



DEVELOPER'S GUIDE

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**Elo Touch Solutions**  
PayPoint Plus® for Windows



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# Section 1: Introduction

## Welcome

Welcome to the Elo PayPoint Plus Developer Program. We thank you for your partnership – together we can shape the future of our Point of Sale capabilities.

## Product Description

The Elo PayPoint Plus register is an all-in-one cash register that comes equipped with a built-in receipt printer, magnetic stripe reader, barcode reader, cash drawer, and customer facing display. Below are the specifications:

Area	PayPoint Plus Windows
Display	15.6" FHD
Touch	Projected Capacitive
Processor	Intel 8 <sup>th</sup> generation i5 processor with vPRO
OS	Windows 10IOT, No OS (with Linux support: Ubuntu, SUSE Linux)
Storage/Memory	16GB RAM/128SSD Hard Drive
Connectivity	WiFi 802.11 b/g/n/ac   Bluetooth 4.1 (BLE)/iBeacon   LAN
IO panel	5x USB, 2xSerial, 1x Cash Drawer Port, 1x Micro HDMI out, 1x 12V PUSB
Printer	Paper width: 80mm Printer speed:250mm/sec Star TSP100iii USB
Scanner	2D

Honeywell N3680

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Cash Drawer	5 bill x 5 coin for NACHina 4 bill x 8 coin for Worldwide 3 position lock
MSR	3 track encryptable
Color	White (Black available as MTO)

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## Confidentiality

By partnering with Elo to integrate with Elo PayPoint Plus ("Register"), you agree you will:

- a. Not share, disclose, use, disseminate, or publish any information about the Elo PayPoint Plus Developer Program or the Register or any related SDK, code, software, firmware, API, or prototype to any third party for any reason other than as permitted in writing from Elo under the Elo PayPoint Plus Developer Program.
- b. Not share, disclose, or use the Register or any related SDK, code, software, firmware, API, or prototype for any reason not related to or permitted under the Elo PayPoint Plus Developer Program.
- c. Limit access to the Register and related SDK, code, software, firmware, API, or prototype and information about the Register and any related SDK, code, software, firmware, API, or prototype and the Elo PayPoint Plus Developer Program to your employees, Affiliates, and onsite consultants and their employees who (i) have a need to know about or use the Register and related SDK, code, software, firmware, API, or prototype in connection with your participation in the Elo PayPoint Plus Developer Program, and (ii) are obligated to you to maintain the security and confidentiality of the Elo PayPoint Developer Program and the Register and related SKD, code, software, firmware, API, or prototype. You will be responsible for each act and omission of each employee, Affiliate, onsite consultant, or employee of an onsite consultant as if such acts and omissions were your own. As used herein, "Affiliate" means any entity that now or hereafter controls, is controlled by or is under common control with a specified entity, where "control" means beneficial ownership, directly or indirectly, of more than 50% of the outstanding shares or other ownership interest (representing the right to elect directors or other managing authority or the right to make the decisions for such entity, as applicable), only for so long as such control exists.
- d. Use the same degree of care as you would use to protect your confidential, non-public or proprietary information and technologies, but in any case no less than a reasonable degree of care, to prevent the unauthorized use, dissemination, disclosure, or publication of information, guides, drawings, photographs, product specifications, data, code, software, firmware, prototypes, API, SDK, or other similar information, documents, or materials about the Elo PayPoint Plus Developer Program or the Register and related SDK, code, software, firmware, API, or prototype. For clarity, this prohibition applies but is not limited to social media posts, links, or shares regarding the Elo PayPoint Plus Developer Program, including your participation in the program.
- e. Not make copies of the Register or any related SDK, code, software, firmware, API, or prototype or any related documents or materials received from Elo in connection with the Elo PayPoint Plus Developer Program.

- f. Notify Elo of any unauthorized use, dissemination, publication or disclosure of information about the Elo PayPoint Plus Developer Program or the Register or any related SDK, code, software, firmware, API, or prototype of which you become aware.
- g. Comply with applicable export control regulations.
- h. Promptly, upon Elo's request or at the end of the Elo PayPoint Plus Developer Program, return the Register to Elo.
- i. Not use or reverse engineer the Register or any information you gather or develop through your use of the Register or participation in the Elo PayPoint Plus Developer Program for development, manufacturing, distribution, or production purposes.
- j. Provide suggestions, comments, or other feedback ("**Feedback**") to Elo about the Register. All Feedback shall be deemed Elo's property, and Elo shall be free to use, disclose, reproduce, license, distribute, or otherwise exploit Feedback as it sees fit without obligation or restriction of any kind.
- k. Adhere to the terms and conditions for use of the SDK.
- l. Adhere to the terms and conditions for use of the API.

## Section 2: Hardware

### Contents of the Box

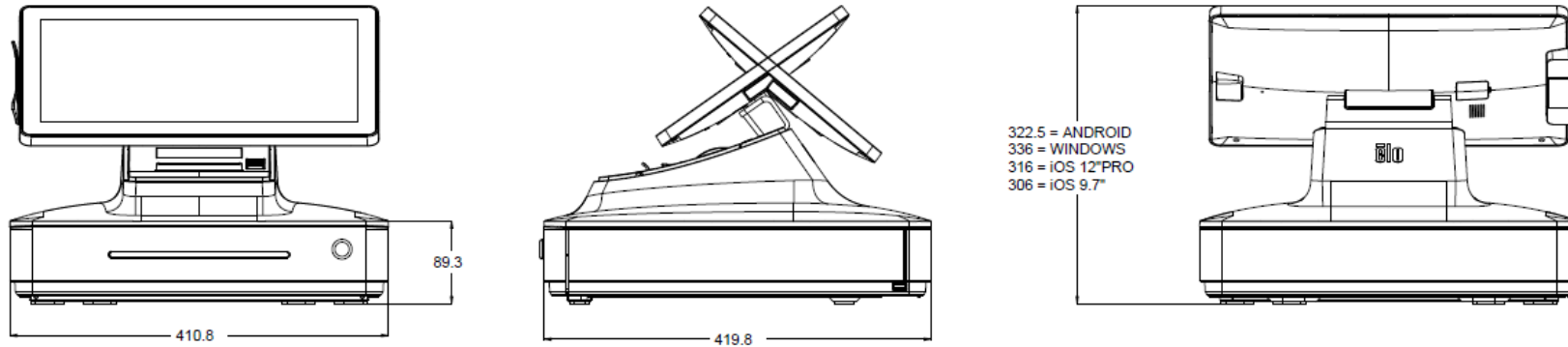
The Register contains the following:

- PayPoint Plus for Windows ("Register")
- Power Cable
- 1 receipt paper roll
- 2 cash drawer keys
- RJ45 to DB9 cable
- Quick install guide
- Windows 10 IOT or No OS (Linux support for Ubuntu, SUSE Linux)

The following utilities available on the device will allow you to download OPOS/JPOS drivers as well as configure the peripheral:

- Star TSP100 futurePRNT Software – includes Windows Driver, Linux CUPS Driver, Configuration Utility, OPOS and JavaPOS and hardware manuals. The TSP100 futurePRNT provides ESC/POS mode emulation, which can be configured in "TSP100 Configuration Utility". Thus, even if your current software is designed for the ESC/POS mode, you will be able to use it as is, without making changes.
- Honeywell EZConfig – Honeywell's EZConfig Cloud for Scanning is a free software service that facilitates fast and easy barcode scanner configurations and firmware updates all in an intuitive interface
- Magtek reader configuration program – Magtek's configuration program is a free utility that allows to remote configuration and key injection services

## PayPoint Plus Dimensions



## Printer

The Register has a built in 3-inch thermal printer. The printer is a TSP100iii from Star Micronics and communicates via USB. Below are the specs of the printer:

<b>Printer Method</b>	Thermal
<b>Printer Speed</b>	43 receipts/minute (250mm/sec)
<b>Resolution</b>	203dpi
<b>Character set</b>	ANK 95, 32 Int 128 Graphic plus Chinese, Japanese, Korean, Taiwanese
<b>Paper Specs</b>	Width 80mm standard, 58mm with paper guide Thickness 0.053 ~ 0.085 mm Roll Diameter Up to 83 mm Maxi Print Width 72mm
<b>Auto Cutter</b>	Guillotine

The integrated printer on PayPoint Plus has a paper feed and power button on top of the unit. To find the device name of the printer, while holding the printer power button press the printer feed button and release the printer power button.



The printer will print pertinent information relevant to the printer. Please find additional Star Micronics support topics below: <http://www.starmicronics.com/support/Default.aspx>

## Scanner

The PayPoint Plus unit has inbuilt 2D omni-directional scanner. The scan engine is an N3680 from Honeywell. Below are the specs of the scanner:

<b>Sensor</b>	CMOS sensor with 640x480 pixel resolution
<b>Illumination and Aiming</b>	White LED illumination, Red dot aimer
<b>Field of View</b>	Horizontal: 37.8°, Vertical: 28.8°
<b>Symbologies</b>	Linear: Codabar, Code 11, Code 128, Code 2 of 5, Code 39, Code 93 and 93i, EAN/JAN-13, EAN/JAN 8, IATA Code 2 of 5, Interleaved 2 of 5, Matrix 2 of 5, MSI, GS1 Databar, UPC-A, UPC E, UPC-A/EAN-13 with Extended Coupon Code, Coupon GS1 Code 32(PARAF), EAN-UCC Emulation, GS1 Data bar  2D Stacked: Codablock A, Codablock F, PDF417, MicroPDF417  2D Matrix: Aztec Code, Data Matrix, MaxiCode, QR Code, Chinese Sensible (Han Xin) code  Postal Codes: Australian Post, British Post, Canadian Post, China Post, Japanese Post, Korea Post, Netherlands Post, Planet Code, Postnet

The PayPoint Plus unit ships with a default of “on/off” mode on the 2D scanner.

The scanner default mode out of the box is:

- Virtual com port interface

- Manual Trigger mode (Hardware or software). A HW manual trigger button is located at the back of the scanner
- Beep on scan
- Set up to read most common codes

If you would like to change the scanner to HID or keyboard mode, please scan the below:

### USB Keyboard Mode



### USB HID Mode



You may need to change settings, configurations or modes on your scanner to fit your application needs. You can make these changes in the following ways:

- Scan [barcodes](#) for common configuration changes (see page 9 to 14).
- Use exposed API's to send serial based commands to scanner (see SDK documentation). [Find serial command list here \(Page 10-3\)](#).

The 2D scanner is compatible with the following Honeywell plug-in's (to be purchased separately). Please call us if you are interested in using either of these plug-in's in your POS app:

- Easy DL™ Plug-in: Honeywell's Easy DL™ scanning software plug-in parses barcode data found on government-issued identification cards (US and Canada) to deliver ready-to-use information to the host system. The embedded barcode parsing functionality can support applications including age verification or automatic electronic form population. Easy DL reduces transaction time by 95%, scanning

and populating information in a matter of seconds. See the datasheet [here](#).

- EasyBCBP™ TotalFreedom Plug-in: Honeywell's EasyBCBP™ identity verification software plug-in parses barcode data found on printed or mobile boarding passes for airport applications such as passenger check-in, passenger boarding, security screening, club lounge entry and duty-free store entry. Powered by Honeywell's TotalFreedom® open-system architecture, EasyBCBP ID verification software eliminates the need for host system software to process the encoded information contained within 2D barcodes found on printed or mobile boarding passes. See datasheet [here](#).

## Cash Drawer

The cash drawer is built similar to a full-size industry standard with external dimensions of 411mm (width) x 420mm (depth) x 89mm (height). The cash drawer open is electrically driven through the printer mechanism (Hence, Star's SDK can be used to drive the cash drawer as well similar to a standard TSP100iii set up).

The US cash drawer insert features a 5 bill and 6 coin configuration. Each bill holder for the US is 168mm x 71mm x 51mm tall. The bill holders are adjustable by +/- 6mm. The coin compartment is 86mm long x 58mm wide x 36mm tall. The worldwide cash drawer features a 4 bill and 8 coin configuration. Each bill holder for the Worldwide cash drawer is 170mm x 91mm x 51mm tall. The coin compartment is 41mm long x 91mm wide x 36mm tall.

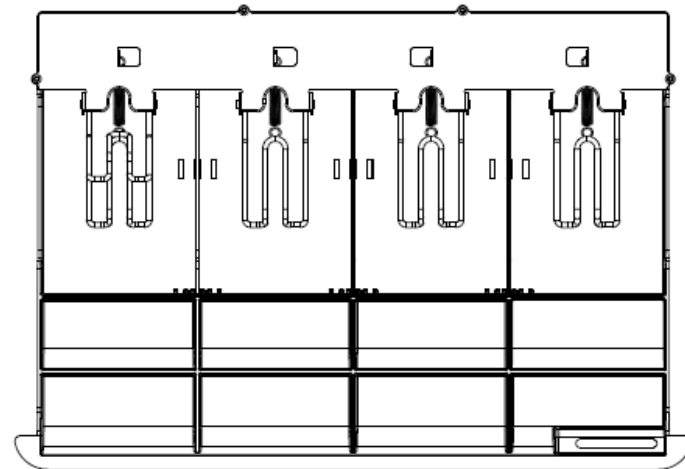
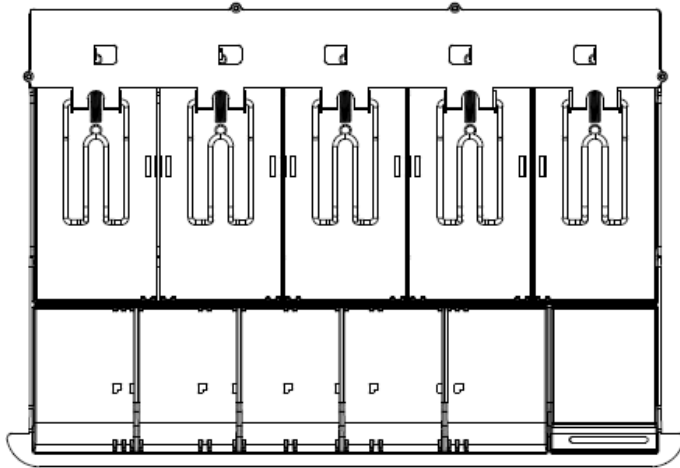
The Cash Drawer is secured with a 3 position lock – Locked, Open, open with SW trigger. The register will be sold with 3 unique keys combinations (001, 002, 003). The key combination is visible and should match on the lock as well as the key. We will make spare keys available for customers to purchase on as-needed basis.

This PayPoint Plus unit also features a second cash drawer port under the unit. This port allows an additional cash drawer to be used with the PayPoint System. If you are using an APG cash drawer, you will need a cable 101A (APG) to run this second cash drawer.

## MSR

The PayPoint Plus unit features a 3-track encryptable MSR from Magtek. Below are the specs:

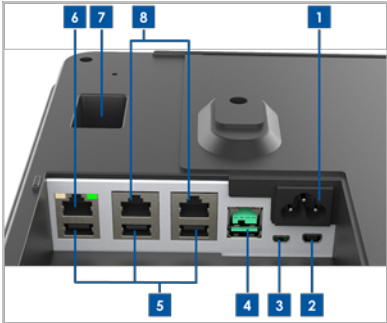
<b>Swipe Speed</b>	4~60 ips (10.1~152.4 cm/sec)
<b>Swipe Direction</b>	Bi-directional
<b># of tracks</b>	3
<b>Encryption</b>	Default not encrypted. Can be encrypted to Level 3 with Elo's API
<b>Supported formats</b>	ISO 7811, ISO 7810, AAMVA, CA DMV, ANSI



You will have the ability to encrypt the reader using Magtek's configuration utility.

## Additional input/output ports

This Register features several ports at the bottom of the unit.



- |   |                      |
|---|----------------------|
| 1 | Power                |
| 2 | Micro HDMI port      |
| 3 | Mini USB port        |
| 4 | 12V USB port         |
| 5 | USB ports            |
| 6 | Ethernet port        |
| 7 | RJ12 cash drawer     |
| 8 | 2x RJ45 serial ports |

## Section 3: Software

### Overview

PayPoint Plus for Windows is available with WIN 10 IOT or without OS (Linux kernels tested by Elo – Ubuntu 16.04/18.04 and SUSE Linux. Other Linux Kernels can be supported – please contact Elo for drivers and integration support).

### How to download drivers:

#### Printer: Star TSP100iiiU

**Windows:** Star's futurePRNT software allows you to download drivers and configure the printer. Click [here](#) to download latest version (Version 7.4 is already installed on the Register). This software includes Windows Driver, Linux CUPS Driver, Mac OS X CUPS Driver, Configuration Utility, OPOS and JavaPOS and hardware manuals.

Drivers Manuals Other Downloads FAQs

Star Micronics TSP100 futurePRNT Software Downloads

Recommended:

The TSP100 futurePRNT Software supports all Star TSP100 Series Printers. The futurePRNT includes support for AllReceipts (digital receipt service), Survey Function, Device management and Engage NOW. (Windows only)

▶ [futurePRNT V7.4 Lite \(283MB\)](#)  
Includes Windows Driver, Linux CUPS Driver, Mac OS X CUPS Driver, Configuration Utility, OPOS and JavaPOS but No Hardware Manuals  
Windows 10(32/64-bit), Windows 8.1(32/64-bit), Windows 8(32/64-bit), Windows 7(32/64-bit)  
Red Hat Enterprise Linux 7.4, openSUSE 42.3, ubuntu 18.04 LTS, CentOS 7.4, Fedora 17, Fedora 27(except for TSP100iiiU)  
macOS 10.13, macOS 10.12, Mac OS X 10.11, Mac OS X 10.10

▶ [futurePRNT V7.4 Full \(476MB\)](#)  
Includes Windows Driver, Linux CUPS Driver, Mac OS X CUPS Driver, Configuration Utility, OPOS, JavaPOS and Manuals

▶ [Bidirectional Control Tool \(465KB\)](#)  
This software is for enabling bidirectional control of printer queue for Star printers.  
Windows 10(32/64-bit), Windows 8.1(32/64-bit), Windows 8(32/64-bit), Windows 7(32/64-bit)  
Target OS: Windows 10 Fall Creators Update (1709)

Software Manuals:

▶ [futurePRNT Software Manual for Windows](#)

▶ [Linux CUPS Driver Software Manual](#)

▶ [Mac OS X CUPS Driver Software Manual](#)

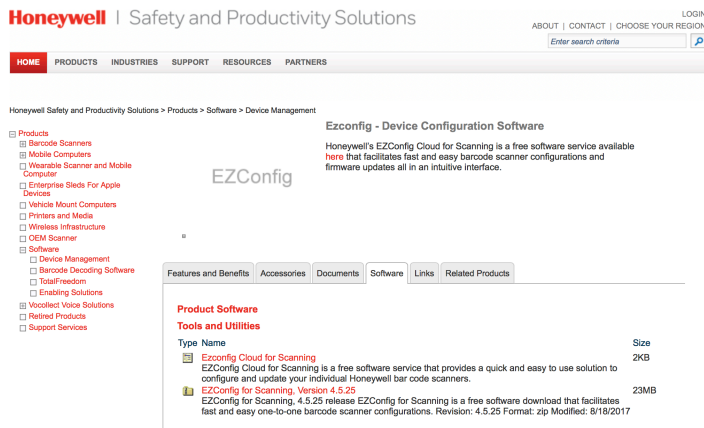
The TSP100 futurePRNT provides ESC/POS mode emulation, which can be configured in "TSP100 Configuration Utility". Thus, even if your current software is designed for the ESC/POS mode, you will be able to use it as is, without making changes. The functions (logo printing, journal, etc.) of the TSP100 futurePRNT remain usable even when you print in the ESC/POS mode. For information about how to use the ESC/POS mode, refer to "4.18 Print Job Routing (Write Printer)" in the manual for details.

Click [here](#) for the user manual for Star's FuturePRNT software for Windows

**Linux:** The following OS are supported by Star: Windows 10 IOT, Red Hat Enterprise Linux 7.4, openSUSE 42.3, ubuntu 18.04 LTS, CentOS 7.4, Fedora 17. Click [here](#) for the user manual and instructions to download LINUX drivers.

## 2D scanner: Honeywell N3680

**Windows:** Honeywell's EZConfig software is a web based configuration utility that facilitates fast and easy barcode scanner configurations and firmware updates all in an intuitive interface. Click [here](#) to download the latest version (a version is installed on the Register).



Click [here](#) for a user guide that details the functionality of this configuration utility.

Click [here](#) for JPOS, OPOS, POSNET drivers

**Linux:** Instead of providing a dedicated USB COM Port driver for Linux, the Register supports the CDC-ACM (Communications Device Class Abstract Control Model) protocol. This protocol is supported by Linux distributions with kernel versions 2.6.14 and higher. This means that a USB COM Port connection can be established without the need for a manufacturer's device driver. Within Linux, the CDC ACM driver is referred to as 'ttyACM' or sometimes just 'ACM'.

The linked document [LINUX USB serial port emulation](#) provides more detailed information to aid setting up and testing a Linux USB serial connection.

**Windows:** the Magtek Reader Configuration Program is a configuration utility that allows for remote configuration and key injection services. Click [here](#) to install the Magtek Reader Configuration Program.

## MagTek, Inc. MagTek Reader Configuration Program

**Name:** MagTek Reader Configuration Program

**Version:** 1.5.4.10

**Publisher:** MagTek, Inc.

The following prerequisites are required:

- Microsoft .NET Framework 4.5 (x86 and x64)

If these components are already installed, you can [launch](#) the application now. Otherwise, click the button below to install the prerequisites and run the application.

Install

Click [here](#) for user guide that details the functionality of this configuration program.



## Section 4: Contact Information

Our team is on standby to provide any help or support during the process. Please first reach out to Technical Support team for any questions or assistance.

### Relationship



Dave Murphy  
Software Alliances

[dave.murphy@elotouch.com](mailto:dave.murphy@elotouch.com)



Sonal Apte  
POS Products

[sonal.apte@elotouch.com](mailto:sonal.apte@elotouch.com)

### Technical Support



Josh Davidson  
Application Engineer  
+1 844 435 6832

[josh@elotouch.com](mailto:josh@elotouch.com)



Courtney Murry  
Application Engineer  
+1 844 435 6832

[courtney.murry@elotouch.com](mailto:courtney.murry@elotouch.com)

### Developer Support

[elodev@elotouch.com](mailto:elodev@elotouch.com)  
Developer Group



Cameron Cole  
HW engineer

[cameron.cole@elotouch.com](mailto:cameron.cole@elotouch.com)

To find out more about our extensive range of Elo touch solutions, go to [www.elotouch.com](http://www.elotouch.com), or call the office nearest you.

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**North America**

Tel +1 408 597  
8000

Fax +1 408 597  
8001

customerservice@e  
lotouch.com

**Europe**

Tel +32 (0)16 70  
45 00

Fax +32 (0)16  
70 45 49

elosales@eloto  
uch.com

**Asia-Pacific**

Tel +86 (21)  
3329 1385

Fax +86 (21)  
3329 1400

www.elotouch  
.com.cn

**Latin America**

Tel +52 55 2281-6958  
www.elotouch.com

