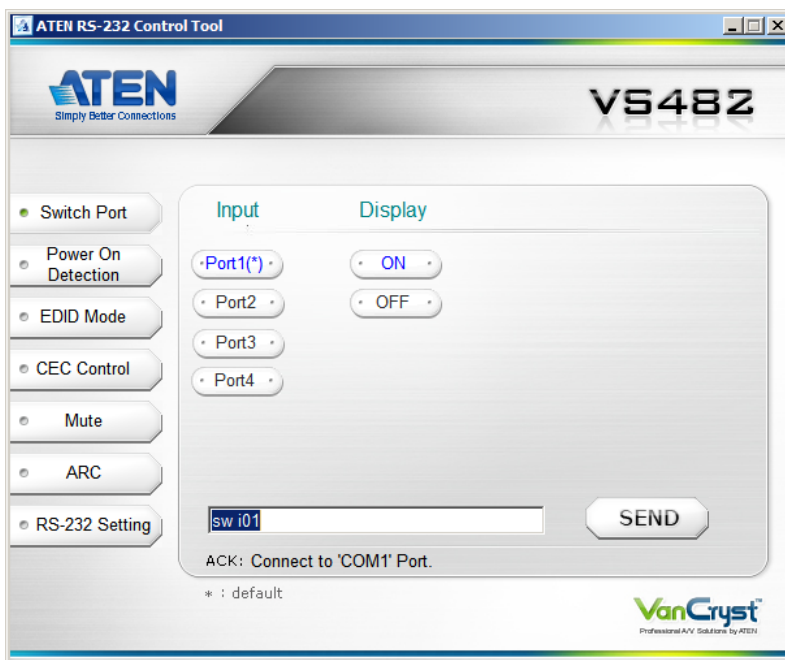


VS482 4-Port Dual View HDMI Switch

RS-232 Control Tool

V1.0.061

User Manual



FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ◆ Reorient or relocate the receiving antenna;
- ◆ Increase the separation between the equipment and receiver;
- ◆ Connect the equipment into an outlet on a circuit different from that which the receiver is connected;
- ◆ Consult the dealer or an experienced radio/television technician for help.

RoHS

This product is RoHS compliant.

SJ/T 11364-2006

The following contains information that relates to China.

部件名称	有毒有害物质或元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
电器部件	●	○	○	○	○	○
机构部件	○	○	○	○	○	○

- : 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006规定的限量要求之下。
- : 表示符合欧盟的豁免条款, 但该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。
- ×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。



RS-232 Control Tool Operation

Overview

The VS482's built-in bi-directional RS-232 serial interface allows system control through a high-end controller, PC, and/or home automation / home theater software package. RS-232 serial operations in a VS482 installation can be managed via a Graphical User Interface (GUI) on systems that are running Windows. In order to use this Control Tool, two separate items of software must be installed on all of the PCs in your installation – .NET Framework 2.0 and the Control Tool AP. This procedure is detailed in the following sections.

Before You Begin

.NET Framework 2.0

To install .NET Framework on your PC, do the following:

1. Download the executable file from the ATEN website or the Microsoft Download Center online, and run it.
2. Follow the instructions on the screen. The installation applet will automatically detect the operating system and install the correct drivers

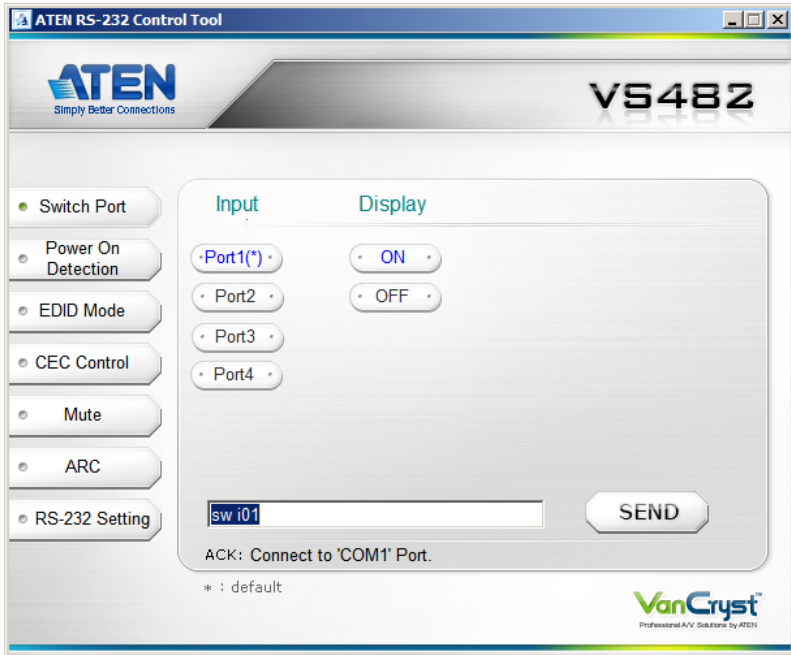
RS-232 Control Tool AP

To download the RS-232 Control AP in order to use the Browser GUI to manage the serial commands in your VS482 installation, do the following:

1. Download the RS-232 Control Tool AP from the ATEN website (www.aten.com).
2. Save the file to a convenient location.
3. Run the file to open the RS-232 Control Tool GUI.

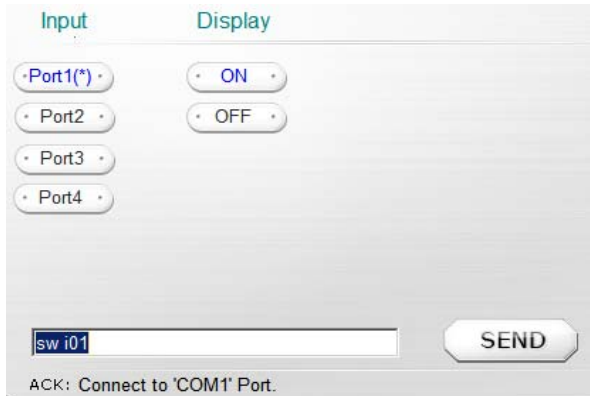
GUI Main Page

The RS232 Control Tool is a convenient and intuitive method to manage the RS-232 commands in your VS482 installation from one screen. To invoke the GUI, simply click on the icon in your file system. The interface appears, and opens on the Switch Port page by default, as below:



The various elements of the GUI are described in the following sections.

Switch Port



The screenshot shows a control interface for a switch port. It is divided into two main sections: 'Input' and 'Display'. Under the 'Input' section, there are four buttons labeled 'Port1(*)', 'Port2', 'Port3', and 'Port4'. Under the 'Display' section, there are two buttons labeled 'ON' and 'OFF'. At the bottom of the interface, there is a text input field containing the command 'sw i01' and a 'SEND' button. Below the input field, a status message reads 'ACK: Connect to 'COM1' Port.'

On the *Switch Port* page, the following actions are possible:

- ◆ Click on a port number (**1–4**) to change the input to that port. Click **Send** to send the command
- ◆ Click **On** to power on the display. Click **Send** to send the command.
- ◆ Click **Off** to turn off the display. Click **Send** to send the command.

Switch Port Commands

These actions can also be performed by keying the command into the text box, and clicking **Send**.

The available formulas for Switch Port commands are as follows:

1. Switch Command + Input Command + Port number [Enter]

For example, to switch input port to port 02, type the following:

sw i02 [Enter]

2. Switch Command + Control [Enter]

For example, to switch to the next port, input the following:

sw + [Enter]

The following tables show the possible values and formats for the **Input** command, **Port Number** and **Control**:

Command	Description
sw	Switch command

Input Command	Description
i	Input command

Port number	Description
xx	01-04 port (default is 01)

Control	Description
on	Turn on the display
off	Turn off the display
+	Next Port
-	Previous Port

-
- Note:** 1. Each command string can be separated with a space.
2. The **Port Number** command string can be skipped, and the default value will be used.
-

Power On Detection



The *Power On Detection* provides two options – On and Off, as shown above.

- ♦ To enable Power on Detection, click **ON** (or enter the command *pod on* in the text box) and click **Send**.
- ♦ To disable Power on Detection, click **OFF** (or enter the command *pod off* in the text box) and click **Send**.

Power On Detection Commands

The formula for Power On Detection commands is as follows:

Power On Detection + Control command [Enter]

For example, to turn off the Power On Detection feature, input the following:

pod off [Enter]

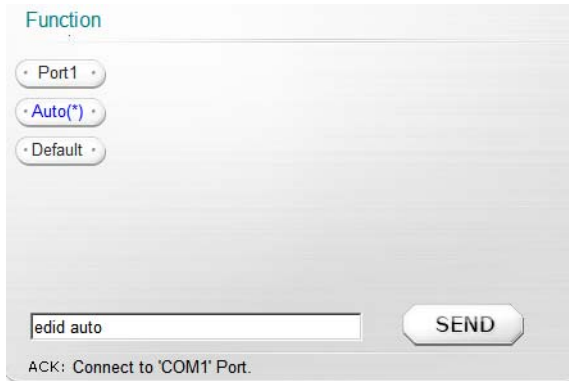
The following tables show the possible values for the **Control** string:

Command	Description
pod	Power On Detection command

Control	Description
on	Turn on
off	Turn off

Note: The default setting for Power On Detection is ON.

EDID Mode



Function

Port1

Auto(*)

Default

edid auto

SEND

ACK: Connect to 'COM1' Port.

On the *EDID Mode* page, the following actions are possible:

- ◆ Click on **Port1** to implement the EDID of the connected display to Port 1, and pass it to the video source.
- ◆ Click **Auto(*)** to implement the EDID of all connected displays. The VS482 uses the best resolution for all displays (default).
- ◆ Click **Default** to implement ATEN's default EDID.
- ◆ Click **Send** to send the command.

Extended Display Identification Data (EDID) is a data format that contains a display's basic information and is used to communicate with the video source/system. You can set up which EDID mode the VS482 uses with the following command:

EDID Command + Control (port1 / auto / default) [Enter]

The EDID commands work only for the first stage unit when cascading VS482 units.

CEC Control



Function

Off(*)

Auto

Port1

cec off

SEND

ACK: Connect to 'COM1' Port.

On the *CEC Control* page, the following actions are possible:

- ◆ Click **Off(*)** to disable CEC (default).
- ◆ Click **Auto** to implement the video source's CEC to all display output.
- ◆ Click on **Port1** to implement the video source's CEC only to port 1.
- ◆ Click **Send** to send the command

Consumer Electronics Control (CEC) allows interconnected HDMI devices to communicate and respond to one remote control. The formula for CEC mode selection commands is as follows:

CEC Command + Control (Off / Auto / Port1) [Enter]

Mute



On the *Mute* page, the following actions are possible:

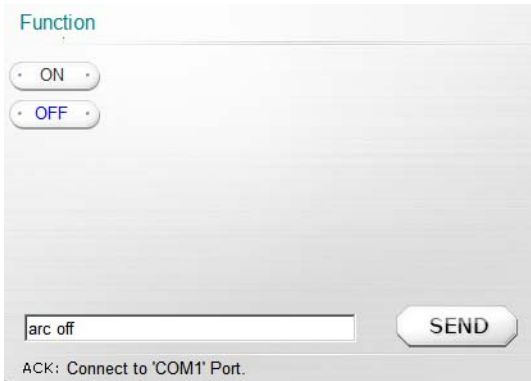
- ◆ Click **ON** to mute the selected port; audio from HDMI output port is disabled.
- ◆ Click **OFF** to enable the audio of the selected port (default).
- ◆ Click **Send** to send the command.

Mute Command

Enable or disable audio coming from the output port(s) using the following command:

Mute Command + Control (On / Off) [Enter]

ARC



Function

ON

OFF

arc off

SEND

ACK: Connect to 'COM1' Port.

On the *ARC* page, the following actions are possible:

- ◆ Click **ON** to enable ARC; output audio passes from HDMI output port 1 to HDMI output port.
- ◆ Click **OFF** to disable ARC.
- ◆ Click **Send** to send the command.

ARC Commands

Audio Return Channel (ARC) allows a source device (TV, STB, etc.) to send audio “upstream” to an audio/video receiver using only one HDMI cable. The formula for enabling/disabling ARC is as follows:

ARC Command + Control (On / Off) [Enter]

RS-232 Setting

COM Setting

COM: COM1

Baud Rate: 19200(*)

Data Bit: 8 bit

Parity: None

Stop Bit: 1 bit

Flow Control: None

CONNECT

ACK: Connect to 'COM1' Port.

The controller's serial port should be configured as follows:

Baud Rate	19200
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None

To select the serial port, do the following:

- ◆ Select a port from the drop-down menu and click **CONNECT**.

If the port has been selected, the Acknowledgment message will read:

Opened port COM1 successfully

Verification

After entering a command, a verification message appears at the end of the command line as follows:

- ◆ **Command OK** - indicates that the command is correct and successfully performed by the switch
- ◆ **Command incorrect** - indicates that the command has the wrong format and/or values.