Cyborg X-300 Desktop Engraver - Table of Contents

Introduction

- General introduction - Safety Instructions
  - Safety before all – General safety instructions
  - List of warning, mandatory and prohibition signs
  - Warning labels
  - Machine label
- Technical Specifications
- Handling and use

Chapter 1 – Getting started

1.1. Features

- 1.1.1. Rotary engraving
- 1.1.2. Diamond scratching

1.2 Component names and functions

- 1.2.1. Front view
- 1.2.2. Rear view
- 1.2.3. Virtual keypad

Chapter 2 – Installation and setup

2.1. Installation environment

2.2. Unpacking

- 2.2.1. Unpacking
- 2.2.2. Checking the contents of the box

2.3. Cable connections

- 2.3.1. Checking the supply voltage
- 2.3.2. Connecting the power cable
- 2.3.3. Connecting the X-300 to your computer or network

2.4. Installing and setting up the software

- 2.4.1. System requirements
- 2.4.2. Installing the Cyborg virtual pendent for a standalone computer
- 2.4.4. Registering and starting the Cyborg pendent software
- 2.4.5. Installing the “Symmetry” engraving software
- 2.4.6. Using other third party software

Chapter 3 – Preparing and executing an engraving job

3.1. Switching the power on and off

- 3.1.1. Switching the power on
- 3.1.2. Switching the power off

3.2. Securing the engraving material onto the engraving table

- 3.2.1. Using the standard included flat engraving table
- 3.2.2. Using the “MultiMat” sheet
- 3.2.3. Using the optional “Auto centre vise”
- 3.2.4. Using the optional “Vacuum table”

3.3. Setting up a tool

- 3.3.1. How to use the cutter calibration stand
- 3.3.2. Installing an engraving tool
- 3.3.3. Installing a scoring tool
- 3.3.4. Installing a diamond scratch tool
- 3.3.5. How to remove a tool from the spindle

3.4. Setting the engraving depth

- 3.4.1. Calibrating and using the depth regulator nose
  - 3.4.1.1. Calibrating the depth regulator nose and the calibration stand
  - 3.4.1.2. Using the depth regulator nose
    - in combination with Auto Z control
    - without Auto Z control
- 3.4.2. Use of the spindle pressure spring
  - 3.4.3.1. Locking the pressure spring for engraving without depth regulator nose
  - 3.4.3.2. Auto plate surfacing with unlocked spring and engraving with locked spring
  - 3.4.3.3. Surface mapping with unlocked spring and engraving uneven surfaces with locked spring

3.5. How to cut materials

- 3.5.1. Materials rotation speed and feed
- 3.5.2. Two-way engraving metals
- 3.5.3. Adjusting feeds and speeds
- 3.5.4. Pause button
- 3.5.5. Cancelling the engraving job
- 3.5.6. Restarting the engraving job

3.6. Controlling the X-300 using the ‘virtual keypad’

- 3.6.1. Keypad overview
  - Introduction - General overview
  - Function keys
  - Settings screen
- 3.6.2. Setting and saving origin points
- 3.6.3. Choosing Z modes

Chapter 4 – Maintenance and cleaning

4.1. Cleaning – a must to prolong your machine’s lifetime

4.2. Periodical maintenance

- 4.2.1. Daily
- 4.2.2. Weekly
- 4.2.3. Monthly
- 4.2.4. Annual

4.3. Basic maintenance

- 4.3.1. Replacing the spindle belt
- 4.3.2. Tensioning the timing belts
- 4.3.3. Removing the machine covers

4.4. Overview of maintenance activities

Chapter 5 – Troubleshooting

5.1. The machine does not initialize

5.2. The spindle does not rotate

5.3. The engraving results are poor

5.4. No connection between machine and computer

5.5. Symmetry has not been set up with the right driver

Chapter 6 – Electrical rating and identification plate

nog blanco in het Word-document - verplaatst naar Introduction (specs) en 1.2.4. (identification plate)

(6.1. Power consumption)

(6.2. Identification plate and serial number)

Chapter 7 – Options

- 7.1. Vacuum converter
- 7.2. Self centering vise
- 7.3. Jigs for the clamping vise
- 7.4. Output signal for switching on and off an external device at the beginning and the end of a job
- 7.5. Output signal for switching on and off an external device at every spindle up/down move

---

Appendices

A. Thesaurus: a glossary with specific terms about all things computerized engraving as being used in this manual.

B. G-code and M-code protocol for the Cyborg controller.

Chapter 4 – Maintenance and cleaning

4.1. Cleaning – a must to prolong your machine’s lifetime

4.2. Periodical maintenance

- 4.2.1. Daily
- 4.2.2. Weekly
- 4.2.3. Monthly
- 4.2.4. Annual

4.3. Basic maintenance

- 4.3.1. Replacing the spindle belt
- 4.3.2. Tensioning the timing belts
- 4.3.3. Removing the machine covers

4.4. Overview of maintenance activities

Chapter 5 – Troubleshooting

5.1. The machine does not initialize

5.2. The spindle does not rotate

5.3. The engraving results are poor

5.4. No connection between machine and computer

5.5. Symmetry has not been set up with the right driver

Chapter 6 – Electrical rating and identification plate

nog blanco in het Word-document - verplaatst naar Introduction (specs) en 1.2.4. (identification plate)

(6.1. Power consumption)

(6.2. Identification plate and serial number)

Chapter 7 – Options

- 7.1. Vacuum converter
- 7.2. Self centering vise
- 7.3. Jigs for the clamping vise
- 7.4. Output signal for switching on and off an external device at the beginning and the end of a job
- 7.5. Output signal for switching on and off an external device at every spindle up/down move

---

Appendices

A. Thesaurus: a glossary with specific terms about all things computerized engraving as

being used in this manual.

B. G-code and M-code protocol for the Cyborg controller.

From:
https://manualscyborg-engraverscom.webhosting.be/ - **cyborg-engravers**

Permanent link:
https://manualscyborg-engraverscom.webhosting.be/doku.php?id=en:x300:table_of_contents&rev=1663755148

Last update: **2022/09/21 12:12**