# Sony ILX-LR1 Remote Control GUI
# (Python + RemoteCli)

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## Overview

This tool provides a graphical interface (built with Python and Tkinter) to control a **Sony ILX-LR1** camera via the `RemoteCli.exe` tool included in the official Sony Camera Remote SDK.
   The interface allows you to:

– View RemoteCli console output in real time.

– Interact manually or through buttons to send commands.

– Automate actions such as autofocus and interval-based photo capture.

– Avoid manual menu navigation: the script enters/exits the correct submenus automatically.

## Requirements

• `RemoteCli.exe` (included in the official Sony SDK)

• Windows 10 or higher

• Python 3.8 or newer

• Tkinter module (`pip install tk`)

• A Sony ILX-LR1 camera connected via USB or Ethernet

## How It Works

### Startup

1. The script launches `RemoteCli.exe` as a subprocess.

2. The user selects the camera manually (as prompted by RemoteCli).

3. The user enters **Remote Control Mode**.

4. After this, the Python interface takes over to control the menus automatically.

**Button Functions**

- **Send** – Sends any typed command directly to RemoteCli. Pressing Enter also work.

- **Focus** – Enters the "Shutter/Rec Operation Menu" and executes autofocus.

- **Focus + Photo** – Executes both autofocus and photo trigger in sequence.

- **Auto** – Starts/stops automatic photo capture every second.

- **Quitter** – Gracefully shuts down RemoteCli and closes the GUI.

**Automatic Navigation**

Before executing any photo or focus action, the script automatically:

1. Enters the **Shutter/Rec Operation Menu** by sending `1`.

2. Sends the corresponding command:

   - `1` → Shutter Release
   - `2 + y` → Half-press for autofocus
   - `3 + y` → Half + Full press (focus + photo)

3. Exits the shutter menu with `0`.

# Installation

1. Make sure the Sony ILX-LR1 is powered on and connected via USB.

2. On the camera:

   - Go to `Setup → USB Connection → PC Remote Function`
   - Make sure **Authentication Setting = Off**

3. In the Remote Function menu, select **Pairing** and ensure the PC is properly paired.

4. Set the path to `RemoteCli.exe` in the Python script.

5. Launch the GUI:

   ```
   python remotecli_gui.py
   ```

# Common Issues and Fixes

**"I don't see the camera"**

- Verify the USB cable and camera power.

- On the camera, check:

  - `Setup → USB Connection → Authentication Setting` is set to `Off`.

**"Connection is refused"**

- On the camera, go to `PC Remote Function → Pairing`

- Perform pairing again and then restart the script.

**"Photo doesn't trigger in AF mode"**

- Make sure the subject is in clear focus and well-lit.

- Use the **Focus** button before capturing photos.

- Check that the **Focus Mode is set to AF-S** (Single-shot autofocus).

- Also check that no settings (like shutter speed or drive mode) prevent capture.

## Future Improvements

- Dynamic parsing of RemoteCli output for adaptive state transitions.

- Full GUI pairing and focus mode toggles.

- Support for burst mode and video recording.