



Light Meter Attachment for iPhone



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Introduction

Thank you for your purchase of **Luxi™**, the first light meter for everyone! **Luxi™** works with the front-facing camera of your iPhone 4/4S or iPhone 5/5s¹ and a light-metering app (see [our Web site](#) for an updated list of compatible applications) to take incident light readings. The app uses these readings to suggest the optimal settings for your DSLR or other camera² in whatever lighting situation you might be shooting in. It's just like having a fully featured standalone light meter in your pocket at all times—but at a fraction of the cost.

We designed **Luxi™** to be easy to use, but we know that the concept of using a light meter is new to many people, and it can seem a little daunting at first. In this guide, we'll walk you through the basics of using **Luxi™** to take great photographs, and we'll offer a few helpful tips along the way. If at any time you have questions or suggestions, you are welcome to contact us at admin@esdevices.com and we'll do our best to point you in the right direction. We love hearing from our customers, so don't hesitate to drop us a line!

Getting Started

Attaching Luxi™ to iPhone

Luxi™ is designed to clip directly onto the top edge of your iPhone, with the white diffusion dome fitting directly over the device's front-facing camera.

Because there are physical differences between the form factors of iPhone 4/4S and iPhone 5/5s, you will need to use the **Luxi™** model which is designed for your phone; our iPhone 4/4S model is incompatible with iPhone 5/5s, and vice versa. Please also note that because of our precision-fit design, **Luxi™** cannot be used with third-party iPhone cases—they must be removed before fitting the clip onto the phone.



FIG. 1: Luxi attached to iPhone

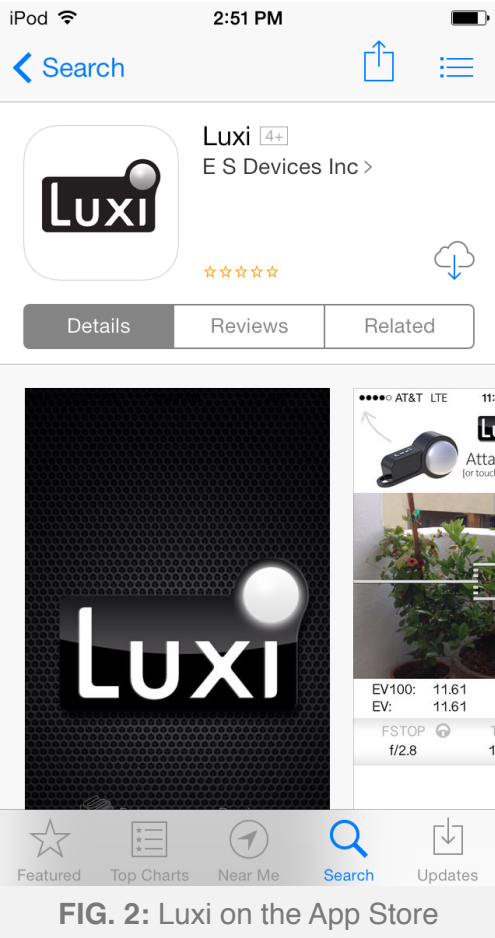


FIG. 2: Luxi on the App Store

Installing a Light Meter Application

Luxi™ works in concert with an iPhone application to take readings of incident light, and then to suggest the optimal camera settings for a given lighting situation. There are many light meter apps on the App Store, though several of them have been written with direct support for **Luxi™**. For the purposes of this guide, we will focus upon the **Luxi™** application itself, though many of the core principles we'll discuss will apply to the use of third-party applications (such as [Pocket Light Meter](#), to give one such example).

The **Luxi™** app can be downloaded [from the app's listing on the App Store](#) (you may either follow this link, or else simply search for "Luxi" in the App Store on your device).

Preparation and App Settings

Calibrating the Luxi™ Application

Luxi™ works by diffusing the light entering the front-facing camera of your iPhone in a way which allows the app to read the amount of light striking your photographic subject or scene. The amount of diffusion which Luxi provides is precisely set to just the right degree for these purposes. Since the camera hardware in the phone was not designed with **Luxi™** in mind—and because camera sensitivity can differ slightly from one iPhone to the next—you'll need to calibrate the **Luxi™** application so that the exact qualities of your iPhone are accounted for.

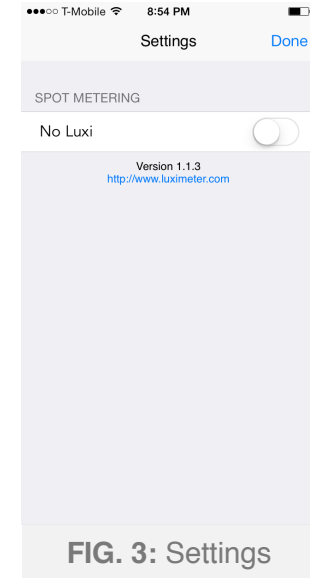
Once you have performed an initial calibration with a newly installed copy of the **Luxi™** application, the app will remember your settings, and you will not need to calibrate again. When you are in the field with your camera, you'll be able simply to place the **Luxi™** clip onto your iPhone, open the app, and start taking incident light readings.

Calibration Procedure

- Grab an 18 percent grey card (if you don't have one, they are available from any photography store, or [on Amazon](#));
- Set your camera to aperture exposure mode, and choose spot metering;
- Set an ISO setting and an aperture setting, and make sure that exposure compensation is set to zero;
- Zoom in on the grey card and make note of the shutter speed that the camera recommends;
- Compare this to what the light meter app suggests (with the Luxi-equipped iPhone sitting beside the 18 percent grey card in the same light) and use the calibration sliders to fine-tune the app so that the shutter suggestion matches your camera's readings.

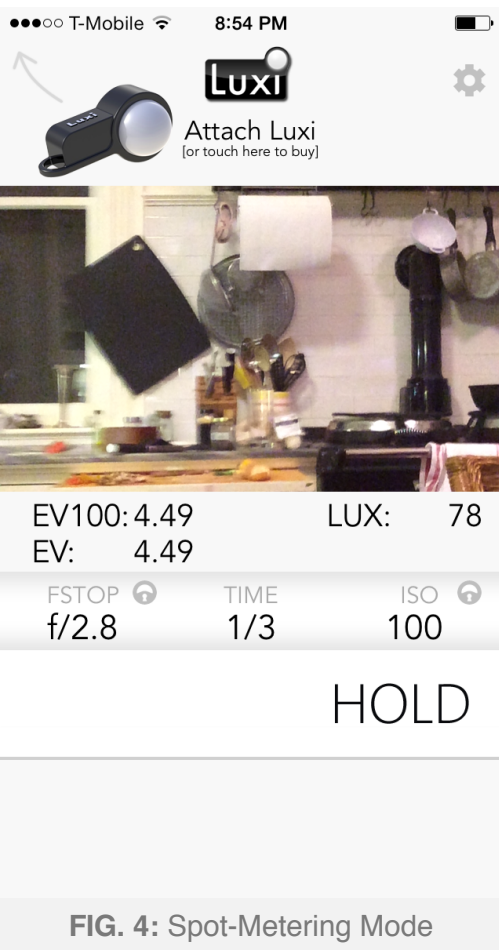
Setting Up The App For Use Without a Luxi™ Clip

If you have not yet received your **Luxi™** clip, you may use the app and your device's rear-facing camera to take spot readings of your scene. On the app's settings screen (accessible by tapping on the small gear icon in the upper right corner of the screen), simply flip the "NO LUXI" toggle switch to the "on" position. With this setting enabled, you'll be able to take readings based on the illumination striking a specific point on your subject (see "Spot-Metering Mode," below, for details).



Using the Luxi™ App

The **Luxi™** app has two modes: one mode provides spot-metering capabilities when no **Luxi™** clip is attached, and the other mode gives incident light readings when the clip is seated on the iPhone.



Spot-Metering Mode

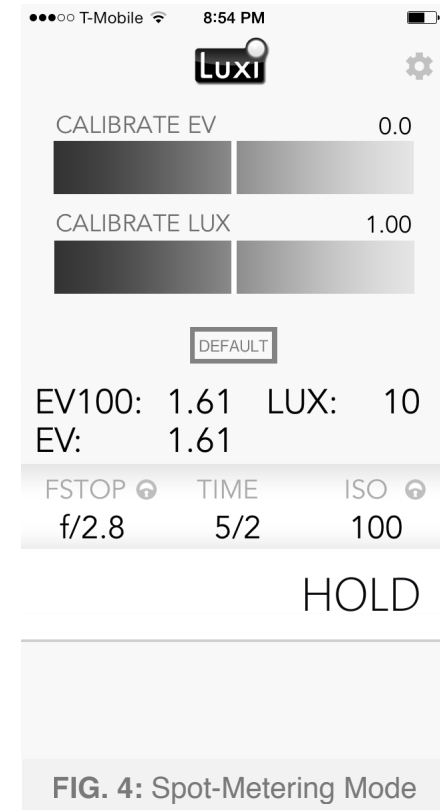
When no **Luxi™** clip is attached, the central part of the app displays an image from the device's rear-facing camera. Note that readings taken in this mode are less accurate than those taken with the **Luxi™** clip, due to the fact that they are based upon the exposure levels in the photographic data displayed in the center of the app—this is not a reading of ambient light levels, as would be given when using **Luxi™**. This mode is relatively akin to using the spot meter which is built in to most modern camera systems.

The crosshairs (enabled in the app's settings) in the center of the rear camera's image can be moved around with one's finger. This feature makes it possible to take a spot reading of an exact point within the image data. A photographer might want to take, for example, the spot readings for the darkest and lightest points of the image, and then use that data to formulate an educated guess as to what the optimal exposure settings might be.

You'll find the app's readings—and the recommended exposure settings based on those readings—underneath the rear camera image. We'll explain how that data can be useful later, in the section entitled **"Setting Your Camera's Exposure"**.

Luxi™ Mode

With a **Luxi™** clip attached to your device, the image from the rear-facing camera is no longer displayed; it is replaced with a pair of slider controls which are used for calibration (see "Calibration Procedure," above). If you'd like to reset your calibration to the original defaults, you may do so by tapping the DEFAULT button. Below those sliders are readings for Exposure Value (EV) and Luminance (LUX); those readings are most often useful for non-photographic use cases. If you are unsure of what these readings mean, you can probably safely ignore them.



Setting Your Camera's Exposure

Of primary interest to most photographers will be the exposure suggestions listed under FSTOP, TIME, and ISO. These are the settings that Luxi is suggesting that you input into your DSLR or other camera in order to achieve the optimal exposure for your current lighting situation:

- You'll set your camera's aperture (or f/stop) setting to the value listed under **FSTOP**;
- The **TIME** parameter suggests the best shutter speed for your DSLR;
- Finally, **ISO** specifies the best ISO setting for your camera in the current conditions.

Just set your camera to those suggestions, and your photos will be perfectly exposed.

We're Here To Help

We've more or less covered the basics of using **Luxi™** above, though we're always here to help in case you should have any questions, issues, or suggestions. Feel free to drop us a line at any time at admin@esdevices.com.

Thanks for checking **Luxi™** out. Happy light metering!

¹ **iPhone**, **iOS**, and **App Store** are registered trademarks of Apple, Inc.

² Not included.