



OPERATING GUIDE

for Secabo C30 and C40

cutting plotters

Congratulations on purchasing your Secabo cutting plotter!

Please read this guide carefully. It tells you how to prepare your cutting plotter for production use in a few easy steps.

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1. Precautions

Please read these instructions and precautionary notes carefully before using the machine for the first time!

- Do not place magnetic objects near the cutting head as even contact pressure cannot otherwise be guaranteed.
- Do not unplug the computer connection lead while a plot is running.
- Release the pressure on contact rollers when not in use by flipping the pressure levers up.
- Keep your hands out of the machine while it is connected to the mains power supply.
- Never open the machine case and do not attempt to modify the machine.
- Avoid liquid spills and metal objects entering the interior of the cutter.
- Make sure the power supply is grounded.
- Make sure the mains power supply (220V) does not fluctuate by more than $\pm 10\%$. In case of mains power fluctuations, use a voltage stabilizer.
- Unplug the power lead during longer periods of inactivity.
- Keep your hands well away from the knife holder while a cutting job is running!
- Always cancel the active job before adjusting the knife holder!
- Keep the cutting plotter well out of the reach of children, and never leave the machine or machine parts unattended when connected to the mains.
- Never touch the tips of drag knives to avoid injury.
- Set up the machine on a stable base to avoid danger of falling.
- Never run the machine during a thunder storm; lightning could damage or destroy the machine.

2. What's in the box

Please check immediately to ensure that you have received the following articles:

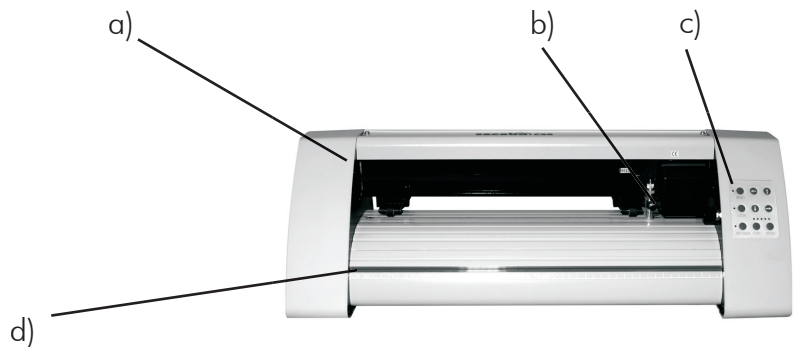
- Cutting Plotter
- Power Lead
- Knife Holder
- 3 Drag Knives
- Penholder and pens
- Serial and parallel connection lead
- CD Rom with drivers and Operating Guide
- Cutting Plotter Stand (dismantled) (option)



3. Description of Machine

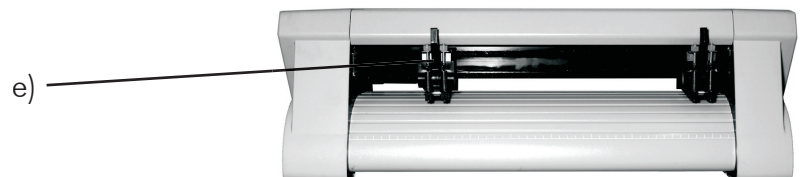
3.1. Front view

- a) Case lid
- b) Cutting head
- c) Operating panel
- d) Cut-off groove



3.2. Rear view

- e) Pressure rollers



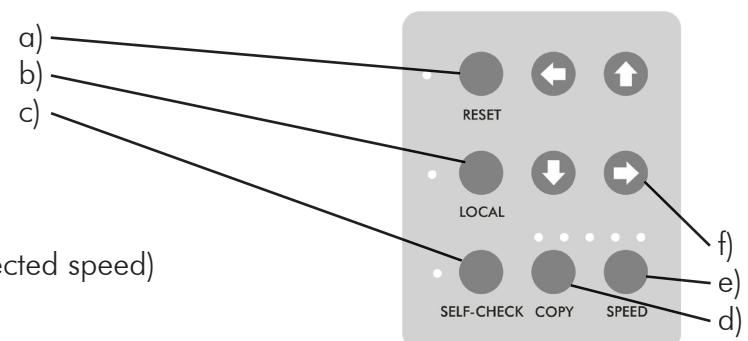
3.3. Side views

- f) serial/parallel port
- g) Power supply, Fuse, Switch



3.4. Operating panel

- a) Reset key with LED display
- b) Local key with LED display
- c) Self-Check key with LED display
- d) Copy key
- e) Speed key (with LEDs to indicated the selected speed)
- f) Arrow keys for moving the cutting head 3



4. Installation and Test

4.1. Setting up the cutting plotter

Make sure that there is enough space to allow unhindered media input and output at the front and rear of the cutting plotter. The operating environment for the cutting plotter must be clean and dry.

- Attach the plotter to a 200V mains power supply using the supplied power lead.
- Now switch the cutting plotter on. Caution – when the cutting plotter is switched on the cutting head automatically moves to the right.

4.2. Installing the plotter driver

To use the cutting plotter with CorelDraw or Freehand, you first need to install the plotter as a printer on your computer system. The printer driver is located on the supplied CD. Simply run the driverSecabo.exe file in the printer driver directory. When installing the cutting plotter, you must select the interface you will be using.

After installing the printer driver, you can plot jobs directly from CorelDraw, Freehand or Adobe Illustrator (Version 11 or newer) on your Secabo Cutting Plotter by selecting File - Print.

4.3. Using Artcut

The Artcut cutting software is available as an option with your Secabo Cutting Plotter. Please refer to the Artcut User Manual for information on installing and using the software.

4.4. Fitting and adjusting knives

- Take one of the cutter knives provided, and insert it into the knife holder so that the blade protrudes from the front.
- Now adjust the cutting depth by turning the silver-colored screw at the top of the knife holder.
- The depth is set correctly when you feel a light scratching on carefully rubbing your fingertip over the tip of the knife. As the knife depth setting depends on the media you will be cutting, you may need to re-adjust later.
- Tighten the brass screw to lock the knife setting.
- You can press the pin at the rear of the knife holder to remove and replace the blade you have inserted at any time. Caution – danger of injury! 4

As various media thicknesses require different knife settings, or even special blades, you may need to repeat the steps detailed above.

4.5. Inserting the knife holder

- Start by loosening the knife holder screw on the cutting head.
- Then holding the knife holder from the top, push the knife holder into the aperture at the side until it is seated properly, and tighten the retaining screw.

4.6. Loading media

- Always load media for processing from the rear of the machine.
- Pull the media up to the cutting strip to set the zero point correctly. See Section 4.7 in this guide for details of setting the zero point.
- If you are using roll media rather than precut media, use the supplied roll holder to ensure that the media unrolls smoothly.
- When loading media, ensure that the media is straight to avoid warping when transporting the media. A misalignment of just a few millimeters can cause severe media warp in longer plots.
- You can load the media at any horizontal position in the machine; it does not matter whether the media is centered, or aligned on the left or right.
- Fix the two pressure rollers by snapping them into place at the outer edges of the media; this ensures straight feeding of the media and defines the maximum cutting area.
- To make sure that the media is positioned correctly, fix one of the pressure rollers first. You can then adjust the media slightly before fixing the second pressure roller to ensure straight feeding of the media.

4.7. Setting the zero point

The zero point is the point on the loaded media where the plot job will start. You need to set the zero point whenever you switch the machine on, or after loading media for processing.

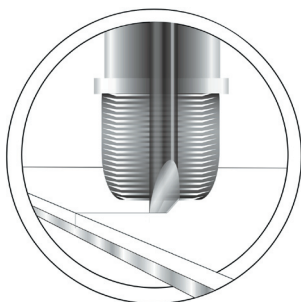
- Switch the cutting plotter on. When the cutting plotter is switched on, the cutting head moves to the right and stops. This sets the zero point to the machine's absolute zero point, however you can adjust the zero point as appropriate.
- To change the zero point setting for your cutting plotter, first press the Local key to set the machine to Local Mode.

- You can now adjust the zero point by pressing the four arrow keys. We recommend setting the zero point to the front right corner of the media.
- Press the Speed key to confirm the new zero point setting.

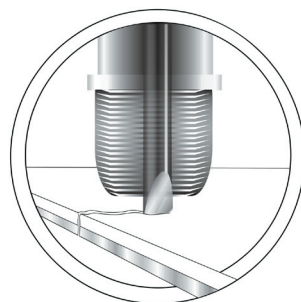
By setting the zero point, you can also target specific media positions, or avoid damaged areas of the media.

4.8. Cutting test

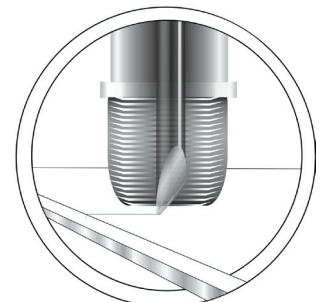
- Press the Self Check key to perform a cutting test.
- The cutting test helps you verify the knife holder setting and cutting force. The cutting test should give you clean and straight cuts in the loaded media; there should be no damage to the backing.
- If the test cuts through the backing, either the cutting force is too high, or the blade or knife holder setting is incorrect. Change these settings and repeat the cutting test.
- You will also need to change the settings, in case of imprecise or too shallow cuts.



Knife setting correct



Knife setting too deep



Knife setting too shallow

5. Device Settings

5.1. Changing the cutting force and speed

If the cutting plotter is plotting, you need to press the Local key to stop the plotter. Pressing the Local key again will restart the plot.

To change the cutting force, turn the small wheel inside the cutting plotter on the right. The force can be set in 8 steps, where the lowest setting corresponds to 70g and the highest to 350g.

Recommended values for several media:

normal self-adhesive media:	approx. 100g
Transflex media:	approx. 100g
Neon foil:	approx. 110g
Flock foil:	approx. 120g
Laminated media:	approx. 180g-250g,
Sandblast foil:	approx. 300g-400g

When setting the cutting force, please note that the correct setting mainly depends on the knife holder, the position of the knife, and the loaded media. These settings are subject to variation.

To set the cutting speed, press the Speed key multiple times. The LEDs illuminate to indicate the set speed. There are 6 speed settings: Speed 1-3 – green LEDs lit, Speed 4-6 – a red LED illuminates additionally.

For faster results, always set the speed to the maximum value: a slower speed only makes sense for fine figures or tough materials.

5.2 Pausing a plot

o pause a plot, press the „Local“ key. Press the „Local“ key again to continue the job seamlessly where you left off.

5.3 Repeating the last plot

To repeat a plot after plotting without needing to resend, simply press the „Copy“ on the cutting plotter. The cutting plotter will now repeat the last plot.

6. After cutting

6.1. Removing the media

- After pressing the Online key in the operating panel, you can use the arrow keys to feed the media forward and backward. To ensure clean cutting of the plotted objects, feed the media forward sufficiently to allow a clean cut at the cutting edge using a suitable knife.
- If you are working with pre-cut media, simply release the pressure rollers and remove the media from the machine.

6.2. Finishing the media

6.2.1. Weeding

Weeding refers to the process of removing the parts of the media you do not require. We recommend using a scalpel or a special weeding tool for this job, to avoid damage to the adhesive surface.

After weeding, you can use a transfer press to transfer flock and flex media to the textiles to be processed; apply application tape to self-adhesive media before transferring.



6.2.2. Applying

Apply application tape to the weeded material and use a roller or flat scraper to press down firmly. To apply adhesive to the transfer foil, remove the backing from the foil to leave the adhesive affixed to the application tape. You can now apply the adhesive to the required surface.



7. Drag knives

Drag knives are extremely sensitive, but also extremely sharp and dangerous precision tools.

- Always keep knives well out the reach of children!
- To avoid danger of injury, always handle knives with caution.
- Handle drag knives with caution, and always replace the protective cap when not in use. If the tip of the knife comes into contact with a hard material such as glass or stone, tiny fissures may occur at the knife tip making the knife useless. Note the following to avoid unnecessary wear and tear of your drag knives and to ensure maximum working life.
- Avoid cutting the backing of loaded media. The deeper you cut into the loaded material, the more wear and tear the drag knives are exposed to.
- Always set the cutting depth of the knives to cut the media precisely and cleanly without cutting too deep. Extending the knives beyond the required cutting depth impacts the service life of the knives without achieving better cutting results.
- Always use the right custom knives for thicker material (e.g. use flock knives for flock media).
- Ragged edges on cutting the loaded media show that the knives are blunt. Always replace blunt knives immediately!

8. Technical Specifications Secabo C30 and C40

	C30	C40
max. media width	385mm	470mm
max. cutting width	300mm	385mm
max. speed	300mm/s	300mm/s
Mechanical resolution	0,0254mm	0,0254mm
Cutting force	70-350g	70-350g
Accuracy	+/- 0,1mm	+/- 0,1mm
Connectors	serial / parallel	serial / parallel
Drive	DC Micro Stepper	DC Micro Stepper
Power consumption	< 120W	< 120W
Ambient temperature	+5°C - +35°C	+5°C - +35°C
Dimensions	55x28x24cm	7x28x24cm
Weight	9kg	12kg

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 V E R T R I E B

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