INFORMATION IS SPECIFIC TO OUR PRODUCTS AND CAN CAUSE DAMAGE IF USED WITH NONE COMPATIBLE PRODUCTS SO PLEASE CHECK WITH YOUR SUPPLIER FOR COMPATIBILITY

These drawings are supplied as a guide no guarantees are implied or given. Caution when wiring and check with a qualified professional if unsure. It is your responsibility to check you have complied with your local legislation as to safety requirements for your country as machines can cause injury to users.

By using these diagrams you agree to the above safety warning.

Documentation will be updated amended at the discretion of CNC4YOU Ltd.
CONDITIONS OF USE

Certain laws and regulations apply to your use of CNC machines and automated equipment and it is essential you comply with your local and any international regulations for construction and use of automated equipment.

These diagrams are a guide to wiring your machine and do not constitute advice or direction to complying with your legal obligations and any health and safety requirements you must comply with. It is crucial you understand the dangers and safety implications when automating your machine or system and special care must be taken when automating your spindle or other cutting tools or equipment and we are showing a simple setup which will be amended without notice to show the complexity of automating cutting tools, but you are again responsible for meeting and understanding your specific end customer use and or meeting all necessary safety regulations and these can and do change regularly so consult your local regulations and make sure you observe all safety regulations.

You are required and agree to maintain compliance with all applicable laws and regulations. You understand and agree that you are solely liable for compliance with such laws and regulations, and under no circumstances shall CNC4YOU Ltd. be responsible or held liable for such compliance. You understand that breach of such laws and regulations may result in both criminal and civil sanctions against you. In accordance with these terms and conditions for CNC4YOU Ltd. you agree to indemnify CNC4YOU Ltd. for any violation of such laws and regulations. If in doubt seek professional advice if you are unsure of your legal obligations.

CNC4YOU Ltd assumes our equipment will be integrated into Industrial control equipment and as above integrated safely to avoid injury to yourselves or third parties. This equipment has not been designed for implicit use for life support applications or intrinsically safe designs where life threatening or critically safe use is required. Our products have not been specifically designed as fail-safe equipment. It is advisable to give adequate training and safety procedures to operators using automatic equipment.

Before using any drawings or wiring diagrams please check on our website for latest version, all wiring diagrams should have a version number if not please contact us so we can amend and issue version information.
Earth wire colour Green and yellow. Earth wire bolted to mounting tab.

EMI / RFI filter is used in this application to help prevent noise generated by the VFD entering back into mains supply and subsequent noise causing problems in your system which can result in spurious steps or triggering limit switch or E-Stop signals.

SPINDLE

Screen connected to earth at VFD and Spindle

4 core 0.75mm screened cable
Product Code: 4_Core_0.75mm_12A

Earth wire and screen Clamped to Spindle connector
Wiring Diagram for Spindle Motor 2

No Volt Relay NVR
Product Code: NVR_15A

EMI / RFI 10A Filter
Product Code: Chassis_Mount_EMI_10A
Product Code: Panel_Mount_IEC 10A

Screen connected to earth at VFD and Spindle

4 core 0.75mm screened cable
Product Code: 4_Core_0.75mm_12Amp

Earth wire and screen
Clamped to Spindle connector

SPINDLE

VFD Settings
PD001 set to 1
PD002 set to 1

VFD must be powered by NVR
so preventing Spindle turning ON
after power has been restored

On board relay must be used
with Charge Pump ON

Spindle automation is only suitable with our
CP0-10V Breakout board. Please do not
use our other breakout boards.
Please read our conditions of use outlined
at beginning of this document.

Product Code: 4_Core_0.5mm_7Amp
4 core 0.5mm screened cable can be
used for wiring these signal wires
Wiring Diagram for Spindle Motor 3

Relay board should be powered from separate Power Supply this gives isolation from relay and VFD and using on board optoisolators as a protected interface. Using this method also protects VFD internal relay and electronics damage if external devices have problems as relay board can be easily replaced.

No Volt Relay NVR
Product Code: NVR_15A

EMI / RFI 10A Filter
Product Code: Chassis_Mount_EMI_10A
Product Code: Panel_Mount_IEC_10A

Screen connected to earth at VFD and Spindle

4 core 0.75mm screened cable
Product Code: 4_Core_0.75mm_12Amp

Earth wire and screen Clamped to Spindle connector

Earth wire colour Green and yellow.

Product Code: 5V_2A_PSU

Brown
L
( Live )
( FG )

Blue
N (Neutral)

Green/Yellow

VFD Settings
PD001 set to 1
PD002 set to 1
PD052 set to 1

Normally open Switches used for Water Pumps and Cooling Systems as pump will turn ON and OFF with Spindle Motor. Second relay can be used for automatically turning ON and OFF air for chip clearance or flood cooling on Mills etc.