# CM4 NAS Double Deck Setup Guide

## 🔧 Step 2: Flash Raspberry Pi OS Lite

1. Download Raspberry Pi OS Lite (64-bit)

2. Use Raspberry Pi Imager to:

* - Flash the image
* - Set SSH, hostname, Wi-Fi (if needed)

3. Boot up your CM4 NAS device with keyboard/monitor (or SSH in)

## 📦 Step 3: Enable SPI, I2C, USB, and RTC

Edit /boot/config.txt:

# Enable SPI for LCD  
dtparam=spi=on  
  
# Enable USB 2.0 ports  
dtoverlay=dwc2,dr\_mode=host  
  
# Enable I2C RTC  
dtoverlay=i2c-rtc,pcf85063a

Then reboot:

sudo reboot

Check RTC:

sudo hwclock -r

## 📺 Step 4: Install LCD Display Script

Install dependencies:

sudo apt update  
sudo apt install python3-numpy python3-pil python3-psutil -y

Download the LCD script:

wget https://www.waveshare.net/w/upload/7/73/CM4-NAS-Double-Deck\_Demo.zip  
unzip CM4-NAS-Double-Deck\_Demo.zip  
cd CM4-NAS-Double-Deck\_Demo/RaspberryPi/example

Test run:

python3 main.py

Auto-start on boot: Edit /etc/rc.local and insert before exit 0:

cd /home/pi/CM4-NAS-Double-Deck\_Demo/RaspberryPi/example  
sudo python3 main.py &

## 🗄 Step 5: Set Up NAS (OMV Only)

Run:

wget -O - https://github.com/OpenMediaVault-Plugin-Developers/installScript/raw/master/install | sudo bash

Then access via browser: http://<IP\_ADDRESS>/

## 🌐 Step 6: Networking

If using Ethernet: Just plug it in

If using Wi-Fi:

Use raspi-config:

sudo raspi-config

Go to Network Options → Wi-Fi

Or manually edit:

sudo nano /etc/wpa\_supplicant/wpa\_supplicant.conf

Add:

network={  
 ssid="YourWiFiSSID"  
 psk="YourWiFiPassword"  
}

## ✅ Summary

Raspberry Pi OS ✅

RTC ✅

USB, SPI, I2C ✅

LCD Display ✅

NAS Sharing ✅ (OMV)

Network (Wi-Fi or NIC) ✅