How to install a driver for a SummaCut R(L)

Introduction

This document describes how to install the software necessary to drive the SummaCut R(L) series roll-cutter.

Note: We do not work with a 'Windows based printer driver'.

A **design software** is needed to create a design. Popular design programs are CorelDRAW, Adobe Illustrator, Inkscape, … Design software is not supplied from Summa.

The contours in the job created with one of those design software's need to be sent to the cutter. Before the contours can be sent, the contours need to be converted in commands understood by the cutter (DM/PL commands). This is accomplished by the software **WinPlot**. WinPlot then needs to send the commands to the cutter using a communication port. Depending on the communication interfaces available, and/or the interface used to drive the cutter, different **driver software** needs to be installed.

Transferring the job from the design software to the cutting software can be done by means of a **plug-in**.
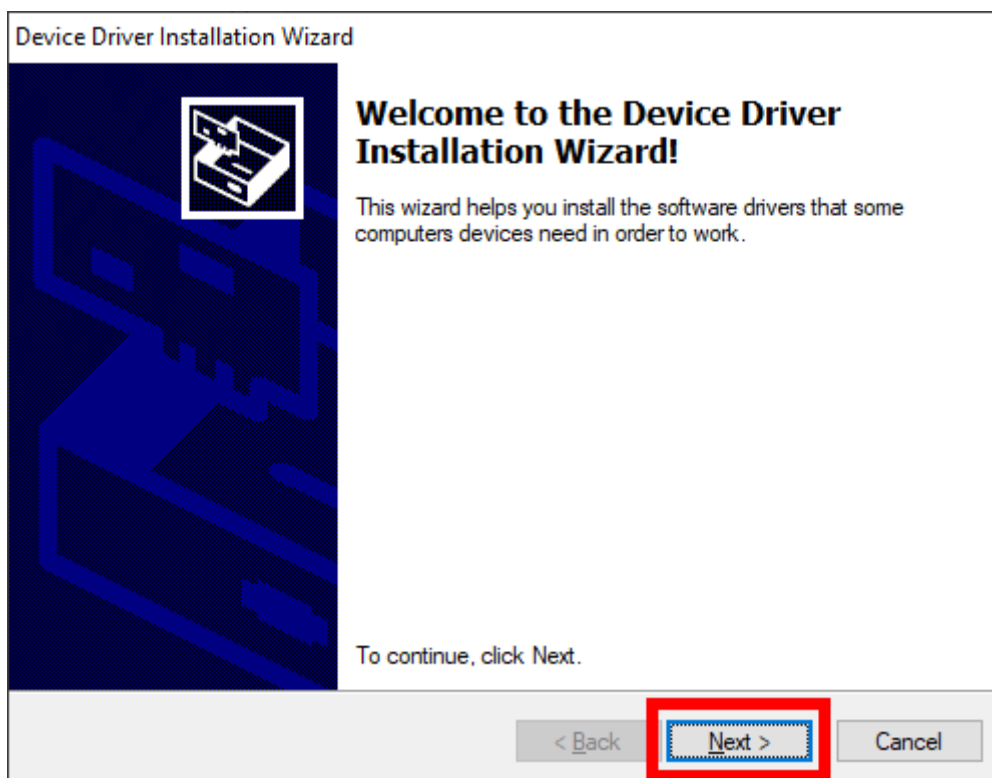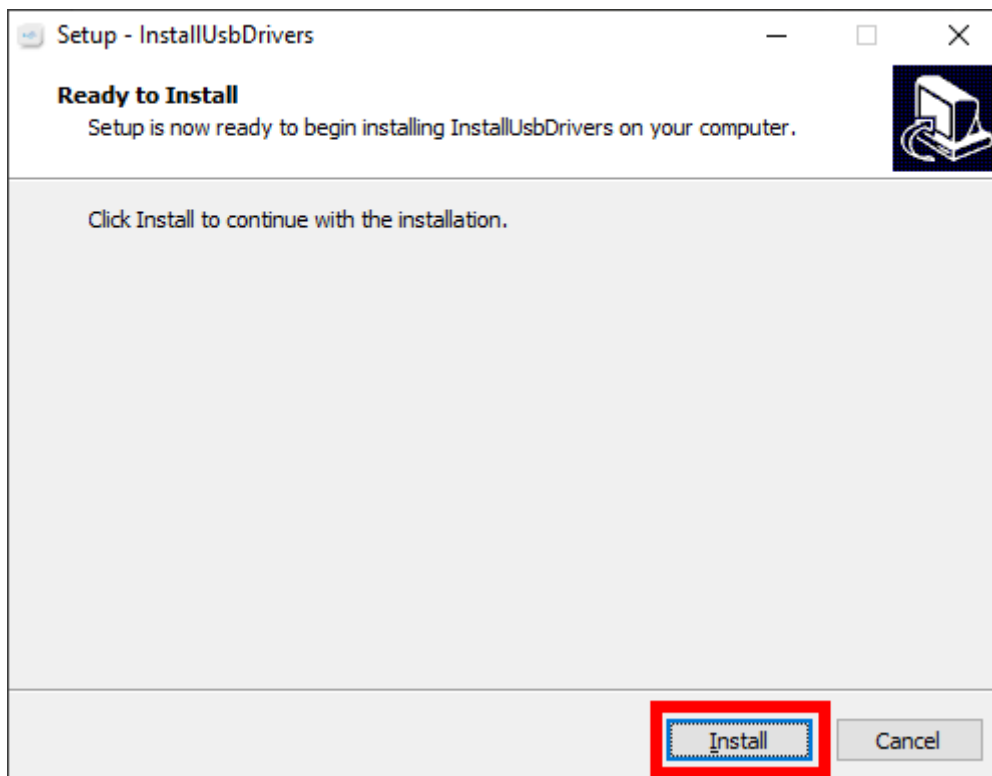
Driver software

USB Interface

USB Driver install

To be able to use the USB interface, a USB driver needs to be installed. This driver is available from the support page of the Summa website:
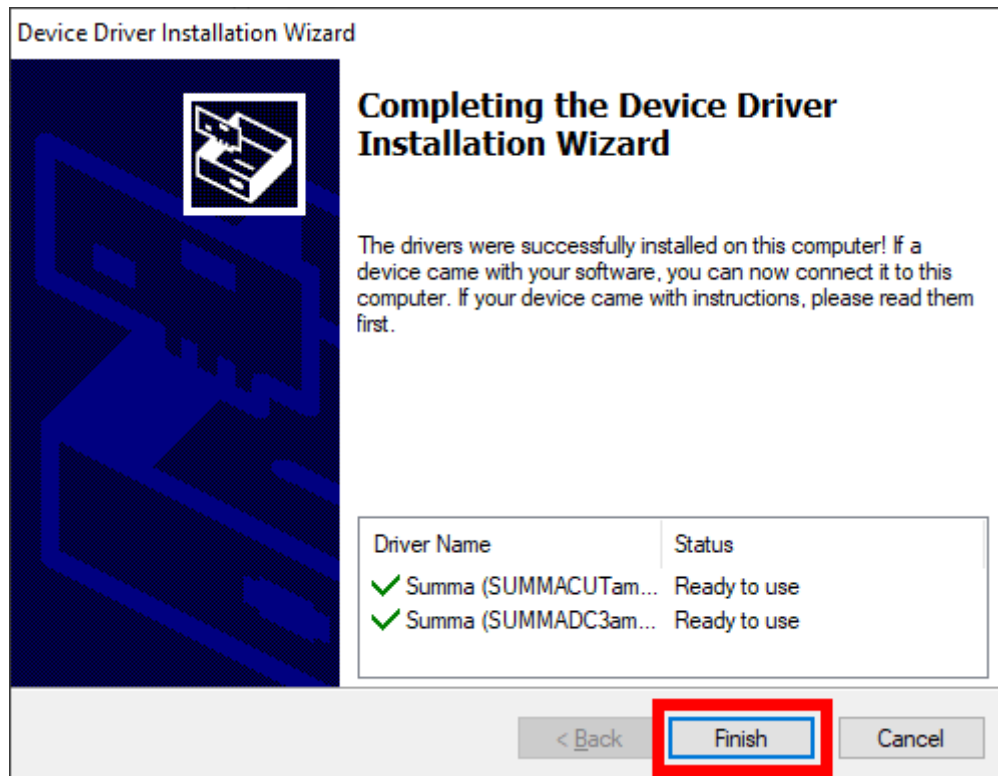
https://www.summa.com/en/support/software-firmware/

Vinyl Cutters

USB Drivers	Description	Version	Date
USB Cutter driver	USB driver for Windows 7, 8, 8.1, 10, 11	10.0 & 7.0	18-06-2020
OPOS-CAM USB driver	USB Camera driver for Windows 7, 8, 8.1, 10, 11	1.0.136	08-05-2014

Download the USB driver. Double click on the downloaded driver to start the install process. Follow the install wizard to complete the install.

Setup - InstallUsbDrivers

Ready to Install
Setup is now ready to begin installing InstallUsbDrivers on your computer.

Click Install to continue with the installation.

Install   Cancel

Device Driver Installation Wizard

Welcome to the Device Driver Installation Wizard!

This wizard helps you install the software drivers that some computers devices need in order to work.

To continue, click Next.

< Back   Next >   Cancel

In the software driving the machine, the communication port used to send the data to the cutter needs to be set to the USB port.

Serial Interface

When the cutter is connected using the serial interface, you do not need a driver, you have to set the correct settings in the cutting software.

Using a serial to USB adapter

In case the cutter is connected to the computer using a USB-RS232 adapter, the USB driver for this adapter needs to be installed (and not the one from Summa), and in the software driving the cutter, the serial port this adapter is emulating should be selected. You will also need to use the serial cable delivered with the machine (reference 423-183) to connect the adapter to the cutter.

Serial interface cable wiring

The serial interface cable reference 423-183 is wired as in below table:

Connector A DB9F	Color	Connector B DB9F
3	Black	2
2	Brown	3
5	Red	5
8	Orange	4
7	Yellow	6
4	Green	8
6	Bleu	7
Shell	Drain	Shell

Procedure to determine serial port emulation of the adapter

Press and hold [⊞], press [R].

Enter the text "devmgmt.msc" in the dialog box:
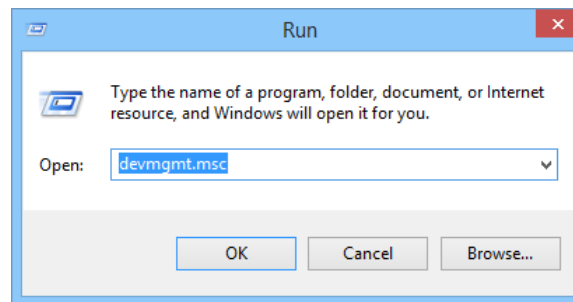
This opens the Device Manager.

Open the branch "Ports (COM & LPT)".

Check for the entry representing the USB to RS232 adapter. This entry displays the communication port this adapter is emulating. This communication port needs to be used in the application driving the machine.
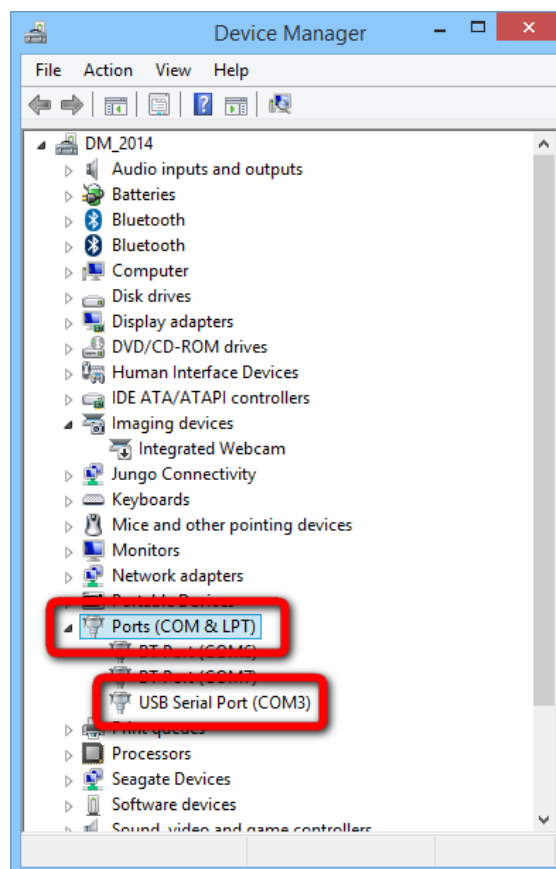
Serial Port Configuration of the Cutter

It is not necessary to load media in the cutter to change the parameters.

Use the below steps to change the serial port configuration of the cutter:

- Power on the cutter.

- Press [MENU] .
  'KNIFE PRESSURE' will appear on the LCD.

- Press [∧] .
  'SYSTEM SETUP' will appear on the LCD.

- Press [ENTER] .
  'ACTIONS' will appear on the LCD.

- Press [<] or [>] until 'CONFIGURATION' is reached.

- Press [ENTER] .
  'LANGUAGE' will be displayed.

- Use [∨] to scroll through the menu until 'BAUDRATE' is reached.

- Press [ENTER] .
  '*9600' will now appear on the LCD. Note the value may be different depending on the current speed the baud rate was set.

- Press [<] or [>] to change the baud rate to the desired speed. Available options are: 2400, 4800, 9600, 19200, 38400, 57600.

- Press [ENTER] to confirm.
  An '*' will appear in front of the value indicating the new active value.

- Press [EXIT] .

- Press [∨] to set the parity parameter.
  'PARITY' will appear on the LCD.

- Press [ENTER] .
  '*NONE' will appear on the LCD. Note this may be different depending on the previously selected parity setting.

- Press [<] or [>] to change the parity setting. Available options are: NONE, MARK, EVEN, ODD.

- Press ⬦ to confirm.

  An '*' will appear in front of the value indicating the new active value.

- Press ⬦.

- Press ⬦ to set the handshake parameter.

  'RTS/DTR' will appear on the LCD.

- Press ⬦.

  '*TOGGLE' will appear on the LCD. Note this may be different depending on the previously selected handshake setting.

- Press ⬦ or ⬦ to change the handshake setting. Available options are: TOGGLE, ALWAYS HIGH.

- Press ⬦ to confirm.

  An '*' will appear in front of the value indicating the new active value.

- Press ⬦ twice to return to set the machine back online.

Available serial communication parameters:

- BAUD RATE: 2400, 4800, *9600, 19200, 38400

- PARITY: *NONE, MARK, EVEN, ODD

- RTS/DTS: *TOGGLE, HIGH

The * indicates the default values.

Network Interface
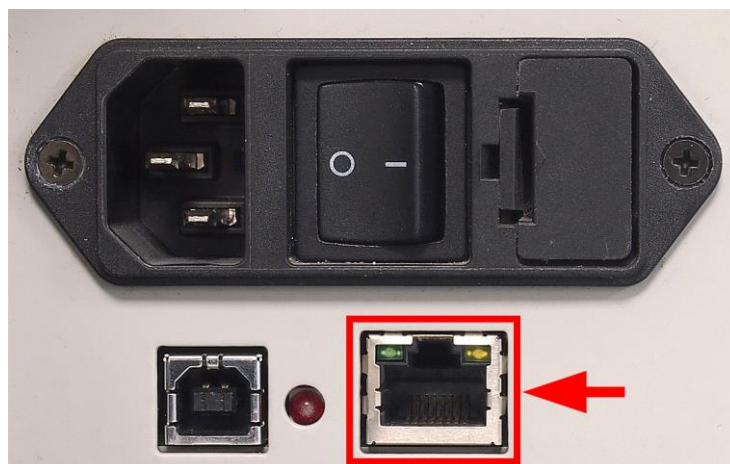
When the cutter is connected using the network interface, you do not need a driver, you have to set the correct settings in the cutting software.

Network Configuration of the Cutter

It is not necessary to load media in the cutter to change the parameters.

Use the below steps to change the network parameters of the cutter:

- Power on the cutter.

- Press ![MENU] .
  'KNIFE PRESSURE' will appear on the LCD.

- Press ![▲] .
  'SYSTEM SETUP' will appear on the LCD.

- Press ![ENTER] .
  'ACTIONS' will appear on the LCD.

- Press ![◄] or ![►] until 'CONFIGURATION' is reached.

- Press ![ENTER] .
  'IP CONFIG' will be displayed.

- Press ![ENTER] .
  *'*DHCP' or '*STATIC' will be displayed.*

- Press ![◄] or ![►] to select between a static IP address or a dynamic IP address. A static IP address is preferred to prevent the IP address of the cutter to change due to the DHCP server lease time settings.

- Press ![ENTER] to confirm the selection. A * will proceed the selection to indicate the preferred method.

- When DHCP was selected, then press ![EXIT] twice to return to set the machine back online.

- Press ![▼] to select the IP address.

- Press ⬦(ENTER) to change the IP address. Press ⬦(<) or ⬦(>) to select the digit to change, press ⬦(^) or ⬦(v) to change the digit until the desired IP address is set.

- Press ⬦(v) to select the subnet mask.

- Press ⬦(ENTER) to change the subnet mask. Press ⬦(<) or ⬦(>) to select the digit to change, press ⬦(^) or ⬦(v) to change the digit until the desired subnet mask is set.

- Press ⬦(EXIT) twice to return to set the machine back online.

WinPlot
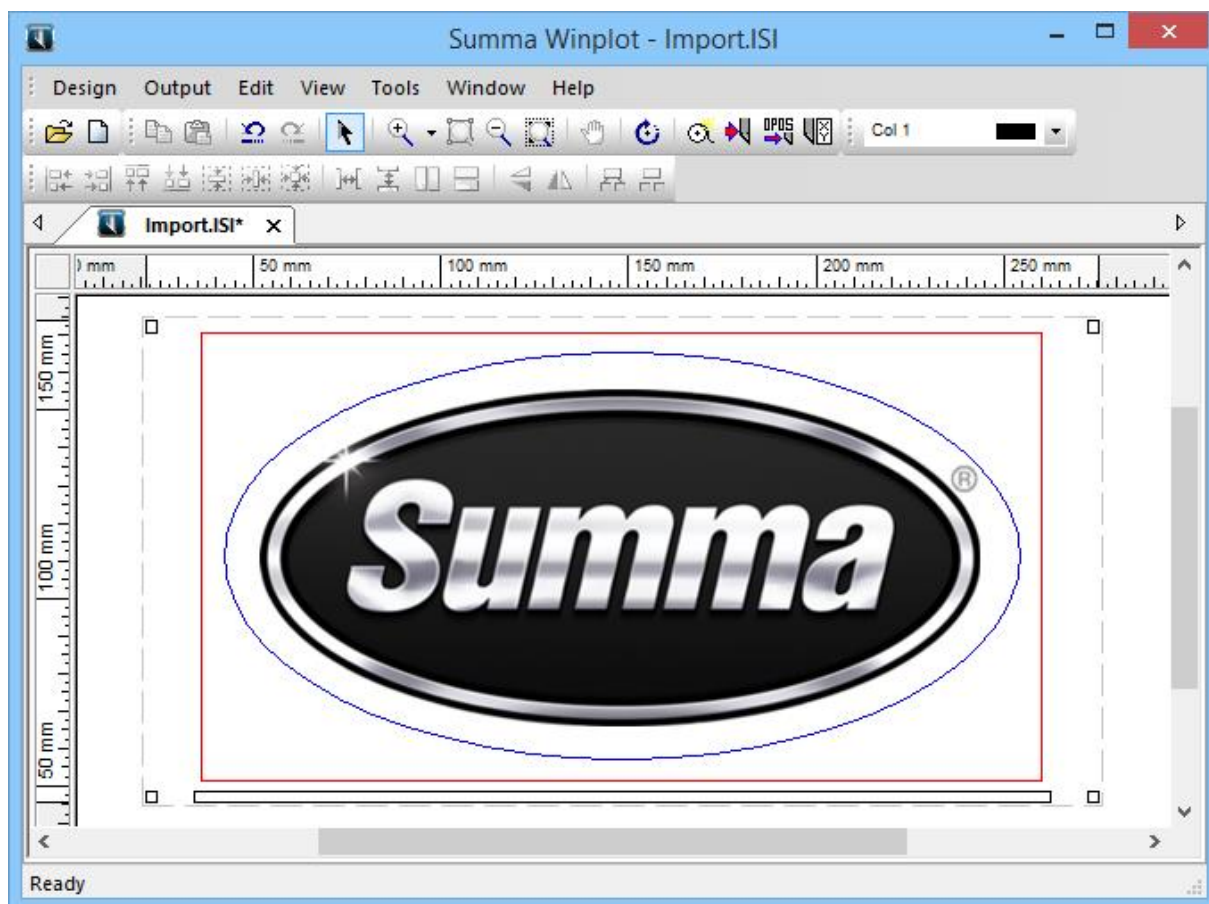
From Windows Vista on, we work with a program called *WinPlot*.

This program can import EPS, AI and PDF files and then send data to the cutter. Most design programs are able to generate files in one of those formats.

We do not work with a 'Windows based printer driver'.

The program *WinPlot* can be downloaded from the Summa support website:
https://www.summa.com/en/support/software-firmware/

⬇ **WinPlot**	Cutting program that imports EPS, AI and PDF files: positioning, rotating and scaling possibilities. Supports Vista/7/8/10 32-bit & 64-bit, and is compatible with all Summa brand cutters.	11.8.0.0	08-05-2019

This program works as a 'cutter driver', and converts the design created and exported in EPS, AI or PDF format in commands understood by the cutter.

The manual with the detailed instruction how to use WinPlot can be downloaded from the manuals section of the support page on the Summa website.
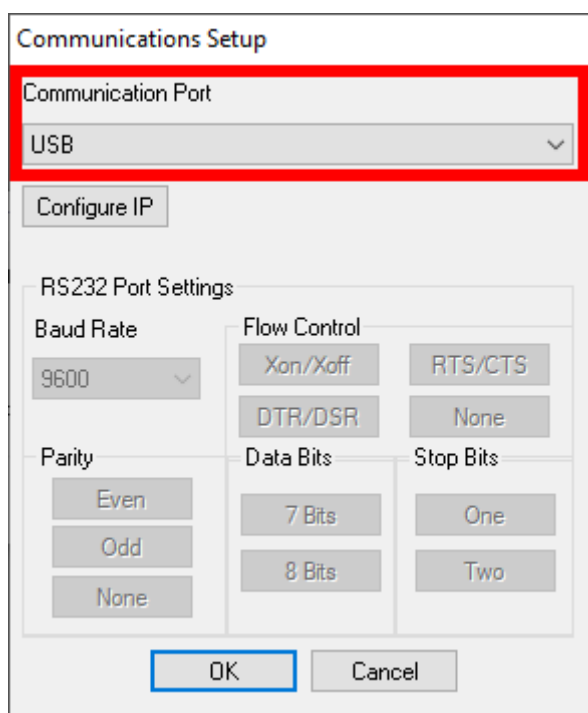
WinPlot	Version	Date
🖥 **English**	07	31-03-2016
🖥 **Français**	07	31-03-2016
🖥 **Deutsch**	07	31-03-2016
🖥 **Nederlands**	07	31-03-2016

Configuration

USB Port

To configure *WinPlot* for use of the USB interface with a Summa Cutter do the following:

- In the *Communication Setup* dialog set the options as in the picture below: in the Communication Port drop down box, select USB.

- Clicking the [OK] button returns you to the *Plotter-Cutter Setup* dialog. There you can optionally change the name of the installed cutter.
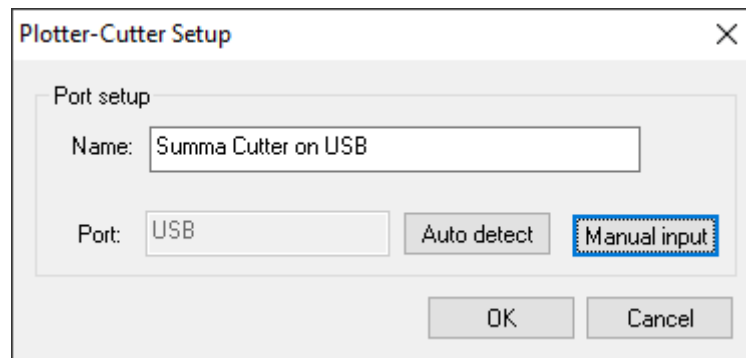
- Click [OK] again to finalize the configuration.

Serial Port

To configure *WinPlot* for use of a serial port with a Summa Cutter do the following:

- In the *Communication Setup* dialog set the options as in the picture below.
  Select the serial port to which the cutter is connected to, e.g. COM5, from the Communication Port drop down box.
  By default, Summa Cutters are configured as follows:
  Baudrate : 9600
  Parity : None
  Data Bits : 8
  Stop Bits : Two
  Flow Control : RTS/CTS
  The serial port parameters (RS232 Port Settings) should match the configuration of the cutter.

- Clicking the [OK] button returns you to the *Plotter-Cutter Setup* dialog.
  There you can optionally change the name of the installed cutter.
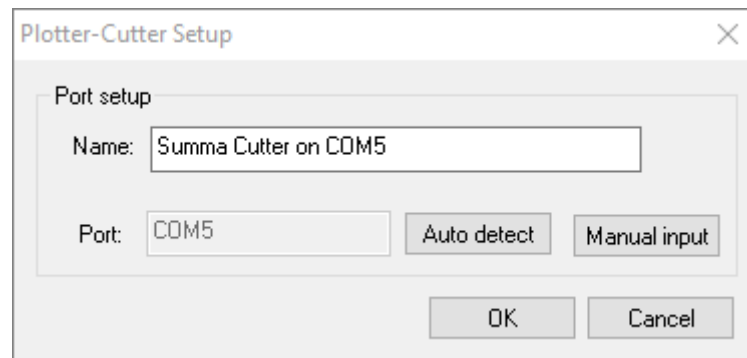
- Click [OK] again to finalize the configuration.

Network Port

To configure *WinPlot* for use of a network port with a Summa Cutter do the following:

- Click on [Configure IP].

- Fill in the IP address as set in the cutter.

- Click [OK] to confirm.

The IP address will be set in the 'Communication Port' drop down box.

- Clicking the [OK] button returns you to the *Plotter-Cutter Setup* dialog. There you can optionally change the name of the installed cutter.
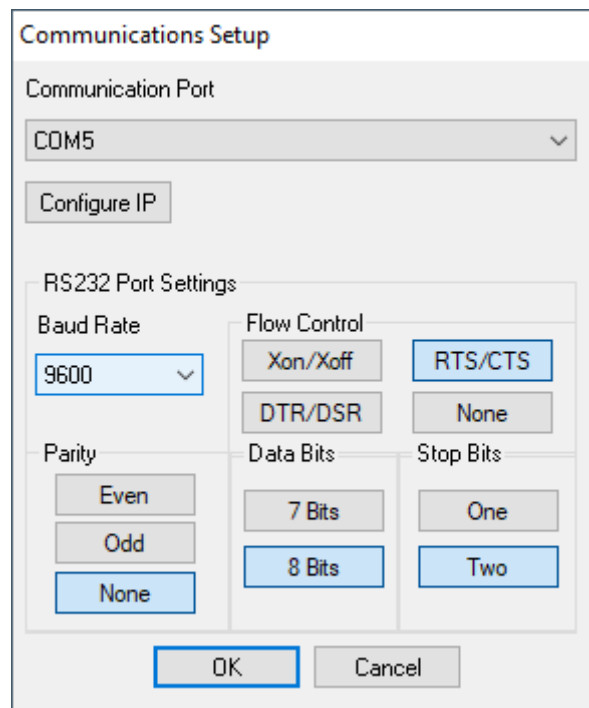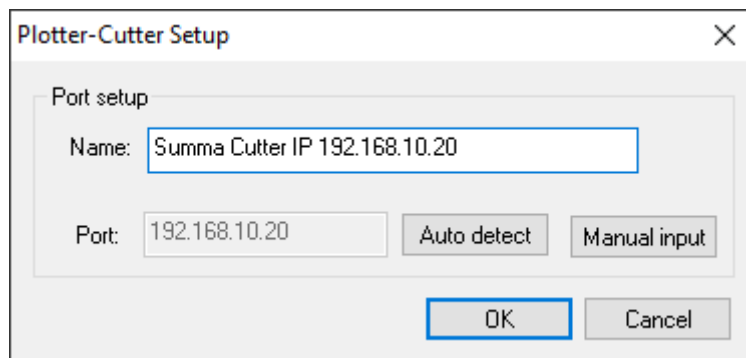

- Click [OK] to finalize the configuration.

Plug-ins

There exists also a *plug-in* for Corel 12->2020 and Illustrator CS1->CC->2021

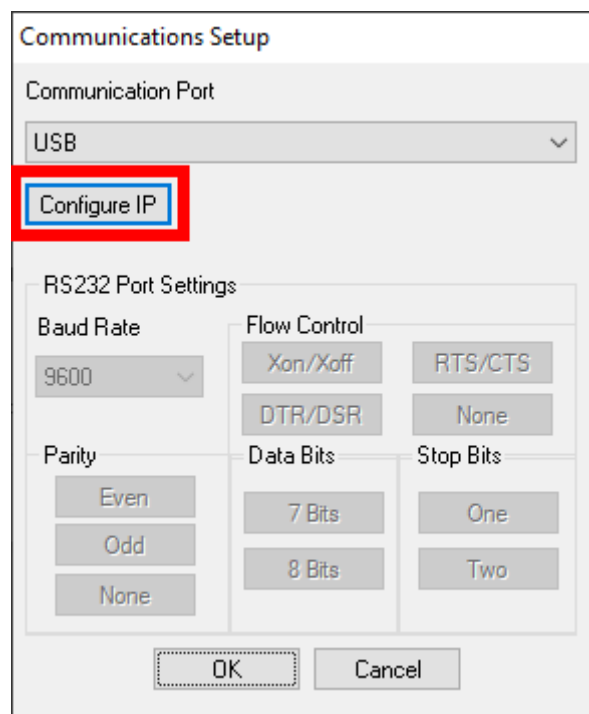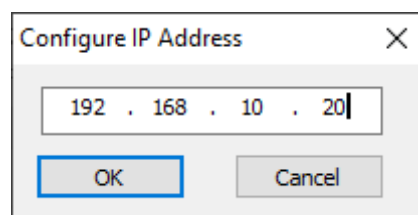The *plug-in* can be installed from the software tool Summa Cutter Tools, which is available from the support page on the Summa website:

https://www.summa.com/en/support/software-firmware/

These gets rid of the hassle to export a job from the designing software, and importing the job in WinPlot.

Close the design software, then click on the [Install] button to have the plug-ins installed for the supported versions of CorelDRAW and/or Adobe Illustrator:
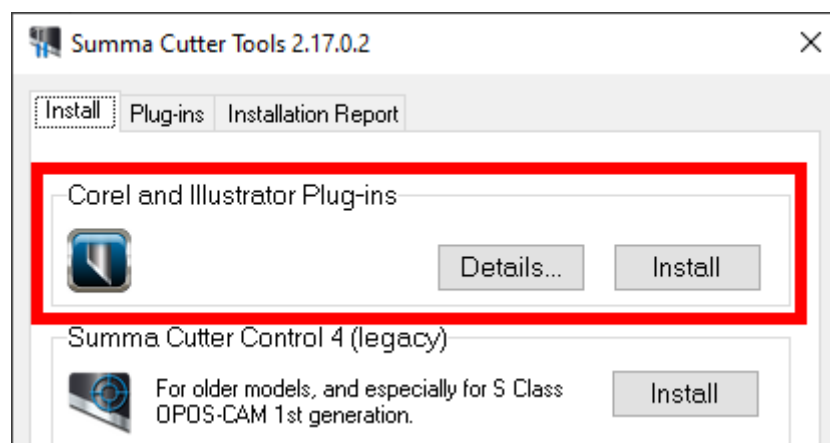
Keep in mind not all versions of CorelDRAW support plug-ins: only the Graphics Suite supports plug-ins:

CorelDRAW®

Product Family Comparison

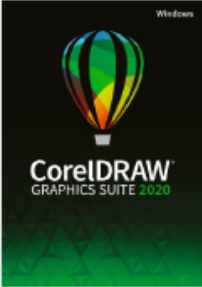|	CorelDRAW ESSENTIALS 2020	CorelDRAW STANDARD 2020	CorelDRAW GRAPHICS SUITE 2020
	For occasional graphics users and creative consumers	For graphics hobbyists and home businesses	For graphics professionals in small to large businesses
Main Applications			**Most Popular**
CorelDRAW® 2020	✓ * CorelDRAW Essentials 2020	✓ * CorelDRAW Standard 2020	✓
Corel PHOTO-PAINT™ 2020		✓ * Corel PHOTO-PAINT Standard 2020	✓
Corel Font Manager™ 2020			✓
CAPTURE™			✓
CorelDRAW.app™			✓
Corel AfterShot™ 3 HDR			✓
Key Features & Tools (Highlights)			
Bitmap-to-vector tracing	(✓) Quick Trace (one-click tracing)	✓ PowerTRACE™	✓ PowerTRACE™ (Advanced with AI technology)
Bevel tool, Shadow tool, Spiral, Smooth and Smear tool		✓	✓
Clone Tool, Artistic Media		✓	✓
Alignment guides, Guidelines docker		✓	✓
Symmetry drawing mode, Block Shadow tool, Impact tool, Pointillizer, PhotoCocktail			✓
Object styles, Color styles, Color harmonies			✓
Professional Print options (CMYK features, Composite, Color separations, Postscript, Prepress tabs, large print preview)			✓
Advanced page layout: left & right master pages, custom placeholder text			✓
Enhanced Color management, Color proofing option, spot color support on output			✓
Collaboration tools**			✓
Automation support (VSTA, VBA), Macro Manager			✓

Once the plug-in is installed, the design can be sent to WinPlot from the toolbar (CorelDRAW) or from the File submenu (Adobe Illustrator):

CorelDRAW

Four options are available:

- Add OPOS registration marks around the design

- Send the complete design to WinPlot

- Send only the selected objects to WinPlot
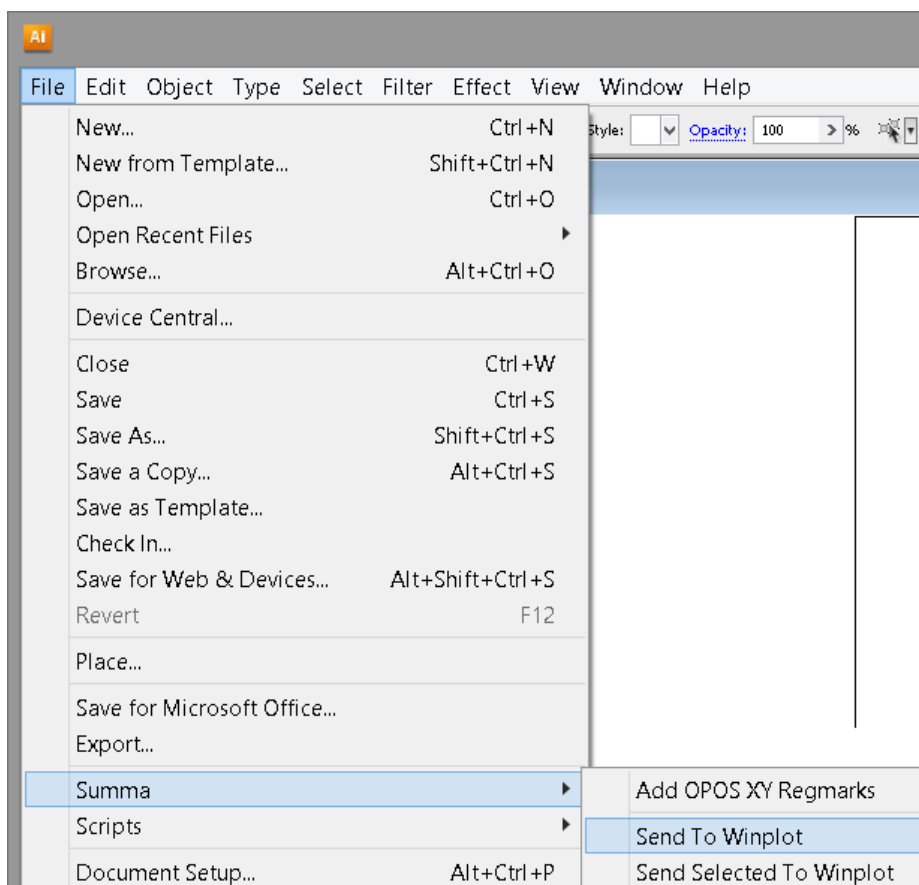
- Export the design to the AI format
  This option can be used when WinPlot is not installed on the computer used to create the design.
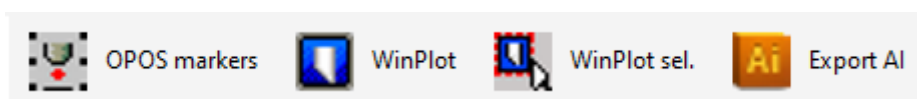
Adobe Illustrator

Three options are available:

- Add OPOS registration marks around the design

- Send the complete design to WinPlot

- Send only the selected objects to WinPlot

Summa Cutter Control 4

The Summa Cutter Control program basically has the same functions as the control panel.

The program Summa Cutter Control 4 (Legacy) can used to:

- Control all parameters of the cutter.

- Create and restore a backup containing all configurations of the cutter.

- Media length calibration to compensate for different media types.

- Perform tests.

- Adjust media sensor sensitivity.

- Send files to the cutter.

- Upgrade the firmware of the cutter.

- Work as a barcode server.
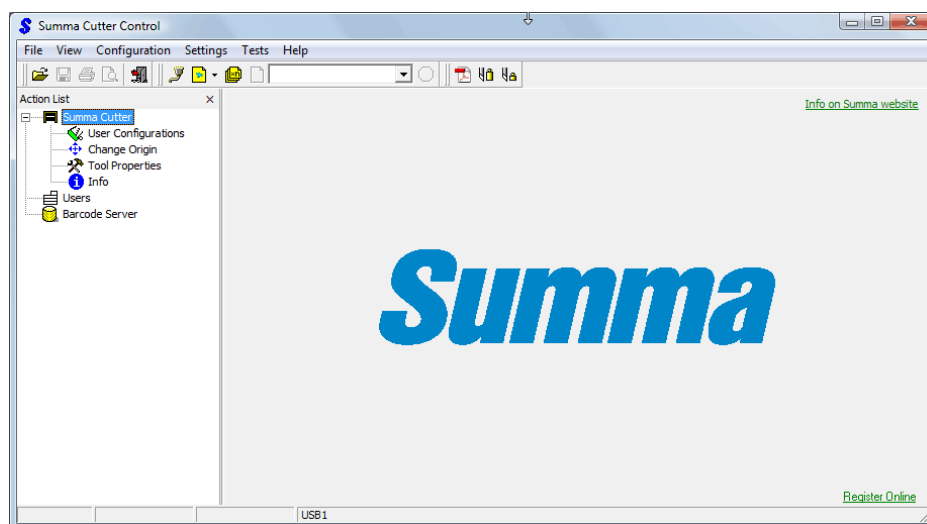
Summa Cutter Control 4 can be installed from the software tool Summa Cutter Tools, which is available from the support page on the Summa website:

https://www.summa.com/en/support/software-firmware/

⛁ **Summa Cutter Tools**	Software bundle including all cutting related tools including:	2.18	21-03-2022
	> Summa Cutter Control 4.20.0.0 Software interface for adjusting parameters on Summa legacy cutter, including speed, mode, pressure, blade offset and much more. Supports Vista/Win 7/Win 8/10.		
	> Plug-in for CorelDRAW 12 - 2022 and Adobe Illustrator CS - CC 2022 Plug-in for CorelDRAW & Illustrator to use with Winplot 6.6 or higher.		

Install Summa Cutter Tools, then run Summa Cutter Tools, finally click the [Install] button to install Summa Cutter Control 4:
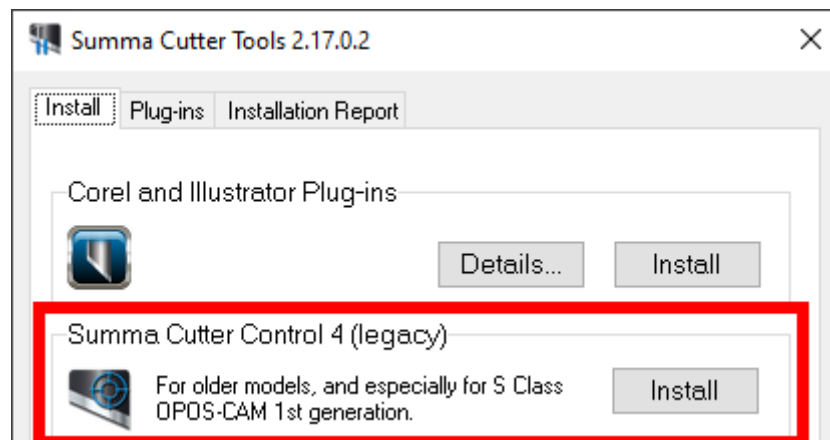
Before the program can be used, the communication interface needs to be selected and configured to match the connection type (USB or RS232) and communication parameters.

Click [Configuration] – [Port], and select the port the cutter is connected to:
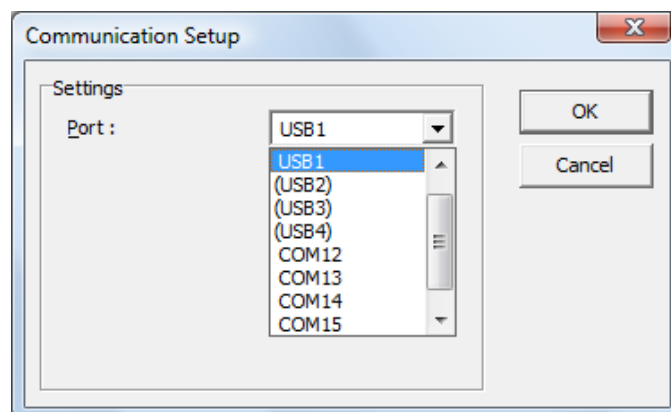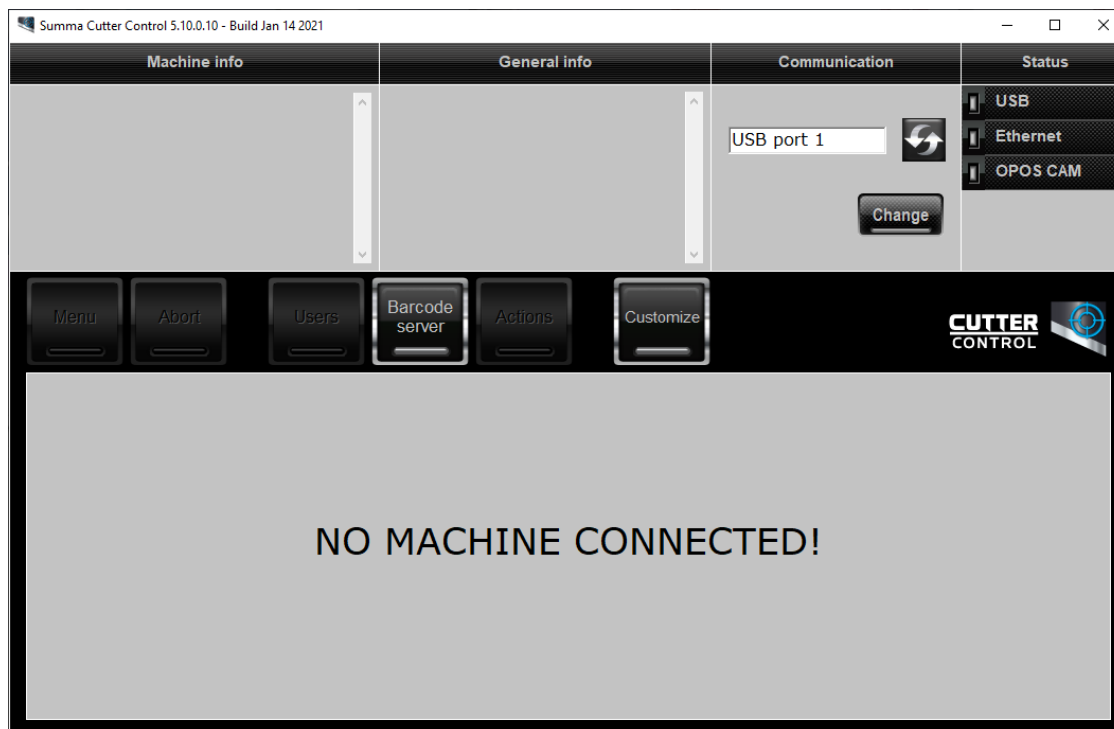

Summa Cutter Control 5

The Summa Cutter Control program basically has the same functions as the control panel.

The program Summa Cutter Control 5 can used to:

- Control all parameters of the cutter.
- Create and restore a backup containing all configurations of the cutter.
- Perform tests.
- Send files to the cutter.
- Upgrade the firmware of the cutter.
- Work as a barcode server.

Note: The firmware of the machine has to be at least revision 025 to be able to work with Summa Cutter Control 5. In case the firmware is on a lower level, then use Summa Cutter Control 4 to upgrade the firmware.

Summa Cutter Control 5 is available from the support page of the Summa website: https://www.summa.com/en/support/software-firmware/

⬇ **Summa Cutter Control 5**	**Summa Cutter Control 5** is a software interface for adjusting parameters on current Summa Roll cutters, including speed, mode, blade offset and much more. Support Windows OS only (Win 7/8/10/11)	5.11.0

Before the program can be used, the communication interface needs to be selected and configured to match the connection type (USB or Network).

Click on [Change] in the 'Communication' pane to select the communication interface.
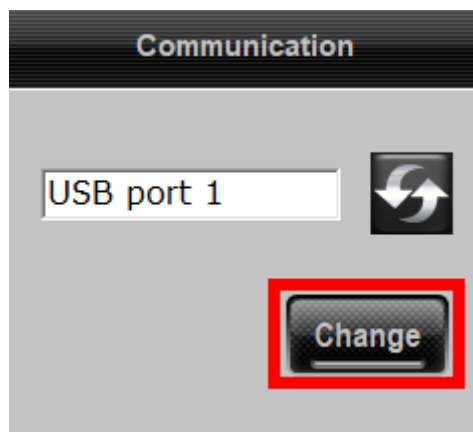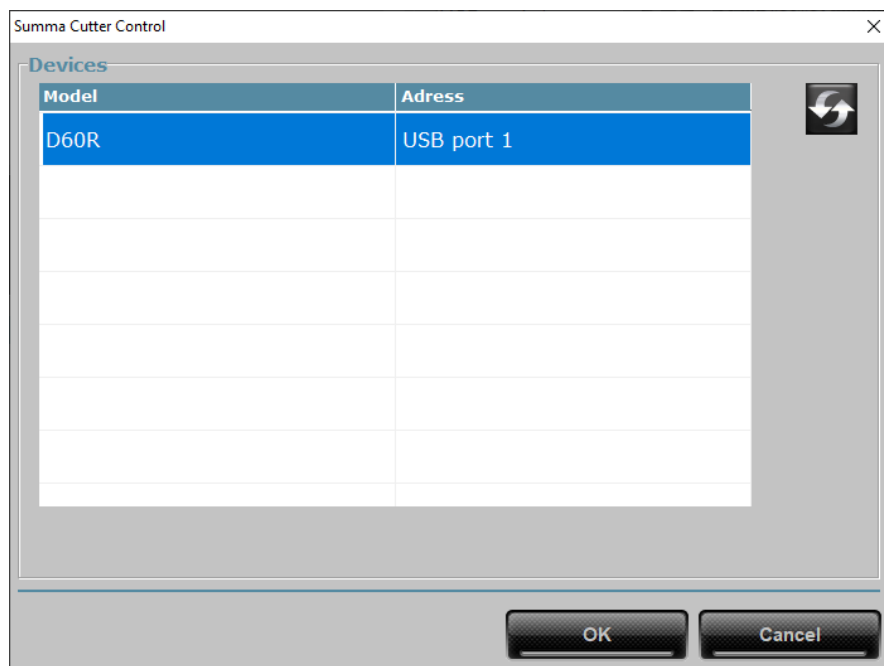
Then click on [Auto] to get a list of connected cutters to the computer or on the network, or click [Manual] to enter the IP address of the cutter.
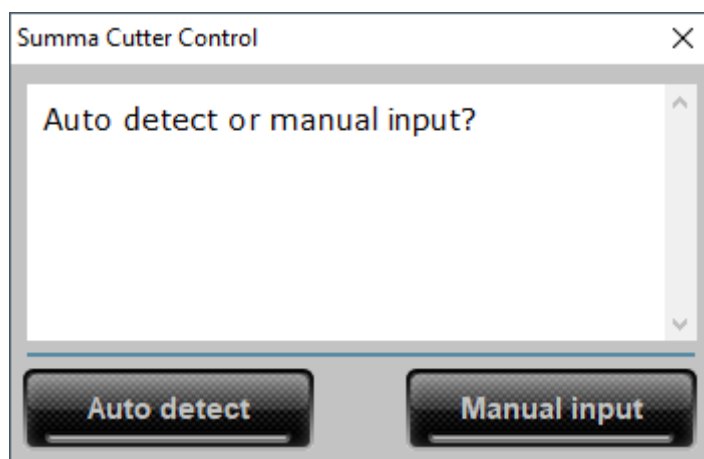
Enter the IP address of the cutter.

Or select the cutter from the list.

Revised June 15, 2022