

# 783 LabVIEW VI Documentation

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Link VIs:

## 783 Connect – Serial

Input Parameters:

1.
2.

Output Parameters:

1.
2.
3.

**Function:** Connects to the device via serial port.

**Note:** You can determine the success of the operation by whether the SN (Serial Number) is obtained. Typically,  does not need to be connected.

## 783 Connect – TCP

Input Parameters:

1.
2.
3.

Output Parameters:

1.
2.
3.

**Function:** Connects to the device via TCP.

**Note:** You can determine the success of the operation by whether the SN is obtained. Typically,  does not need to be connected.

## 783 Disconnect

Input Parameters:

1.
2.

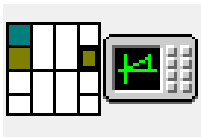
Output Parameters:

1.

**Function:** Disconnects and releases resources.

**Note:** Call this method to release resources when the device is not in use, especially after ending a serial port connection.

**General Interface:**



input device			
error in			error out
input parm 1			IsCorrect / output parm 1
input parm 2			output parm 2

**Note:** For the following control and reading vi, the `input device` , `error in` , and `error out` parameters are the same for all.

Control vi: `IsCorrect` is used to determine whether the execution was successful.

**Control VIs:**

**783 Set Mode – Control**

**Function:** Sets the mode to pressure control mode.

**783 Set Mode – Vent**

**Function:** Sets the mode to venting mode.

**783 Set Mode – Measure**

**Function:** Sets the mode to measurement mode.

**783 Set Control Pressure With Unit**

Input Parameters:

1. `value`
2. `unit`

**Function:** Controls the pressure based on the input value and unit.

**783 Set Control Pressure (Current Unit)**

Input Parameters:

1. `value`

**Function:** Controls the pressure based on the input value and the current unit.

**783 Set Pressure Control Mode**

Input Parameters:

1. `mode` : 0–Fast / 1–Standard / 2–Custom

**Function:** Sets the pressure control mode.

**783 Set Pressure Range – Manual**

**Function:** Sets the manual range mode.

**783 Set Manual Range**

Input Parameters:

1. `rangeIndex` : (Call '783 Get Controller Ranges' to obtain)

**Function:** Sets the manual range (effective only in manual range mode).

### 783 Set Pressure Range – Auto

**Function:** Sets the automatic range mode.

### 783 Clear Pressure

**Function:** Clears the pressure.

### 783 Cancel Clear Pressure

**Function:** Cancels the clear pressure operation.

### 783 Set Unit

Input Parameters:

1. `unit` : Unit symbol

**Function:** Sets the unit of measurement.

### 783 Set Max Control Slewrate

**Function:** Sets the maximum control slew rate.

### 783 Set Setpoint Limit Pressure Range

Input Parameters:

1. `downValue` : Setpoint limit lower bound
2. `upValue` : Setpoint limit upper bound

**Function:** Sets the setpoint limit range, in the current control pressure unit.

### 783 Set Setpoint Limit State

Input Parameters:

1. `enable` : True – Enabled / False – Disabled

**Function:** Sets whether the setpoint limit state is enabled or disabled.

### 783 Set Auto zero

**Function:** Enables automatic zeroing.

### 783 Set Close Auto zero

**Function:** Disables the automatic zeroing.

## Reading VIs:

### 783 Get Mode

Output Parameters:

1. `mode` : ""/"Unknown"/"Vent"/"Measure"/"Control"

**Function:** Reads the current mode.

### 783 Get Pressure Control Mode

Output Parameters:

1. `controlMode` : ""/"Fast"/"Standard"/"Custom"

**Function:** Reads the pressure control mode.

### 783 Get Controller Range

Output Parameters:

1. `Array <I32, String>: (rangeIndex, range("Lower,Upper,Unit"))`

**Function:** Reads all ranges of the device.

### 783 Get Pressure

Output Parameters:

1. `value`
2. `unit`

**Function:** Reads the current output pressure value.

### 783 Get Target Pressure

Output Parameters:

3. `value`
4. `unit`

**Function:** Reads the target pressure value.

### 783 Get Pressure Stable State

Output Parameters:

1. `state` : True – Stable / False – Unstable

**Function:** Reads whether the pressure control has reached a stable state.

### 783 Get Pressure Range Mode

Output Parameters:

1. `mode` : ""/"Manual"/"Auto"

**Function:** Reads the pressure range mode.

### 783 Get Unit

Output Parameters:

1. `unit` : Unit symbol

**Function:** Reads the current pressure unit.

### 783 Get Setpoint Limit State & Pressure Range

Output Parameters:

1. `isOpen` : True / False
2. `range` : ""/"Lower,Upper,Unit"

**Function:** Reads whether the setpoint limit state is open and the range when it is open.

### 783 Get Module Range

Output Parameters:

1. `range` : "Lower,Upper,Unit \n Lower,Upper,Unit \n ..."

**Function:** Reads the module pressure control range.

### 783 Get Auto Zero State

Output Parameters:

1. `state` : True – Enabled / False – Disabled

**Function:** Reads whether automatic zeroing is enabled.

## demo

Demonstrates the usage of some .vi.

