SP500X CONTROLLER USERS GUIDE



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Software Setup

- 1. Download the "**Driver.zip**" file to a known location. NOTE: Only need to do this once, after the driver is installed it does not need to be reinstalled
 - 1. Unzip the file
 - 2. Open the "Driver" folder
 - 3. Open the folder for your version of Windows
 - 1.3.1. For Windows 10 pick "Win10" folder

1.3.1.1. Run "dpinst_amd64" if your machine is 64-bit, or

1.3.1.2. Run "dpinst_x86" if your machine is 32-bit

- 1.3.2. For all other versions of Windows, open the appropriate folder
 - 1.3.2.1. Open x64 for 64-bit machines, OR

1.3.2.1.1. Run "dpinst_amd64"

1.3.2.2. Open x86 for 32-bit machines

1.3.2.2.1. Run "dpinst_x86"

- 4. Follow the onscreen directions to finish the install
- 5. Reboot your computer

- 2. Download the Pc App release package file to a known location. For example, "TrinityController_v1.9.2.zip"
 - 1. Unzip this file and use the Installer to install the program
 - 2. Click on setup.exe

💽 setup.exe	2/18/2020 2:12 PM	Application	772 KB
🗹 🔂 SP500x Controller Setup.msi	2/18/2020 2:12 PM	Windows Installer	10,808 KB
Lead .			
😥 SP500x Controller		- 🗆 X	
Welcome to the SP500x Co	ntroller Setup Wi	zard 🌄	
The installer will guide you through the steps re	equired to install SP500x Con	troller on your computer.	
WARNING: This computer program is protected			
Unauthorized duplication or distribution of this or criminal penalties, and will be prosecuted to			
	< Back Next >	Cancel	

3. Click Next, then browse to an install location and user access (Everyone recommended) and click Next again

🛃 SP500x Controller					\times
Select Installation Folde	Pr				
The installer will install SP500x Controller	to the following folde	er.			
To install in this folder, click "Next". To in	nstall to a different fol	der, enter it belov	w or clic	:k ''Bro	wse''.
Eolder: C:\Program Files\Handheld Group\SF	P500x Controller\		В	rowse	
			Dia	sk Cost	
Install SP500x Controller for yourself, o Everyone Just me	r for anyone who use	s this computer:			
	< Back	Next>		Can	cel

- 4. Click Next one more time to start the installation process.
- 5. If you are prompted a message box asking for permission to install click Yes.
- 6. Run "SP500xController" From the Start Menu

Firmware Upgrade

In order to upgrade the SP500X device, the unit should now be powered on and connected to the PC via USB.

1. On the device make sure that the unit is at the main screen and not in a state requesting user input as this will block communication to the serial port.



Click on Connect → Device Connect. Select the Comport AND Mount Point that the SP500X imprinter is connected to.



3. Press Connect button and after a couple seconds the connection should be established & the "Device Connection" window should shut down and the Connection Status indicator should turn green. Note: Your content for the items below will be different.

		Board Rev: 0x400	Fw: MVT06-30-20_153936-honeywell
	()	MAC: 0080A3CDC7BB	App: MVT4.0.2
		Serial: MVT1HHG028	Disconnect
•••	Connection Status		

 Click Upgrade → Upgrade or Restore at the top of the window. Then click the "Choose ZIP File" button and browse to the location where you downloaded the firmware release package file. Then click "Upgrade Application".

🖢 Upgrad	le Window	×
Upgrade Ap	pplication and System	Available DFU Devices
ZIP File:	MVT4.2.4-honeywell.zip	
DFU File:		Upgrade Application
		Put the unit into DFU Mode by holding the check button on power up. Then choose a zip file to be able to restore the unit
		Restore Unit

5. The upgrade progress percentage feedback will be displayed at the bottom left of the Upgrade Application Window as the procedure continues. or the necessary files from the release package will be moved to unit's EMMC drive and unit will reboot and do the upgrade procedure while the Red LEDs at the back of the unit will be on (Takes roughly 1 – 2 mins)



6. At this point the firmware upgrade is complete. Tap "OK" and unit should be rebooting automatically at this point. Green LEDs being lit up at the back of the unit indicates that the upgrade procedure is completed on the unit side. It can take up to a minute for the unit to reboot as the new firmware takes hold on the unit.

Unit Recovery

If a unit does not complete a boot-up to the active screen, it is possible to recover the unit in most circumstances.

1. In order to recover a unit, user needs to put the unit into DFU mode manually by connecting the unit to the PC via a USB-C cable first, then holding the check button while powering the on the unit.

NOTE: The LCD will not turn on if this is done correctly

2. Then the user needs to navigate to the **Upgrade -> Upgrade or Recover** Menu Window and the unit will be shown under the "Available DFU Devices" drop down menu.

Upgrade Window	×
Upgrade Application and System	Available DFU Devices
Choose ZIP File	STM Device in DFU Mode Y
ZIP File:	
DFU File:	Upgrade Application
	Put the unit into DFU Mode by holding the check button on power up. Then choose a zip file to be able to restore the unit
	Restore Unit

- 3. Click on the "Restore Unit" button to begin the recovery process.
- 4. Once the recovery process is complete the unit will reboot and you will be prompted to start a Firmware Upgrade

Creating/Editing Template Files

1. Create a new file or Open and existing file



2. Once a file is open your view will now be this



3. Editable Area

3.1.1. The editable area is locked to the center of the Designer App window. Horizontal and vertical *PixelRulers* adjust accordingly to display the correct values. The editable area is shown in a white background. Outside of the editable area is a gray background.



4. Pixel Ruler

4.1.1. The ruler has a green box on it corresponding with the size of the template: 0.56" x 2" @1200 DPI

5. Zoom Tool

5.1.1. Zoom can be controlled by clicking the "+" and "-" buttons in the toolbar. Typing and entering a zoom percentage is enabled to the zoom % value. Mouse wheel and slider bar may also be used.

	Q 100%	
6.	Add/Edit Text	
	6.1.1. The tool will add a new TEXT object to the template 6.1.2. The following properties can be changed for a TEXT object	
	X Pos: 0.340519 Message: REED-1234 Point Size X: 19	
	Y Pos: 0.201330 Font: arial Point Size Y: 19	
7.	Add/Edit Bar	
	7.1.1. The tool will add a new BAR object to the template7.1.2. The following properties can be changed for a BAR object	
	X Pos: 0 Width: 0.200000	
	Y Pos: 0	
8.	Add/Edit Picture 8.1.1. The 8.1.2. The following properties can be changed for a PICTURE object	
	X Pos: 0.0 Image Path: C:\testlabel.jpg .	
	Width: 2.4	
	Y Pos: 0.0 Height: 0.5	
9.	Add/Edit 1D Barcode	
	9.1.1. The tool will add a new 1D BARCODE object to the template	

9.1.2. T	he following p	properties can be	changed for a 1D BA	RCODE object		
	X Pos:	0.0	Value:	111111111	Height:	0.4 -
	Y Pos:	0.0	Type: Point Size:	Code 128 ×		
10. Add/Edit 21 10.1.1. 10.1.2.	The		new 2D BARCODE c be changed for a 2D	bject to the template BARCDE object		
	X Pos:	0.0	Value:	8888888	Height:	0.5 -
	Y Pos:	0.0	Type: Point Size:	OR Code [×] 12		

11. Cut, Copy, and Paste are all functional for all objects.



12. Object Tree Viewer.

- 12.1.1. A complete list of all Objects contained in the current template
- 12.1.2. The user can enter/edit customized names for each *Object*, and enable/disable rendering of individual objects



12.1.3. An *Object* can also be set as "Variable". Variable objects can have their value dynamically set at the moment of printing.



13. Saving files to unit

- 13.1.1 After the template design is completed you may have it as a new file (as a name your backend will call to print fields to) or if testing in demo only, as a demo file make sure to save as HHG-DEMO.ig and allow overwriting of the existing file.
- 13.1.2 Files should be saved to the 'images' folder on the device.
- 13.1.3 Reboot unit before trying to scan/print with the new or updated image.

Device Settings

NOTE: The device must be connected to the application in order to view/change settings

Server Settings Window

Using this feature user can view and change the server settings.

Server Window	, ×
Server Com	munication Settings
File Server IP :	192 · 168 · 1 · 143
File Server Port :	6500 Clear File Values
Prim Server IP :	192 · 168 · 1 · 143
Prim ServerPort :	6500 Clear Prim Values
Alt Server IP :	192 - 168 - 1 - 143
Alt Server Port :	6500 Clear Alt Values
Listen Port :	6500 Clear Listen Value
Save	Cancel

LCD Settings Window

Using this feature user can set the LCD front light intensity as well as the LCD rotation. The settings are applied realtime without any reboot necessary

LCDPopup	×
LCD S	ettings
Frontlight Intensity	: 25 0 - 100
Rotation :	Left hand Y
Save	Cancel

Wifi Settings

Using this feature user can view and change the WIFI settings

🖉 Wifi Window	×
Wifi Con	figuration
SSID	Example
Password	•••••
Security	WPA2 ~
Band	2.4 GHz Only 💙
Apply	Cancel

Service Settings

Using this feature the user can view the Serial Number, App ID, Fw ID, FPGA ID and MAC Address.

🙋 Database Window	×
Device Service	e Information
Serial Number :	MVT1HHG028
Application ID :	MVT4.0.2
Firmware ID :	MVT06-30-20_153936-h
FPGA ID :	0x400
MAC Address :	0080A3CDC7BB

Log View

The Log View feature enables the user to be able to view the log files on the connected device

1. Click App -> Logs



- 2. Use the "Choose a log file" drop down to select a log file on the device.
- 3. Once a log file is selected user also has the ability to filter the displayed outputs by category using the Critical, Error, Waring, Debug1, Debug2 and Debug3 buttons located above, green categories are the ones that are

6	v1.8.6.1 - Level 3		- 0
pp Connec	t Upgrade Se	ettings	
ALL CRITICAL	15	DEBUG 1 DEBU	2 DEBUG 3 Choose a Log File : \Log_07-24-20_15-21-03.log • Refresh Log Files List
Date	e Ca	itegory Mod	le Description ^
07/24/2020-15:21:0	3 DEBUG	G1 Main	Initialize Logging
07/24/2020-15:21:0	3 DEBUG	G1 Main	Init Py_SDK
07/24/2020-15:21:0	3 DEBUG	G1 Honeyw	I Initializing Honeywell module
07/24/2020-15:21:0	3 DEBUG	G1 Honeyw	I Port is open. Initiating decoder setup
07/24/2020-15:21:0	3 DEBUG	G 1 Scanner	symbols_off:None
7/24/2020-15:21:0	3 DEBUG	G 1 Scanner	multiple:None
07/24/2020-15:21:0	4 DEBUG	G 1 Scanner	128_enable:None
07/24/2020-15:21:0	4 DEBUG	G 1 Scanner	enable_maxi:None
07/24/2020-15:21:0	4 DEBUG	G 1 Scanner	enhaced_trigger:None
07/24/2020-15:21:0	4 DEBUG	G 1 Scanner	window:None
07/24/2020-15:21:0	4 DEBUG	G 1 Scanner	set_cr:None
07/24/2020-15:21:0	5 DEBUG	G 1 Scanner	symbology_enable:b'SHOTGN0\x06!128ENA1\x06!PRECA2\x06,BK2995C80\x06!
07/24/2020-15:21:0	5 DEBUG	G 1 Scanner	beep_enable:b'BEPBEP0\x06!'
07/24/2020-15:21:0	5 DEBU	G 1 Scanner	DataFormatMode2:b'DFM_EN2\x06,DEC1\x06!
07/24/2020-15:21:0	5 DEBUG	G 1 Scanner	Set128:b'DFMBK300996A0018F100 00996A0011F100\x06!'
07/24/2020-15:21:0	5 DEBUG	G 1 Scanner	42x_ignore:b'DFMBK300996A999982000334323088 00996A999982000334323188\x06!'
07/24/2020-15:21:0	6 DEBU	G 1 Scanner	spAMZ_ignore:b'DFMBK300996A99998200027370B8 0099499998200027370B8\x06!'
07/24/2020-15:21:0	6 DEBU	G 1 Scanner	SetMaxi:b'DFMBK30099789999F100\x06!'
07/24/2020-15:21:0	6 DEBUG	G 1 Scanner	SetQR:b'DFMBK30099739999F100\x06!'
07/24/2020-15:21:0	6 DEBUG	G 1 Battery	Found Design Cap: 3191
07/24/2020-15:21:0	6 DEBU	G 1 Battery	Found Design Cap: 3191
07/24/2020-15:21:0	6 DEBU	G 1 Battery	Remaining:2217Level:77%
	6 DEBUG	G 1 Battery	Found Bat: 3200 Total Cap:2845 Design Cap:3191 Remaining:2217

Barcode Config

Barcode Config allows the user to generate a QR Code that can be scanned by the device to update the device's Wifi and Server settings. NOTE: You do NOT need to have a unit connected to the PC to use this feature.



1. Click on App->Barcode Config

🙋 SP5	00X Controller v1.8.6.1 - Leve	el 3				- 🗆 ×
Арр	Connect Upgra	de Settings				
	2	erver Communication Setting	s	Wifi Configuration		be filled with data to
	File Server IP :	123 . 123 . 133 . 123		SSID :	Example	generate QR Code ✔ EnableServer
	File Server Port :	3323 Clear File Values				Enable Wifi Generate from CSV
	Prim Server IP :	123 . 123 . 123 . 123	Processing	× Password :	•••••	
	Prim ServerPort :	12313 Clear Prim Values	Success QR Code is generated!		Show Password	
	Alt Server IP :	123 . 123 . 123 . 123		Security :	WPA2 ~	File Name : ExampleBarcode
	Alt Server Port :	12312 Clear Alt Values	ОК			Generate QR Code
	Listen Port :	1231 Clear Listen Value		Band :	2.4 GHz Only *	
$\left(\right)$	Board Rev: 0x400	Fw: MVT06-30-20_153936-honeywell				
	MAC: 0080A3CDC7BE					
	Serial: MVT1HHG028 inection tatus	Disconnect			nan	dheid

 3.2.1. A .csv file can also be used import the data neededto generate the QR Code.
 3.2.1.1. CSV file format: 1st column FileName 2nd column raw data to be put in the barcode keys and values

3.2.2. The generated QR Code will be located in the "ConfigureByBarcode" folder within the Application base directory.