

Operating instructions-Override Shield

CNC Motion Controller: AC-CNC2017-2S (REV03/04)

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All our products are tested and subject to the controls of our

Quality assurance. We therefore guarantee that our products are free from material and Manufacturing errors.

Override Shield CNC Motion Controller AC-CNC2017-2S (REV03/04)

With the Override Shield you have the possibility to easily retrofit the functions "feed adjustment" and "Speed adjustment". The function "Speed adjustment" is only to be used together with frequency inverter controlled RF spindle.

These features are provided as of ESTLCAM version 11.

1.1 Installation of the Override Shields

Working material: Screwdriver

1. Make your system powerless
2. Remove the Nano 328P 5v from the CNC Motion Controller card.
3. Now plug the Nano 328P 5v onto the Override Shield.
4. Insert the Override Shield on the CNC Motion Controller as shown in Figure 1.1.1. Pay attention to the correct seat so that the pin and female are congruent.

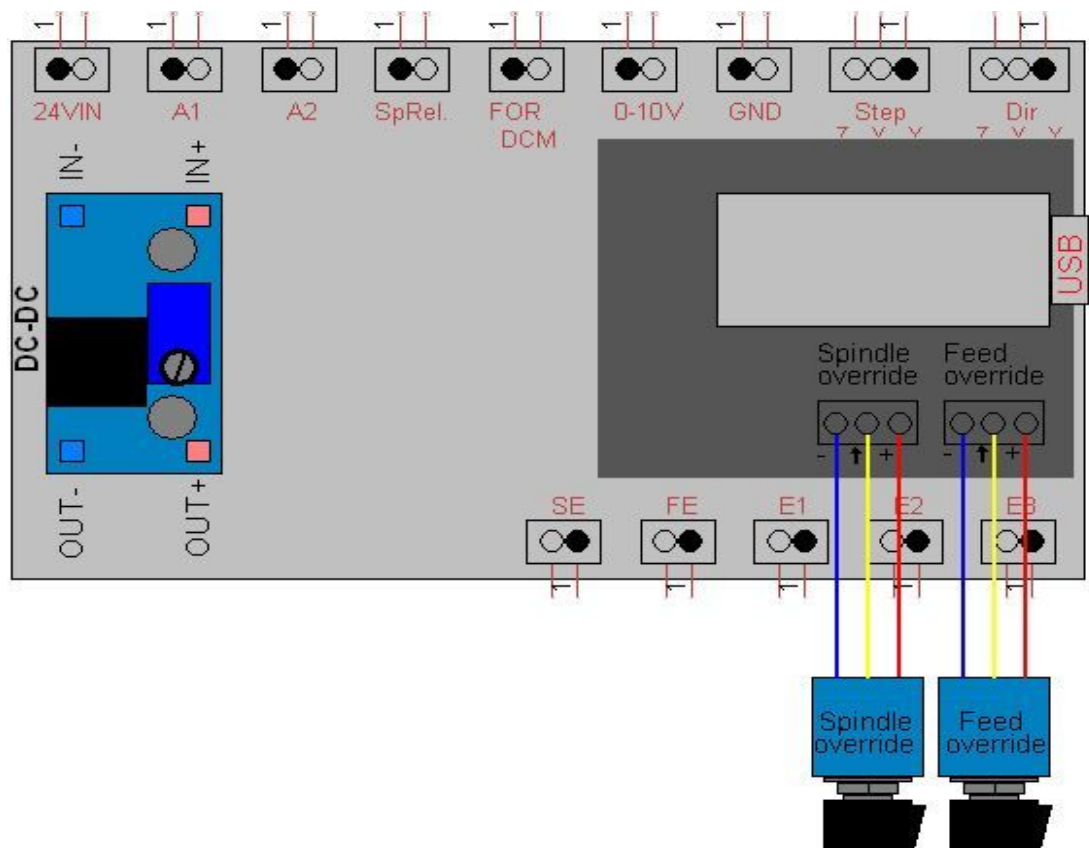
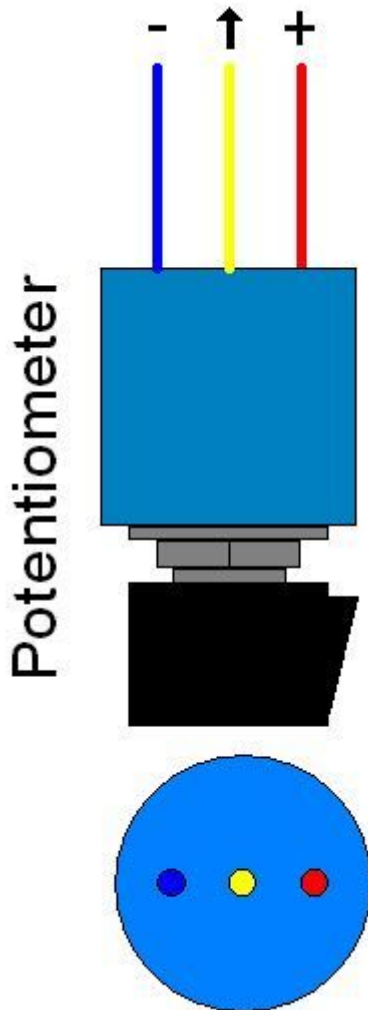


Figure 1.1.1

1.2 Attaching the Potentiometers

Conventional rotary potentiometers can be used with a resistor of e.g. 10k ohm.

The following information about the technical data is not mandatory, but can be used as a guide.



1.2.1 Selection of Rotary potentiometers

- Type: Rotary potentiometer
- Version: Mono
- Resistor: 10k Ohm
- Construction: Linear
- Angle of rotation: 280 ° or greater
- Nominal voltage: from 5VDC
- Nominal voltage: from 5VAC

1.2.2 Wiring

The cabling is pleasantly simple.

- Connect the middle Pohl of your potentiometer to the middle connector of the corresponding screw terminal (arrow up symbol)
- Then one of the outer pohl of the potentiometer with the screw terminal marked with the (-) symbol.
- And the remaining Pohl with the screw terminal marked with "+".

Figure 1.2.1.1

1.2.3 Set the direction of rotation of the potentiometers

If you notice later in the course that the direction of rotation of the potentiometer is not correct, simply replace the Pohl with "+" and "-" to change the direction of rotation of the potentiometer.

2.0 Setting the ESTLCAM Software

So that you get the feed. And speed adjustment, you still have to make settings in the ESTLCAM software.

- > (menu) settings
- > (menu) CNC control
- > (tab) analog inputs

Put hooks as shown in Figure 2.0.1 at the options you want.

Switch to the (tab) Basic setting and program the Nano 328P 5v by clicking on (Button) control programming.

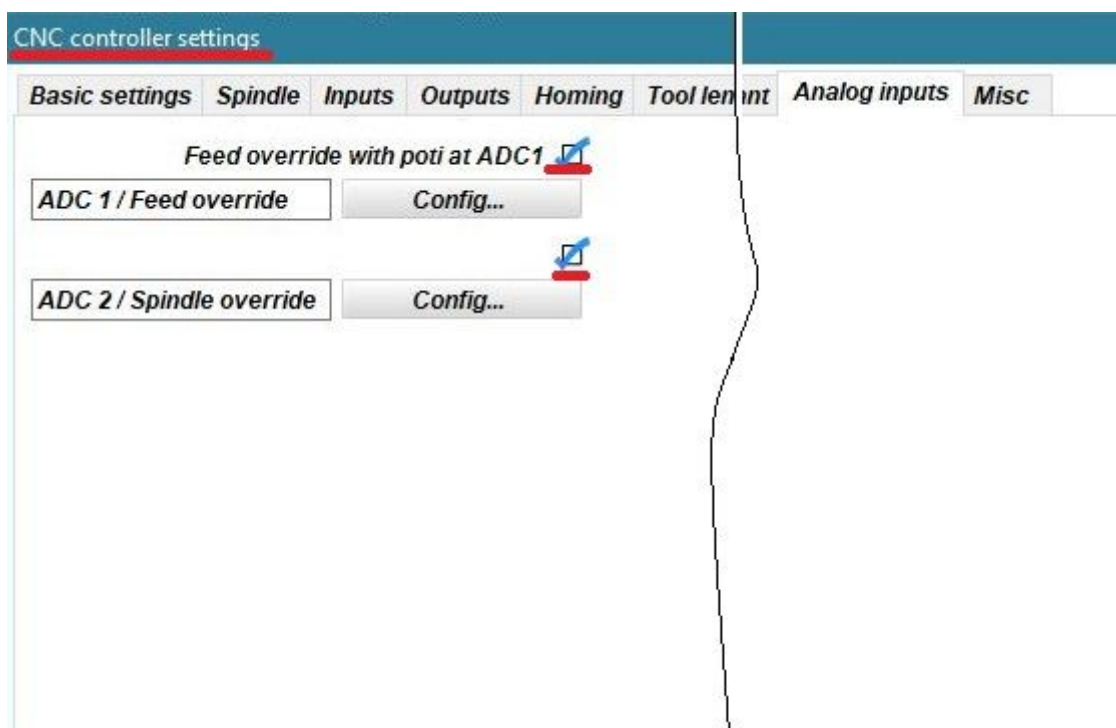


Figure 2.0.1

2.1 Testing of feed and speed adjustment

After you have programmed your Nano 328P 5V the CNC control will open automatically.

Turn the pots and observe the bars under F: (Feed) and S: Speed.

If you find that the direction of rotation of the potentiometers is not correct, proceed as described in point 1.2.3 Set the direction of rotation of the potentiometer.

2.2 Configuration of the analogue inputs of the feed and speed adjustment

In der ESTLCAM Software begeben Sie sich nach :

- > (Menu) *Setup*
- > (Menu) *CNC Controller*
- > (Tab) *Analog inputs*
- > (Button) *Config...*

Proceed with the mouse via a text field and this calibration instruction appears :

Calibration:

- The input can be calibrated by defining 2 calibration points:
Example Potentiometer:
 - Turn the poti to its "0%" position...
 - Enter the actually measured value displayed in the titlebar in calibration voltage 1...
 - And "0" in calibration value 1...
 - Now turn the poti to its "100%" position...
 - Enter the actually measured value displayed in the titlebar in calibration voltage 2...
 - And "100" in calibration value 2...
 - Done... the displayed values will now match the ones printed on the potentiometer...

Follow these instructions.

3.0 Warranty and Warranty

The legal warranty applies.

Warranty provision

We grant 6 months warranty.

The guarantee includes the free rectification of defects which are demonstrably attributable to the use of defective material or manufacturing faults.

We do not assume any warranty or liability for damages or consequential damages in connection with this product.

We reserve the right to repair, rectify, spare part delivery or refund the purchase price.

4.0 Disposal



If the appliance is to be disposed of, it must not be thrown into the household waste. These must then be disposed of at collection points, where televisions, computers etc are delivered (please inquire at your local office or in the Municipal administration According to these electronic waste collection points).