

How to install a driver for a SummaCut



Introduction

This document describes how to install the software necessary to drive a SummaCut series roll-cutter.

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

Serial Interface



As 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.

Note: Even when using the USB interface on the computer, the serial port the adapter is emulating has to be used in the software driving the machine.

Serial interface cable wiring



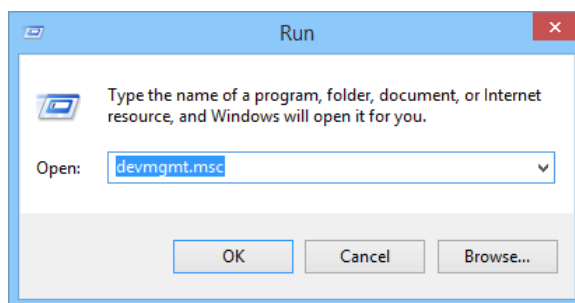
The serial interface cable reference 423-183 is wired as in below table:

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 emulated by the adapter

Press and hold , press .

Enter the text “devmgmt.msc” in the dialog box:



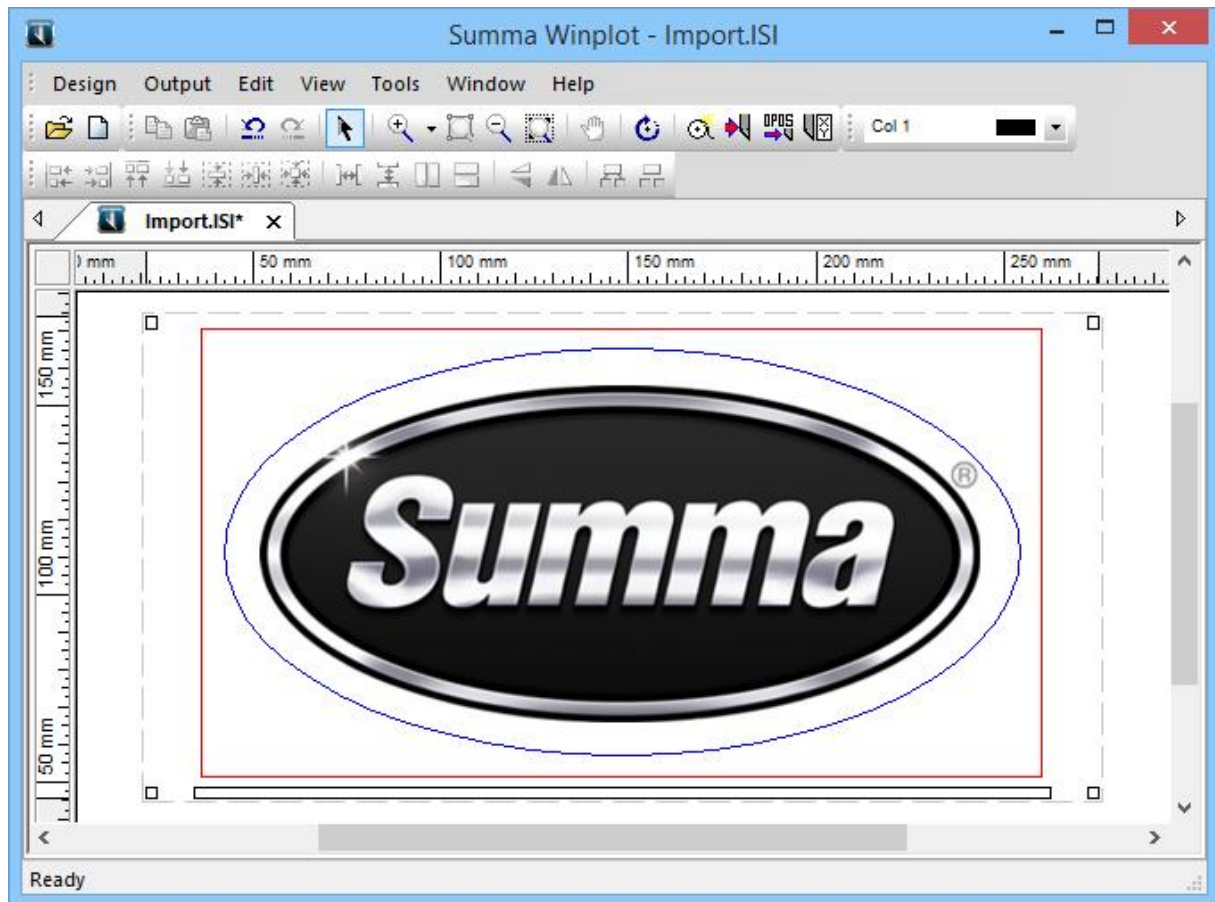
This opens the Device Manager.

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.



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

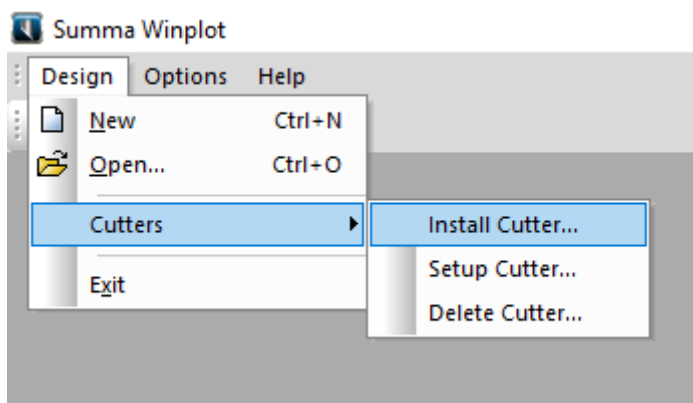
The manual with the detailed instruction how to use WinPlot can be downloaded from the manuals section of the support page on the Summa website.

WinPlot	Version	Date
 English	07	31-03-2016
 Français	07	31-03-2016
 Deutsch	07	31-03-2016
 Nederlands	07	31-03-2016

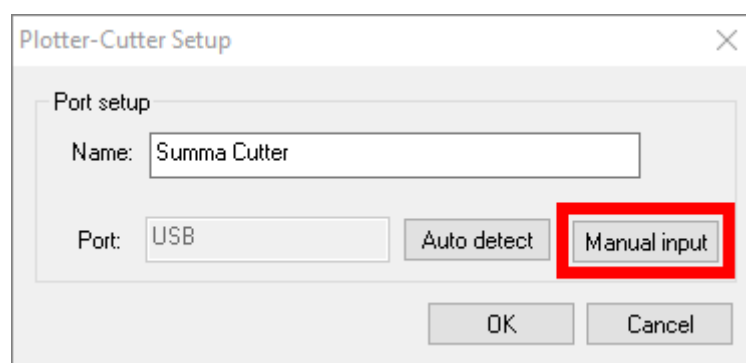
Configuration

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

- Start *WinPlot* with no document, or close any open document.
- Click [Design] – [Cutters] – [Install Cutter].
This option will not be available when there is a document open in WinPlot.



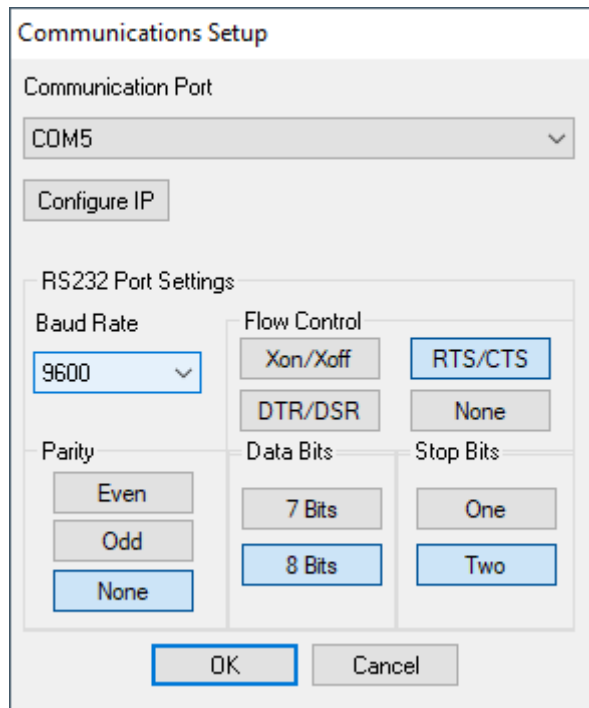
- In the *Plotter-Cutter Setup* dialog click [Manual input].



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.



Communications Setup

Communication Port
COM5

Configure IP

RS232 Port Settings

Baud Rate: 9600

Parity: None

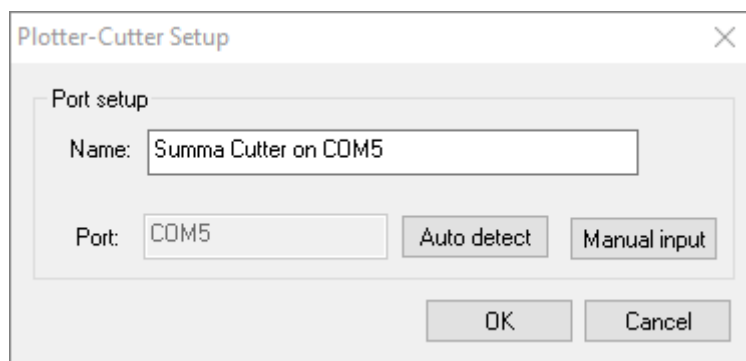
Data Bits: 8 Bits

Stop Bits: Two

Flow Control: RTS/CTS

OK Cancel

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

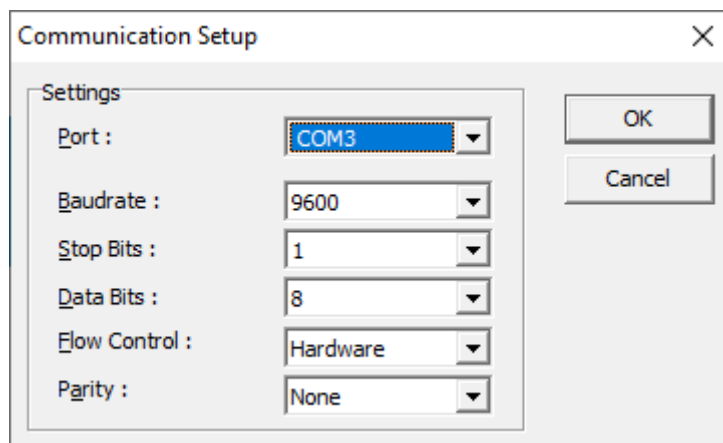


- Click [OK] again to finalize the configuration.

Serial Port Configuration of the Cutter

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

The serial port parameters can be changed from Summa Cutter Control only. The serial interface parameters set in Summa Cutter Control needs to match the setting of the cutter.



Available serial communication parameters for the cutter:


- BAUD RATE: 2400, 4800, 9600, 19200, 38400
- PARITY: NONE, MARK, EVEN, ODD
- RTS/DTS: TOGGLE, HIGH

The default settings for the serial part are: 9600 Baud, No parity, and Toggle RTS/DTS (hardware handshake).

When it is not possible to establish a communication between the cutter and Summa Cutter Control, then it may be helpful to plot the configuration of the cutter. This is done by the "MENU PLOT".

The MENU PLOT is a hard copy of the present cutter configuration, i.e. the items selected in the USER CONFIG submenus. The plot is organized by menu categories to show the current values for the various USER CONFIG 1(->4) configurations.

To activate the MENU PLOT, follow next procedure:

- Power down the cutter
- Load an A3 format of paper.
- Install a pen.
- Press and hold the  key.
- Boot up the cutter.
- On beeping, release the key.

The cutter will start loading the media. Then the menu-settings for all 4 user configurations are plotted.


D520FLASH EEPROM 9955026 1473001
CURRENT USER CONFIG : 2

PARAMETER	USER CONFIG 1	USER CONFIG 2	USER CONFIG 3	USER CONFIG 4
KNIFE PRESSURE	100g	100g	100g	100g
KNIFE OFFSET	.43mm	.45mm	.45mm	.45mm
VELOCITY	500mm/s	500mm/s	500mm/s	500mm/s
TURBOCUT	OFF	OFF	OFF	OFF
OVERCUT	1	1	1	5
PEN PRESSURE	80g	80g	80g	80g
POUNCE PRESSURE	120g	120g	120g	120g
POUNCE GAP	1 mm	1 mm	1 mm	1 mm
CONCATENATION	0	0	0	0
SMOOTHING	OFF	OFF	OFF	OFF
EMULATE	DM/PL	DM/PL	DM/PL	DM/PL
TOOL	DRAG KNIFE	DRAG KNIFE	DRAG KNIFE	DRAG KNIFE
MENU UNITS	METRIC	METRIC	METRIC	METRIC
ADDRESSING	.025mm	.025mm	.025mm	.025mm
BAUD RATE	9600	9600	9600	9600
PARITY	NONE	NONE	NONE	NONE
RTS/DTR	TOGGLE	TOGGLE	TOGGLE	TOGGLE
DM/PL ERRORS	IGNORED	IGNORED	IGNORED	IGNORED
HPGL ERRORS	IGNORED	IGNORED	IGNORED	IGNORED
HPGL ORIGIN	RIGHT-FRONT	RIGHT-FRONT	RIGHT-FRONT	RIGHT-FRONT
MEDIA SENSOR	ON	ON	ON	ON
FRONT SENSOR	ON	ON	ON	ON
AUTOLOAD	ON	ON	ON	ON
SPECIAL LOAD	XY ADJUST.	XY ADJUST.	XY ADJUST.	XY ADJUST.
TOOL COMMAND	ACCEPT	ACCEPT	ACCEPT	ACCEPT
LOAD ON W CMD	ON	ON	ON	ON
FLEX-CUT	OFF	OFF	OFF	OFF
RECUT OFFSET	5 mm	5 mm	5 mm	5 mm

Plug-ins

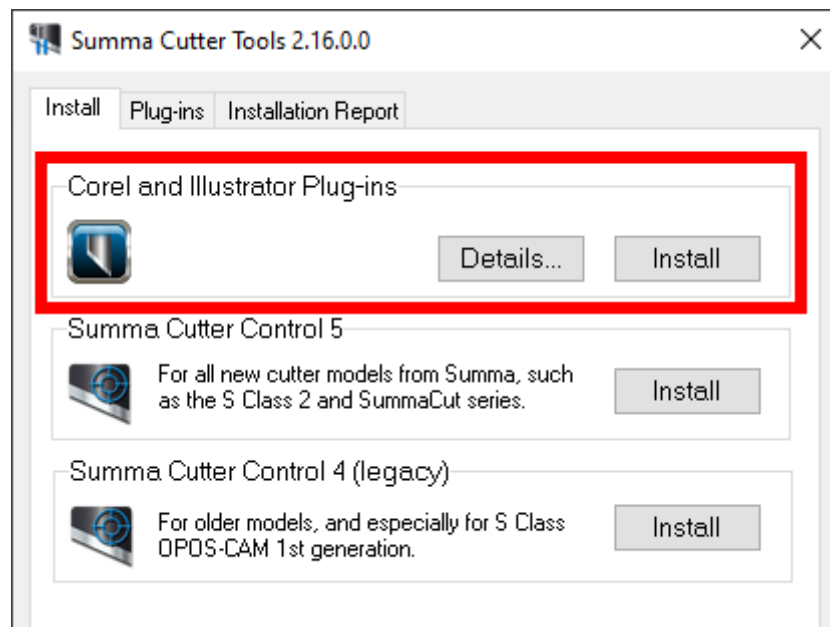
There exists also a *plug-in* for Corel 12->2020 and Illustrator CS1->CC->2021

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

 Summa Cutter Tools	Software bundle including all cutting related tools including:	2.18	21-03-2022
	<ul style="list-style-type: none"> > 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.		
	<ul style="list-style-type: none"> > 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.		

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®

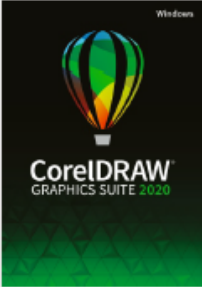
Product Family Comparison



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			✓

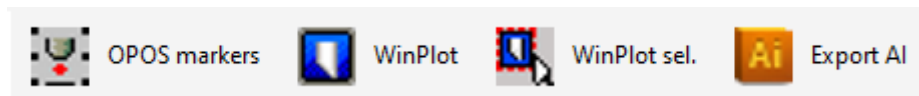
Once the plug-in is installed, the design can be sent to WinPlot from the toolbar (CorelDRAW) or from the File submenu (Adobe Illustrator):

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

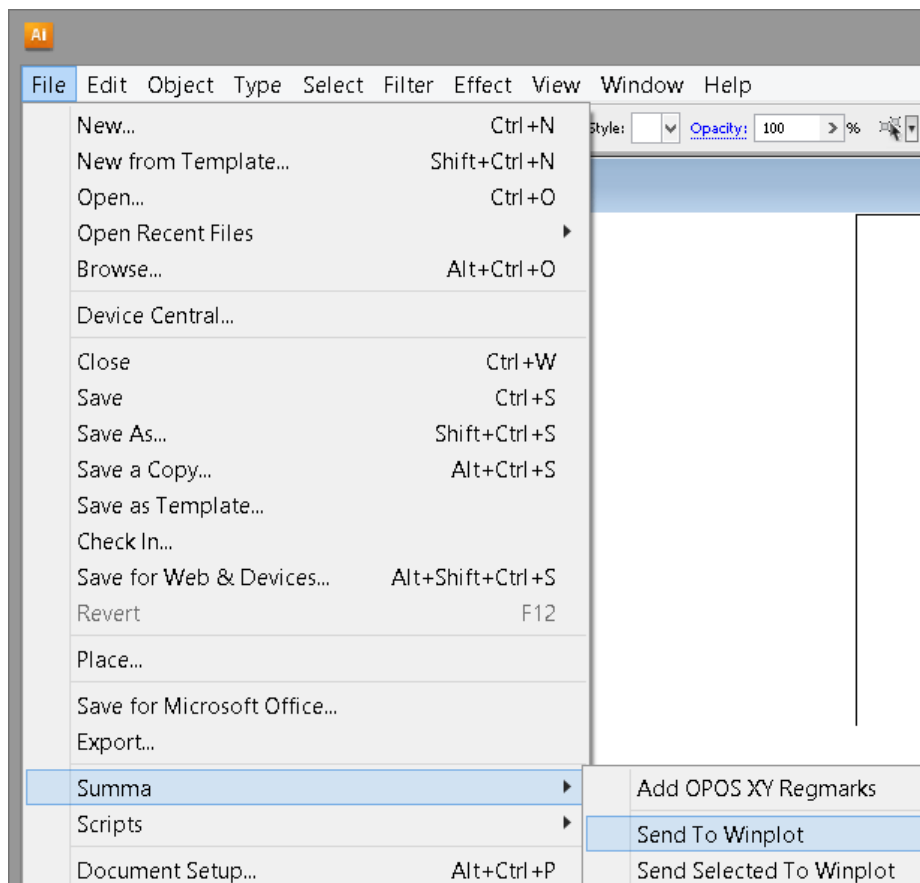
This option can be used when WinPlot is not installed on the computer used to create the design.



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

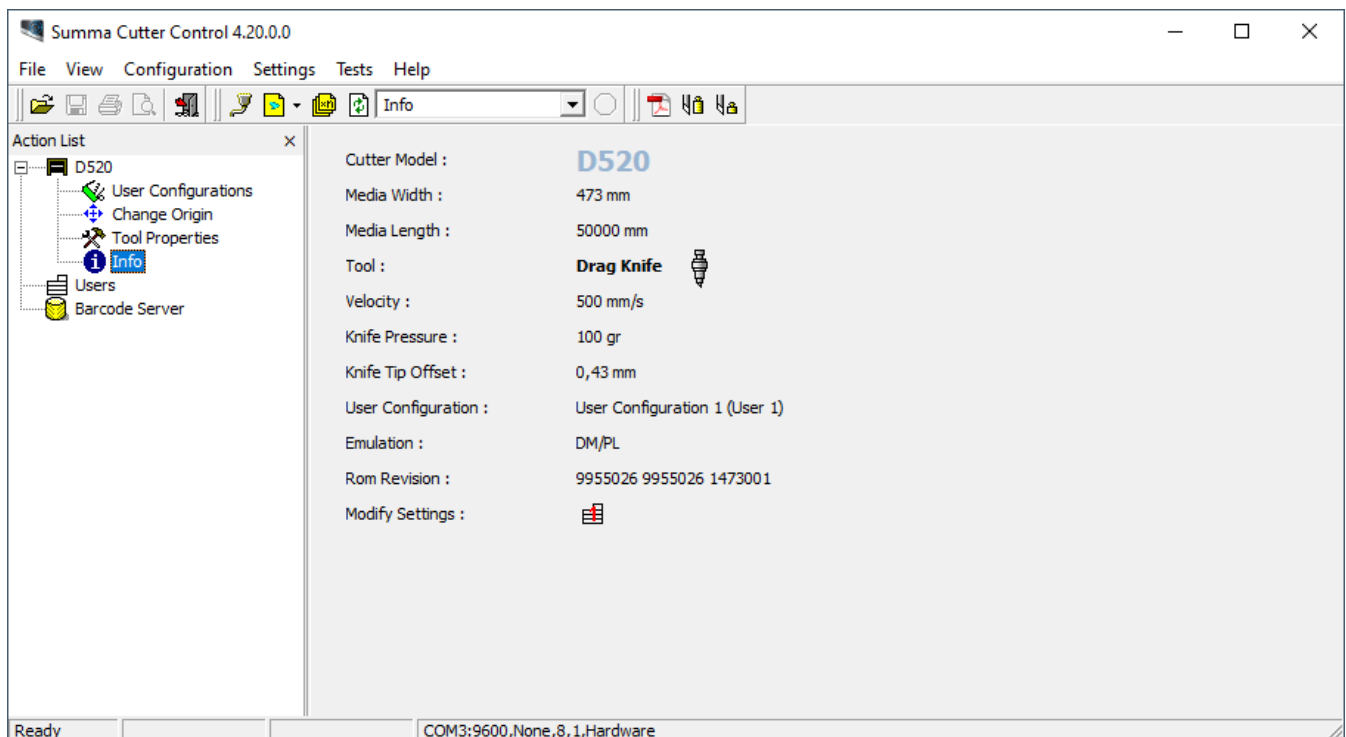


Summa Cutter Control 4


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

The program Summa Cutter Control 4 (Legacy) can be 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. This function is not compatible with this model of cutter.

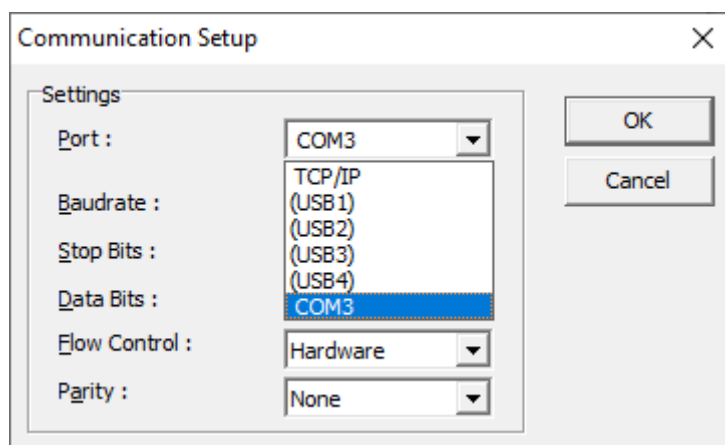


Summa Cutter Control can be installed from the software tool *Summa Cutter Tools*, which is available from the support page on the Summa website.

 Summa Cutter Tools	Software bundle including all cutting related tools including:	2.18	21-03-2022
	<div><div></div><div>> 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.</div></div>		
	<div><div></div><div>> 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.</div></div>		

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], or click the Port button  in the toolbar, and select the port the cutter is connected to:



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