

Ficha técnica

Epson

Modelos / familias

TM-H6000VI

Fuente del fabricante

TM-H6000VI Technical Reference Guide

https://files.support.epson.com/pdf/pos/bulk/tm-h6000vi_trg_en_revc.pdf

Las páginas siguientes son un extracto técnico del documento oficial del fabricante.

Application Development Information

This chapter describes how to control the printer and gives information useful for printer application development.

Controlling the Printer

The printer supports the following command systems:

- ESC/POS
- ePOS-Print XML
- ePOS-Device XML

Users can control the printer by using the followings.

- EPSON Advanced Printer Driver
- EPSON OPOS ADK
- EPSON OPOS ADK for .NET
- EPSON JavaPOS ADK
- Server Direct Print

ePOS-Print XML

ePOS-Print XML is the Epson original control command system for POS printers defined in XML. With ePOS-Print XML commands, you can print in environments where HTTP communication is available and from OS applications. For detailed information about ePOS-Print XML, see the "ePOS-Print XML User's Manual".

ePOS-Device XML

ePOS-Device XML is a command system that uses XML to define functions to control various POS peripherals (including this product printer unit) connected to this product. An application creates a request message in XML format and sends it to this product using socket communications. For detailed information about ePOS-Device XML, see the "ePOS-Device XML User's Manual".

ESC/POS

ESC/POS is the Epson original printer command system for POS printers and customer display. With ESC/POS commands, you can directly control all the printer functions, but detailed knowledge of printer specifications or combination of commands is required, compared to using drivers and applications.

For detailed information about ESC/POS commands, see the Product Specifications. Product Specifications is available after contracting the non-disclosure agreement with Epson. For details, please contact the selling agency.

Controlling the Cash Drawer

A pulse output is sent to drawer kick connector pin 2 or pin 5, and you can open the drawer.

You can also check the open/close status of the drawer by checking the signal level of the drawer kick connector pin 3. These controls are executed by a driver or by commands.

ESC/POS Commands

Prepare the output command for the specified pulse and the status transmission command.

For detailed information about ESC/POS commands, see the Product Specifications. Product Specifications is available after contracting the non-disclosure agreement with Epson. For details, please contact the selling agency.

For Windows Printer Drivers (APD)

You can set so that the drawer opens at the start/end of printing or start/end of a page. For details, see the manual for drivers.

For details on control, see the manual for Status API of the driver.

OPOS (OCX Driver)

Register a cash drawer using the SetupPOS Utility, and control using the OpenDrawer method or the DirectIO function.

For details, see the "EPSON OPOS ADK MANUAL APPLICATION DEVELOPMENT GUIDE CashDrawer" and the "UnifiedPOS Specification".

OPOS for .NET

Register a cash drawer using the SetupPOS Utility, and control using the OpenDrawer method or the DirectIO function.

For details, see the "EPSON OPOS ADK for .NET MANUAL Application Development Guide Cash Drawer (EPSON Standard)" and the "UnifiedPOS Specification".

JavaPOS

Register a cash drawer using the SetupPOS Utility, and control using the OpenDrawer method or the DirectIO function.

For details, see the "EPSON JavaPOS ADK MANUAL Application Development Guide Cash Drawer (EPSON Standard)" and the "UnifiedPOS Specification".

Server Direct Print

Prepare the output command for the specified pulse and the status transmission command.

For details, see the "Server Direct Print User's Manual".

Software

The following software is provided for application development.

Development Kits

Software	Description
EPSON OPOS ADK	This OCX driver can control POS peripherals using OLE technology. * Because controlling POS peripherals with original commands is not required on the application side, efficient system development is possible.
EPSON OPOS ADK for .NET	The OPOS ADK for .NET is a POS industry standard printer driver compatible with Microsoft POS for .NET. It allows you to develop applications that are compatible with the UPOS (Unified POS) specification. When developing applications, use a separate development environment such as Microsoft Visual Studio .NET.
EPSON JavaPOS ADK (Windows/Linux)	JavaPOS is the standard specification which defines an architecture and device interface (API) to access various POS devices from a Java based system. Using JavaPOS standard API allows control with Java based applications of functions inherent to each device. A flexible design with Java language and JavaPOS enables many different types of computer systems, such as stand alone or network configuration, to use a same application. You can use JavaPOS to build applications and drivers independently of platforms. This allows flexible configurations using thin clients to meet the system requirements.

*: OLE technology developed by Microsoft divides software into part blocks. The OPOS driver is presupposed to be used with a development environment, such as Visual Basic, unlike ordinary Windows printer drivers. It is not a driver to be used for printing from commercial applications.

You can acquire documents regarding the UnifiedPOS from the following link.

<https://www.omg.org/spec/UPOS>

Drivers

Software	Description	Operating environment
EPSON Advanced Printer Driver (APD)	In addition to ordinary Windows printer driver functions, this driver has controls specific to POS. The Status API (Epson original DLL) that monitors printer status and sends ESC/POS commands is also attached to this driver.	Windows
EPSON TM Virtual Port Driver	This is a serial/parallel-USB/LAN conversion driver to make an Epson TM/BA/EU printer connected via USB or LAN accessible from a POS application through a virtual serial or parallel port. It allows you to directly control devices connected via USB or LAN with ESC/POS commands without making changes in the POS application that controls devices connected via a serial or parallel interface.	Windows
TM Series Printer Driver for Linux	This driver allows you to control the printer using Common UNIX Printing System (CUPS) on GNU/Linux. This is a full raster printer driver. It is able to print images, text, and vector graphics etc., that an application displays.	GNU/Linux

Utilities

Software	Description	Operating environment
TM-H6000VI Utility	A utility for checking and changing various printer settings. Use this utility to: • Check the current settings • Test operation • Store logos • Set paper saving • Set printing control • Set communication interfaces • Configure the network settings • Configure the TM-Intelligent function settings • Save/restore settings	Windows
Epson TM-H6000VI Slip Paper Sensor Adjustment Tool	This tool is for adjusting the slip paper sensor of the TM-H6000VI. Use this tool if the Slip LED blinks even though slip paper has been removed from the printer.	Windows
Epson Deployment Tool	Use to make network and printer settings simultaneously. Allows you to make settings efficiently at the time of introducing TM printers for the first time, or when configuring multiple TM printers at the same time.	Windows

Epson Monitoring Tool	Use to check a list of status for the Epson printers connected to the network. You can also update certificates for multiple printers used for WPA-Enterprise/WPA2-Enterprise in a batch.	Windows
BmpToRaster	You can convert BMP image files to multi tone or black and white print command data.	Windows
TM-H6000VI Firmware Updater	This tool allows you to update the firmware for the TM-H6000VI.	Windows

Others

Manual	Description
ePOS-Print XML User's Manual	Describes ePOS-Print XML statements. This manual comes with sample programs.
ePOS-Device XML User's Manual	Describes ePOS-Device XML statements. This manual comes with sample programs.
Server Direct Print User's Manual	Describes the details and specifications of Server Direct Print. This manual comes with sample programs.
Web Config Reference Guide	Describes items that can be configured in Web Config.

Download

You can obtain software and manuals from one of the following URLs.

For customers in North America, go to the following web site and follow the on-screen instructions.

<https://www.epson.com/support/>

For customers in other countries and regions, go to the following web site:

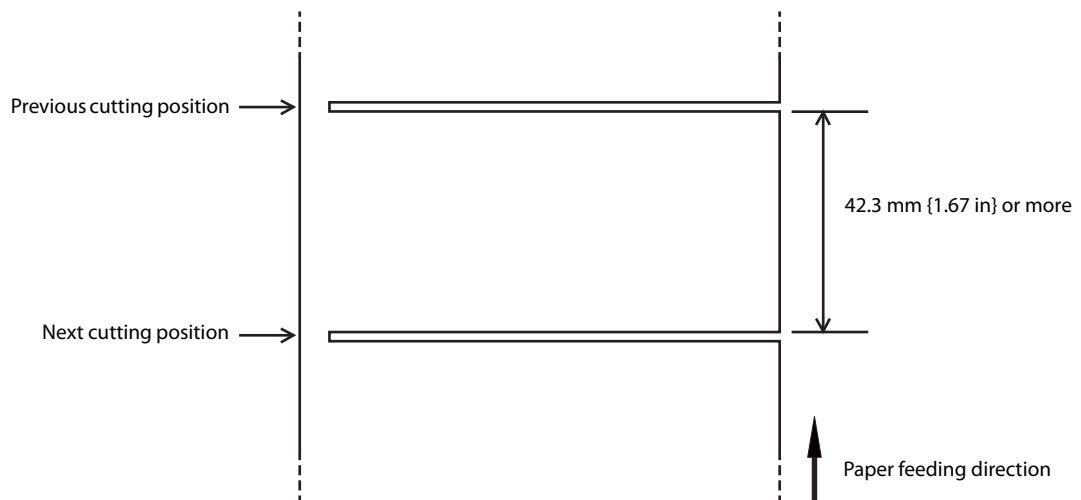
<https://epson.sn>

Precautions when Developing Applications

This section describes information that you should be aware of when developing systems and applications using this product.

Minimum Paper Length when Cutting

When printing short in the vertical direction of the paper, cut the paper at least 20 mm {0.79 in} away from the previous cutting position. If the cut paper is too short, the top edge of the paper may get caught in the opening of the case during paper feeding, causing a paper jam.



Notes on Printing Barcodes and Two-Dimensional Symbols

- Ensure adequate space around the code; “quiet zone” that is required for the code.
- To print PDF417 (two-dimensional symbol), the following settings are recommended.
 - Module height: 3 to 5 times the module width
 - Vertical size of the symbol: approximately 5 mm {0.20 in} or more
- The recognition rate of ladder bar codes and two-dimensional symbols may vary depending on widths of the modules, print density, environmental temperature, type of paper, and characteristics of the reader. Make sure to check the recognition rate beforehand to determine the settings and use conditions so that the restrictions of the reader are satisfied.
- Reading quality of multi-gradation bar codes and two-dimensional symbols is not guaranteed.
- When printing a ladder barcode or two-dimensional symbol that is created as a graphics data, set the print speed to level 4.
- Note the following when printing barcodes on the face of a slip:
 - Ladder barcodes and 2-dimensional symbols are not supported.
 - Be sure to add HRI characters because the recognized rate of barcode reading may vary depending on density, gradation, or performance capabilities of barcode reader used.