

Microcom Linux CUPS Driver
User Manual

Version 2.0

October 23, 2018

Introduction

The Microcom Linux CUPS driver can be used to print to a Microcom printer through the CUPS printing system on Linux. Once the Driver package is installed, a printer can be added through the CUPS admin web interface and the Microcom printer models will be available to select.

Installing using .deb package

To install using the .deb package, run the following command in the same folder as the .deb file:

```
sudo dpkg -i micCups-<version>-linux-yy.deb
```

This should install the package. The output should be similar to the following:

```
sudo dpkg -i micCups-<version>-linux-yy.deb
```

```
[sudo] password for microcom:
```

```
Selecting previously unselected package miccups.
```

```
(Reading database ... 154107 files and directories currently installed.)
```

```
Preparing to unpack micCups-<version>-linux-yy.deb ...
```

```
Unpacking miccups (x.x) ...
```

```
Setting up miccups (x.x) ...
```

The prompt should return once installation completes.

Installation using custom installer script

If you do not wish to install drivers using the .dev package, a custom installer is available. To run this installer, first extract the .tar.gz containing the custom installer files by running the following command:

```
tar zxvf micCups-<version>-linux-yy.tar.gz
```

Output should look like the following¹:

```
micCups.install
micCups.license
micCups.readme
micCups.remove
micCups.ss
micCups.sw
```

Now, run the following command in the same folder as the extracted files:

```
sudo ./micCups.install
```

Output should be similar to the following:

```
[sudo] password for microcom:
```

```
Copyright 2018 by Microcom Corporation Inc., All Rights Reserved.
```

```
This installation script will install the Microcom Linux CUPS Driver
software version (x.x) on your system.
```

```
Do you wish to continue?
```

Type “yes” and press enter. Next a license agreement will be presented followed by the prompt:

```
Do you agree with the terms of this license?
```

Type “yes” and press enter. The remaining installation process should yield the following output:

```
Removing old versions of micCups software...
```

```
Copyright 2018 by Microcom Corporation Inc., All Rights Reserved.
```

```
Removing/restoring installed files...
```

```
Checking configuration files...
```

```
Removal is complete.
```

```
Backing up old versions of shared files to be installed...
```

¹The *micCups.readme* file also contains similar instructions for installing the custom installer package.

Installing software...

Updating file permissions...

Installation is complete.

At this point, installation is complete. To remove the installation at a later time you may run
sudo ./micCups.remove

Supported Models

438 (203 DPI)

438M (300 DPI)

485TM (203 DPI, Cutter)

485TM (203 DPI, Tear)

485TM (300 DPI, Cutter)

485TM (300 DPI, Tear)

485TM W (203 DPI, Cutter)

485TM W (203 DPI, Tear)

485TM W (300 DPI, Cutter)

485TM W (300 DPI, Tear)

485T (203 DPI, Cutter)

485T (203 DPI, Tear)

485T (300 DPI, Cutter)

485T (300 DPI, Tear)

485T W (203 DPI, Cutter)

485T W (203 DPI, Tear)

485T W (300 DPI, Cutter)

485T W (300 DPI, Tear)

485TC (203 DPI, Cutter)

485TC (203 DPI, Tear)

485TC (300 DPI, Cutter)

485TC (300 DPI, Tear)

485TC W (203 DPI, Cutter)

485TC W (203 DPI, Tear)

485TC W (300 DPI, Cutter)

485TC W (300 DPI, Tear)

Steps for Adding a USB 438 Printer Device

1. Open a web browser and navigate to <http://localhost:631>
This will load the CUPS admin web interface. Click “Adding Printers and Classes”. On the next screen (The Administration screen) click “Add Printer”.
2. The next screen should look similar to the following. Select the correct USB device and click “Continue”. In this example the correct port is called “USB Serial Port #1”.

Add Printer

Add Printer

Local Printers: USB Serial Port #1

Discovered Network Printers: Samsung M262x 282x Series (Samsung M262x 282x Series)

Other Network Printers: Internet Printing Protocol (ipp14)
 LPD/LPR Host or Printer
 AppSocket/HP JetDirect
 Internet Printing Protocol (ipp)
 Internet Printing Protocol (ipp)
 Backend Error Handler
 Internet Printing Protocol (http)
 Internet Printing Protocol (https)

- The next screen will ask about serial port options. Use the default settings as shown in the screenshot and then click “Continue”.

Add Printer

Add Printer

Connection: serial:/dev/ttyUSB0?baud=230400

Baud Rate: 230400 ▾

Parity: None ▾

Data Bits: 8 ▾

Flow Control: None ▾

Continue

- The next screen will ask for a name, description and location for the printer. Use the desired values and then click “Continue”.

Add Printer

Add Printer

Name:
(May contain any printable characters except "/", "#", and space)

Description:
(Human-readable description such as "HP LaserJet with Duplexer")

Location:
(Human-readable location such as "Lab 1")

Connection: serial:/dev/ttyUSB0?baud=230400

Sharing: Share This Printer

Continue

- Next, the correct PPD driver file should be selected. This may be done by selecting “Microcom” as the make of the printer in the drop-down list and clicking “Continue”.

Note: The connection name may vary depending on USB Serial connection or USB PRN connection.

Add Printer

Name: Microcom438

Description:

Location:

Connection: usb://Microcom/485TC%20(300dpi%20Tear)?serial=01062507012

Sharing: Do Not Share This Printer

Make:

- KONICA MINOLTA
- Kyocera
- Kyocera Mita
- Lanier
- Lexmark
- Microcom
- Minolta
- Minolta QMS
- Mitsubishi
- NEC
- NRG

Or Provide a PPD File: No file selected.

6. Select the correct printer model from the next screen. In this example, a 438 203dpi printer is selected.

Add Printer

Name: Microcom438

Description:

Location:

Connection: usb://Microcom/485TC%20(300dpi%20Tear)?serial=01062507012

Sharing: Do Not Share This Printer

Make: Microcom

Model:
Microcom 438M (300dpi), 2.2 (en)
Microcom 485T (203dpi Cutter), 2.2 (en)
Microcom 485T (203dpi Tear), 2.2 (en)
Microcom 485T (300dpi Cutter), 2.2 (en)
Microcom 485T (300dpi Tear), 2.2 (en)
Microcom 485T W (203dpi Cutter), 2.2 (en)
Microcom 485T W (203dpi Tear), 2.2 (en)
Microcom 485T W (300dpi Cutter), 2.2 (en)
Microcom 485T W (300dpi Tear), 2.2 (en)

Or Provide a PPD File: No file selected.

- The printer should be successfully added and now the default options must be configured. These should be set to a default setup for the model you selected but may need modified to work with a particular application or specific type of media. The “General” settings page is shown below.

Set Default Options for Microcom438

General **Dimensions** **Banners** **Policies**

General

Media Size: Default - 3.3inx1.9in ▼

Speed: Default - 6.00 ▼

Dispense Mode: Default - Advance When Idle ▼

Registration Method: Default - Black line ▼

Contrast: Default - 100 ▼

Retraction Delay (ms): Default - 0 ▼

Set Default Options

- Media Size may be changed to a pre-selected size or to “Custom” in order to type in a custom media size.
- Speed is in inches per second.
- Dispense mode changes how the printer will dispense tickets. This includes whether it will cut, advance, or do nothing after it prints a ticket.
- The registration method indicates if the media is registered via a blackline, blowhole, or gap. Continuous means that no registration will be performed per print job.
- The contrast specifies the darkness of the printout. A value of 100 is a nominal darkness.
- Retraction delay specifies how long the printer will wait before advancing the media when it is in an “Advance When Idle” dispense mode.
- The next section is titled “Dimensions” and includes information such as the registration

mark location. This settings page is shown below.

Set Default Options for Microcom438

General **Dimensions** **Banners** **Policies**

Dimensions

Blackline Height (in): Default - 0.13 ▼

Registration Offset (in): Default - 1.06 ▼

Gap Height (in): Default - 0.0 ▼

Dispense Distance (in): Default - 0.51 ▼

Set Default Options

15. The blackline height specifies the height of the blackline (if any) in inches.
16. The registration offset indicates how many inches from the top of a label/ticket the registration mark is. For blackmark it is how far away from the top of the ticket the blackline is. For diecut it is the length of the printable area that can be peeled away. This value is not used for continuous registration.
17. Gap height is the size of the gap or space between labels when diecut media is used (if any) in inches.
18. Dispense distance indicates how far the printer should advance a ticket once it finishes printing to either cut the ticket/label or advance it far enough to a tear edge depending on application.

19. Once all of the default settings are correct, click “Set Default Options”.
20. The print queue screen on the web interface should look similar to the following:

Microcom438

Microcom438 (Idle, Accepting Jobs, Not Shared)

Maintenance ▾ Administration ▾

Description:
Location:
Driver: Microcom Corp 438 (300dpi), 1.1 (grayscale)
Connection: serial:/dev/ttyUSB0?baud=230400+bits=8+parity=none+flow=none
Defaults: job-sheets=none, none media=unknown sides=one-sided

Jobs

Search in Microcom438:

No jobs.

21. To print a test page, select the “Maintenance” menu and click “Print test page”. If the printer was configured correctly a test page should print out successfully.
22. If an error occurred, please check the /var/log/cups/error_log file and submit to Microcom support along with details of your setup.

Steps for Adding a Network Printer

Adding a network printer involves similar steps to adding a USB printer except the first few screens do the following instead:

1. Select “AppSocket/HP JetDirect” under the 'Other Network Printers' section.

Add Printer

Local Printers:

Discovered Network Printers:

Other Network Printers:

- Internet Printing Protocol (ipp14)
- Internet Printing Protocol (http)
- Internet Printing Protocol (https)
- AppSocket/HP JetDirect
- Internet Printing Protocol (ipp)
- LPD/LPR Host or Printer
- Internet Printing Protocol (ipps)

2. For the connection string, type `socket://IPADDRESS:9100` where `IPADDRESS` is the ip address of the printer. If you are not sure about the IP address then do a “press + press and hold”² operation on the printer. In the example below the IP address is 192.168.200.5. After this step, the remaining steps are the same as in the USB printer installation instructions.

Add Printer

Connection:

Examples:

```
http://hostname:631/ipp/  
http://hostname:631/ipp/port1
```

```
ipp://hostname/ipp/  
ipp://hostname/ipp/port1
```

```
lpd://hostname/queue
```

```
socket://hostname  
socket://hostname:9100
```

See ["Network Printers"](#) for the correct URI to use with your printer.

²To do this, press the button and release it, then within 1 second quickly press and hold the button until the printer begins to print.