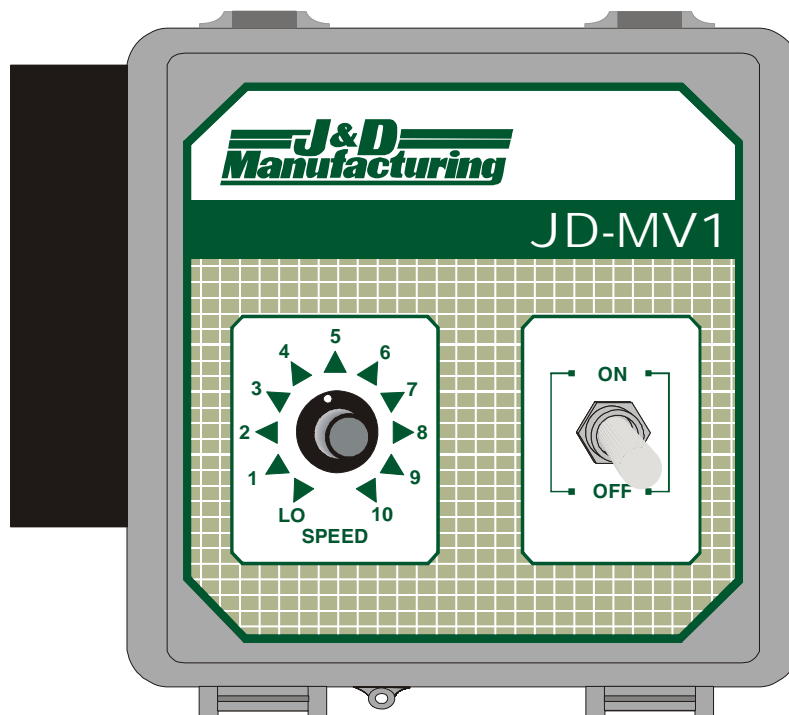


# MANUAL

## JD-MV1

Manual Variable  
Speed Control



**Installation / User's Guide**

This guide will inform the electrician on proper wiring and installation procedures and, will also inform the user on how to use the JD-MV1 controller.

The manufacturer recommends that the following installation instructions be followed to as closely as possible, and that all work be performed by a certified electrician. Failure to do so may void the warranty.

## **Description**

The JD-MV1 controller is designed to control manually a variable speed output. An **ON/OFF Switch** is used to activate or not the output and a **Speed Selector** is used to adjust the speed of the variable output. The controller operates on 115/230V and 50/60Hz.

The JD-MV1 comes in a PVC non-corrosive enclosure that is protected from dust and humidity. The JD-MV1 is covered by a complete two-year warranty.

## **Unpacking**

Unpack the JD-MV1 module and inspect contents for damage. Should the contents appear to be damaged, contact your local distributor to return the material.

The package should contain the following standard items:

1 JD-MV1

1 Installation / User's guide

## **Mounting hardware required**

This is the list of the mounting hardware needed, which is not included with the product:

Screws (to mount the module on the wall)

Screwdriver

Soldering iron kit or approved sealed connectors

## General installation guidelines

### JD-MV1

- It is recommended to install the unit in a hallway to limit the JD-MV1 exposure to noxious gases.
- In order to avoid condensation problems inside the JD-MV1, it is recommended to install the module on an inside wall. If it is not possible, use spacers to have an air gap between the wall and the controller.
- It is required to install the JD-MV1 right side up with the cable entry holes facing down.
- The enclosure is watertight, but do not spray water or submerge the JD-MV1 in water. Cover it carefully with plastic when cleaning the room.
- The JD-MV1 should be installed in easy-access location but away from damaging elements (heat, cold, water, direct sunlight...).
- Do not drill the face, the side, the top or the underside of the control.
- Do not install the JD-MV1 near high-voltage equipment, power supply or transformer.

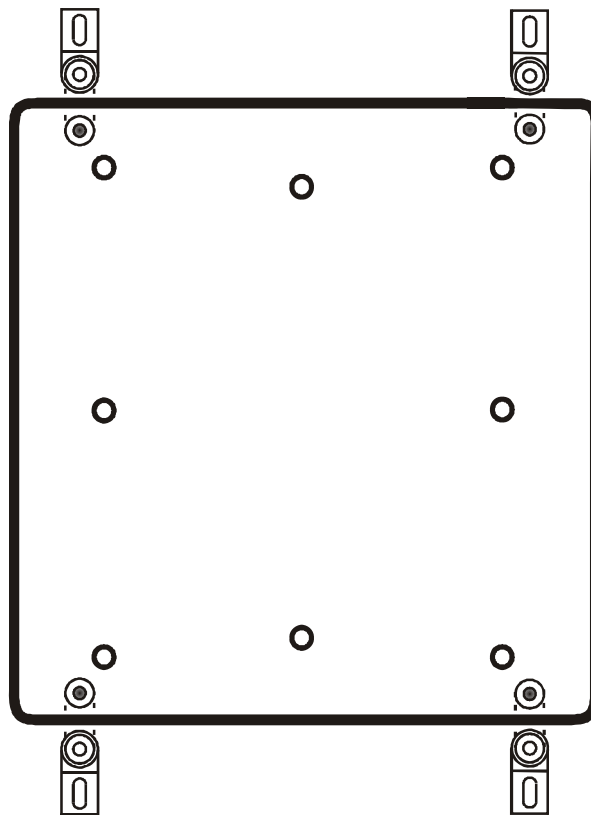
### Electrical cables

- All electrical cables must be installed according to local wiring codes.
- All cable shields must be connected to the shield terminal on the cord to which the cable is connected. The shield is needed to protect the JD-MV1 against any electromagnetic interference generated by lightning or nearby operating machinery.
- Never use the shield as a conductor.
- Connect only one end of the shield to the JD-MV1.
- Use separate conduits for the low voltage cables and the high voltage cables. There must be at least 1 foot (30 cm) between low-voltage and high-voltage conduits.
- If a low voltage cable has to cross over a high voltage cable, make this crossing at 90°.
- All cable connections must be soldered or done with approved sealed connectors.
- It is prohibited to use overhead cables outside the building.

## Mounting

- The enclosure must be mounted in a location that will allow the cover to be completely opened.
- Fasten the four brackets to the four mounting holes on the back of the enclosure using the four screws provided with the brackets.
- Then mount the enclosure on the wall by inserting screws through the brackets' adjustment slots, into the wall. Make sure to position the enclosure so that all wires extend out of the bottom section of the enclosure.
- The bracket slots serve to adjust the position of the controller.
- Once you have adjusted the controller position, tighten the four mounting screws. (see figure 1).

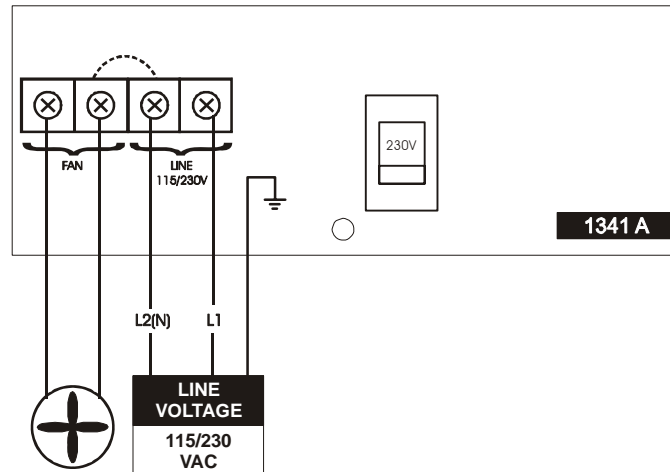
FIGURE NO. 1 Mounting Position and Devices



## **Wiring Procedure**

1. Open the JD-MV1 controller enclosure.
2. Verify the technical specifications to know which wire to use.
3. Connect the equipment to the 2 black terminal block identified as FAN as shown in figure 2.
4. Connect the power source to the 2 black terminal block identified as LINE as shown in figure 2.
5. Make sure that the voltage selector switch is set to the correct voltage before powering up the JD-MV1 (refer to figure 3 for the location of the switch).
6. Power up the JD-MV1 controller. Verify that the controller operates correctly.
7. Close the JD-MV1 enclosure. Don't forget to put a security screw or a padlock.

Figure 2: Wiring Diagram

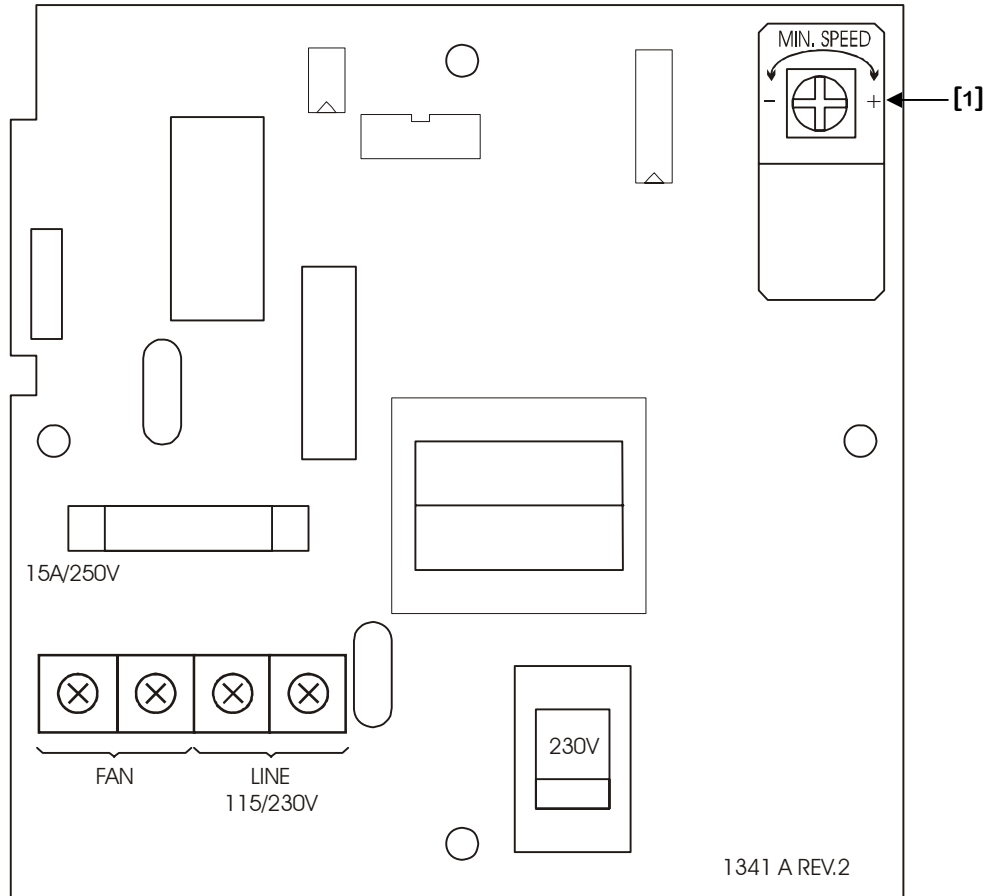
**WARNING!**

- ⚡ To avoid electric shock, disconnect power source prior to installation or troubleshooting.
- ⚡ Make sure that the voltage selector switch is set to the correct voltage before powering up the controller.

## Using the JD-MV1

With the JD-MV1 you can manually control a variable output. Refer to figures 3 and 4 for the location of the different switches and selectors of the controller.

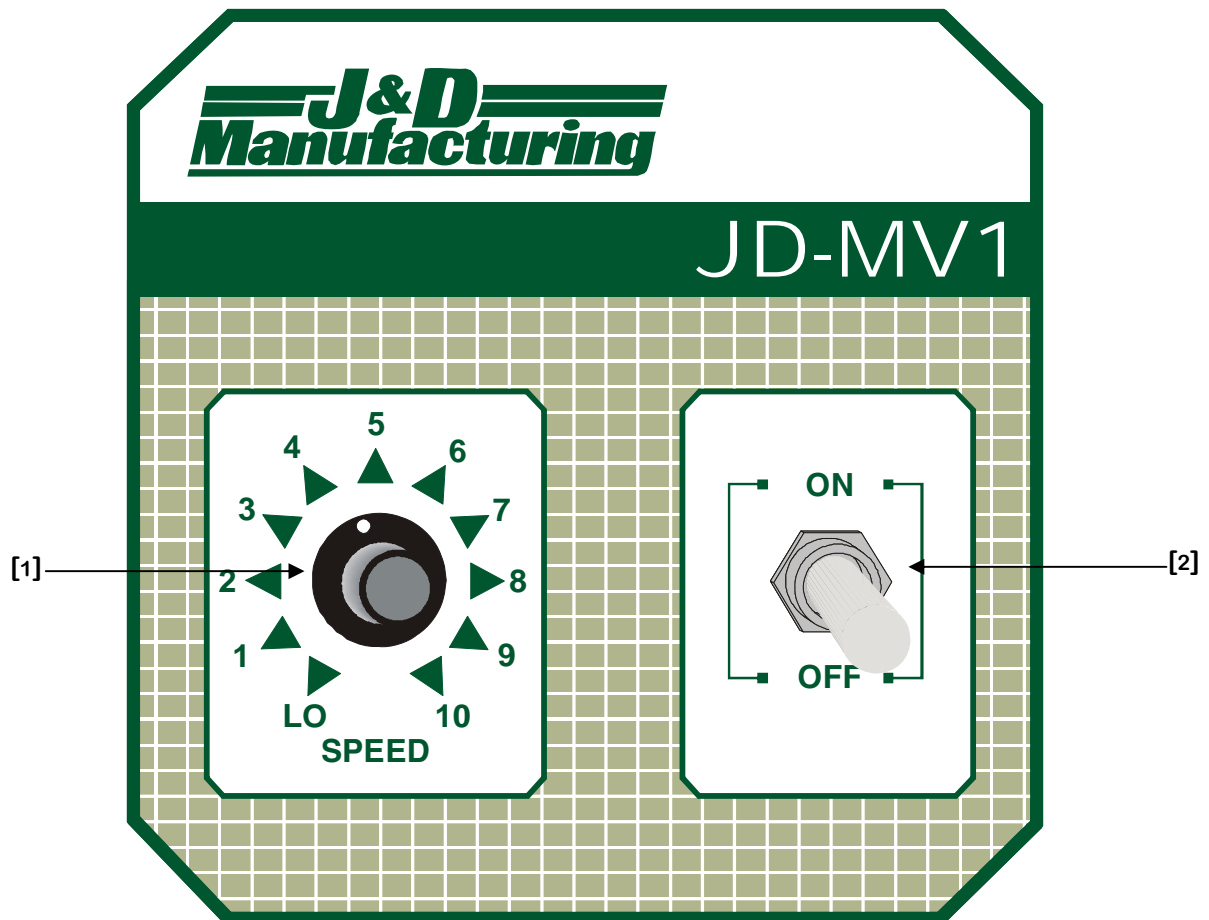
Figure 3: Electronic Board and component location



### 1. Minimum Speed Potentiometer

This potentiometer is used to adjust the **Minimum Speed** of the fan. That **Minimum Speed** will be the speed of the output when the **Speed Selector** is set to LO.

Figure 4: JD-MV1 Faceplate

**1. Speed Selector**

This selector is used to set the speed at which the output will run.

**2. ON/OFF Switch**

This switch is used to activate or not the variable output.

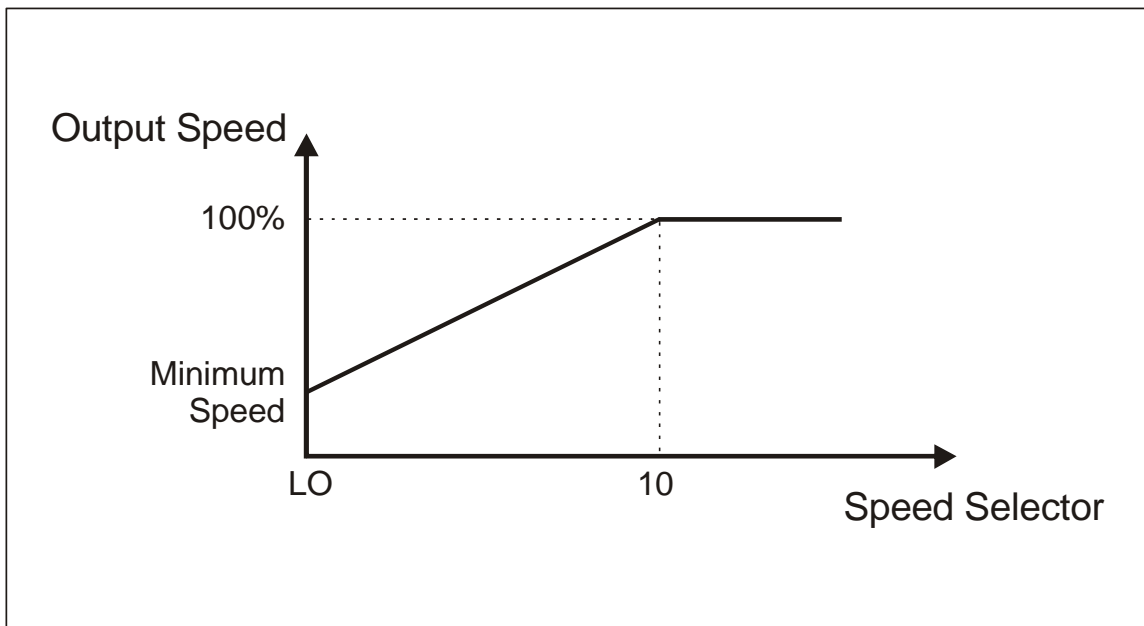


The JD-MV1 controller will make the fan modulate according to the **Speed Selector** and the **ON/OFF Switch** on the faceplate (refer to figure 4). It is also possible to adjust the **Minimum Speed** with the potentiometer located inside the controller box on the electronic board (refer to figure 3). That **Minimum Speed** will be the speed of the output when the **Speed Selector** is set to LO.

Here is a description of the JD-MV1 operation.

- To turn on or off the variable output, use the **ON/OFF Switch** located on the faceplate (refer to figure 4)
- With the **ON/OFF Switch** turned on, use the **Speed Selector** to increase or decrease the variable output speed. When the **Speed Selector** is set to LO, the **Minimum Speed** set by the potentiometer inside the controller will be used (refer to figure 3).

Figure 5: Logic Diagrams



## Specifications

DESCRIPTION	VALUE
Storage temperature	-4°F to 131°F (-20°C to 55°C)
Operating temperature	32°F to 113°F (0°C to 45°C)
Humidity	90% maximum Non-condensing
Weight	1,4 lb (0,6 kg)
Size	5 15/16" x 5 15/16" x 3 9/16" (15 cm x 15 cm x 10 cm)
Protection index	IP 66
Warranty	2 years
<b>POWER SUPPLY</b>	
Operational voltage range (SW1 @ 115V)	92 to 125VAC
Operational voltage range (SW1 @ 230V)	184 to 250VAC
Operational frequency range	45 to 65 Hz
<b>VARIABLE OUTPUT</b>	
Maximum Allowable Current (Fuse value)	15A, 250VAC
Recommended maximum current for fans	12FLA
Minimum load	300mA @ 230VAC

## Limited Warranty

The manufactured equipment and supplied components have gone through rigorous inspection to assure optimal quality of product and reliability. Individual controls are factory tested under load, however the possibility of equipment failure and/or malfunction may still exist.

For service, contact your local retailer or supplier. The warranty period shall be for two years from manufacturing date. Proof of purchase is required for warranty validation.

In all cases, the warranty shall apply only to defects in workmanship and specifically exclude any damage caused by over-voltage, short circuit, misuse, acts of vandalism, lightning, fortuitous events, acts of God, flood, fire, hail or any other natural disaster. Any unauthorized work, modification or repair on this product automatically voids the warranty and disclaims the manufacturer from all responsibility.

The manufacturer assumes only those obligations set forth herein, excluding all other warranties or obligations. This warranty stipulates that in all cases the manufacturer shall be liable only for the supply of replacement parts or goods and shall not be liable for any personal injury, damages, loss of profits, interrupted operations, fines for infringement of the law or damages to the production of the PURCHASER and the PURCHASER shall take up the defence and hold the manufacturer faultless regarding any legal or extra legal proceedings, notice, or claim by the customer or by a third party, and regarding any legal and extra legal expenses and fees brought forward on by such damages.

JD-MV1 VER : 1.2  
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