

## **GUI Layout Preview - New Features**

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### **Complete GUI Layout with New Features**

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[Logo] Human Blur Tool v3.0  
AI-Powered Privacy Protection **for** Images & Videos

Input Selection

Select file or folder to process:  
 [Browse File] [Browse Folder]

Folder media filter:  
 Both    Images Only    Videos Only

Processing Mode

Black Mask (Recommended **for** maximum privacy)  
 Blur (Intelligent contour-following blur)

Blur Settings (Blur Mode Only)

Intensity:  151  
Passes:  (More passes = stronger blur)

Advanced Settings

Confidence:  0.50  
Model: yolov8n-seg.pt (Fastest)

Output Settings NEW

Filename suffix: [-background\_\_\_\_\_]  
(e.g., -background<sup>1</sup>, -blurred<sup>1</sup>, ...)

Keep audio **in** output videos (requires ffmpeg)  
(Uncheck to remove audio from videos) NEW

Processing Progress

Processing: photo.jpg  
Current file:   
Overall progress:  45%

Status: Ready to process media files

## New “Output Settings” Section - Detailed View

**Output Settings**

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 **Custom Filename Suffix**

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Filename suffix: [-background\_\_\_\_\_] ← Text Input  
(e.g., '-background', '-blurred', '-processed')

- Default: "-background"
- Examples: "-privacy", "-censored", "-anonymous"
- Applies to both images and videos
- Used in both single file and batch processing

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 **Audio Handling (Videos Only)**

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Keep audio in output videos (requires ffmpeg) ← Checkbox  
(Uncheck to remove audio from videos)

- Default: Checked (audio preserved)
- Requires ffmpeg to be installed
- Only affects video files
- Uncheck to create silent videos

## Before vs After - File Output Examples

### Example 1: Image Processing

Before (original behavior):  
input.jpg → input-background.jpg

After (with custom suffix "-privacy"):  
input.jpg → input-privacy.jpg

### Example 2: Video with Audio (default)

Before:  
video.mp4 → video-background.mp4 (**with** audio)

After (same **default** behavior):  
video.mp4 → video-background.mp4 (**with** audio)

## Example 3: Video without Audio (new option)

Before:  
 video.mp4 → video-background.mp4 (always **with** audio **if** present)

After (audio checkbox unchecked):  
 video.mp4 → video-background.mp4 (audio removed)

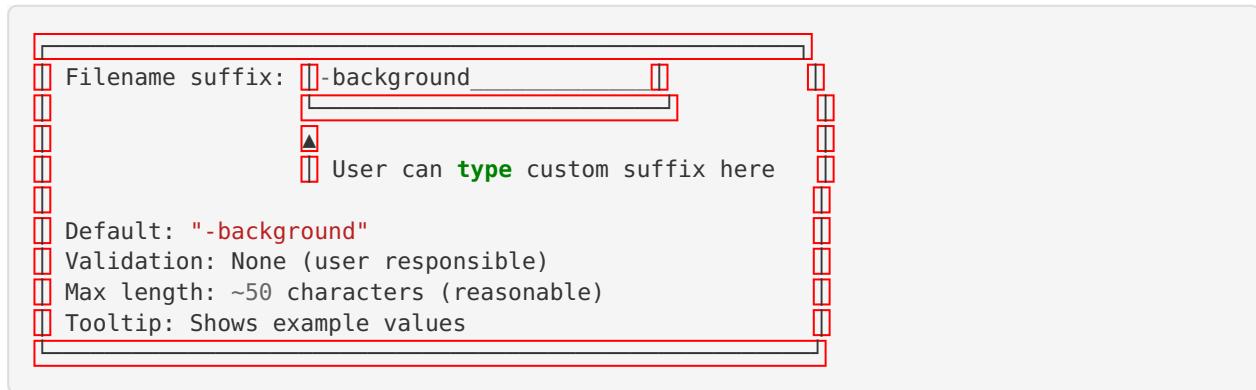
## Example 4: Custom Suffix + No Audio

Before:  
 presentation.mp4 → presentation-background.mp4 (**with** audio)

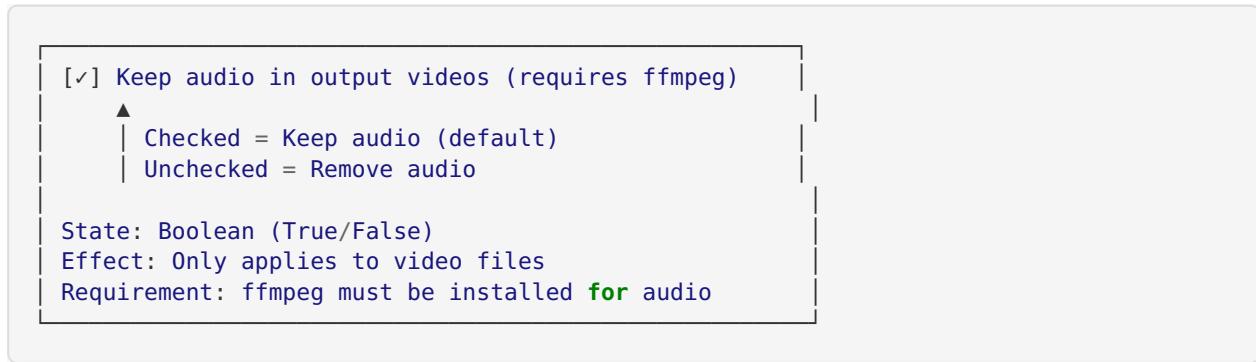
After (suffix="-anonymous", audio unchecked):  
 presentation.mp4 → presentation-anonymous.mp4 (no audio)

## Interactive Elements Detail

### 1. Filename Suffix Text Field



### 2. Audio Handling Checkbox



## User Interaction Flow

### Flow 1: Using Custom Suffix

1. User **opens** GUI
2. User clicks in "Filename suffix" field
3. User deletes "-background"
4. User types their custom suffix (e.g., "-privacy")
5. User selects file/folder
6. User clicks "**Process Media**"
7. Output files have custom suffix: "**file-privacy.jpg**"

### Flow 2: Removing Audio from Video

1. User **opens** GUI
2. User selects a video file
3. User unchecks "**Keep audio in output videos**"
4. User clicks "**Process Media**"
5. Video is processed
6. Console shows: "**Audio removal requested - output will have no audio**"
7. Output video has no audio track

### Flow 3: Batch Processing with Custom Settings

1. User **opens** GUI
2. User clicks "**Browse Folder**"
3. User sets "Filename suffix" **to** "-batch-processed"
4. User unchecks "**Keep audio in output videos**"
5. User clicks "**Process Media**"
6. All files in folder are processed with:
  - Custom suffix: "**-batch-processed**"
  - No audio in videos
7. Progress shows: "**Processing [5/20] video-batch-processed.mp4**"

## Settings Persistence During Session

### What is Remembered

- During a single session (GUI open):
- Filename suffix** → Kept between different file selections
  - Audio handling** → Kept between different file selections
  - All other settings** → Kept as before

- After closing and reopening:
- Filename suffix** → Returns to default "-background"
  - Audio handling** → Returns to default (checked)

# Visual Design Notes

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## Color Scheme

- Labels: Default text color
- Input fields: Standard entry background
- Help text: Gray color (less prominent)
- Icons: Emoji for visual appeal (📢, NEW)

## Layout Principles

- Consistent spacing with other sections
- Clear visual hierarchy
- Helpful contextual information
- No clutter, clean design

## Accessibility

- Clear labels for screen readers
  - Logical tab order
  - Keyboard accessible
  - Visual feedback on interaction
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# Error Messages and Warnings

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## When ffmpeg is not installed

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Console output:  
"⚠ ffmpeg not available - audio will not be preserved"  
"ℹ Install ffmpeg to enable audio preservation"
```

## When audio checkbox is unchecked

```
Console output:  
"ℹ Audio removal requested - output will have no audio"
```

## When custom suffix is empty

```
Behavior: Uses empty suffix (filename has no suffix)  
Example: input.jpg 🗑 input.jpg (may overwrite!)  
Note: No validation currently implemented
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# Responsive Behavior

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## Window Resize

- GUI is non-resizable (fixed size)
- All elements maintain position

- No overlap or clipping issues

## With/Without Logo

- If logo not found: Text layout adjusts
- Title and subtitle remain visible
- No crash or error

## Integration with Existing Features

### Works With:

- ✓ Single file processing (images and videos)
- ✓ Batch folder processing
- ✓ All mask types (Black and Blur)
- ✓ All model selections
- ✓ All confidence levels
- ✓ Media type filters (Both, Images Only, Videos Only)

### Does Not Affect:

- ✓ Detection confidence
- ✓ Blur intensity and passes
- ✓ Model selection
- ✓ Processing speed
- ✓ Output quality

## Quick Reference Card

**HUMAN BLUR TOOL - OUTPUT SETTINGS**

 **Filename Suffix**

- Customize output file names
- Default: "-background"
- Examples: **-privacy**, **-blurred**, **-censored**
- Works with all file types

 **Audio Handling (Videos)**

- Keep:  (**default**) - Preserves audio
- Remove:  - Creates silent video
- Requires: ffmpeg installed
- Only **for**: Video files (.mp4, .mov)

## Screenshots (Conceptual)

```
[Input Selection Section]
  ↓
[Processing Mode Section]
  ↓
[Blur Settings Section (conditional)]
  ↓
[Advanced Settings Section]
  ↓
[OUTPUT SETTINGS SECTION] ← NEW! [NEW]
  ↓
>Action Buttons]
  ↓
[Processing Progress Section]
```

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**Note:** This is a conceptual preview. The actual GUI will render with native tkinter widgets and may have slight visual differences depending on the operating system theme.

**To see the actual GUI:** Run `python gui_enhanced.py` after installing dependencies.