# XReal One Pro

Development with the XReal SDK

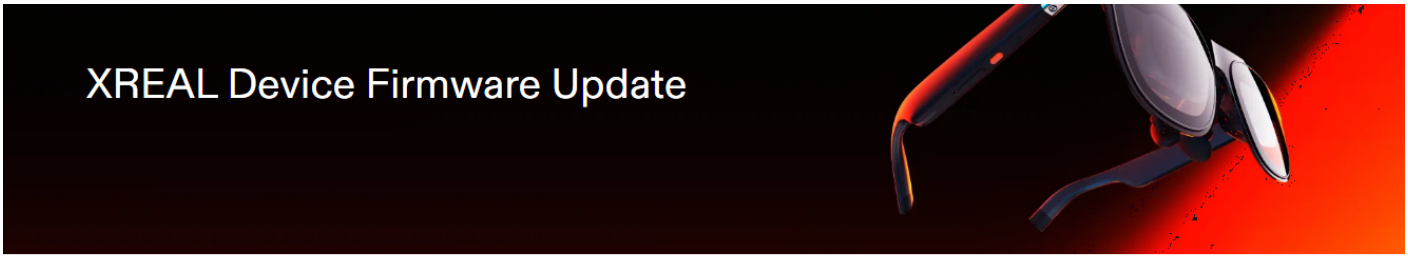
- Setup
- Debugging
- Connecting the glasses in Android

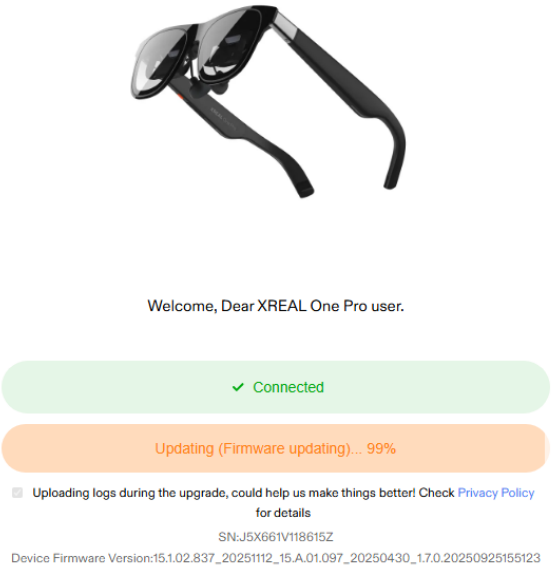
# Setup

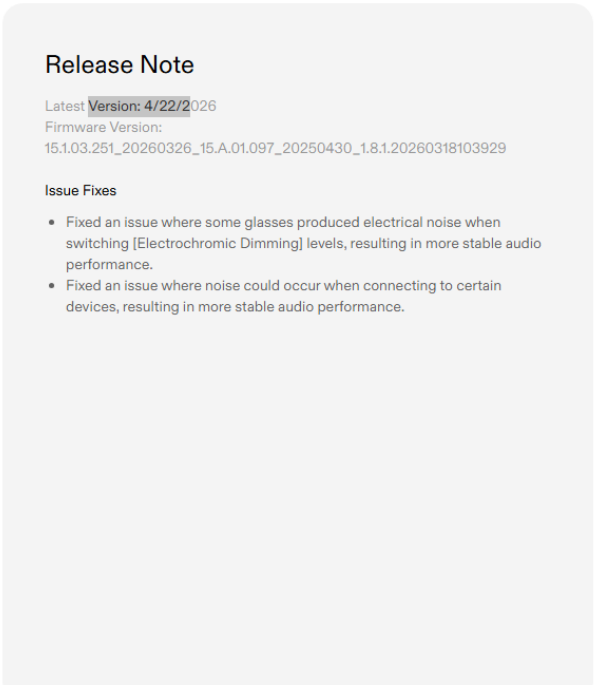
Don't forget to update the glasses first:

https://www.xreal.com/ota/

Also, in the SDK tutorials, they will mention a version of Unity3D. This is relevant as the latest Unity3D might not work with the SDK provided.



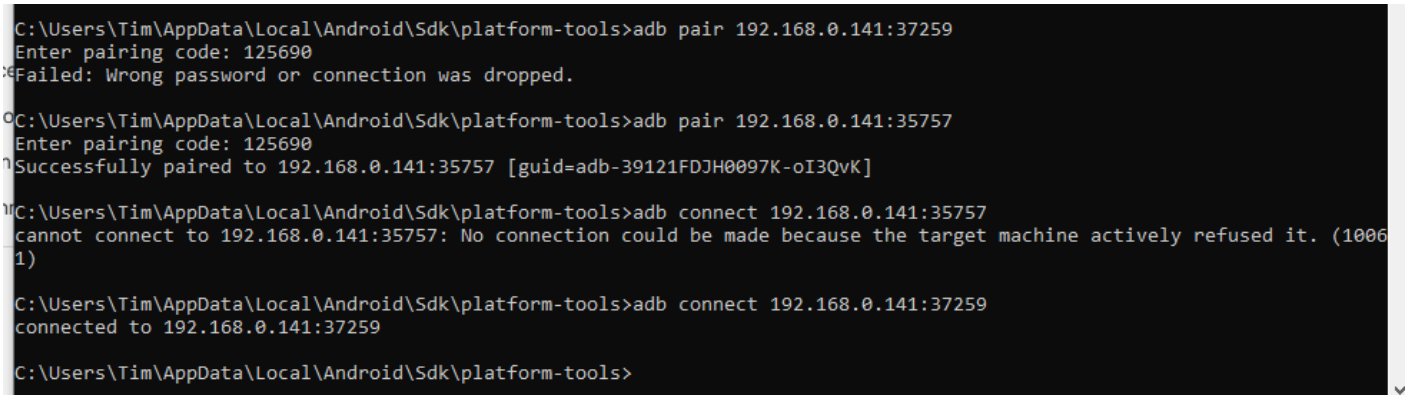



# Debugging

Enable wireless debugging in Android, then you'll see the IP adress and port to pair.

Once paired you can connect to the main debu gport in ADB



# Connecting the glasses in Android

It seems to be a chore at first and depending on your phone, it might or might not work.
Don't look into "desktop mode" etc.

Issue logged here

**Pixel 8** has this toggle in settings "External displays" - and you have to set the checkbox every time you connect.
**Xperia 5** does not have this toggle.

## Automatic route:

Install the APK and via adb
C:\Users\Tim\AppData\Local\Android\Sdk\platform-tools>

```
adb shell pm grant com.sophior.screenenabler android.permission.WRITE_SECURE_SETTINGS
adb shell pm grant com.sophior.screenenabler android.permission.DUMP
```

## Manual route;

Analyzing via adb (via wireless debugging), it is this action that is required:

```
adb shell cmd display enable-display 139
```

You can find the display id via this one:

```
adb shell cmd display get-displays
```

If it is not listed find it here:

```
adb shell dumpsys display | findstr /i "XREAL HDMI EXTERNAL mDisplayId mIsEnabled state OFF DisplayViewport"
```

Then, the Android will prompt to "Allow display over other apps", when enabled, the glasses will start up and I can read the parameters in the headtracking and have a 3D app.
When I exit the app, there is the mirroring of Android.

I made this script, but it requires to be connected to the Android phone with adb:

```
$adb = "$env:LOCALAPPDATA\Android\Sdk\platform-tools\adb.exe"
$dump = & $adb shell dumpsys display
$displayId = $null
$currentId = $null
$inExternalBlock = $false
$isXreal = $false
$isDisabled = $false
foreach ($line in $dump) {
    if ($line -match 'mDisplayId=(\d+)') {
        $currentId = $matches[1]
        $inExternalBlock = $false
        $isXreal = $false
        $isDisabled = $false
    }
    if ($line -match 'type EXTERNAL|type=EXTERNAL|mPrimaryDisplayDevice=HDMI Screen|mPrimaryDisplayDevice
        $inExternalBlock = $true
    }
    if ($line -match 'XREAL One Pro|HDMI Screen') {
        $isXreal = $true
    }
    if ($line -match 'mIsEnabled=false|state OFF|committedState OFF') {
        $isDisabled = $true
    }
    if ($currentId -and $inExternalBlock -and $isXreal -and $isDisabled) {
        $displayId = $currentId
        break
    }
}

if (-not $displayId) {
    Write-Host "No disabled XREAL/external display found."
    exit 1
}

Write-Host "Enabling external display ID $displayId..."
& $adb shell cmd display enable-display $displayId
& $adb shell input keyevent KEYCODE_WAKEUP

Write-Host "Done."
```