



# Model 554 USBPro™II HID-Compliant Interface User's Guide

## Functional Description

The APG Cash Drawer Model 554 USBPro™ II HID-Compliant End Node Interface is designed to plug directly into the USB port or hub. This cash drawer interface is defined as Low Speed, High Power per USB Specification Version 1.1. Supplied on the disk are evaluation Human Interface Device (HID) programs for Windows 98SE, WindowsME, Windows2000, and WindowsXP. For other operating systems, contact APG or go to <http://www.apgcd.com/drivers.html> for availability. This interface has diagnostic lights to assist in installation and troubleshooting. The standard product includes a six-foot USB A-B cable.

## I. Configuration and Use

1. Unpack all components and save packaging.
  2. Connect the square plug into the USB port on the bottom of the cash drawer.
  3. Connect the rectangular plug of the USB cable to the computer USB port or Hub.
  4. The PC will recognize the USBPro™ Cash Drawer as a valid HID device and will automatically install the driver.
- SOFTWARE DEVELOPERS NOTE: The APG Test Programs on the "APG USBPro™ Interface Drivers and Demo Software" disk include VB and VC++ source code.

## II. Operating the Cash Drawer using the sample APG-provided Test Applications

Several different test applications, with source code, have been provided with the product for your implementation convenience.

1. Insert "APG USBPro™ Interface Drivers and Demo Software" disk into appropriate drive.
2. Click on the "Start" button, then click on the "Run" option
  - Open "a:\554USBProII HID Compliant Cash Drawer\Executables\hiddemo5.exe".
  - When the 554 cash drawer is connected, the HID# field will show the coded drawer number (1-255).
  - Press "Open Drawer" to trigger the cash drawer to open.Or, for a DLL implementation of the driver set
  - Open "a:\554USBProII HID Compliant Cash Drawer\554\_DLL\_Implementation\Visual\_Basic\_Application\TestUSB554DLL.exe"
  - Click on "OpenUPort" to open the USB port
  - Click "OpenUCD" to open the cash drawer
  - Click "UCDStatus" to check the cash drawer status
  - Click "CloseUPort" to close the USB port.Or, for a Control Panel Extension of the driver set in Windows 2000 and Windows XP
  - Open a:\554USBProII HID Compliant Cash Drawer\Executables\poscpl.cpl".
  - Click the "Open Drawer" button. The file monitors and reports cash drawer status.
3. Sample code is provided. Review and include, as appropriate, the portions of the code for your needs.
4. The USBPro™ II Cash Drawer is designed to wait 3 seconds between multiple openings to recharge the cash drawer.

## III. Troubleshooting

The cash drawer is equipped with two diagnostic lights or LED's (Light Emitting Diodes) inside the drawer to aid in troubleshooting a system. Open the drawer with the key, remove the plastic money tray, and look into the back of the cash drawer to observe the lights.

1. Plug the cash drawer into the USB port. The LED's will flash simultaneously when the cash drawer is connected until it is recognized by the operating system.
2. Immediately after the USB drivers are active, the LED's will flash on alternately.
3. If the LED's still flash simultaneously, open the Device Manager (see below) and verify the driver status is functional.
  - A. Go to Device Manager under Control Panel then System application.
  - B. On the list is "Human Interface Devices" with a plus sign in front. Clicking on the plus sign expands to show all the active HID-compliant USB device drivers.
  - C. "HID-compliant device" and "USB human interface device" will be displayed when the cash drawer is connected.
  - D. Plugging in the USB cash drawer or unplugging changes the display quickly. It may be necessary to click on the plus sign again to reset the list.
4. USB hubs typically require an external power supply for High-Power devices such as the USBPro™ Cash Drawer.

If difficulties persist, contact your supplier for more information or contact: APG Cash Drawer technical support at (763) 571-5000, or via email at [support@apgcd.com](mailto:support@apgcd.com)

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