



# Troubleshooting Guide — Darby Linux

---

## Table of Contents

---

1. [WiFi Issues](#)
  2. [Graphics / Display Issues](#)
  3. [Audio Issues](#)
  4. [Trackpad Issues](#)
  5. [Keyboard Issues](#)
  6. [Bluetooth Issues](#)
  7. [Boot Issues](#)
  8. [Performance Issues](#)
  9. [Suspend / Resume Issues](#)
  10. [T2 Chip Issues](#)
  11. [Gaming Issues](#)
  12. [Security Issues](#)
  13. [Wallpaper Issues](#)
  14. [Update System Issues](#)
  15. [Getting Help](#)
- 

## WiFi Issues

---

### WiFi adapter not detected

**Symptoms:** No WiFi option in network settings, `iwconfig` shows no wireless interfaces.

**Solution:**

```
# Check what Broadcom chip you have
lspci -nn | grep -i network

# Reinstall drivers
sudo ./scripts/hardware/mac_drivers.sh --component wifi

# Try different driver combinations:

# Option 1: brcmfmac (modern, open-source – best for most Macs)
sudo modprobe -r wl b43 2>/dev/null
sudo modprobe brcmfmac

# Option 2: wl (Broadcom proprietary – broadcom-sta)
sudo modprobe -r brcmfmac b43 2>/dev/null
sudo modprobe wl

# Option 3: b43 (open-source – for older chips)
sudo modprobe -r wl brcmfmac 2>/dev/null
sudo modprobe b43

# After finding the working driver, reboot
sudo reboot
```

## WiFi connects but no internet

```
# Check DNS
ping -c 3 8.8.8.8           # If this works, it's a DNS issue
ping -c 3 google.com        # If this fails, set DNS manually

# Set Google DNS
echo "nameserver 8.8.8.8" | sudo tee /etc/resolv.conf
sudo systemctl restart NetworkManager
```

## WiFi drops after suspend

The kit includes a suspend/resume fix. If it's not working:

```
# Verify the fix is installed
ls -la /usr/lib/systemd/system-sleep/99-mac-suspend-fix.sh

# Reinstall it
sudo cp configs/network/99-mac-suspend-fix.sh /usr/lib/systemd/system-sleep/
sudo chmod +x /usr/lib/systemd/system-sleep/99-mac-suspend-fix.sh
```

---

## Graphics / Display Issues

---

### Screen tearing

```
# For Intel GPUs – verify TearFree is enabled
cat /etc/X11/xorg.conf.d/20-intel.conf
# Should contain: Option "TearFree" "true"

# If file is missing, create it
sudo mkdir -p /etc/X11/xorg.conf.d
sudo bash -c 'cat > /etc/X11/xorg.conf.d/20-intel.conf << EOF
Section "Device"
    Identifier "Intel Graphics"
    Driver "intel"
    Option "TearFree" "true"
    Option "AccelMethod" "sna"
EndSection
EOF'
```

### Black screen after boot

```
# Boot into recovery mode (hold Shift during GRUB)
# Or add "nomodeset" to kernel parameters:

# At GRUB menu, press 'e' to edit
# Find the line starting with "linux" and add "nomodeset" before "quiet"
# Press Ctrl+X to boot

# Once booted, make it permanent:
sudo nano /etc/default/grub
# Change: GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
# To:      GRUB_CMDLINE_LINUX_DEFAULT="quiet splash nomodeset"
sudo update-grub
```

### Wrong resolution / scaling on Retina display

```
# Check current DPI
xdpyinfo | grep resolution

# Manually set DPI in XFCE
xfconf-query -c xsettings -p /Xft/DPI -s 144 # Adjust value as needed

# Or edit the HiDPI script
sudo nano /etc/profile.d/hidpi-xfce.sh
```

---

## Audio Issues

---

### No sound

```
# Check if audio devices are detected
aplay -l

# Check PulseAudio
pulseaudio --check && echo "Running" || echo "Not running"

# Restart PulseAudio
pulseaudio -k && pulseaudio --start

# Check ALSA mixer levels
alsamixer
# Use arrow keys to adjust, press 'M' to unmute

# Try different audio model for Apple hardware
sudo nano /etc/modprobe.d/apple-audio.conf
# Try these models one at a time:
# options snd-hda-intel model=mbp101
# options snd-hda-intel model=mbp55
# options snd-hda-intel model=imac27_122
# options snd-hda-intel model=auto
# Reboot after each change
```

### Headphone jack not working

```
# Install hdajackretask (allows remapping audio ports)
sudo apt install alsa-tools-gui
hdajackretask
```

## Trackpad Issues

---

### Trackpad not responding

```
# Check if the trackpad is detected
xinput list | grep -i "touch\|track\|bcm"

# Check kernel modules
lsmod | grep -i "bcm5974\|applespi\|hid_apple"

# Load module manually
sudo modprobe bcm5974 # For USB trackpads
sudo modprobe applespi # For SPI trackpads (2015+ MacBooks)
```

### Trackpad too sensitive / not sensitive enough

```
# Adjust acceleration speed in the config
sudo nano /etc/X11/xorg.conf.d/70-apple-trackpad.conf
# Change AccelSpeed value (range: -1.0 to 1.0)
# Higher = faster/more sensitive
```

## No tap-to-click

```
# Verify the config has tapping enabled
grep -i "tapping" /etc/X11/xorg.conf.d/70-apple-trackpad.conf
# Should show: Option "Tapping" "on"

# Apply changes without reboot
sudo systemctl restart lightdm
```

---

## Keyboard Issues

### Function keys not working as expected

```
# Check current fnmode
cat /sys/module/hid_apple/parameters/fnmode
# 0 = disabled, 1 = media first, 2 = function first

# Change temporarily
echo 2 | sudo tee /sys/module/hid_apple/parameters/fnmode

# Change permanently
sudo nano /etc/modprobe.d/apple-keyboard.conf
# Set: options hid_apple fnmode=2
sudo update-initramfs -u
```

### Command (⌘) and Alt/Option (⌥) swapped

```
# The kit swaps them by default for PC-like layout
# To restore Mac layout:
sudo nano /etc/modprobe.d/apple-keyboard.conf
# Change: options hid_apple swap_opt_cmd=0
sudo update-initramfs -u
sudo reboot
```

---

## Bluetooth Issues

---

### Bluetooth not finding devices

```
# Check Bluetooth service
sudo systemctl status bluetooth

# Restart Bluetooth
sudo systemctl restart bluetooth

# Check if adapter is blocked
rfkill list bluetooth
sudo rfkill unblock bluetooth

# Scan for devices
bluetoothctl
> power on
> agent on
> scan on
```

### Bluetooth audio stuttering

```
# Edit PulseAudio Bluetooth config
sudo nano /etc/pulse/default.pa
# Add or modify:
# load-module module-bluetooth-discover

# Restart PulseAudio
pulseaudio -k && pulseaudio --start
```

---

## Boot Issues

---

### GRUB menu not showing

```
# Hold Shift during boot to show GRUB
# To make it always visible:
sudo nano /etc/default/grub
# Change: GRUB_TIMEOUT_STYLE=hidden → GRUB_TIMEOUT_STYLE=menu
# Change: GRUB_TIMEOUT=0 → GRUB_TIMEOUT=5
sudo update-grub
```

### Mac won't boot from USB

1. Shut down completely (don't restart)
2. Press power button, then **immediately** hold **Option (⌥)**
3. Wait for the boot disk selection screen
4. Select the USB drive

If the USB doesn't appear:

- Try a different USB port
- Recreate the USB with a different tool
- On newer Macs, you may need to disable Secure Boot in macOS Recovery

## Boot stuck at black screen with cursor

This usually means the display driver is failing. See [Graphics / Display Issues](#).

---

## Performance Issues

---

### System feels slow

```
# Check resource usage
htop

# Verify performance tweaks are applied
cat /etc/sysctl.d/99-mac-performance.conf

# Check if TLP is running
sudo tlp-stat -s

# Disable animations in XFCE
xfconf-query -c xfwm4 -p /general/use_compositing -s false
```

### High CPU temperature / fans always on

```
# Check temperature
sensors # (install: sudo apt install lm-sensors && sudo sensors-detect)

# Check if thermald is running
sudo systemctl status thermald

# Install mbpfan for better fan control
sudo apt install mbpfan
sudo systemctl enable mbpfan
sudo systemctl start mbpfan
```

---

## Suspend / Resume Issues

---

### Mac won't wake from suspend

```
# Try closing and opening the lid
# If that doesn't work, hold the power button for 5 seconds

# Disable problematic suspend method
sudo nano /etc/default/grub
# Add to GRUB_CMDLINE_LINUX_DEFAULT: acpi_osi=Darwin
sudo update-grub
```

### WiFi/Bluetooth dead after resume

See [WiFi drops after suspend](#) above.

---

## T2 Chip Issues

---

### Keyboard/trackpad not working on T2 Mac

```
# Check if apple-bce module is loaded
lsmod | grep apple_bce

# Load it manually
sudo modprobe apple-bce

# If module not found, install T2 support
sudo ./scripts/hardware/t2_support.sh --keyboard

# Or install the full t2linux kernel (recommended)
sudo ./scripts/hardware/t2_support.sh --kernel
sudo reboot
```

### No audio on T2 Mac

```
# Check T2 audio status
sudo ./scripts/hardware/t2_support.sh --check

# Reinstall T2 audio support
sudo ./scripts/hardware/t2_support.sh --audio

# Check if audio devices are detected
aplay -l

# The apple-bce module must be loaded for audio
lsmod | grep apple_bce
```

### Touch Bar shows nothing

```
# Check if driver is loaded
lsmod | grep apple_ib_tb

# Load manually
sudo modprobe apple-ibridge
sudo modprobe apple-ib-tb

# If not available, install Touch Bar support
sudo ./scripts/hardware/t2_support.sh --touchbar

# Change mode
sudo touchbar-mode 1    # Force function keys
```

### T2 Mac won't boot Linux

1. Ensure Secure Boot is **disabled**: Boot into macOS Recovery → Startup Security Utility → “No Security”
  2. Enable external boot media in the same utility
  3. Apply boot fixes: `sudo ./scripts/hardware/t2_support.sh --boot`
  4. If GRUB fails, try systemd-boot: `sudo bootctl install`
-



## Gaming Issues

---

### Steam won't launch

```
# Check if 32-bit libraries are installed
dpkg --print-foreign-architectures # Should show "i386"

# Reinstall Steam dependencies
sudo dpkg --add-architecture i386
sudo apt update
sudo apt install -y libc6:i386 libstdc++6:i386 libgl1:i386

# Reinstall Steam
sudo ./scripts/gaming/setup_gaming.sh --steam
```

### Games crash with Proton

```
# Check Vulkan support
vulkaninfo --summary

# Ensure Vulkan drivers are installed
sudo apt install mesa-vulkan-drivers mesa-vulkan-drivers:i386

# Try a different Proton version in Steam:
# Steam → Game → Properties → Compatibility → Select Proton version

# Check gaming kernel parameter
cat /proc/sys/vm/max_map_count
# Should be 2147483642 for gaming. If not:
echo 2147483642 | sudo tee /proc/sys/vm/max_map_count
```

### Poor gaming performance

```
# Switch to performance governor
sudo ./scripts/gaming/setup_gaming.sh --performance-on

# Use gamemode launcher
gamemoderun steam

# Check GPU driver status
sudo ./scripts/gaming/setup_gaming.sh --status

# For NVIDIA: Install proprietary drivers
sudo apt install nvidia-driver nvidia-settings
```

---

## Security Issues

---

### Locked out by firewall

```
# If you have physical access:
sudo ufw disable
sudo ufw status

# Re-enable with safe rules
sudo ufw reset
sudo ufw default deny incoming
sudo ufw default allow outgoing
sudo ufw allow ssh
sudo ufw enable
```

### Fail2ban blocked my IP

```
# Check banned IPs
sudo fail2ban-client status sshd

# Unban a specific IP
sudo fail2ban-client set sshd unbanip YOUR_IP_ADDRESS

# Check jail status
sudo fail2ban-client status
```

### Can't SSH after hardening

The SSH hardening script does **not** disable password authentication by default. If you manually enabled key-only auth without setting up keys:

```
# From physical console:
sudo nano /etc/ssh/sshd_config.d/90-darby-hardened.conf
# Make sure PasswordAuthentication is NOT set to "no"
# Or comment it out
sudo systemctl restart sshd
```

---

## Wallpaper Issues

---

### Wallpaper not generated

```
# Check for required tools
which convert      # ImageMagick
which python3      # Python 3

# Install ImageMagick if missing
sudo apt install imagemagick

# Regenerate
sudo ./scripts/ui/wallpaper_manager.sh --generate
```

## Wallpaper doesn't fit screen

```
# Check your resolution
xrandr | grep " connected"

# Regenerate at your resolution
sudo ./scripts/ui/wallpaper_manager.sh --generate

# Or scale an existing wallpaper
sudo ./scripts/ui/wallpaper_manager.sh --scale /usr/share/darby-linux/wallpapers/
darby-night-sky.png 2560x1440
```

## Wallpaper not applied to all monitors

```
# Check monitor info
./scripts/ui/wallpaper_manager.sh --info

# Set per-monitor wallpaper
./scripts/ui/wallpaper_manager.sh --set-monitor 1 /path/to/wallpaper.png
./scripts/ui/wallpaper_manager.sh --set-monitor 2 /path/to/other.png
```

---

## Update System Issues

### OTA check fails

```
# Check network connectivity
curl -I https://github.com

# Check update configuration
cat /etc/lightweight-linux-mac/update.conf

# Run check manually with verbose output
sudo bash -x /opt/lightweight-linux-mac/scripts/ota/update_manager.sh check
```

### Rollback fails

```
# List available backups
ls -la /var/cache/lightweight-linux-mac/rollback/

# Manual rollback
sudo /opt/lightweight-linux-mac/scripts/ota/update_manager.sh rollback
```

---

## Getting Help

If your issue isn't listed here:

1. **Check logs:** `cat /var/log/lightweight-linux-mac-install.log`
2. **Search the issue tracker:** [GitHub Issues](https://github.com/lightweight-linux-for-macs/releases/issues) (<https://github.com/lightweight-linux-for-macs/releases/issues>)

**3. Open a new issue** with:

- Your Mac model ( `cat /etc/lightweight-linux-mac/hardware.conf` )
- Linux distribution and version ( `lsb_release -a` )
- Kernel version ( `uname -r` )
- Description of the problem and steps to reproduce
- Relevant log output