<u>Updating LCD Firmware for</u> <u>WattsOn-Mark II Metering Kit HMI</u>

Summary

The WattsOn-Mark II Metering Kit (W2KIT) optionally includes a color touchscreen LCD. This LCD is designed to be firmware upgradable.

This guide was written using Windows 7, however the installation steps should be similar for other versions of Windows.

Requirements

- 1. Windows PC
- 2. LCD Update Utility and Driver (downloadable from Elkor's website)
- 3. LCD Firmware Data File (available from Elkor)
- 4. USB Mini cable.

First Time Installation

- 1. Download the LCD Update Utility (LCD_Update_Setup.exe)
- 2. Execute the "setup.exe" file and complete the installation of the utility. The default installation location is: C:\Program Files (x86)\Elkor Technologies\LCD_Update

IMPORTANT: Carefully follow the setup utility prompts. The setup utility will attempt to automatically install the correct driver software, however it needs to have the LCD connected before the driver is installed. Windows must first install a generic driver which the software will update.

If the driver installation fails, it is possible to install the driver manually as per the "Manual Driver Installation" section at the end of this manual.

Updating the LCD Software

Once the driver is in place, the software update process is straightforward.

- 1. Supply power to the LCD and ensure that it is running. The LCD requires external power (ie: power is not provided via the USB connection).
- 2. Plug in the LCD via mini-USB cable to your Windows PC. Drivers should already be installed as per prior section.
- 3. Ensure that you have the correct ".pkg" file (ie: W2-Kit_v1-05.pkg), which contains the LCD software.
- 4. Locate the "Elkor LCD Update Utility". By default, it is installed to the Desktop



5. Start the utility. Ensure that "Download Operate" is selected, and click "Download User Data"

KHMa	inager			
	Download Operate	Communication Set	B port	
🍠	Upload Operate	IP: NULL		PORT:NULL
	System Operate	Serial NO.: NULL		Set
6-6	Get Version	Download Section	LOGO Show Set	
	Decompile Operate	Download User Data		Set
54	Pass Through Communication	Download LOGO	Clear Section	
		Download Recipe	🗌 Clear Recipe	🗖 Clear FRW Data
		Download FRW Data	🔲 Clear History Data	Clear ERW Data
		Recipe Editor	Clear History Event	Execute
			< <back< th=""><th>NEXT>> Exit</th></back<>	NEXT>> Exit

6. Select the new pkg file, and click "open"

🚱 Open	r 805	100		×
Look <u>i</u> n: 🚺	LCD_Firmware_Update	← 🗈 💣 📰▼		
Name	*	Date modified	Туре	Si
🌗 khmana	ger	7/25/2017 2:11 PM	File folder	
🛛 ы output		7/25/2017 3:31 PM	File folder	
W2-Kit_v1-05.pkg		7/25/2017 12:57 PM	PKG File	
•	III			P.
File <u>n</u> ame:	W2-Kit_v1-05.pkg			Open
Files of type:	User Data Files (*,pkg)		•	Cancel
	Open as <u>r</u> ead-only			

7. Select ONLY the "Data File" checkbox, and click "Download"

Select HMI:			- Select Section:
HMI Station	HMI Information	n	🗹 Data File
HMIO			🔲 Recipe File
			LOGO File
			Clear Recipe
4			Clear History Event Data
			Clear History Record Data
Download File Path:	z:\data\products\wat	tson_v2\kit_in_box	Clear ERW Data
	\lcd_firmware_update	·\w2-kit_v1-05.pkg	Clear FRW Data
			Download to USB1
			Download to USB2
Communication Type:	USB port		Download to SD
IP: NULL		PORT: NULL	
			Download
COM: NULL		BPS: NULL	

8. The software will transfer to the LCD, and the message will confirm

DownLoad [4%]	KHDownload Mess	
Flash writing, please wait	Download success!	
	ОК	Cancel

The process is complete. The LCD will likely reboot, and the software will be updated.

Manual Driver Installation

Windows will typically install a generic driver. This driver may be called "PNX Bulk Device" or "Gadget Serial v2.4". Despite Elkor trying to automate the driver installation process, these next steps may be necessary:

NOTE: This process needs to be done only once upon a new installation. After the driver is installed, it will automatically be detected when the HMI is plugged in.

1. Open "**Device Manager**". The easiest way is to press [Windows Key] + R and type **devmgmt.msc**, or open the Device Manager through the Control Panel:

📼 Run	
Type the name of a program, folder, document, or Internet resource, and Windows will open it for you. Open: devmgmt.msc Image: Second	Control Panel (3) Device Manager View devices and printers Update device drivers
	\mathcal{P} See more results
OK Cancel <u>B</u> rowse	device manager × Shut down +

- 2. With Device Manager Open, look for one of these categories:
 - "Other Devices" (In case "Gadget Serial v2.4" was installed)
 - "LibUSB-Win32 Devices" (in case "PNX Bulk Device" was installed)



3. In either case, Right-Click on the "Gadget Serial v2.4" or "PNX Bulk Device" entry and select "Update Driver Software..."



4. Click "Browse my computer for driver software"



5. Click "Let me pick from a list of device drivers on my computer"



6. ***IF*** a dialog comes up titled "Select your device's type from the list below", select "Show All Devices", and click "Next"

Select your device's type from the list below.	
Common hardware types:	
Show All Devices	*
W 61885 Device Class	E
AVC DEVICES	
Biometric Devices	
Relutooth Radios	
Computer	
Disk drives	
S Display adapters	
DVD/CD-ROM drives	
Floppy disk drives	
Floppy drive controllers	-
Floppy drive controllers	*

7. Click "Have Disk"

Derect	the device driver you want to install for this hardware.
Ŧ	Select the manufacturer and model of your hardware device and then click Next. If you have disk that contains the driver you want to install, click Have Disk.
Show	gompatible hardware
Model	
1000	

8. Click "Browse" and navigate to the driver folder which is inside the installation folder (default: *C:\Program Files (x86)\Elkor Technologies\LCD_Update\driver*).

📇 Locate File	To particular resident fill and		×
Look in: 🌗	driver 👻	G 🤌 📂 🎞 -	
Name	*	Date modified	Ту
🌗 amd64		7/25/2017 3:31 PM	Fi
퉬 i386		7/25/2017 3:31 PM	Fi
퉬 ia64		7/25/2017 3:31 PM	Fi
🗿 bulkusb.i	inf	5/31/2012 12:00 PM	Se
1			
			_
File <u>n</u> ame:	bulkusb.inf	✓ <u>O</u> pen	
Files of type:	Setup Information (*.inf)	- Cancel	

9. Select the "bulkusb.inf" file. Click "Open", and then "OK" in the Install from Disk menu

10. The Dialog should show "Kinco HMI USB", Click "Next" and allow Windows to finish the driver installation.

G 🛛 Upd	date Driver Software - PNIX Bulk Device	
Select	t the device driver you want to install for this hardware. Select the manufacturer and model of your hardware device and then clic disk that contains the driver you want to install, click Have Disk.	k Next. If you have a
V Shore	w gompatible hardware El nco HMI USB	
	his driver is digitally signed. ell me why driver signing is important	Have Disk
		Next Cancel

11. Windows should complete the installation:

🕞 🗕 Update Driver Software - Kinco HMI USB	
Windows has successfully updated your driver software	
Windows has finished installing the driver software for this device:	
Kinco HMI USB	
	Close

12. Confirm that the driver is properly installed by opening Device Manager (as per step #1), and confirming that the "Kinco HMI USB" driver appears under the "Universal Serial Bus controllers" category:

