USB Interface / USB-HUB Combo Interface

USB Interface
P/N#2261998USBA1-XX:
USB Interface KIT (Includes Power Supplies & USB Host Cables)
P/N# 641-2575-00:
Cash Drawer Power Supply (12V dc)
P/N# 641-25BX-00:
USB Host Cable

USB-HUB Combo Interface
(A combination of our standard USB Interface and a 4-Port HUB)
P/N# 2261998USBA1-XX:
USB-HUB Interface KIT (Includes Power Supplies & USB Host Cables)
P/N# 641-2575-00:
Cash Drawer Power Supply (12V dc)
P/N# 641-25CE-00:
USB Hub Power Supply (5V dc)
P/N# 641-25BX-00:
USB Host Cable

GETTING STARTED:

If you have purchased a USB-HUB Combo, proceed by always connecting the standard USB interface which serves as the cash drawer's connectivity first. For both types of interfaces, please follow these steps:

❶ **Select Cash Drawer Number**
The MMO POS USB Interface Board is factory defaulted to recognize the first cash drawer to be installed as drawer number zero (0), see Figure 1.0 Dip-Switch Position (Default Setting). If user decides to assign another drawer number, please follow the pin configuration illustrated in SWITCH SETTINGS Table 1.0 or label attached to the interface for correct pin orientation. **MMF recommends selecting cash drawer number one (1) as your option**.

❷ **Connect the Power Supply** (12VDC / .8 Amp)
Plug the small plug tip to the interface power port in the back of the cash drawer interface as illustrated in Figure 1. Plug the power adapter end into a 120 Volt AC Recepticle.
Always connect the power supply before the USB Cable. LED#2 (GREEN) and LED#5 (RED) should be ON at this time, refer to Table 2.0 for reference.

❸ **Connect USB Cable**
Plug the Type B connector end to the USB Port of the interface as illustrated in Figure 1 and the Type A Connector to the USB port of the Host Computer. ALL the LED except LED#4 (GREEN) should be ON at this time. Refer to Table 2.0 for LED State.

❹ **Test Functionality of Interface**
Follow the steps detailed below for 'USB Test Utility Installation'.

❺ **Install OPOS Drivers**
Follow the steps detailed below for 'MMF OPOS Drivers Installation'.

NOTE: Do not assign two (2) USB interface cash drawers within the same system with the same cash drawer number.
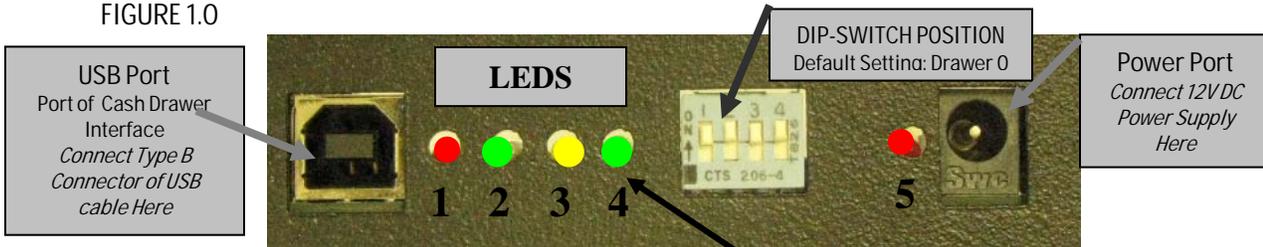
FIGURE 1.0

TABLE 1.0   **This light should not be ON at any time**

SWITCH SETTINGS		DRAWER							
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
DIP-SWITCH	**SW1**	ON	OFF	ON	OFF	ON	OFF	ON	*OFF*
	SW2	ON	ON	OFF	OFF	ON	ON	OFF	*OFF*
	SW3	ON	ON	ON	ON	OFF	OFF	OFF	*OFF*
	SW4	RESERVED							

Note: OFF is when pins are facing down (↓). ON is when pins are facing up (↑).

TABLE 2.0

LED NAME	COLOR	STATE		
		ON		OFF
		Solid	Intermittent	
LED-1	Red	USB Cable Connected	▓▓▓	No USB Cable
LED-2	Green	Cash Drawer Closed	USB Communication Transmit	Cash Drawer Open
LED-3	Yellow	Solenoid in position and ready to kick drawer open	▓▓▓	Solenoid kicked drawer open
LED-4	Green	**Port Powered- Not Recommended** See Note 1 1st:Plug USB Cable 2nd:Plug Power Adapter	▓▓▓	**Adapter Powered** 1st:Plug Power Adapter 2nd:Plug USB Cable
LED-5	Red	Power Supply Connected	▓▓▓	No Power Supply

NOTE 1
Port Powered: Draws power from the computer, which will not provide enough power to operate cash drawer's latch mechanism.

NOTE 2: Adapter Powered: Draws power from the provided power supply adapter.

USB TEST UTILITY INSTALLATION

A CD with the utility drivers and test utility (See Figure 1.1) is included with the cash drawer. The drivers and test could also be found by logging on to:
http://www.mmfpos.com/drivers

❶ Download the *MMF USB Driver and Test Utility* file from the website by opening the zipped file or insert CD.

 » *Open folder named "MMF USB_Setup"*
 » *Click on the "Setup.exe" Icon*
 » *Click on "Run"*
 » *Follow through the automatic setup*
 » *After download is completed, go to "Start" Menu*
 » *Go to "All Programs"*
 » *Select the "MMF Cash Drawer Company USB CRDemo" program*

FIGURE 1.1

❷ Click Status, a result letter character (O/C/N) should appear in the result box under the cash drawer number given to the unit by setting the dip switch (Step 1-Getting Started)

LEGEND	
Action	**Result under Assigned Drawer #**
Present	N
Closed	C
Opened	O

❸ Make sure cash drawer is closed and the letter 'C' appears in the result box.

❹ Click 'Kick' to open the cash drawer, the letter 'O' should now appear in the result box.

❺ Repeat if necessary.

MMF OPOS DRIVER V1.9 INSTALLATION

STEP 1
Install MMF OPOS Driver V1.11, available under: http://www.mmfpos.com/drivers

① *The user installing the MMO POS software and configuring the cash drawer devices on Windows 2000 and Windows XP is required to have Administrator Rights. Once the software is installed, all users with normal rights can use it.*
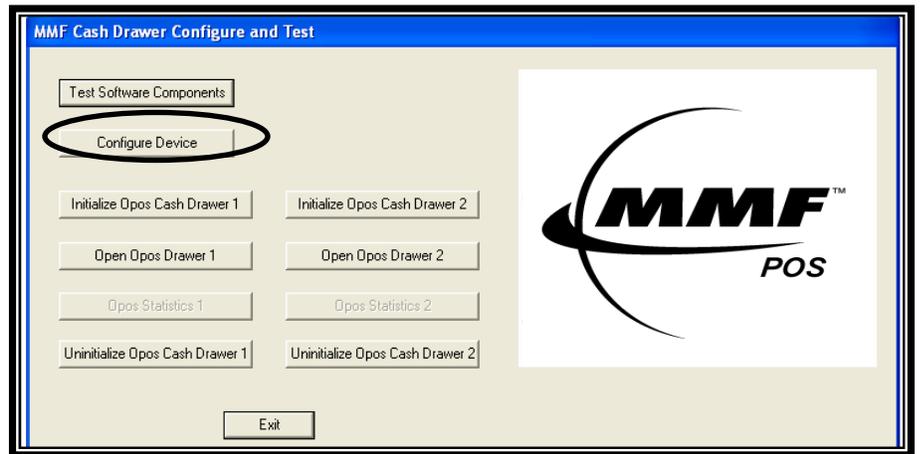
STEP 2
If using CD, open the file named MMF OPOS 1.11
To install the driver run the file: Setup.exe.
The program will ask you to unzip, click Unzip.
» *After download is completed, go to "Start" Menu*
» *Go to "All Programs"*
» *Select the "MMF Cash Drawer" program*
» *Select the "Configure and Test" program*

STEP 3
Open the "Configure and Test" program and click on "Configure Device". (See Figure 1.2)

STEP 4
To configure drawer **-** click on "Add new drawer". A window will appear asking you to enter a name for your cash drawer, name it *Cash_Drawer#1 (See NOTE)*. Select the option of "USB Interface with Statistics" as the Cash Drawer Interface (See Figure 1.3) and click "OK" to save settings.
NOTE: The name Cash_Drawer#1 is case and character sensitive. Please type it exactly as shown

FIGURE 1.2
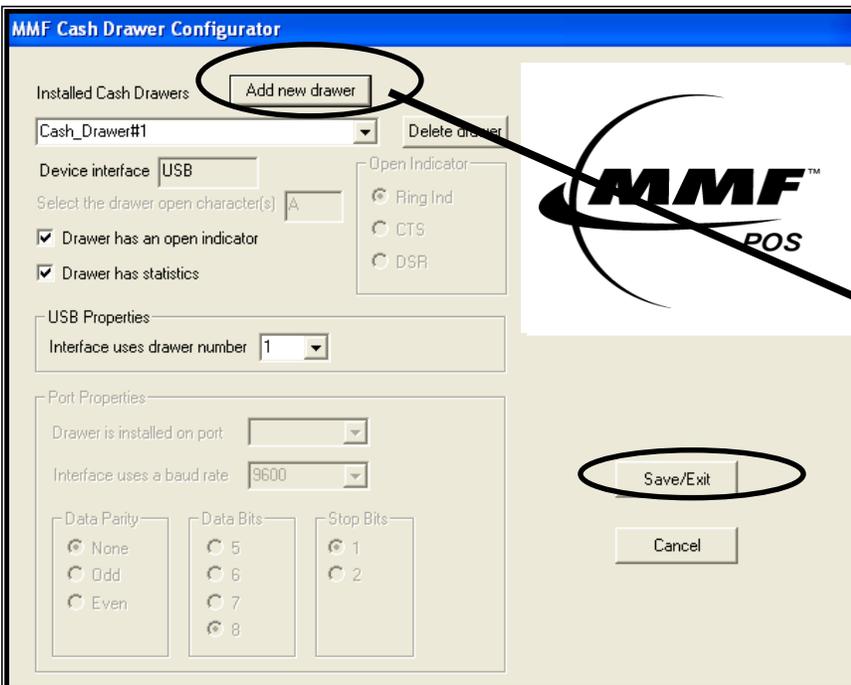
FIGURE 1.3

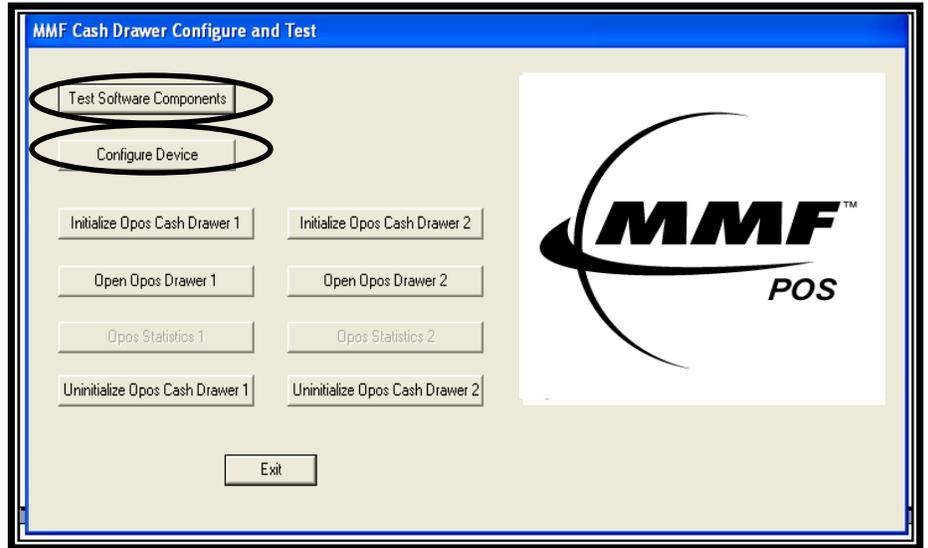NOTE: NOTE: The name Cash_Drawer#1 is case and character sensitive.
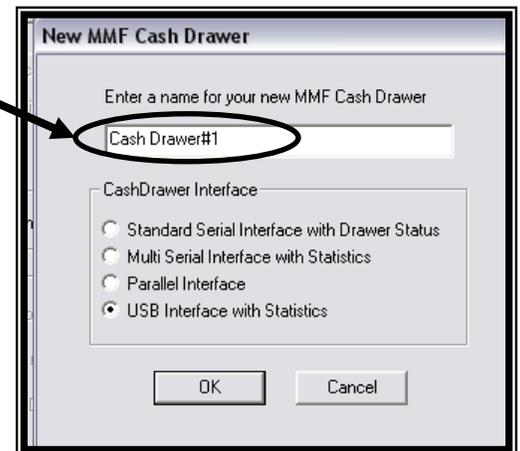
STEP 5

To test drawer **-** Click on
"Initialize OPOS Drawer 1"
then, click on "Open OPOS
Drawer 1" (See Figure 1.4
the following message will be
displayed:

Drawer Open Event

Drawer Open Event Cash_Drawer#1

OK

STEP 6

Click "OK" to the above message and then
manually close the cash drawer.
When the drawer is completely closed the
following message will be displayed:

Drawer Close Event

Drawer Close Event Cash_Drawer#1

OK

FIGURE 1.4

MMF Cash Drawer Configure and Test

Test Software Components

Configure Device

Initialize Opos Cash Drawer 1   Initialize Opos Cash Drawer 2

Open Opos Drawer 1   Open Opos Drawer 2

Opos Statistics 1   Opos Statistics 2

Uninitialize Opos Cash Drawer 1   Uninitialize Opos Cash Drawer 2

Exit

STEP 7

Click on "Un-initialize OPOS Drawer 1" and the test is complete. Repeat only if necessary.

TROUBLESHOOTING TIPS

☑ Make sure the power supply adapter was connected **before** the USB cable and that LED#4 (GREEN)
is OFF.

☑ Check Dipswitch Setting correlate to the name of the cash drawer. If you decide to change dipswitch
settings, disconnect the power cable and USB cable from the interface, change dipswitch pins and
reconnect all the cables per the steps detailed in the 'Getting Started' Section on page one of this
manual.

☑ If installing the OPOS drivers, when adding a new drawer, make sure you selected "USB Interface
with Statistics" as the Interface type.

☑ If installing the OPOS drivers, make sure that under
'USB Properties' the number in the dropdown is the
same as the number selected for the drawer on the
dipswitch.

     USB Properties
     Interface uses drawer number   1   ▼

☑ Switch to another USB port in the computer, if necessary.
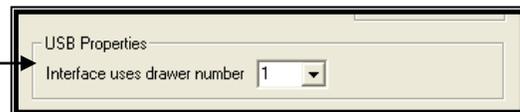
4-PORT USB HUB FEATURES:

- ☒ Compliant with USB Specification 2.0 / 1.1
- ☒ Supports Data Rate: 1.5/12/480 Mbps
- ☒ 4 Downstream Ports
- ☒ Support split transaction to handle full speed and low speed transaction at downstream facing ports when Hub controller is working at high-speed mode.
- ☒ One Transaction Translator per hub and supports four (4) concurrent non-periodic transactions.
- ☒ Self or Bus-Powered

      Self Power Mode (With Power Supply)
           -Connects up to four (4) devices (Any USB Peripheral Device)
           -500mA per each USB downstream port – Type A Connectors

      Bus Powered Mode (No Power Supply)
           -Connects up to four (4) self-powered or low- powered devices
           -100mA per each USB downstream port – Type A Connectors
           -Only self powered hubs may be connected to hub

- ☒ Supports Over-Current detection and individual power control
- ☒ Supports "non-removable" attribution on individual port

> **System Requirements:**
> - ☒ Windows 98/SE/2000/ME/XP/Vista
> - ☒ MAC OS 8.6.1 or above (USB1.1)

USB 4 –PORT HUB SET-UP

STEP 1

Determine if the 5V power supply will be necessary (Self or Bus Powered) according to the type of peripherals that will connect to it.

Self Powered Peripherals: Devices which have their own power supply adapter, and just need the USB connectivity as a communication medium. Such devices **will not** need the hub to be powered by the 5V power supply provided.

Bus Powered Peripherals: Devices which do not have their own power supply adapter and will need 5V or less to operate. Such devices **will** need the hub to be powered by the 5V power supply provided.

If not sure, connect the power supply anyway. Plug the small plug tip to the hub power port in the back of the cash drawer interface as illustrated in Figure 1.5. Plug the power adapter end into a 120 Volt AC Recepticle.

5V Power Jack for
4-Port USB HUB

Host Cable-
Connect to
Computer

STEP 2

Connect the host cable to the host computer as illustrated in Figure 1.5.

STEP 3

Connect the peripherals to any of the 4 ports available.

NO Drivers or Software necessary for the USB 4-Port Hub

> **Information**
>
> **FCC Statement**
>
> **DECLARATION OF CONFORMITY WITH FCC RULES FOR ELECTROMAGNETIC COMPATIBILITY**
>
> *We, MMF Cash Drawer, declare that the product:*
>
> *USB Interface to which this declaration relates:*
>
> Complies with Part 15 of the FCC Rules
>
> This Class 'A' Digital apparatus complies with Canadian ICES-003.
>
> Cet appareil numérique de la classe 'A' est conforme à la norme NMB-003 du Canada.

CE Declaration

Complies with the EMC Directive 89/336/EEC Standard EN55022 (2006), EN55024(1998), EN61000-3-2(1995), EN61000-3-3(2006)