

# C# Video Display Demos

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This repository contains three separate C# demo projects, each illustrating a unique way to display video streams using different technologies and stream formats.

## Demo 1: SDL Window Display (YUV Stream)

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### Overview

The second demo uses SDL (Simple DirectMedia Layer) to create a window for rendering a YUV video stream.

### Running the Demo

- Ensure SDL2 libraries are installed and properly configured on your system.
- Open `csharpdemo2.sln` with Visual Studio.
- Build and run the project.
- The video stream in YUV format will be rendered within the SDL window.

## Demo 2: WinForms with PictureBox (RGB Stream)

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### Overview

This demo project is built using Windows Forms. It showcases how to display an RGB video stream within a PictureBox control.

### Running the Demo

- To run this demo, open `csharpdemo1.sln` with Visual Studio.
- Build and run the solution.
- The video stream will be displayed inside the PictureBox on the form.

## Demo 3: Dual Video Display

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### Overview

The third demo demonstrates dual video streaming, where two video windows are displayed simultaneously.

### Running the Demo

- Open `csharpdemo1.sln` with Visual Studio.
- Build and run the solution.
- Two video streams should appear in separate windows within the application interface.