



USBPro™ Interface User's Guide

Functional Description

The 354 USBPro™ 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. The USB driver supplied on the disk is for Windows 95 (with OSR 2.0) or Windows 98 operation only.

This interface has diagnostic lights to assist in installation and troubleshooting. The standard product includes a 6 foot USB A-B cable.

I. Configuration and Use

This Guide assumes the installer has some technical experience connecting computer peripherals.

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. If the PC prompts "Unknown Device", step through the installation prompts using the "APG USBPro™ Interface Drivers and Demo Software" disk. Make sure to select the disk drive where the disk is installed when prompted for the file location.

SOFTWARE DEVELOPERS NOTE: The APG Test Program on the "APG USBPro™ Interface Drivers and Demo Software" disk includes C++ source code. See the "Programmers Reference" document in the "Software Programmers Kit" directory. USB OPOS drivers are available from the APG Cash Drawer web site: www.apgcd.com.

II. Operating the Cash Drawer using the APG Test Program

1. Insert "APG USBPro™ Interface Drivers and Demo Software" disk into appropriate drive.
2. Click on the "Start" button.
3. Click on the "Run" option, and Open "a:\chstst.exe".
4. Select "Find Cash Drawer(s)", and press **OK** button. NOTE: This command will not be repeated.
5. Selecting "Read Status from Cash Drawer" will bring up a popup window with the drawer status. Press the **OK** button to continue.
6. Select "Open Cash Drawer" to trigger drawer.
7. The USBPro™ 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 these 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. Right click on "My Computer" icon and select "Properties".
 - B. Click on the "Device Manager" tab.
 - C. On the bottom of the list is "Universal serial bus controller" with a plus sign in front. Clicking on the plus sign expands to show all the active USB device drivers.
 - 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

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