

Document Camera Service Manual

DC80A

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Document Camera Service Manual

Introduction

This Document Camera is equipped with the most advanced RGB progressive CCD to capture the details of documents and output the high quality RGB signal. Also provide some easy but useful functions such as flip image, adjust the brightness and digital zoom to let your presentation successful

Package Check

The Document Camera comes with the parts listed below. Check if all parts are included. If anything is missing, contact your authorized dealer or service center.

Note : The power adapter is a safety related part. Please contact your authorized dealer or service center for replacement.

- ◆ Document Camera
- ◆ User's Manual
- ◆ VGA Cable
- ◆ Power Adapter
- ◆ Lamp
- ◆ Power Cord
- ◆ Diffusion Film

Installation

Place the Document Camera on a sturdy table and avoid a lamp just overhead to get shadow image or Hot spot. Connecting as Fig.1

Note : Be sure the power switch is set in OFF position.

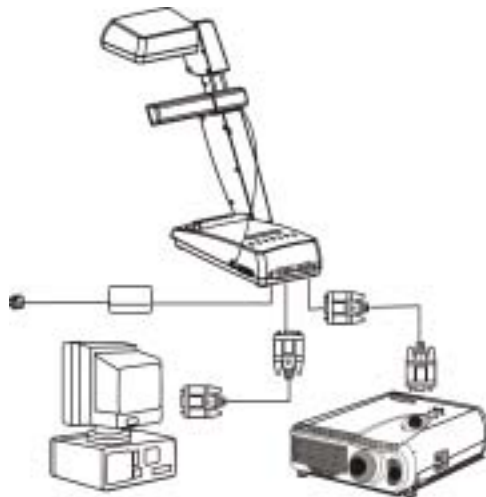


Figure 1: System Configuration of Document Camera

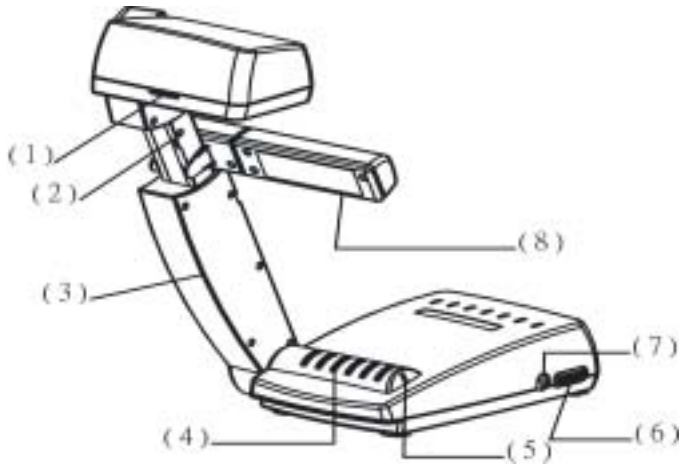


Figure 2: Front side view of Document Camera

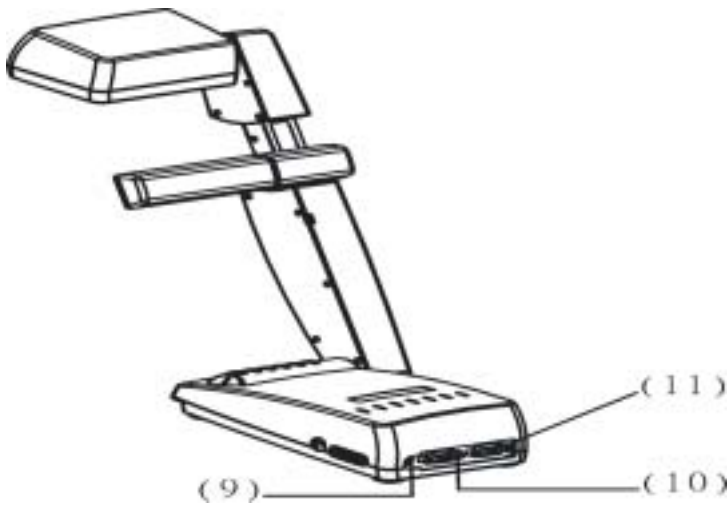
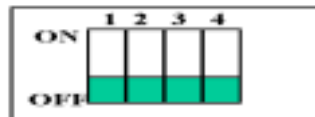


Figure 3: Rear Side View of Document Camera

- | | |
|--------------------------|----------------|
| (1) Focus Ring | (7) Lamp Power |
| (2) Height Adjust Column | (8) Lamp |
| (3) Angle Adjust Column | (9) DC12V In |
| (4) Control Panel | (10) VGA In |
| (5) LED | (11) VGA Out |
| (6) Power Switch | |







DIP switch description



Switch	Description
SW1	ON:SVGA output format ; OFF:XGA output format
SW2	ON :Flickerless Disable ;OFF: Flickerless enable
SW3	ON:50 Hz AC power ; OFF: 60Hz AC power
SW4	ON:AE Disable ; OFF:AE enable

Note : The DIP switch setting will be taken effect only when you re-power on the camera

Control Button Description

	Source Select	Source selection : computer VGA or camera
	Digital Zoom	Zooming from 100% to 300%
	Image Type	Photo , Text , Invert or Mono
	Flip	Rotate the image 180 degrees
	Decrease Brightness	Decrease picture brightness
	Increase Brightness	Increase picture brightness

Some Using Tips

Tip 1: How to avoid the hot spot.

Glassy paper will result serious reflection of environment light and the lamp. If the document paper is glassy, you can take measures to overcome this problem.

- ◆ Change the camera location to avoid the overhead light source.
- ◆ Turn off the lamp.
- ◆ Put the diffuse film on the paper to prevent a direct reflection.

Tip 2: How to control the camera to get best picture

- ◆ Turn on the lamp to get more light for better S/N ratio.
- ◆ Select the proper image type setting to get the best quality.

Photo: Color picture, such as photo, color catalog ..

Text : Text rich document , such as report, text book

Invert : Negative film

Mono: Gray only picture.

- ◆ Adjust the focus ring to get sharpening picture.
- ◆ Put the document as flatten as possible.

Tip3: How to avoid a shadow image on document

- ◆ Don't place your camera just beneath the lamps. You can turn off the room's light and turn on the lamp.

Tip 4: How to avoid image flickering

- ◆ The image flickering is caused by fluorescent lamp with power AC frequency 60Hz/50Hz light flickering. Please check your power system frequency and set the DIP switch accordingly to remove the flickering problem.

Note : The DIP switch setting will be taken effect only when you re-power on the camera

Maintenance

Replacing the mainboard

1. There are four screws on the CCD Box Cover.



2. Loosen four screws and open the CCD Box Cover. The mainboard and CCD board are under the iron sheet.



3. Remove the CCD lens unit and detach the flat cable. Loosen one screw and then take the mainboard and the CCD Board.



4. There is a screw securing the mainboard and CCD Board.



5. Detach the mainboard and CCD board carefully and then get each one of them.



6. The same applies to the CCD housing and arm joint (which has no spring).
(0.7kgf-cm)

Replacing the Hinge

1. There are four screws under the rubber foot. Loose them and open the Top Base Cover.



2. Remove the screw and spring used to fasten the hinge.



3. Detach the flat cable.



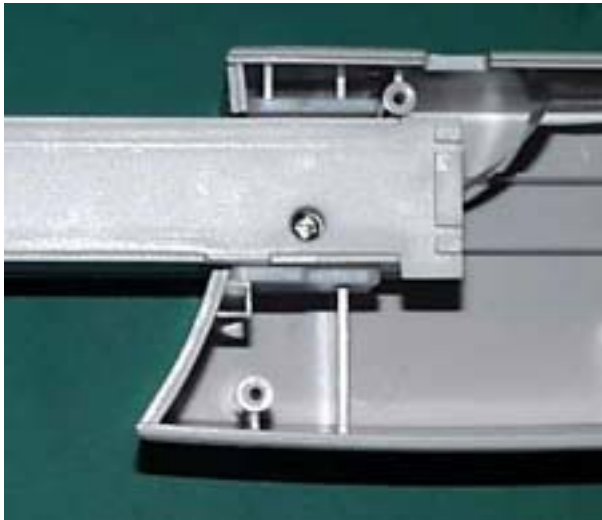
4. Remove two screws that keep the hinge in place.



5. Replace the hinge, and repeat the above steps in reverse order. (3.5kgf-cm)

Replacing the internal slide of the arm

1. Detach the arm from the base as steps shown above.
2. Remove the 17 screws that keep the lower arm in place, and remove the cover. You now have access to the interior.



3. Detach the slide, and replace it with the new part. Then, repeat the above steps in reverse order.

