

**User's  
Manual**

**PSI Module  
WE Control API ASCII Commands  
User's Manual**

**IM 707741-91E  
1st Edition**

## **Introduction**

Thank you for purchasing the WE Control API (Model 707741).

This User's Manual contains information about the ASCII commands that are used when the WE Control API is used with the WE7512 PSI Module.

For information about the installation, program model, functions, and other information pertaining to the WE Control API, see the "WE Control API User's Manual" (IM 707741-61E).

## **Notes**

- **The contents of this manual describe the WE Control API Ver. 3.0.4.0. If you are using another version of the API, the information given in this manual may differ from that of API that you are using.**
- The contents of this manual are subject to change without prior notice as a result of continuing improvements to the instrument's performance and functions.
- Every effort has been made in the preparation of this manual to ensure the accuracy of its contents. However, should you have any questions or find any errors, please contact your nearest YOKOGAWA dealer as listed on the back cover of this manual.
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## **Revisions**

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## ASCII Commands

ASCII Command	Description
CH<x>:Input:Range	Sets/Gets the analog input range.
Input:Digital(8bit)	Gets the 8-bit digital input value.
Input:Digital(8bit):DI Condition Window	Sets/Gets the input time of the 8-bit digital signal.
CH<x>:Output:Range	Sets/Gets the analog output range.
CH<x>:Output	Sets/Gets the analog output value.
CH<x>:Output:Output	Turns ON/OFF the analog output/Gets the ON/OFF state.
Output:Digital(12bit):Output	Turns ON/OFF the 12-bit digital output/Gets the ON/OFF state.
Output:Digital(8bit):Output	Turns ON/OFF the 8-bit digital output/Gets the ON/OFF state.
Output:Digital(12bit)	Sets/Gets the 12-bit digital output value.
Output:Digital(8bit)	Sets/Gets the 8-bit digital output value.

### CH<x>:Input:Range

#### Description

Sets/Gets the analog input range.

#### Parameter

10 V | 5 V | 0-10 V

#### Example (VisualBasic)

```
err = WeSetControl (hMo, "CH1:Input:Range", "10 V")
' Set the input range of analog CH1 to ±10 V.
Dim value As Variant
err = WeGetControl (hMo, "CH1:Input:Range", value)
value → 10.0E+00
```

### Input:Digital(8bit)

#### Description

Gets the 8-bit digital input value.

#### Parameter

0 to 255

#### Example (VisualBasic)

```
err = WeGetControl (hMo, "Input:Digital(8bit)", value)
value → 0
```

## **Input:Digital(8bit):DI Condition Window**

### **Description**

Sets/Gets the input time of the 8-bit digital signal.

### **Parameter**

100 u to 1 s

### **Example (VisualBasic)**

```
err = WeSetControl (hMo, "Input:Digital(8bit):DIConditionWindow", 100e-6)  
      ' Set the input time to 100 ms.  
Dim value As Variant  
err = WeGetControl (hMo, "Input:Digital(8bit):DIConditionWindow", value)  
value → 100.0E-06
```

## **CH<x>:Output:Range**

### **Description**

Sets/Gets the analog output range.

### **Parameter**

10 V | 5 V | 0-10 V

### **Example (VisualBasic)**

```
err = WeSetControl (hMo, "CH1:Output:Range", "10 V")  
      ' Sets the output range of analog CH1 to ±10 V.  
Dim value As Variant  
err = WeGetControl (hMo, "CH1:Output:Range", value)  
value → 10.0E+00
```

## **CH<x>:Output**

### **Description**

Sets/Gets the analog output value.

### **Parameter**

When the range is ±10 V: -10.000 to 9.995 V

When the range is ±5 V: -5.000 to 4.998 V

When the range is 0 to 10 V: 0 to 9.998 V

### **Example (VisualBasic)**

```
err = WeSetControl (hMo, "CH1:Output", "1.24")  
      ' Set the analog output value to 1.24 V.  
Dim value As Variant  
err = WeGetControl (hMo, "CH1:Output", value)  
value → 1.240E+00
```

## **CH<x>:Output:Output**

### **Description**

Turns ON/OFF the analog output/Gets the ON/OFF state.

### **Parameter**

Off | On

### **Example (VisualBasic)**

```
err = WeSetControl (hMo, "CH1:Output:Output", "On")  
      ' Turn ON the analog output of CH1.  
Dim value As Variant  
err = WeGetControl (hMo, "CH1:Output:Output", value)  
value → On
```

## **Output:Digital(12bit):Output**

### **Description**

Turns ON/OFF the 12-bit digital output/Gets the ON/OFF state.

### **Parameter**

Off | On

### **Example (VisualBasic)**

```
err = WeSetControl (hMo, "Digital(12bit):Output", "On")
' Turn ON the 12-bit digital output.
Dim value As Variant
err = WeGetControl (hMo, "Output:Digital(12bit):Output", value)
value → On
```

## **Output:Digital(8bit):Output**

### **Description**

Turns ON/OFF the 8-bit digital output/Gets the ON/OFF state.

### **Parameter**

Off | On

### **Example (VisualBasic)**

```
err = WeSetControl (hMo, "Output:Digital(8bit):Output", "On")
' Turn ON the 8-bit digital output.
Dim value As Variant
err = WeGetControl (hMo, "Output:Digital(8bit):Output", value)
value → On
```

## **Output:Digital(12bit)**

### **Description**

Sets/Gets the 12-bit digital output value.

### **Parameter**

0 to 4095

### **Example (VisualBasic)**

```
err = WeSetControl (hMo, "Output:Digital(12bit)", "4095")
' Set the 12-bit digital output to 0xffff.
Dim value As Variant
err = WeGetControl (hMo, "Output:Digital(12bit)", value)
value → 4095
```

## **Output:Digital(8bit)**

### **Description**

Sets/Gets the 8-bit digital output value.

### **Parameter**

0 to 255

### **Example (VisualBasic)**

```
err = WeSetControl (hMo, "Output:Digital(8bit)", "255")
' Set the 8-bit digital output to 0xff.
Dim value As Variant
err = WeGetControl (hMo, "Output:Digital(8bit)", value)
value → 255
```

**Event**

None

**Valid API functions**

API	Valid?	Note
WeStart	Yes	
WeStop	Yes	
WeStartSingle	Yes	
WeStartWithEvent	Yes	
WeIsRun	Yes	
WeLatchData	No	
WeGetAcqDataInfo	No	
WeGetAcqData	No	
WeGetScaleData	No	
WeGetMeasureParam	No	
WeSaveAcqData	No	
WeSaveScaleData	No	
WeSaveAsciiData	No	
WeGetCurrentData	Yes	The analog input value can be retrieved. The data are double-precision real values.
WeGetAcqDataEx	No	
WeGetAcqDataSize	No	
WeSaveAcqHeader	No	
WeSavePatternData	No	
WeLoadPatternData	No	
WeStartEx	No	
WeStopEx	No	