

Canon Camera Interface Hardware Recommendations and Setup Guidelines

Introduction

ImageWare® Systems, Inc. (IWS) has created this document as a reference guide to help you assemble and use high-quality photo equipment to take professional quality digital photographs using your photo ID system and our Canon Camera plug-in.

IWS has tested the following hardware configurations using our Canon Camera plug-in. We have deemed the equipment cited below to be the most effective for these purposes. However, other than the Canon cameras, it is not necessary to purchase these exact brands and models if they are not readily available to you.

Note: IWS is only recommending the equipment described in this document as known to be compatible with our software and usage practices. We are not a reseller for these products and sell only the software add-in.

Digital Camera Hardware Recommendations

We recommend using either a Canon Powershot A70 or G5 Digital Camera with our software.

Note: This software add-in will not work with any other brand of camera, but *may* work with other models of Canon digital camera, although only those models mentioned above have been tested.

Once you receive your camera, please unpack it to ensure that all parts are included. The following links direct you to the Canon web pages describing the package contents for each item:

Canon Powershot A70 Digital Camera <http://www.powershot.com/powershot2/a70-60/kit.html>

AC Adapter Kit ACK600 <http://www.powershot.com/powershot2/a70-60/accessory.html>

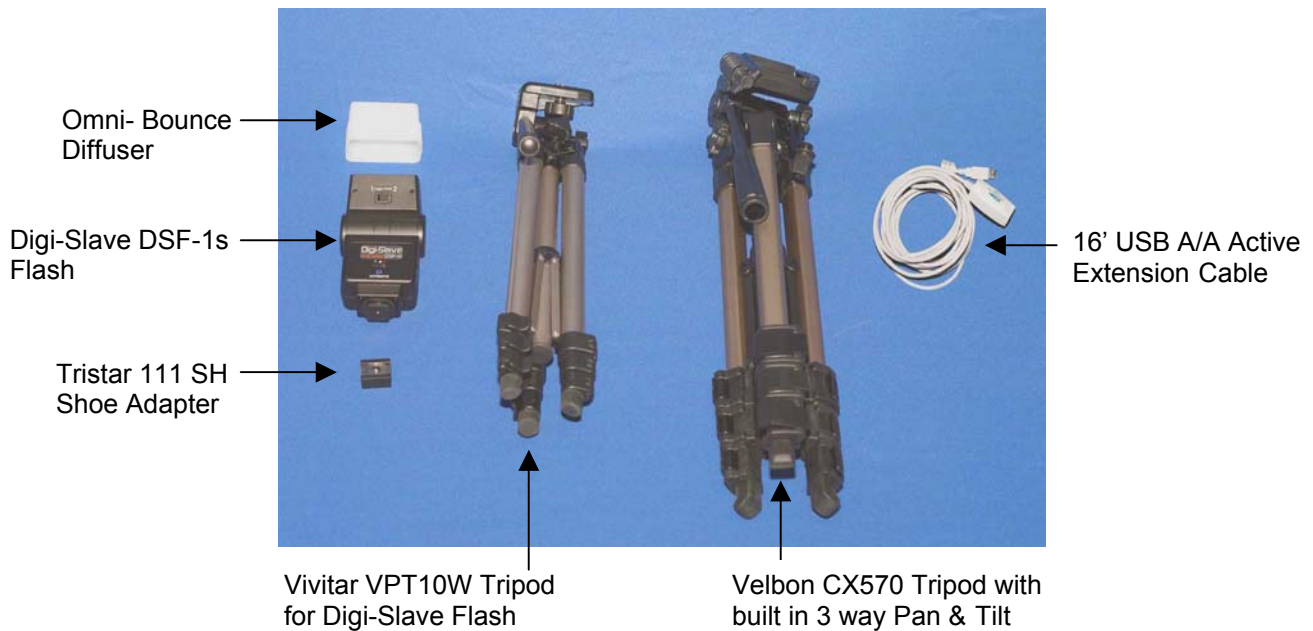
This item is not included with Canon's A70 but is highly recommended.

Canon Powershot G5 Digital Camera <http://www.powershot.com/powershot2/g5/kit.html>

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We recommend the following flash and tripod configuration:

- Digi-Slave DSF-1s Flash
- Omni-Bounce Diffuser
- Vivitar VPT1-W Tripod (for the flash)
- Velbon CX404H Tripod with built-in pan & tilt head (for the camera)
- Tristar 111 SH shoe adapter
- 16 foot USB A/A active extension cable (camera to PC)

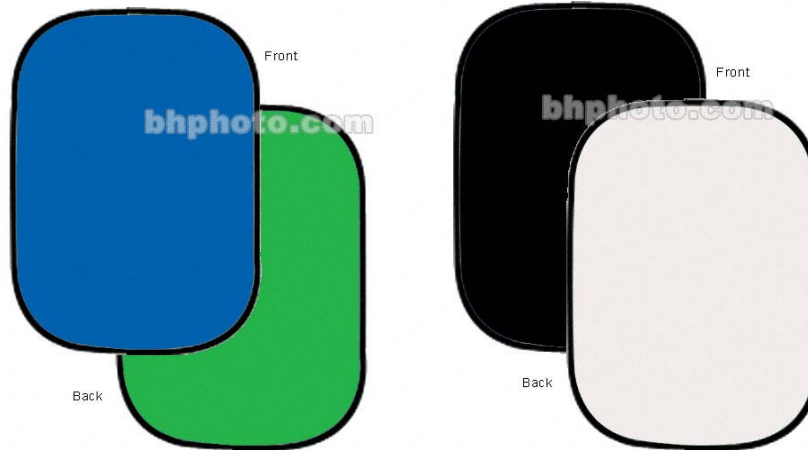


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Portable Background Recommendations

If you require a portable image capture set up, we recommend the following backgrounds:

- Portable Botero 2 sided 5' x 7' background with a) Chroma key colors blue/green, or b) Black/white



Permanent Background Recommendations

If you require a permanent image capture location, there are two options: a standing backdrop or a hanging backdrop.

Standing Backdrop Option

- Tristar 3 section backdrop stand
- Photographic background roll in your choice of white, blue or grey.



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Hanging Backdrop Option

- Tristar clamp and crossbar hanging backdrop
- Photographic background roll in your choice of white, blue or grey.



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Hardware Set Up

Step 1: Camera and Tripod Assembly

1. Extend the legs of the Velbon CX570 tripod to their maximum height and lock into place using the side lever leg locks.
2. Tighten the friction screws on the panhead so it will not move when you attach the camera.
3. Attach the camera according to the tripod manufacturer's instructions.
4. Crank the center pole on the tripod so the camera is at the subject's eye level.
5. Plug the AC adaptor and AV interface cables into the camera.
6. Secure wires to the tripod (using tape or cable ties). Allow some slack in the cables at the top so that the camera is free to tilt up and down and pan side to side.
7. Plug the AC adaptor into a power outlet.
8. Plug the USB extension cable into the camera's AV interface cable then into your computer's USB port.



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Step 2: Digi-Slave Flash and Tripod Assembly

- Open up Vivitar VPT10W tripod but do not extend the legs.
- Attach the Tristar 111 SH shoe adaptor to the panhead on the tripod.
- Attach the Digi-Slave flash to the shoe adaptor.
- Tilt the flash head to 45 degrees (as shown in the image below).
- Place the Omni-Bounce diffuser over the flash.
- Extend the center pole on the tripod until the top of the flash is 24 inches high.

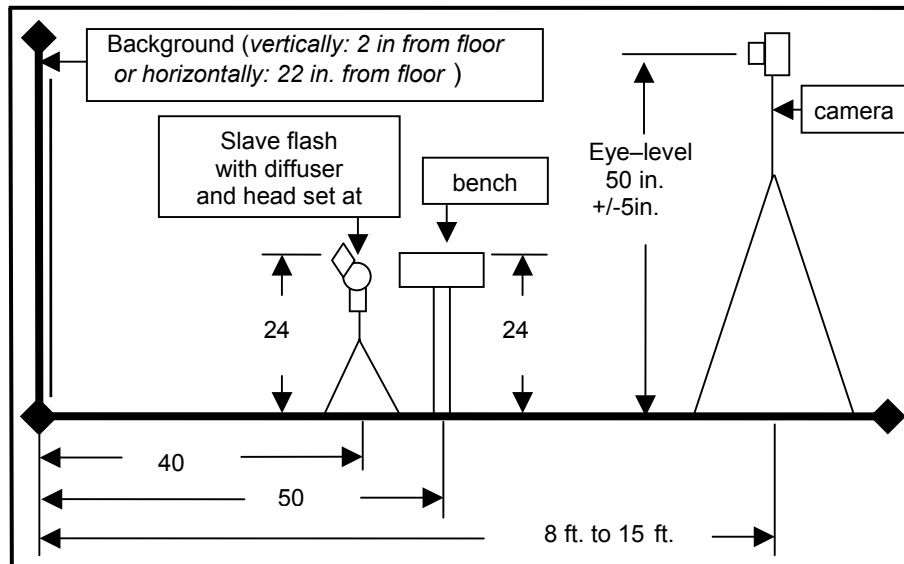


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Step 3: Ideal Studio Set-up

The following diagram illustrates an ideal studio set up using the equipment described above.



For the backdrop placement, use either of these options:

Portable (recommended) - Hang portable background vertically 2 inches from the floor or horizontally 22 inches from the floor.

Permanent - Feed the backdrop roll through the crossbar, then attach to either backdrop stand or hanging clamps. Roll out the paper and secure as per the manufacturer's instructions.

Place the slave flash with diffuser 40 inches away from the backdrop. Make sure it is tilted towards the backdrop at 45 degrees. This will illuminate the backdrop adding a slight outline of light around the subject, thereby subtly distinguishing the subject from the background (useful for dark-haired subjects on dark backgrounds).

Situate a bench or stool (for the subject to sit on) 50 inches from backdrop at the same height as the slave flash. The recommended seat height is 24 inches.

Place the camera tripod 8 to 15 feet from the backdrop. Adjust the camera to the camera operator's eye level (approximately 50 inches high) using the crank on the center pole of the tripod.

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Sample photos of setup



Slave flash pointing toward portable backdrop.



Ceiling mounted backdrop with camera stool and slave flash measured to proper distances

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Step 4: Camera Settings

We recommend the following settings for the Canon digital cameras (you will need to change these settings manually):

Canon A70 Digital Camera

In the Canon User's manual, find the pages specified below:

Flash: Set flash to 'On (Red Eye)', page 67

White Balance: Set to 'Daylight', page 103

ISO Speed: Set to '100', page 110

AV Setting: Set the aperture to '5.6', page 94

Canon G5 Digital Camera

In the Canon User's manual, find the pages specified below:

Flash: Set flash to 'On (Red Eye)', page 60

White Balance: Set to 'Flash', page 86

ISO Speed: Set to '100', page 92

AV Setting: Set the aperture to '5.6', page 79

Step 5: Install the Canon ID Camera Interface Add-in

There are two Canon ID Camera Interface Add-ins available from IWS: one for the EPI line of products, and one for the ID Server line of products. Follow the installation instructions that come with the appropriate add-in.

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Example of Solution



- Portable backdrop (green)
- Slave flash behind subject
- Subject seated on stool
- Camera at subject's eye level
- Camera connected to PC
- PC loaded with Canon add-in software to photo ID application
- Photo ID application open using the plug-in to capture the picture