iPad + USB DSLR Photobooth Guide

Connect your Canon, Nikon, or Sony camera straight to your iPad with a USB-C cable for real studio photos, flash sync, and events that work without internet.

Step 1: Install the photobooth4u iPad app

IPADOS 15 OR NEWER

After you download **photobooth4u-kiosk-ipad.ipa (v1.0.3)** from the offline iPad guide page, install it onto the iPad from a Windows PC or Mac. Do this once before your event:

1. On the computer, install **Sideloadly** (free, from sideloadly.io; on Windows also install Apple's non-Store iTunes if asked).
2. Plug the iPad into the computer with a cable. If the iPad asks, tap **Trust**.
3. Open Sideloadly, drag the **.ipa** file into it, type your Apple ID email, then click **Start**.
4. On the iPad open **Settings → General → VPN & Device Management**, tap your Apple ID, then tap **Trust**.
5. If you see **Developer Mode** under **Settings → Privacy & Security**, turn it **On** and let the iPad restart.
6. Connect to Wi-Fi once, open **photobooth4u**, enter your `PB-XXXX-XXXX-XXXX` code and tap **Activate iPad**.

Pre-requisite Side Note (Mac & Windows):
- **Mac ("Sideloadly Not Opened"):** Click **Done** (not Trash) → ensure Sideloadly is in **Applications** → open **System Settings** → **Privacy & Security** → scroll down → click **Open Anyway** → authenticate.
- **Windows:** Install Apple's non-Microsoft-Store **iTunes** (from sideloadly.io) so Sideloadly detects your iPad over USB.

Good to know (7-day refresh):
With a free Apple ID the app expires after 7 days. Before an event, re-run Sideloadly (~30s over USB or Wi-Fi) **without deleting the app** — all frames, designs, and photos stay intact! (A paid Apple Developer cert lasts 1 year.)

Step 2: The Single-Port iPad Hardware Wiring Chain

Because iPads have only one USB-C (or Lightning) port, you must route power and camera data through a **Powered USB-C Hub with Power Delivery (PD)** so the iPad never dies during a live event.



Essential Hardware Checklist

- **iPad with USB-C:** iPad Pro (any), iPad Air 4/5/M2, iPad 10th Gen, or iPad mini 6. (Lightning iPads require Apple Lightning to USB 3 Camera Adapter).
- **Powered USB-C Hub:** Must feature at least one USB-A/C data port AND a **USB-C Power Delivery (PD) In** port (Anker, Ugreen, Satechi).
- **High-Wattage Wall Charger:** 30W–65W USB-C wall adapter plugged into the hub's PD port to power both the iPad and attached peripherals.
- **Camera USB Data Cable:** Genuine camera manufacturer data cable (avoid charge-only phone cords).

Pro Event Tip: AC Dummy Battery

Do NOT rely on regular camera batteries at long weddings or corporate gigs. A DSLR in constant Live View drains a battery in 60–90 minutes.

Use a DC Coupler (Dummy Battery) Plug a dummy battery directly into a wall outlet or high-capacity power bank. Your camera stays powered on for 12+ hours with zero battery swaps mid-event.

Camera Menu Configuration by Brand

Before plugging your camera into the iPad hub, set the camera dial and menu settings to allow external PTP host tethering control.

CANON EOS

Canon EOS DSLRs & Mirrorless

EOS R, R5, R6, R8, R10, R50, RP, 5D IV, 6D II, 90D, 80D, 200D/250D, M50 II

- **Dial:** Set top dial to **M, Av, Tv, or P** (not Auto/Video).
- **Quality:** Set to **JPEG** (L/M/S or RAW+JPEG).
- **Live View & USB: Live View shoot: Enable**; USB mode to **PC Remote / Computer**.
- **Wi-Fi/Bluetooth:** Turn **OFF** in the camera menu (avoids port lockout).
- **Auto Power Off:** Set to **Disable** so camera never sleeps.
- **SD Card:** Keep a formatted SD card inside camera.

NIKON

Nikon Z & D-Series

Z5, Z6, Z7, Z50, Zfc, D850, D780, D750, D7500, D5600, D3500, D3400

- **Dial:** Turn dial to **Manual (M)** mode.
- **Focus Mode:** Set to **AF-S (Single AF)** with wide-area or face detection.
- **USB Connection:** Set to **MTP / PTP** in Setup Menu.
- **Standby Timer:** Set c2 (Standby Timer) to **No Limit** or 30 mins.
- **Flash Sync:** Set built-in flash or hot-shoe speedlite to Manual.
- **Live View:** Enabled automatically upon iPad connection.

SONY ALPHA

Sony Alpha Mirrorless

A7 III, A7 IV, A7C, A7R, A6000, A6100, A6400, A6600, A6700, ZV-E10

- **Dial & Format:** Mode dial to **M, A, or S**; File Format to **JPEG**.
- **USB Connection:** MENU → Setup → **PC Remote** (Crucial!).
- **Release w/o Card:** Set to **Enable**; USB LUN to **Multi**.
- **PC Remote Settings:** Still Img. Save Dest. → **PC Only** (or PC+Camera).
- **Smartphone Control:** Set to **OFF** (required for USB tethering).
- **Power Save Start Time:** Set to **30 Min** or Off.

Olympus & Other PTP Cameras + Strobe Flash Sync (v1.0.3)

v1.0.3 also supports **Olympus & other PTP USB cameras** (set USB mode to Tether/Control/PTP & JPEG; cameras without USB PTP live view can use an HDMI capture card or iPad camera). Because the iPad triggers the real DSLR shutter, hot-shoe radio triggers (Godox Xpro/X2T) fire studio strobes with zero shutter lag.

Recommended Camera Exposure Settings for Photo Booths

Lighting Setup	Shutter Speed	Aperture	ISO	Focus Mode
Studio Strobes / Softbox	1/125s – 1/160s	f/6.3 – f/8.0	ISO 100 – 200	Single AF (AF-S) on backdrop center
LED Constant Ring Light	1/80s – 1/100s	f/3.5 – f/4.5	ISO 400 – 800	Face Detection / Continuous AF
Ambient / Indoor Venue	1/60s – 1/80s	f/2.8 – f/4.0	ISO 800 – 1600	Center Point AF with AF Assist Beam

iPadOS Kiosk Setup & USB Permissions

Configure your iPad settings to keep the screen awake, enable permanent USB accessory data access, and lock down the booth so guests cannot exit into your apps.

1. Prevent USB Disconnect (Crucial)

By default, iPadOS locks down its USB-C port after 60 minutes of inactivity to protect your device. For live events, you must disable this lock:

1. Open iPad **Settings**.
2. Tap **Face ID & Passcode** (or Touch ID & Passcode).
3. Scroll down to the *Allow Access When Locked* section.
4. Toggle **USB Accessories** to **ON (Green)**.

> Your DSLR will now stay permanently tethered without sudden mid-event disconnects.

2. Apple Guided Access (Kiosk Lock)

Lock the iPad into **photobooth4u** so guests cannot swipe home, view notifications, or change iPad settings:

1. Open **Settings → Accessibility → Guided Access**.
2. Turn **Guided Access** ON and set a 4-digit Passcode.
3. Open the **photobooth4u** app.
4. **Triple-click the Top Power Button**. Tap **Start** in the upper right.

> To exit after the event: Triple-click the Top button, enter your passcode, and tap **End**.

3. Launching & Testing in photobooth4u

Step A: Unlock Licence

Enter your photobooth4u code on the activation screen. The iPad needs Wi-Fi once to verify; thereafter it works 100% offline.

Step B: Select Camera

In the booth, go to **Setup → 4 Camera** and choose **DSLR / Mirrorless camera (USB)** (or tap the Camera icon in the top bar) to start Live View.

Step C: Test Capture

Tap the screen to trigger a countdown. The camera fires, the photo downloads to the iPad, and the photo strip preview renders instantly!

4. Local File & Photos Storage Architecture

Every photo taken on the iPad is automatically saved in two locations on device (zero cloud required):

1. In-App Event Storage

`Files → On My iPad → photobooth4u`

Full-resolution originals and finished strips saved inside `Documents/Pictures/photobooth4u/<Event>/`.

2. iPad Photo Library (Camera Roll)

Apple Photos App → Recents

Easily AirDrop all event photos to your client's iPhone or Mac at the end of the night!

Local Wi-Fi QR Downloads & Printing

Guests scan an on-screen QR code to download their high-res photos and GIFs directly from the iPad over local Wi-Fi without needing cell service or cloud uploads.

How Local QR Downloads Work

The iPad app runs an embedded read-only HTTP server on **port 47777** (`LocalShareServer.swift`):

- **Step 1 (Join Wi-Fi):** Connect the iPad to a pocket router or phone hotspot (no data needed). Type its Wi-Fi name & password in **Setup → 6 Share** so guests get a **Join Wi-Fi QR**.
- **Step 2 (Scan Result QR):** At the end of each session, the screen displays a QR code linking to:

  ```
  http://<ipad-ip>:47777/e/<event>/
  ```

- **Step 3 (Instant Save):** The guest's phone opens the branded mobile gallery with a **Save Photo** button.

> **Zero data usage:** All photos transfer locally over the venue router at up to 100 Mbps!

Wireless Printing from iPad

Print physical 4R photo cards or 2x6 strips instantly:

- **AirPrint Dye-Sub Printers:** Connect directly to Canon SELPHY (CP1300, CP1500), Epson PictureMate, or DNP/HiTi via wireless print servers (WPS Pro).
- **Receipt Photobooth:** Connect to thermal receipt printers over Bluetooth or network IPP.
- **Auto-Cut:** Set your layout to 2x6 dual strips; AirPrint sends the cutting command directly to the printer spooler.

> Turn on **Silent Auto-Print** in booth settings to skip all confirmation dialogs.

Pre-Event Operator Checklist (Print & Laminate)

Hardware Rig:

- [ ] iPad charger plugged into USB-C Hub PD port.
- [ ] Camera dummy battery plugged into wall power.
- [ ] High-speed USB data cable firmly secured.
- [ ] Wireless flash trigger powered on & test fired.

iPad & Camera Settings:

- [ ] Camera dial set to Manual (M) with focus locked.
- [ ] iPad Settings → USB Accessories turned **ON**.
- [ ] iPad volume set to 100% for voice prompts.
- [ ] Guided Access locked (Triple-click top button).

Troubleshooting: What If the Camera Won't Connect?

1. **Unplug & replug:** Unplug the USB-C cable from the iPad and plug it back in. iOS will re-initialize the `ICDeviceBrowser` session.
2. **Check USB mode:** On Sony, confirm USB is set to *PC Remote*. On Canon, turn off Wi-Fi/Bluetooth in camera menu.
3. **Check power:** Ensure the iPad hub's power LED is glowing. A hub without enough current cannot handshake with a DSLR sensor.