C2935M-QS (2/06)
CCC1380UH Series Camera
Quick Start Guide

This quick start guide describes how to install and configure the CCC1380UH Series camera in most applications. It contains a representation of the setup menus to help you locate and change specific settings.
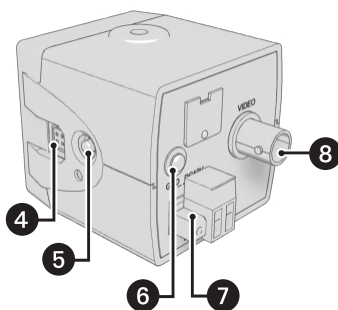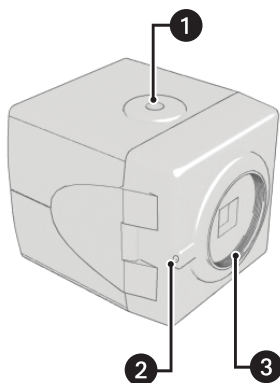
Refer to the enclosed CD for the following documentation:

- Installation/Operation manual: INSTALL.PDF
- Quick Start Guide: QSG.PDF
- Important Safety Instructions: SAFETY.PDF

MODELS

CCC1380UH-6   1/3-inch ultra high resolution color camera, 24 VAC or 12 VDC, NTSC format

CCC1380UH-6X   1/3-inch ultra high resolution color camera, 24 VAC or 12 VDC, PAL format
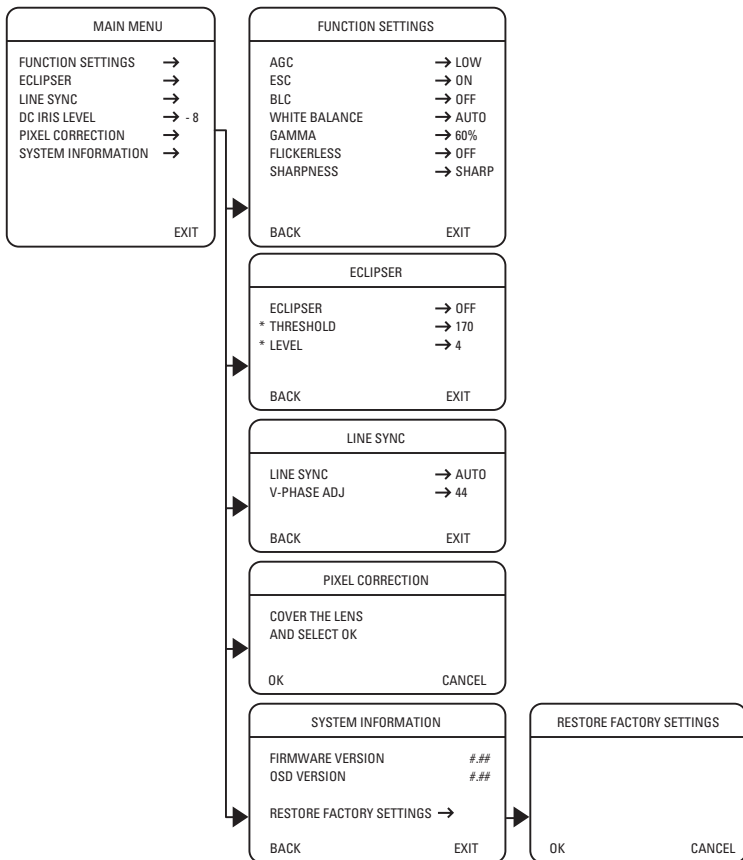

1 Camera Mount	**5** Setup Button
2 Back Focus Locking Screw	**6** Ground Screw
3 Lens Mount	**7** Power Terminal Block
4 Auto Iris Lens Connector	**8** Video Output Connector

SETUP MENUS

Use the setup menus to customize the camera settings.

```
MAIN MENU

FUNCTION SETTINGS      →
ECLIPSER               →
LINE SYNC              →
DC IRIS LEVEL          → - 8
PIXEL CORRECTION       →
SYSTEM INFORMATION     →


                    EXIT
```

```
FUNCTION SETTINGS

AGC                → LOW
ESC                → ON
BLC                → OFF
WHITE BALANCE      → AUTO
GAMMA              → 60%
FLICKERLESS        → OFF
SHARPNESS          → SHARP


BACK               EXIT
```

```
ECLIPSER

ECLIPSER           → OFF
* THRESHOLD        → 170
* LEVEL            → 4


BACK               EXIT
```

```
LINE SYNC

LINE SYNC          → AUTO
V-PHASE ADJ        → 44


BACK               EXIT
```

```
PIXEL CORRECTION

COVER THE LENS
AND SELECT OK

OK                 CANCEL
```

```
SYSTEM INFORMATION

FIRMWARE VERSION       #.##
OSD VERSION            #.##

RESTORE FACTORY SETTINGS →

BACK                   EXIT
```

```
RESTORE FACTORY SETTINGS




OK                 CANCEL
```

ACCESSING THE SETUP MENUS

Use the five-position button on the side panel to access and navigate the setup menus. The following table lists the button presses for each menu action.

MENU ACTION	BUTTON ACTION
Enter setup menus.	Long center press
Move up or down in menu or item options.	Up or down press
Move right or left in menu.	Right or left press
Select menu or item.	Short center press
Save setting and exit to menu.	Short center press

LENS

The CCC1380UH Series camera supports both manual and auto iris lenses, either fixed focal length or varifocal. It automatically senses an auto iris lens as soon as you plug in the connector.

The camera has a standard CS-mount that can accept a C-mount lens with a PCMA40 lens adapter.

To mount the lens onto the camera:

1. Make sure the lens will not touch the camera imager when installed.
2. Use clean, compressed air or a clean, dry lens cloth to make sure there is no dust or other foreign matter between the lens and the camera imager.
3. **C-mount lens:** Screw the adapter onto the lens.
4. Screw the lens onto the lens mount.
5. **Auto iris lens:** Connect the four-pin connector from the lens to the connector on the side of the camera.
6. Perform the lens focusing procedure before using the lens (refer to *Lens Focusing*).

MOUNT

The CCC1380UH Series camera can be mounted from either the top or bottom, depending on the type of camera mount used in your installation. Use a standard 1/4-20 screw. The maximum thread depth is 0.25 inches (6.4 mm).

POWER

Connect 12 VDC or 24 VAC power to the back of the camera using the supplied terminal block. Use a Class 2 isolated power source for the CCC1380UH camera that can supply 12 VDC ±15% or 24 VAC ±15%, 50/60 Hz. Maximum power consumption is about 3.5 watts.

VIDEO

Connect a coaxial video cable to the BNC connector on the back of the camera.

DC IRIS LEVEL ADJUSTMENT

Select this option to adjust the electronic properties of the DC-drive auto iris lens to the auto iris electronic properties of the camera. Perform this procedure before using the camera or each time you change the lens.
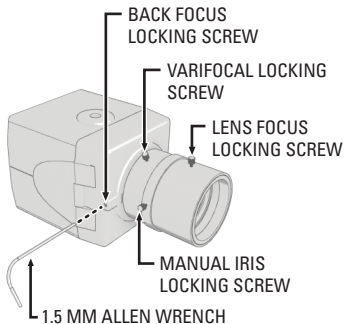
To perform this procedure:

1. Focus the camera (refer to *Lens Focus*).
2. Aim the camera at a bright, flickerless scene.
3. Select DC IRIS LEVEL from the MAIN MENU.
4. Adjust the DC IRIS LEVEL value. The range is -20 to 20. The default is -8. Adjust for the best image.
5. Press the center of the button to save the value.
6. Exit the MAIN MENU.

LENS FOCUS

After mounting the lens, you must focus your CCC1380UH Series camera. You will adjust both the back focus (on the camera) and the fine focus (on the lens).

NOTE: The back focus has already been adjusted using a standard CS-mount lens. However, you might need to adjust it again to match the mounted lens.

BACK FOCUS LOCKING SCREW

VARIFOCAL LOCKING SCREW

LENS FOCUS LOCKING SCREW

MANUAL IRIS LOCKING SCREW

1.5 MM ALLEN WRENCH

1. **Auto iris only:** Cover the auto iris lens with a suitable neutral density (ND) filter. This opens the iris fully. For best results, use an ND3 filter.

2. **Manual iris only:** Open the iris completely. Refer to the figure above, which shows the manual iris, varifocal, and lens focus locking screws for a sample lens. Refer to your lens documentation for more information.

3. If Automatic Gain Control (AGC) is set to OFF, set it to LOW or HIGH on the FUNCTION SETTINGS menu. AGC is set to LOW by default.

   a. Display the FUNCTION SETTINGS menu.

   b. Change AGC to either LOW or HIGH.

   c. Select EXIT to save the AGC setting.

4. Aim the camera at the farthest object in the field of view. Make sure it is at least 6.5 ft (2 m) away.

5. **Fixed focal length lens only:**

   a. Set the lens focal length to far (∞).

   b. Adjust the back focus:

      (1) Use a 1.5-mm Allen wrench to loosen the back focus locking screw.

      (2) Turn the lens until the image is focused.

      (3) Tighten the back focus locking screw clockwise.

      WARNING: Do not over-tighten the back focus locking screw because you may damage the camera.

      Back focus is a coarse adjustment. You will make the fine focus adjustment in the next step.

   c. Adjust the lens focus to achieve the best fine focus.

6. **Varifocal lens only:**

    a. Set the varifocal to wide (W) and the lens focal length to far (∞).

    b. Adjust the back focus:

        (1) Use a 1.5-mm Allen wrench to loosen the back focus locking screw.

        (2) Turn the lens until the image is focused.

        (3) Tighten the back focus locking screw clockwise.

        WARNING: Do not over-tighten the back focus locking screw because you may damage the camera.

        Back focus is a coarse adjustment. You will make the fine focus adjustment in steps c and d.

    c. Move the varifocal locking screw up or down to set the field of view.

    d. Adjust the lens focus to achieve the best fine focus.

    e. Repeat steps c and d until the focus is correct.

7. **Manual iris only:** Adjust the iris for the best picture quality. The largest aperture gives the best light sensitivity; the smallest aperture gives the greatest depth of field.

8. Tighten all lens locking screws.

    WARNING: When tightening the lens locking screws, do not over-turn or force any screw.

9. **Auto iris only:** Remove the ND filter.

10. If necessary, reset the AGC setting to its previous value.

    a. Display the FUNCTION SETTINGS menu.

    b. Change AGC to OFF, LOW, or HIGH.

    c. Select EXIT to save the AGC setting.

11. **Auto iris only:** Perform the auto iris lens adjustment procedure (refer to *DC Iris Level Adjustment*).