Luxi

Light Meter Attachment for Smartphones and Tablets

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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 mobile device 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 camera[1] 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 Your Mobile Device

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

Several models of **Luxi™** are available; you'll want to ensure that you have selected the model appropriate for your device. **Luxi™ For All** works with nearly all iOS and Android devices, while the older models are suited only for use with iPhones 5/5s or 4/4; they are labeled as such anywhere they are sold.

If in doubt, select **Luxi™ For All**.

FIG. 1: Luxi For All on an Android smartphone

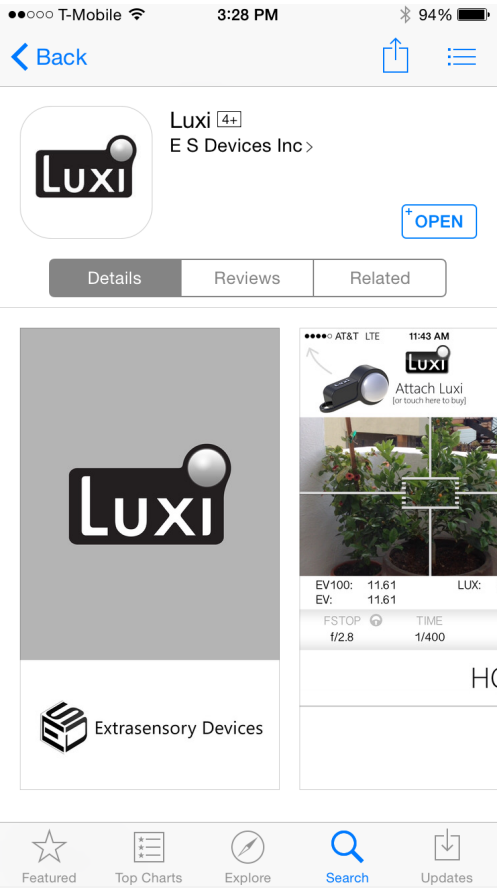

FIG. 2: Luxi on the iOS App Store

Installing a Light Meter Application

Luxi™ works in concert with a smartphone 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 and/or Google Play, 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 the iOS app Pocket Light Meter, to give one such example).

The **Luxi™** app can be downloaded from the App Store or from Google Play (you may either follow these links, or else simply search for "Luxi" in the App Store or on Google Play on your device).

Preparation and App Settings

Calibrating the Luxi™ Application

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

Once you have performed an initial calibration, 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 mobile device, 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 mobile device 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

Optionally, you may use our **Luxi™** app without a Luxi clip (this feature is currently iOS-only). 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). Do note that use without a **Luxi™** clip is not supported on Android devices at this time.

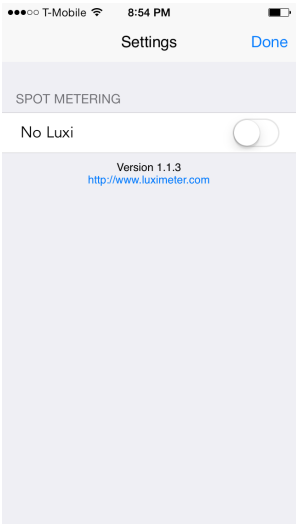

FIG. 3: Settings

Using the Luxi™ App

The **Luxi™** app for iOS has two modes[2]: 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.

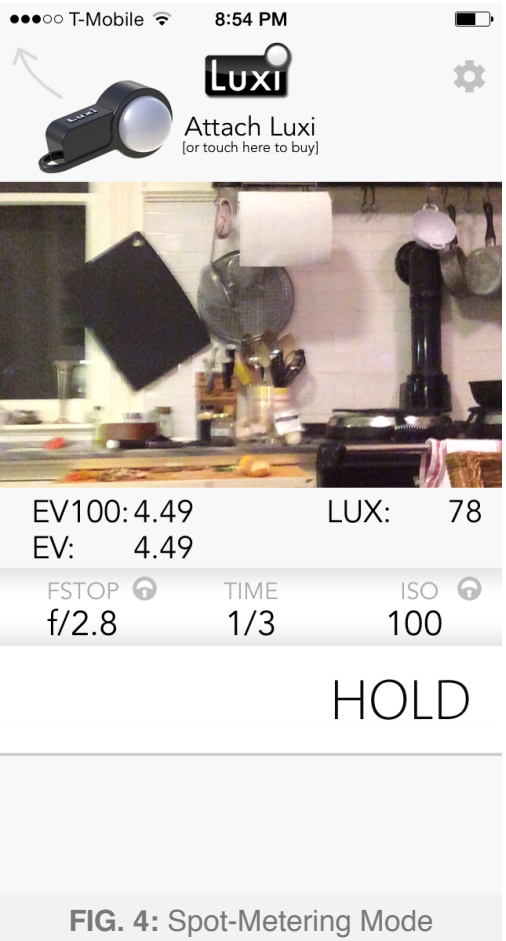

FIG. 4: Spot-Metering Mode

Spot-Metering Mode (iOS Only)

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.

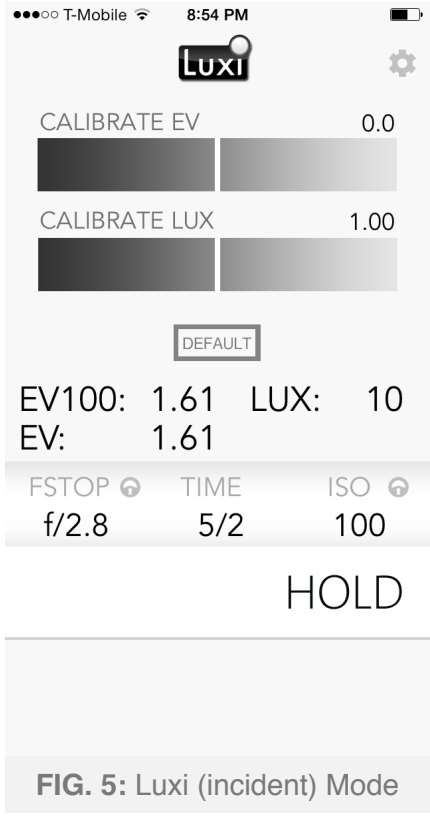

FIG. 5: Luxi (incident) Mode

Locking, Unlocking, & Setting Exposure Parameters

Luxi™ is capable of suggesting any one of the three common exposure parameters (**FSTOP**, **TIME**, and **ISO**) which are available for adjustment on SLRs and other manual-exposure-capable cameras. You will want to select the other two settings based on your desired style of photography. For example: if you are shooting on film with an ISO value of 100 *and* you wish to control depth of field, you'll want to lock **FSTOP** and **ISO** to your desired settings, and let **Luxi™** suggest an appropriate **TIME** for you.

- To unlock any of the exposure parameters which are currently locked, simply tap on that value in the app's interface. The app will automatically lock one of the other values.

- To lock a currently unlocked setting, simply tap it, and Luxi's suggestion will be saved.

- To change the value of a currently locked setting, **press on the setting and hold it** for a few seconds; a selection menu will then appear, allowing you to lock the setting on your desired value.

Setting Your Camera's Exposure

Of primary interest to most photographers will be those 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] Not included.

[2] The Android version of the app has only one mode; for instructions, you may skip ahead to the section labeled "Luxi Mode” on page 10 of this guide.