

# **Universal Valve Actuators**

## Models EUH, EUD, and EUT

### Quick Start Guide

The VICI universal actuator models are designed to work with both two position and multiposition valves, with any number of ports. This is accomplished through simple programming via the serial interface or the manual remote. The actuator consists of a single unit housing a stepper motor/gearbox assembly and the control components, a universal AC input (100-240 VAC, 50-60 Hz) to 24 VDC power supply, a manual remote, and the interconnecting cables.

### Mounting

The actuator should be oriented so that any potential leakage of liquid from the valve or fittings flows away from rather than into the actuator.

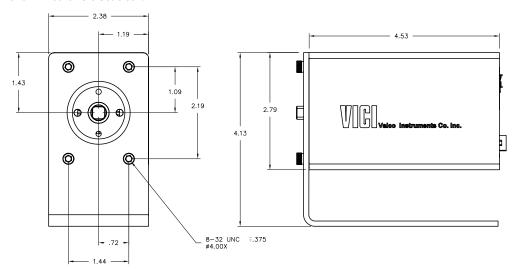


Figure 1: Universal actuator mounting dimensions

#### **Power Connector Function**

Input power (24-28 VDC, 2.5 amps recommended) is supplied through a coaxial connector: the inner pin is + voltage and the outer pin is ground. The average DC current requirement is 2.1 amps. Standby current draw is 60 milliamps. The actuator should not share a power supply with other noise-sensitive electronics, as the high current draw can cause problems.

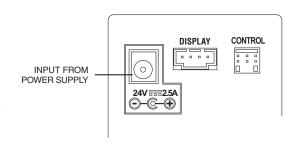


Figure 2: Power connection on rear panel

### **Basic Operation of the Manual Remote**

The manual remote provides simple valve positioning capabilities, but in the configuration mode, it can be used to perform extensive actuator setup functions. For information on using the manual remote to configure the actuator, refer to "Using the Manual Remote to Configure the Actuator" on the next page.

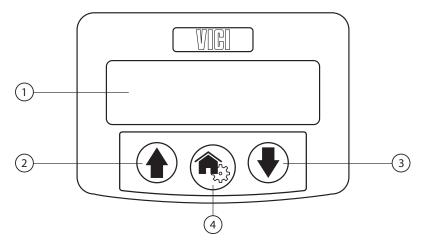


Figure 3: Universal actuator manual remote

#### 1. Display

#### 2. **UP** arrow button

In *two position* configuration, pressing the UP arrow button moves the actuator to Position B. If it is already in Position B, nothing happens.

In *multiposition* configuration, pressing the UP arrow button advances the actuator one position; i.e., from 1 to 2, 4 to 5, etc.

#### 3. **DOWN** arrow button

In *two position* configuration, pressing the DOWN arrow button moves the actuator to Position A. If it is already in Position A, nothing happens.

In *multiposition* configuration, pressing the DOWN arrow button reverses the actuator one position; i.e., from 2 to 1, 5 to 4, etc.

#### 4. HOME/SETUP button

In two position configuration, pressing the HOME button moves the actuator to Position A. If it is already in Position A, nothing happens.

In *multiposition* configuration, pressing the HOME button sends the actuator to Postion 1.

In either configuration, pressing and holding the HOME button for 5 seconds sends the manual remote into the configuration mode. Refer to "Using the Manual Remote to Configure the Actuator" on the next page.

### **Using the Manual Remote to Configure the Actuator**

The manual remote can be used for simple valve positioning functions, but in the configuration mode, it can perform extensive actuator setup functions.

### **Accessing the Configuration Mode**

To access the configuration mode, press and hold the HOME/SETUP button for 5 seconds.

#### **Button Functions**

- When a screen appears, a line will be highlighted. Use the UP and DOWN arrow keys to highlight a
  different line.
- When the desired line is highlighted, press the HOME/SETUP button to enter that value.
- For parameters such as number of ports or positions, use the arrow keys to toggle up and down to the desired value, which is then entered by pressing the HOME/SETUP button.
- Only two menus—the Interface Setup and Baudrate—have more than three options. Use the arrow keys to scroll down to additional screens to select the desired value or parameter.
- The UP arrow key also functions as a back button.

A complete menu tree appears on the next page.

### **Examples**

To configure the actuator for a 10 position multiposition valve:

- 1. On the main menu, use the arrow buttons to highlight Valve Setup. Press the HOME/SETUP button.
- 2. On the Valve Menu, use the DOWN arrow button to highlight Multiposition. Press the HOME/SETUP button.
- 3. On the Multiposition Menu, press the HOME/SETUP button when Set positions is highlighted.
- 4. Use the UP and DOWN arrow buttons to move through the numbers until 10 is showing. Press the HOME/SETUP button.

Main Menu

1. Valve Setup

2. Interface Setup

3. Information

Valve Menu

1. Two position

2. Multiposition

Multiposition Menu

1. Set positions

2. Move Direction

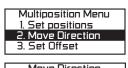
3. Set Offset

Set positions:

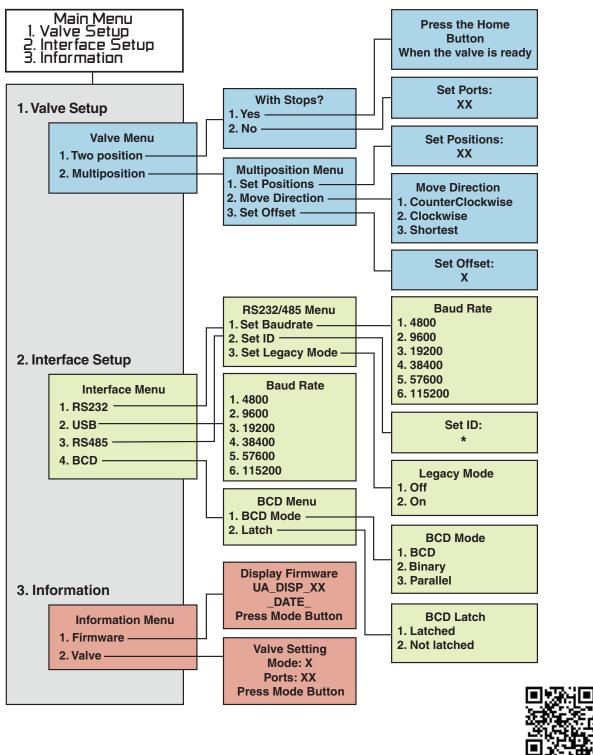
In the multiposition mode, "counterclockwise" means that the actuator moves in the "positive" direction—position 1 to position 2. The clockwise direction is "negative", moving in the direction of position 2 to position 1.

To set our just-configured 10 position actuator to move in a clockwise direction:

- 1. Repeat Steps 1 and 2 above to get to the Multiposition Menu.
- 2. Use the DOWN arrow button to highlight Move Direction. Press the HOME/SETUP button.
- 3. Use the DOWN arrow button to highlight Clockwise. Press the HOME/SETUP button.



#### **Menu Tree**



#### For More Information

For detailed information on serial control, digital protocols, and other features of the universal actuator, refer to the complete Universal Actuator Manual at www.vici.com/ua-manual (accessible via the QR code above), or request a copy by calling 713-688-9345 or (int) +41-41-925-6200.

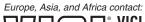
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TN-423 Rev 6/18