



Project Indigo Camera App

This guide provides a comprehensive overview of Adobe's Project Indigo, an alternative camera app for iPhones. You'll learn how to navigate the interface, understand the different shooting modes, and utilize the pro controls to unlock the full potential of this powerful app.

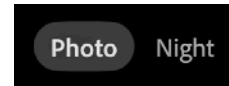
## Downloading and Installing Project Indigo

To begin, head over to the Apple App Store and search for "Indigo." Make sure the app you select is from Adobe to ensure you're downloading the correct application.



## Photo Mode

When you launch Project Indigo, it defaults to Photo Mode, where it continuously captures images in the background. It uses short exposures to maintain sharpness and can capture between 9 to 36 frames. When you press the shutter button, the app selects the current frame as the master image and aligns the preceding frames to it. It then uses these aligned images to reduce noise and expand the dynamic range, capturing more highlight detail than the native camera app.



## Night Mode

Night Mode is designed for low-light situations. Unlike Photo Mode, it doesn't continuously capture images. Instead, it waits until you press the shutter button to begin capturing multiple longer exposures.

## Identifying Night Mode

When Night Mode is active, the word "night" appears at the bottom of the screen, and a moon icon is displayed in the upper right corner. This icon also indicates the exposure time the app will use, helping you understand how long you need to hold the camera steady.



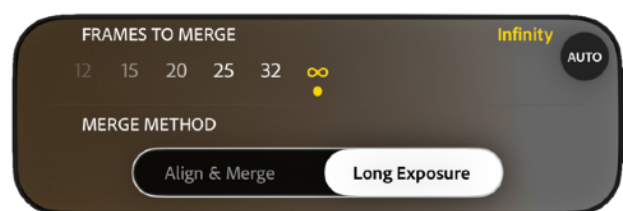
## Long Exposure Effect in Night Mode

To create long exposure effects like silky water or motion blur, you need to access the Pro Controls within Night Mode.

1. **Access Pro Controls:** Tap the Pro Controls icon in the lower right corner of the screen.
2. **Select Exposure Settings:** Look for the icon with two arrows pointing at a line. Tapping this will open the long exposure settings.
3. **Set Exposure Length and Frames:** Choose the desired exposure length (up to one second) and the number of frames to capture. For example, setting the exposure length to one second and the number of frames to 32 will result in a 32-second exposure.



4. **Choose Combination Method:** Select "Long Exposure" to combine the frames into a single image that simulates a long exposure, creating motion blur effects. Alternatively, choose "Align & Merge" for noise reduction, similar to the default Night Mode.

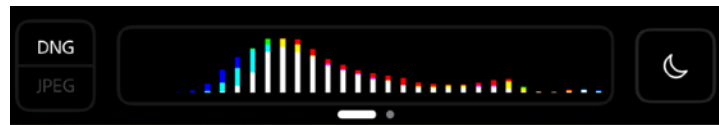


## Touring the Interface

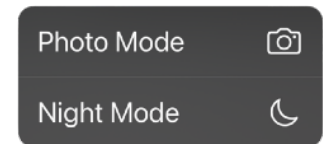
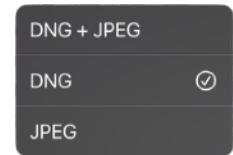
Let's explore the Project Indigo interface from top to bottom.

### Top Bar

The top bar displays the histogram and file format options.




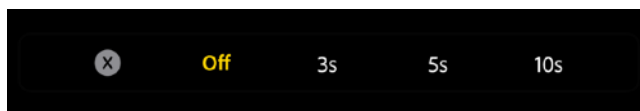
- **File Format:** Tap the file format (DNG or JPEG) to choose between capturing a DNG (RAW) file, a JPEG, or both. Capturing in DNG format gives you more flexibility in post-processing.
- **Histogram:** Tap the histogram to cycle through different display options: histogram only, histogram with shutter speed and ISO, or shutter speed and ISO only. I prefer using the plain histogram to monitor exposure.
- **Night:** The icon in the upper right corner allows you to switch between Photo and Night Mode. This is useful when the Pro Controls are enabled, as they replace the mode selection at the bottom of the screen.



### Swiping for Additional Settings




Swipe left on the histogram to reveal a second page of settings. This page contains five icons:

- **Self-Timer:** Set a timer (e.g., 5 seconds) to include yourself in the shot. 



- **Grid Overlay:** Overlay a grid (rule of thirds or center grid) to aid in composition. 



- **Level Indicator:** Activate a level indicator to ensure your phone is level, preventing tilted horizons. The yellow lines indicate when the camera is level. 
- **Zebra Stripes:** Enable zebra stripes to highlight overexposed areas where detail is being lost. Red stripes indicate areas with no captured detail. 
- **Settings (Gear Icon):** Access the app's settings to adjust default formats, enable Burst SR (Super Resolution), and toggle EIS (Electronic Image Stabilization). 

### Lens Selection

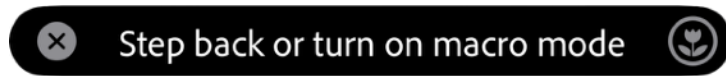
At the bottom of the viewfinder, you can select different lenses. Lenses with an "SR" badge indicate they are digitally zoomed lenses that use Super Resolution to enhance detail.



The true lenses on the iPhone are typically the .5x, 1x, and 5x. The 2x and 10x options are cropped versions of these lenses. I appreciate the "SR" badges because they remind me that these lenses are not providing the full resolution of the sensor but will utilize Super Resolution to extract more detail than the iPhone's native camera app.

## Macro Mode

When you're very close to a subject and using a lens other than the .5x, a message may appear indicating that the current lens cannot focus that closely.



### Activating Macro Mode

Tap the macro icon in the lower-left corner of the viewfinder to activate macro mode. The icon will turn yellow, and a letter will indicate which lens the app has switched to (W for wide angle or UW for ultra-wide angle).



### Lens Selection in Macro Mode

If both the wide-angle and ultra-wide-angle lenses can focus within the current range, a prompt will appear asking you to choose between them.

### How Macro Mode Works

It's important to understand that macro mode doesn't truly enable macro capabilities for the selected lens. Instead, it switches to a lens capable of focusing at the current distance and then crops in to simulate the framing of the original lens.

### Selfie Camera

When using the selfie camera, you can switch between a 1x and a 1.5x view for a slightly zoomed-in perspective.



### Pro Controls

The Pro Controls, accessed via the icon in the lower right of the viewfinder, offer manual control over various camera settings.



### Accessing and Resetting Pro Controls

Tapping the Pro Controls icon replaces the Photo and Night modes with a set of manual controls. To reset the controls to auto, press and hold the Pro Controls icon.



### Pro Controls Interface

When Pro Controls are active, the top of the viewfinder displays the exposure compensation, shutter speed, and ISO settings. An icon indicates the stability of your phone, providing feedback on how well it can handle longer exposures.

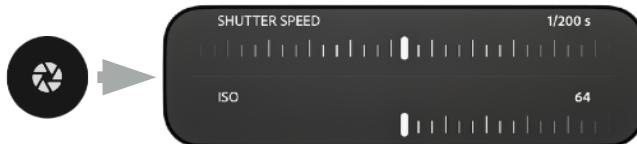


## Available Pro Controls

- **Focus:** Manually adjust the focus by dragging your finger left or right.



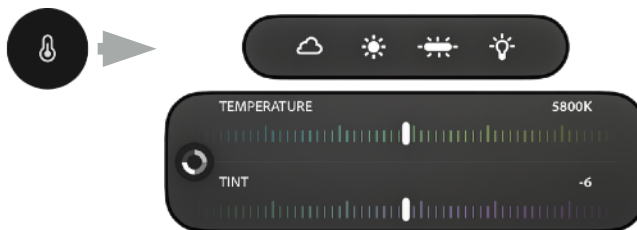
- **Shutter Speed and ISO:** Select your desired shutter speed and ISO settings.



- **Exposure Compensation:** Adjust the exposure to brighten or darken the image.

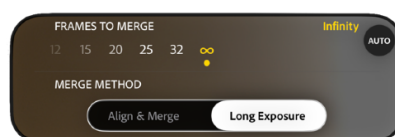
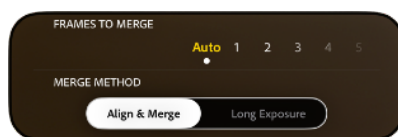


- **White Balance:** Choose from presets (cloudy, daylight, fluorescent, tungsten) or manually adjust the temperature and tint sliders.



## Night Mode Specific Controls

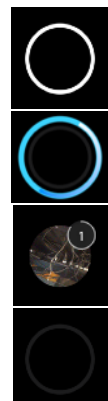
In Night Mode, an additional icon appears, allowing you to control the long exposure settings. This lets you set the exposure length and the number of frames to merge, enabling you to create custom long exposure effects.



## Shutter Button Indicators

The appearance of the shutter button changes to indicate different states:

- **Ready:** A white circle indicates the app is ready to take a picture.
- **Capturing:** A blue animated circle indicates that the app is actively capturing images, typically in Night Mode. Wait for it to return to a gray circle before taking another shot.
- **Processing:** A number on top of the film strip icon indicates that the app is processing a previous exposure. The shutter button remains bright, allowing you to take more pictures, but the app may eventually fill its cache.
- **Cache Full:** A gray shutter ring with a number indicates that the app's cache is full and you need to wait for it to process images before taking more.



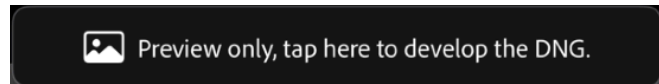
**Important Warning:** Avoid launching the default camera app, force quitting Project Indigo, or turning off your phone while the app is processing images (indicated by a number on the film strip icon) to prevent image loss.

## Film Strip

Tapping the icon in the lower-left corner opens the film strip, where you can review captured images.

## RAW File Previews

If you've captured RAW (DNG) files, the preview will initially appear dull with a message indicating it's only a preview.



## Optimizing RAW Files

Tap the bar with the text to optimize the image. This will take some time, but it will result in a brighter, more vibrant image. However, optimizing the image converts it to a JPEG.

## Film Strip Icons

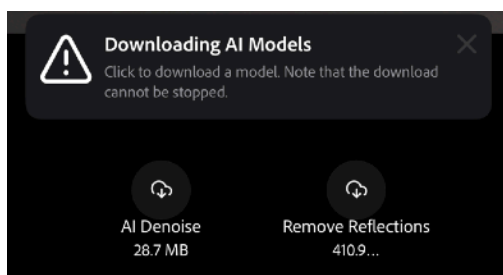
The icons at the bottom of the film strip provide various options (left to right):



- **Share Sheet:** Opens the standard share sheet for sharing the image.
- **Info:** Displays information about the image.



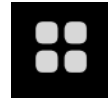
- **Adobe Labs:** Accesses experimental features like AI Denoise and Remove Reflections (these are also available in Lightroom).



- **Lightroom:** Sends the image directly to Lightroom for editing.
- **Delete:** Deletes the image.

### Grid Icon

The grid icon in the upper right corner opens the image in the Apple Photos app.



### Arrow Icon

The arrow pointing to the left returns you to Project Indigo's camera view.



### Limitations: 12 Megapixel Capture

Project Indigo is limited to capturing 12-megapixel photographs. While the native iPhone camera app can capture 48-megapixel images with newer phones, the iPhone's sensor design mitigates the impact of this limitation.

Unlike traditional camera sensors, which capture only one color (red, green, or blue) per pixel, the iPhone's sensor groups four pixels of the same color together. This "pixel binning" approach means that using the entire square of green pixels as a single pixel results in a 12-megapixel image.

### File Formats

Understanding the nuances of file formats is crucial for maximizing image quality.

- **DNG (RAW) Files:** Project Indigo captures 16-bit DNG files, offering over 32,000 brightness levels, compared to the iPhone's native 11-bit DNG files, which provide just over 2,000 brightness levels. This wider dynamic range allows for more extensive adjustments without image degradation.
- **JPEG Files:** The JPEG images produced by Indigo are similar to those with Adobe's adaptive profile applied in Lightroom, enhancing subjects and skies using AI. These JPEGs contain both a standard dynamic range (SDR) and a high dynamic range (HDR) version, along with a gain map for adapting between the two. You can tap and hold on a JPEG image in the film strip to compare the SDR and HDR versions.

With this guide, you're now equipped to explore the capabilities of Project Indigo and capture stunning images with your iPhone. Remember to experiment with the different modes, Pro Controls, and file formats to discover what works best for your creative vision.