

VP 700 Programming

Programming for the VP 700

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Programming - Overview

The VP 700 can easily be controlled through a RS 232 port through a set of ASCII string commands.

Simply sending a correctly formatted ASCII string to the VP 700 will allow for switching on or off a specific power outlet.

Power Outlets are numbered 0 - 2.

0 = Power Outlet 1

1 = Power Outlet 2

2 = Power Outlet 3

After each command is sent, the VP 700 will send back a response. Make sure to always check the response to confirm success or failure of command just sent. If response is not read after each command, possible errors can occur when trying to read the current status of the VP 700, as it can read old responses to previous commands.

Programming - ASCII String Chart

Below is a comprehensive list of all commands used by the VP 700.

CR - Carriage Return

Turn Power Outlet On: (16 characters)

OUTLET 0 - %01#WCSR00001**CR

OUTLET 1 - %01#WCSR00011**CR

OUTLET 2 - %01#WCSR00021**CR

Turn Power Outlet Off: (16 characters)

OUTLET 0 - %01#WCSR00000**CR

OUTLET 1 - %01#WCSR00010**CR

OUTLET 2 - %01#WCSR00020**CR

Query Power Outlet Current Status: (15 characters)

OUTLET 0 - %01#RCSR0000**CR

OUTLET 1 - %01#RCSR0001**CR

OUTLET 2 - %01#RCSR0002**CR

Response Codes: VP 700 returns these ascii strings according to whether the outlet is currently on or off when the above query codes are sent. (10 characters)

ON - %01\$RC120CR

OFF - %01\$RC021CR

Programming - ASCII String Dissected

Example ASCII String: (Turns Power Outlet 0 to ON)

`%01#WCSR00001**CR`

<code>%01#WCSR000</code>	<code>0</code>	<code>1</code>	<code>**</code>	<code>CR</code>
Initializes VP700 to read mode	Outlet Bit (Power outlet 0)	Status Bit (set ON)	End of command	Carriage Return

Pseudo-Code in C

Turning power Outlet 0 On:

```
char ascibuffer[111];
DWORD dwWritten;

sprintf(ascibuffer, "%01#WCSR00001**\r");
Write(hCom, ascibuffer, 16, &dwWritten, NULL);
readResponse();
```

Testing if Power Outlet 0 is On or Off:

```
DWORD dwWritten, dwBytesRead;

char szRes1[] = "%01$RC021\r"; // OFF
char szRes2[] = "%01$RC120\r"; // ON

sprintf(ascibuffer, "%01#RCSR0000**\r");

Write(hCom, ascibuffer, 15, &dwWritten, NULL); //send VP 700 read status command

Read(hCom, &ascibuffer, 10, &dwBytesRead, NULL); //read from VP 700 response

if(strcmp(szRes1, ascibuffer)) {
    //Power outlet 1 OFF
}
else if (strcmp(szRes2, ascibuffer)) {
    //Power outlet 1 ON
}
```
