# How to sideload MX-23 on a Orange Pi 5 (5 Plus, 5 Pro)

### **Background**

Orange Pi 5 is a powerful and reasonably priced SBC (single board computer) produced by Shenzhen Xunlong Software Co., Ltd. At first glance it resembles the Raspberry Pi although there are many significant differences as explored in <u>comparisons between the two</u>. <u>Documentation</u> and <u>resources</u> are good but the ecosystem is not strong—e.g., the Forum is difficult at best.



**Resource:** Documents, components, software, etc. in https://github.com/jerry3904/OrangePi respin

#### Preparation

- 1. Download and install the latest Orange Pi 5 **debian\_bookworm\_desktop\_xfce** image from <u>the official site</u>. I used the Feb 2024 image for the respin described in this how-to.
- 2. Flash (MX Live USB or similar) the image to a good-quality SD card that is big enough (but at least 16GB) for your intended use. I used a 32 GB Samsung Pro.
- 3. Update (default password: **orangepi**): Menu > System > Software & Updates, "Updates" tab; or CLI:

sudo apt update && sudo apt dist-upgrade

4. Install at least LibreOffice Writer to avoid an error message later. You can use Menu > Settings > orangepi-config, "Software" for the whole suite; or CLI for just Writer:

sudo apt install libreoffice-writer

- 6. Remove conflicts:
- --Uninstall *oreangepi-bookworm-desktop-xfce* to avoid a later conflict with an MX package. CLI:

sudo apt purge orangepi-bookworm-desktop-xfce

Note that this will remove the backgrounds of the login page and main screen.

--Uninstall *pasystray* to avoid later conflict with the MX sound setup

sudo apt purge pasystray

- 7. Enable the MX repo. Click on the link this up-to-date page. You will need two items:
- a. The MX-23 apt line. Here is the one that worked for me (different from what is given on that page which shows a trailing slash on the url):

deb <a href="http://mxrepo.com/mx/repo">http://mxrepo.com/mx/repo</a> bookworm main non-free

b. The public key: in **Resource** but also available on this page by following the directions on that MX page or just right-clicking the link "MX-23 public key" to save it.

Now that you have both of those, open Settings > Software & Updates again.

- --On the "Other software" tab click the "Add" button and paste in the apt line you saved.
- --On the "Authentication" tab, click the "Import Key File" button and navigate to where you stored that.

Click to close the app. Software & Updates will prompt you to update system information. Do that and reboot.

#### **Basic Installation**

1. Install

sudo apt install mx-packageinstaller user-installed-packages mx-tweak synaptic

Launch Package Installer > Popular Applications tab. Click on "Desktop Environments" and highlight Xfce. Click Install.

Once all that has finished reboot.

2. Set up the panel

Right-click the panel > Panel > Panel Preferences. Select Mode "deskbar"

Launch MX-Tweak > Panel tab. Click to apply: Restore default panel

Missing icons will be fixed in the next step.

Log out/in.

- 3. Get MX system software
- a. Download from the **Resource/methodology** the "uip-list etc."

b. Launch user-installed-packages and click on the bar to "Open a previously saved list etc." A list of any packages unable to be installed will be shown. There should be nothing there that affects MX or Xfce. Save that list for future use.

- c. Proceed with the installation of the remainder, then log out/in.
- 4. Use synaptic to install the other MX Tools you want.
- 5. Recommended (can be done later just as well)
- a. change user password with MX User Manager if not done already.

b. right-click the desktop > Desktop Settings, change the source folder to "backgrounds" and select a wallpaper.

c. Click Menu > Settings > Keyboard, "Application Shortcuts" tab, and click the "Add" button.

Name: Drop-down terminal

Command: xfce4-terminal --drop-down

## **Basic Configuration**

1. MX Tweak

a. Theme

Application: mx-comfort

Icons: papirus-mxblue-darkpanes

Window manager: mx-comfort

b. Config options

Select and apply: "Reset Thunar custom etc." and "Enable single click in Thunar"

Log out/in and check.

- 2. Set correct time zone with MX Date & Time; use MX Locale to get a detailed setup (and to remove unneeded packages).
- 3. Updater
- a. Copy two files from Documents:

mx-version

lsb-release

Use Thunar as root to paste them into /etc. Check that they are there.

b. Click Menu > Settings > Session & Startup, "Application Autostart" tab, and click the "Add" button.

Name: Updater

Command: apt-notifier

- c. Paste the file "apt-notifier.conf" from Documents into ~/.config/MX-Linux/
- d. log out/in (reboot if necessary)
- 4. Conky
- a. launch mx-conky to import the themes to the Home folder, then close.
- b. launch conky-manager to select a conky (default MX-Cowon\_MildBlue\_temp)
- c. Click Menu > Settings > Session & Startup, "Application Autostart" tab. Click the "Add" button, and enter

Name: Conky

Command: sh .conky/conky-startup.sh

- 5. Login screen
- a. delete as root the existing /etc/lightdm/ folder
- b. copy the folder "Lightdm" in Documents and paste it into /etc
- c. reboot
- 6. Splash

The package plymouth-themes-mx should have been installed already. Run the following commands one at a time:

sudo plymouth-set-default-theme MXLiveLogo

sudo update-initramfs -u -k all