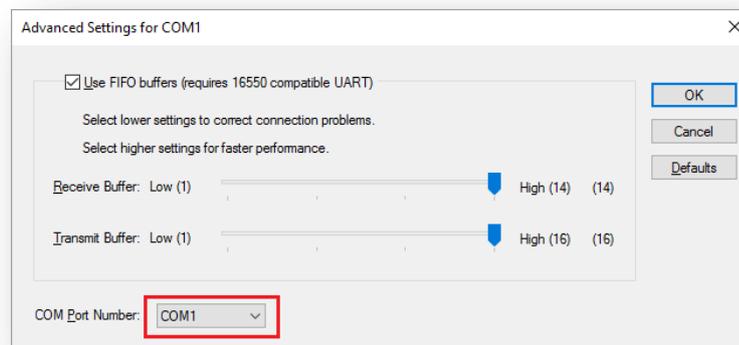
   o When you are finished making changes, click **OK** to close the Properties dialog box.

USB driver not available for my Windows version

Before upgrading your Windows operating system to a new version, you may need to check for updated drivers. If the supplied USB drivers do not support your operating system, please consult the manufacturer's website for the latest downloads.

   ! EasySIGN does <u>not</u> include USB drivers. The included drivers in the EasySIGN software only take care of the communication between your machine and the connected interface (for example via the USB driver that is installed on your system).