



Drilling Cycle Controller



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THIS MANUAL CONTAINS INFORMATION FOR INSTALLING AND OPERATING THE FOLLOWING PRODUCT:

- **DRILLING CONTROLLER**

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TINY CONTROLS PRIVATE LIMITED
B-17/A, NISHAT PARK, KAKROLA MOR, NEW DELHI, INDIA – 110078
WEB: <https://www.tinycontrols.com>
PHONE: +91-11-2533-1567, +91-991-119-3210

GENERAL DESCRIPTION

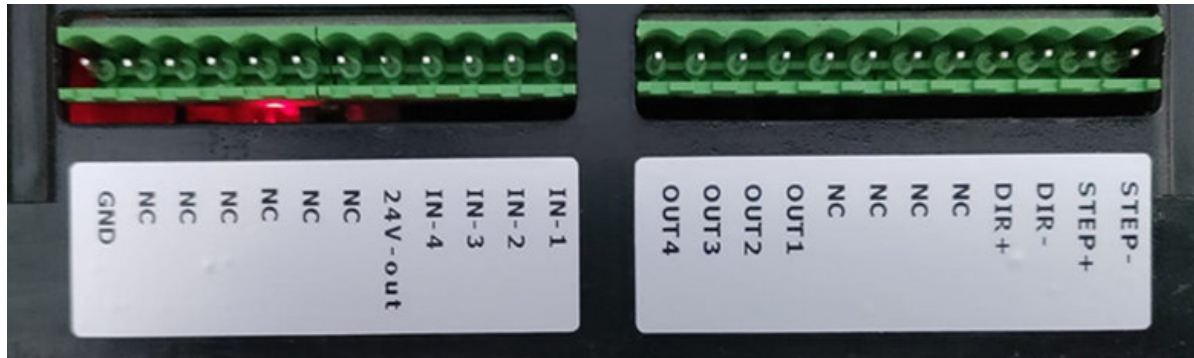
The Tiny Controls Drill controller is a new concept for drilling operations. It is an economical solution designed to automate the repetitive drilling tasks. Main Screen variables control the drilling parameters and Setup Menu controls the Machine/ system parameters.

It's a peck cycle controller with easy to edit parameters like Total Depth, No of cycles to complete the drill and Feed speed. Rapid speed is set in the Settings Menu.

SPECIFICATION/FEATURES:

- **Supply Voltage:** 90V to 250V AC 50Hz/60Hz
- **Max Pulse Rate:** 40 KHz
- **Overall Size:** 165mm x 102mm x 76 mm
- **Mounting:** Panel mount: 155mm x 92mm
- **Control:** Jogging and Drill Cycle
- **Inputs:** 4 NPN inputs
- **Outputs:** 4 differential outputs for Stepper/Servo Pulse/Direction. AND 3 Open collector Relay driver outputs
- **Display:** 20x4 alphanumeric LCD
- **Max Operating Temperature:** 55 deg C

TERMINALS



Pin Descriptions:

STEP-, STEP+ : Step or Pulse Output to Stepper/Servo Driver

DIR-, DIR+ : Direction output to Stepper/Servo Driver

OUT1 to OUT3 : Relay Driver (connect relay between 24v-out and Outx)

OUT4 : Reserved for future use, do not use

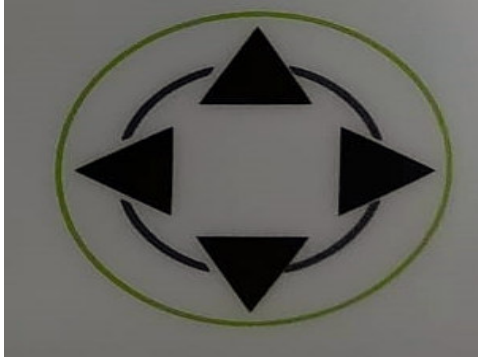
IN-1 : NPN input for "Home Sensor/Limit Switch"

IN-2 : NPN input for "Start/Stop"

IN-3 : NPN input for "Safe Height"

IN-4 : NPN input for "Emergency"

OPERATING THE CONTROLLER



- Use Up/Down keys for jogging
- Use Left/Right keys to set Jogging speed
- Any time after jogging, press "0" key to set Zero (Drilling Start or Surface) position
- If Sensor/Limit switch is mounted and attached to the controller, "1" key can be used for Homing
- "Cancel" key can be used anytime to cancel homing
- Other parameters can be altered in the Settings Menu
- Press "Ok" to enter Settings Menu
- "6" key initiate the Drilling, switch attached to input-2 can also be used to Start/Stop Drilling