

ENGLISH

Volume

1

MMF CASH DRAWER  
Standard Serial Interface

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Instruction Manual  
/User Guide

# Standard Serial Interface - User Manual

The MMF Standard-Serial Interface is part of the upgradeable interface series of electronic boards located behind the cash drawer's body which enables the unit to be controlled electronically by a host, such as a computer or terminal by way of a serial RS-232 output port.



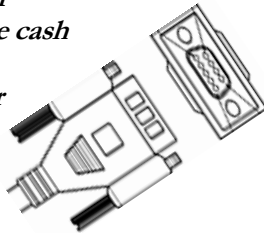
## Getting Started



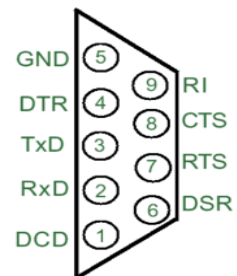
- ☑ Prepare a location for the cash drawer by selecting a secured, leveled surface that is no smaller than the cash drawer.
- ☑ Operating temperature should be controlled at 20° F to 100°F (-7° C to 37°C).
- ☑ Position the cash drawer and remove any packing tape or guards from the tray.

## Connections

**Warning!**  
*Make all electrical connections to the cash drawer with the computer's power turned off.*



PIN 1: DCD - Data Carrier Detect
PIN 2: RXD - Receive Data
PIN 3: TXD - Transmit Data
PIN 4: DTR - Data Terminal Ready
PIN 5: GND - Signal Ground
PIN 6: DSR - Data Set Ready
PIN 7: RTS - Request to Send
PIN 8: CTS - Clear to Send
PIN 9: RI - Ring Indicator



- ❶ Connect the power supply by plugging the small plug tip to the interface receptacle in the back of the cash drawer. Plug the power adapter end into a 120 Volt AC Receptacle.
- ❷ Uncoil the already attached interface cable and securely fasten to COM1 or COM2 of the computer.
- ❸ Follow test procedure detailed below to verify proper operation of the interface.

# Test Procedures

## Test from DOS:

1 Go to Start » Programs » Accessories » Command Prompt

2 Configure the COM port settings by typing:

**MODE com1:9600,n,8,1** <enter>

The computer should return the following

```
C:\Documents and Settings\testp>mode com1:9600,n,8,1
Status for device COM1:
-----
Baud:          9600
Parity:        None
Data Bits:     8
Stop Bits:     1
Timeout:       OFF
XON/XOFF:      OFF
CTS handshaking: OFF
DSR handshaking: OFF
DSR sensitivity: OFF
DTR circuit:   ON
RTS circuit:   ON

C:\Documents and Settings\testp>
```

2 To test the cash drawer type:

**copy con com1:** <enter>

**A** <enter>

**F6** <enter>

The drawer should open at this point and the PC will return the following

```
C:\Documents and Settings\testp>copy con com1:
A
^Z
1 file(s) copied.
C:\Documents and Settings\testp>
```

## An alternative test command program:

1 Configure the COM port settings by typing:

**MODE com1:9600,n,8,1** <enter>

The computer should return the following

```
C:\Documents and Settings\testp>mode com1:9600,n,8,1
Status for device COM1:
-----
Baud:          9600
Parity:        None
Data Bits:     8
Stop Bits:     1
Timeout:       OFF
XON/XOFF:      OFF
CTS handshaking: OFF
DSR handshaking: OFF
DSR sensitivity: OFF
DTR circuit:   ON
RTS circuit:   ON

C:\Documents and Settings\testp>
```

2 Type:

**echo>com1** <enter>

The drawer should open at this point

3 Close drawer. To open again, Press F3.

Cash drawer should open and computer should reply with: **echo>com1**

If the drawer fails to open using the test command program, refer to the troubleshooting guide. If drawer opens successfully, install your POS software or OPOS Drivers, if needed. If the cash drawer fails to open with the POS Software, contact your software manufacturer for further assistance.

# Software Drivers

**Warning!**  
*Do not use the OPOS drivers if the cash drawer connects directly to a receipt printer.*

MMF offers application developers and end users most of the choices available for cash drawer control. OPOS Drivers are used by developers for its built-in networking capabilities, which makes it easy to connect a variety of current and legacy retail device peripherals, PCs, servers, and services in the retail and hospitality markets that work together on a single point-of-service system.

## **MMF OPOS DRIVER V1.9 INSTALLATION**



### **STEP 1**

Install MMF OPOS Driver V1.9, available under:  
[http://www.mmfcashdrawer.com/08/driver\\_downloads.html](http://www.mmfcashdrawer.com/08/driver_downloads.html)

ⓘ The user installing the MMF cash drawer 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**

To install the driver run the file: Setup.exe. When the installation is complete, the Start Menu item under the 'Programs' folder will have the following option: 'Configure and Test'

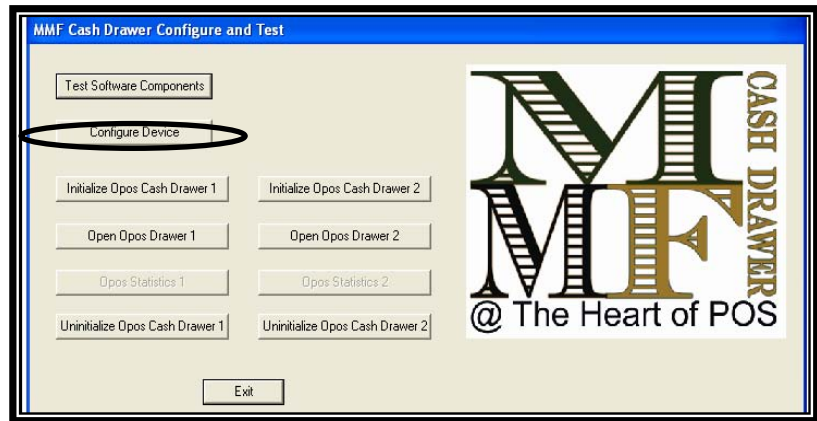
### **STEP 3**

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

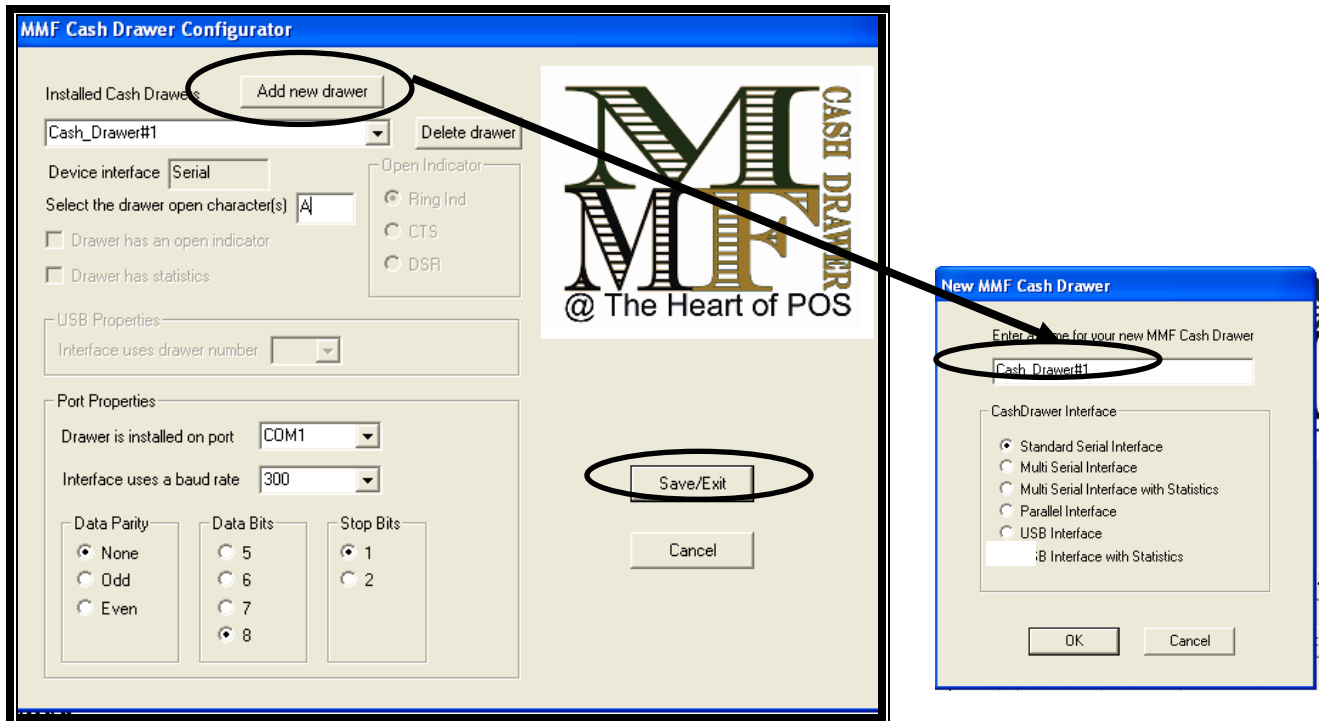
### **STEP 4**

To configure drawer - click on "Add new drawer" and name unit by typing 'Cash\_Drawer#1' in the text box. Type all the settings as illustrated on the configuration screen (See Figure 1.3) and click "OK" to save settings.

**FIGURE 1.2**



**FIGURE 1.3**

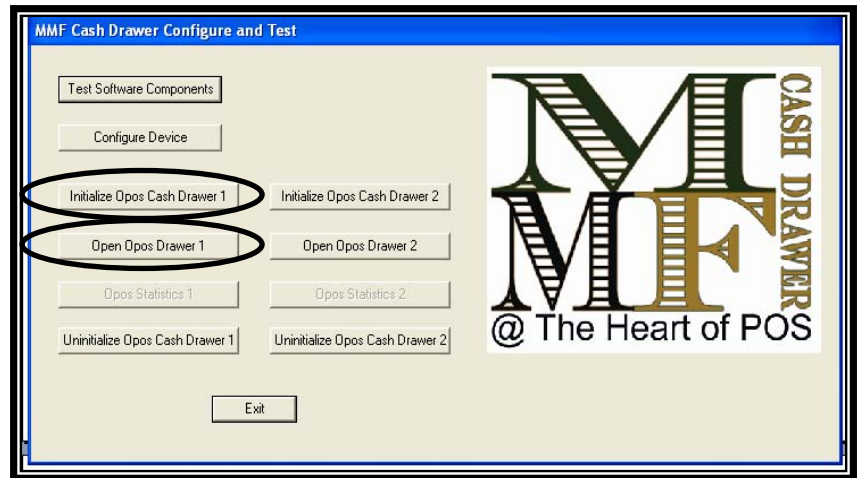


**STEP 5**

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:



**FIGURE 1.4**



**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:



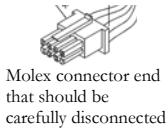
**STEP 7**

Click on “Un-initialize OPOS Drawer 1” and the test is complete.

## Replacement / Removal of Interface

*The interfaces can be upgraded in the field to/from Printer-Driven, Serial, and/or USB connections to meet the changing needs of your POS system.*

For replacement parts and/or accessories, contact your supplier or visit our website at <http://www.mmfcashdrawer.com>



- Unplug all power connections to the interface and disconnect RS232 connector from host unit.
- Unscrew the two (2) side screws of the interface located on the back of the cash drawer.
- Locate internal cable connected between the electronic board and the latch mechanism with an 8-position male Molex connector and carefully disconnect the middle connection. Do not disconnect the end of the cable that is connected to circuit board.
- Upgrade or replace interface by reconnecting the internal cable's middle connection with the Molex connector of new interface. The circuit board must not be touched, please hold interface by the mounting plate. Screw both sides of mounting plate in place.

## Cash Drawer Maintenance

### Troubleshooting:



- Cash Drawer does not open electronically
  - Verify RS-232 cable is properly connected and secured to host unit.
  - Verify power supply is properly connected. GREEN LED light should be ON.
  - Verify correct position of the lock. If using a three position lock, the lock would need to be in the 12 o'clock position for MediaPLUS Series cash drawers or 3 o'clock position for Heritage Series cash drawers to open electronically.
  - Verify you are connected to the proper COM Port. If your software is communicating with COM 1, the cash drawer must be connected to COM1 accordingly.
  - Use the MMF Test Procedures to test proper functionality of the interface prior to using POS software.
  - Verify Baud Rate, Parity, Data Bits, and Stop Bits are set correctly for your software. Baud Rate should be set between 110-9600. If your computer is not set within this specification, correct it in your software.
- Cash Drawer does not open manually or electronically
  - Make sure all packing tapes were removed from the cash tray and that no foreign objects are obstructing the cash tray from opening.

### Support:



Please visit MMF Cash drawer on-line at [www.mmfcashdrawer.com](http://www.mmfcashdrawer.com) for FREE Technical Support or call 1-800-769-1954.