



User Manual

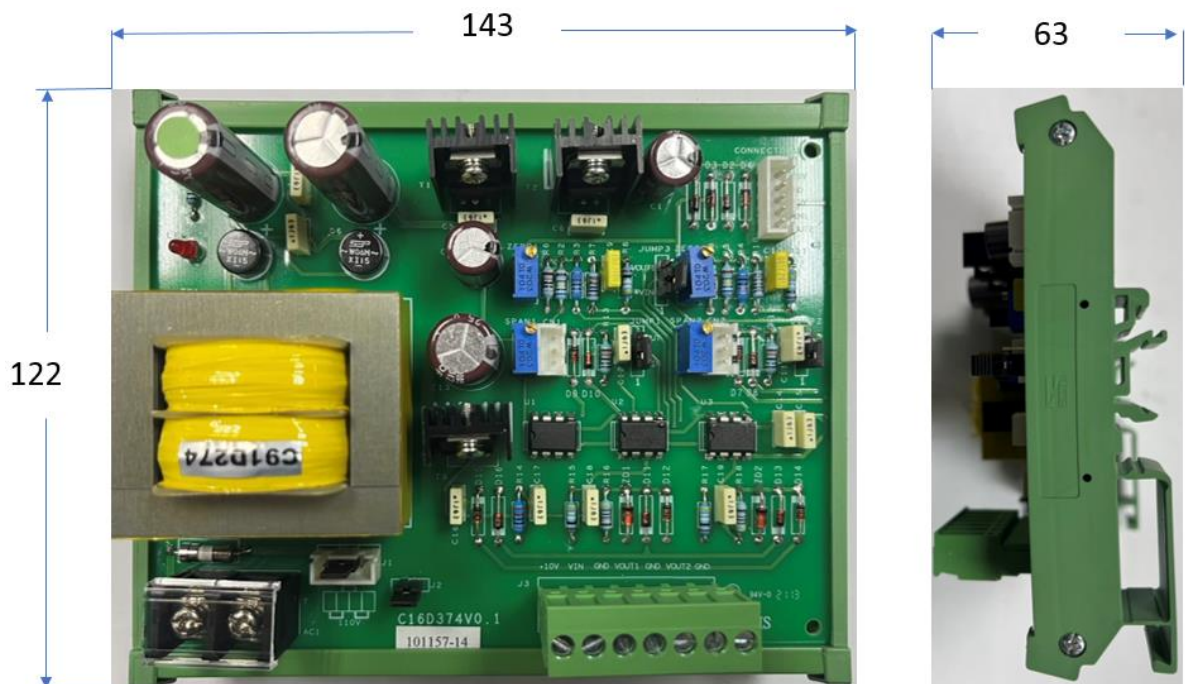
RATIO CONTROLLER

Ratio Controller Manual

Mainboard Pinout Description

- **Terminal Block R, T (AC Power Input Side)**
Caution: Incorrect wiring may cause product damage.
Input Voltage:
 - **AC 110V $\pm 10\%$, 50/60Hz:** Short pins 1 and 2, and pins 3 and 4 of J1.
 - **AC 220V $\pm 10\%$, 50/60Hz:** Short pins 2 and 3 of J1.
Factory Setting: 220V (J2 contains a spare jumper for 110V).
Important: Ensure the correct jumper configuration before applying power.
- **Terminal Block J3 (VR Input Connections)**
 - **+10V Terminal:** Provides +10VDC power supply.
 - **VIN Terminal:** VR signal input.
 - **GND Terminal:** VR 0V reference.
- **First D/A Output (J3 D/A Terminals VOUT1, GND)**
 - **VOUT1 Terminal:** Outputs +0V to +10VDC.
 - **GND Terminal:** 0V reference.
- **Second D/A Output (J3 D/A Terminals VOUT2, GND)**
 - **VOUT2 Terminal:** Outputs +0V to +10VDC.
 - **GND Terminal:** 0V reference.
Note: These two D/A outputs are independent, with separate **Zero** and **SPAN** potentiometers for fine-tuning each D/A channel. The potentiometers are blue precision resistors located at the center of the PCB.
Caution: Do not common-ground the GND terminals unless necessary.
- **JUMP3 Terminal: Command Signal Selection for Second D/A Output**
 - Short pins 1 and 2 (VO1): The second D/A will parallel the external (VIN) signal.

- Short pins 2 and 3 (VIN1): The second D/A will be cascaded with the first D/A signal.
- **JUMP1 Terminal: SPAN Potentiometer Selection for First D/A Output**
 - Short pins 1 and 2 (IN): Select the **SPAN1** adjustment using the blue VR on the first D/A.
 - Short pins 2 and 3 (OUT): Select external VR adjustment via the CN1 connector for the first D/A.
- **JUMP2 Terminal: SPAN Potentiometer Selection for Second D/A Output**
 - Short pins 1 and 2 (IN): Select the **SPAN2** adjustment using the blue VR on the second D/A.
 - Short pins 2 and 3 (OUT): Select external VR adjustment via the CN2 connector for the second D/A.
- **Dimensional Diagram**



The enclosure specification: **Dinkle KMLR-0140**

Unit: mm

Get ISO 9001 international quality certification



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