Vesta Automation GUI

The following instructions are intended for the automation of the Vesta Laser Control System. The Vesta Laser Control System or "VestaSDK" uses TCP for remote communications. The port number C:\ProgramData\Waviks\Vesta\Calibration Files\Vesta.ini. If no port is specified, the default port is 6342.

Installation Guide:

1. Download the Vesta Automation GUI Installer executable file provided by Waviks.
2. Run the Vesta Automation GUI Installer as Administrator
   a. Select whether or not to create a desktop shortcut and go through the rest of the installation steps
3. If the installer created a desktop shortcut, right click on the shortcut, otherwise locate the Vesta Automation GUI executable in C:\Program Files (x86)\Vesta Automation GUI and right click it.
   a. Select properties from the drop down list
   b. Go to the compatibility tab
   c. Press change settings for all users
   d. Check the box next to "Run this program as an administrator"
   e. Apply and exit properties screen

4. Run the Vesta Automation GUI executable (NOTE TO USER: this program is single threaded so there may be occasions where you have to wait for it to finish a process)

How to uninstall the Vesta Automation GUI:

1. Navigate to C:\Program Files (x86)\Vesta Automation GUI
2. Run unins000.exe

Communications:

When sending commands to the VestaSDK using the GUI, the computer running the Vesta Automation GUI must be connected to the Remote PC for the Vesta Master Controller over ethernet.

Starting the Connection:

Once the above step has been completed, the "Start Connection!" button in the Vesta Automation GUI will be able to connect to the Remote PC, provided that the "Enter Port #" has been filled with the appropriate port #. If the entry doesn't contain only numbers the "Start Connection!" button will use the default port (6342).

Not Connecting?:

If the program fails to connect over ethernet, press the "Edit IP" button in the bottom left corner. Change the IP address on line 2 to the IP address of the target.

Building Command List:

There are two options when entering a command into the Command List found in the Vesta Automation GUI. First, a default command can be inserted by clicking on one of the options in the left scroll window. If a command has square brackets then the user will be prompted in a pop-up window to fill said brackets. The four most recently used default commands are bound to alt + (a,s,d,f). Once the command has been selected and filled with input, if necessary, it will be listed in the command list. The second option for listing a command in the Command List is to use a custom command that contains a list of default and or custom commands.

Creating Custom Commands:

To create a custom command the desired default and/or custom commands should be listed in the Command List. After, by clicking the Create custom command button in the top right corner of the Vesta Automation GUI a custom command will be created and saved. Said custom command will contain all of the commands that were in the Command List at the time of its creation.

Build Modes:

There are three build modes that can be selected by clicking the button located in the bottom right corner of the Vesta Automation GUI. The three options are "Append", "Beginning", and "Insert at". The user can swap between these three at any time to change the location that commands are inserted into the Command List.

Editing Command List:

There are three options for editing the Command List. First, the edit button, found to the left of each command label, is used to directly edit the text of the command it is associated with. When clicked, a pop-up window will open and prompt the user to edit the text inside of the entry. To exit without editing the command, the user can close the pop-up window with the red "x". This process contains no input checking so the user must be careful to only edit the desired parts of the text field. Commands that have been edited will turn white to signify their change. The second option for editing the Command List is to remove a command, this can be done by clicking the "-" button found to the right of the command to be deleted. The last option is to use the "Delete All" button found at the middle of the bottom of the Vesta Automation GUI, this button will delete all of the commands listed in the Command List.

Editing Custom Commands:

The commands contained in custom commands can only be edited on the Right hand side of the Vesta Automation GUI. There are two options, edit and delete (when a custom command is deleted all instances of it inside of the Command List and other custom commands will also be deleted.). When the "Edit" adjacent to a custom command is clicked, the Command List in the center of the screen will be covered by the custom command's commands. Then, to edit the commands found inside of the custom commands the user uses the same processes that were

used for **Editing Command List**, and **Building Command List**. Any editing that is done inside of the custom command will not affect the Command List that was hidden, it only affects the commands contained inside of the custom command that was edited. To stop editing the custom command and return to editing the Command List, click the "Done Editing" button. To cancel editing the custom command, click the "Cancel Edit" button. To change the name of the custom command select the "Edit" button adjacent to that custom command and use the entry widget located in the top center of the Vesta Automation GUI. Once the desired name has been inserted press the "Done Editing" button.

Duplicating (mirror and/or with slight changes) Custom Commands:

To duplicate a custom command with or without changes to the commands, do the following. For the custom command that you wish to "duplicate" select the edit button on the right hand of the GUI next to that command's button. Once in the custom command editor, make the modifications that will be in the "duplicate." After that, press the "Create custom command" button in the top right corner and enter the desired name. To ensure that the original custom command remains unchanged, click the cancel edit button after the "duplicate" command has been created.

Remotely Restarting/Starting the Vesta Software:

To remotely restart/start the vesta software on the Remote PC press the "Restart Vesta" button in the bottom right corner. This process will take ~15 seconds, after the software is reset/started the Vesta Automation GUI will attempt to reconnect to the Remote PC.

Running the Command List:

Once the Vesta Automation GUI has been connected to the Vesta Master Controller with the "Start Connection!" button, a positive response was received, and the Command List has been populated with the desired default commands and custom commands the user can press the Run List button to execute the Command List. The Command List is run from top to bottom and is sent periodically. The period between commands depends on the sleep time entered into the "Enter Sleep Time" entry. The sleep time is entered in whole seconds and should not contain any

characters or spaces. If the "Enter sleep time" entry is not edited then the Vesta Automation GUI will default to a 2 second sleep time. (Note: Windows may report that the program is not running if the software is executing a long movement like when a home command is sent)

Viewing and Creating Logs:

Once the entire command list has been run, the option to create a log will become available. When the "Create Log File" button, located at the top of the Running Commands screen shows the commands sent and responses received, is clicked, it will store all of the commands sent and all of the responses in a text file that uses the current date and time as a file name. The logs are stored in C:\Program Files (x86)\Vesta Automation GUI\Logs.

How to open documentation from the Vesta Automation GUI:

Use the blue question mark in the bottom right hand corner of the Vesta Automation GUI to open this documentation pdf.