



OM-299647B

2025-10

ArcCapture



OWNER'S MANUAL

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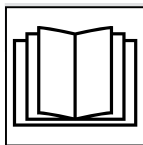
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SECTION 1 – SAFETY PRECAUTIONS – READ BEFORE USING

-  **Protect yourself and others from injury—read, follow, and save these important safety precautions and operating instructions.**

1-1. Weld Camera Hazards

-  The symbols shown below are used throughout this manual to call attention to and identify possible hazards. When you see the symbol, watch out, and follow the related instructions to avoid the hazard. The safety information given below is only a summary of the more complete safety information found in the Principal Safety Standards. Read and follow all Safety Standards.
-  Only qualified persons should install, operate, maintain, and repair this equipment. A qualified person is defined as one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project and has received safety training to recognize and avoid the hazards involved.
-  During operation, keep everybody, especially children, away.
-  Welding-related hazards are present when using the welding camera. Read the welding power source and wire feeder Owner's Manuals and labels carefully for more information on arc welding hazards. Also read American National Standard Z49.1, Safety in Welding, Cutting, and Allied Processes, from American Welding Society (www.aws.org).



READ INSTRUCTIONS.

- Read and follow all labels and the Owner's Manual carefully before installing, operating, or servicing unit. Read the safety information at the beginning of the manual and in each section.
- Use only genuine replacement parts from the manufacturer.
- Perform installation, maintenance, and service according to the Owner's Manuals, industry standards, and national, state, and local codes.



ELECTRIC SHOCK can kill.

Touching live electrical parts can cause fatal shocks or severe burns.

- Do not touch live electrical parts.
- Disconnect input power before installing or servicing this equipment.
- Do not store or use equipment in damp or wet conditions or in standing water.
- Keep cords dry, free of oil and grease, and protected from hot metal and sparks.
- Use only well-maintained equipment. Repair or replace damaged parts at once. Maintain unit according to the manual.
- Always verify the supply ground—check and be sure that plug is connected to a properly grounded receptacle outlet.



HOT PARTS can burn.

- Do not touch hot parts bare handed.
- Allow cooling period before working on equipment.



ARC RAYS can burn eyes and skin.

Arc rays from the welding process produce intense visible and invisible (ultra-violet and infrared) rays that can burn eyes and skin. Sparks fly off from the weld.

- Wear an approved welding helmet fitted with a proper shade of filter lenses to protect your face and eyes from arc rays and sparks when welding or watching (see ANSI Z49.1 and Z87.1 listed in Safety Standards).
- Wear approved safety glasses with side shields under your helmet.
- Use protective screens or barriers to protect others from flash, glare, and sparks; warn others not to watch the arc.
- Wear body protection made from leather or flame-resistant clothing (FRC). Body protection includes oil-free clothing such as leather gloves, heavy shirt, cuffless trousers, high shoes, and a cap.

1-2. California Proposition 65 Warnings

⚠ WARNING – This product can expose you to chemicals including lead, which are known to the state of California to cause cancer and birth defects or other reproductive harm.

For more information, go to www.P65Warnings.ca.gov.

1-3. Principal Safety Standards

Safety in Welding, Cutting, and Allied Processes, American Welding Society standard ANSI Standard Z49.1. Website: www.aws.org.

Safety in Welding, Cutting, and Allied Processes, CSA Standard W117.2 from Canadian Standards Association. Website: www.csagroup.org.

Safe Practice For Occupational And Educational Eye And Face Protection, ANSI Standard Z87.1, from American National Standards Institute. Website: safetyequipment.org.

Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use — Part 1: General requirements, CAN/CSA Standard C22.2 No. 61010-1-12, from Canadian Standards Association. Website: www.csagroup.org.

Camera 2025-04

1-4. EMF Information

Electric current flowing through any conductor causes localized electric and magnetic fields (EMF). The current from arc welding (and allied processes including spot welding, gouging, plasma arc cutting, and induction heating operations) creates an EMF field around the welding circuit. EMF fields can interfere with some medical implants, e.g. pacemakers. Protective measures for persons wearing medical implants have to be taken. For example, restrict access for passers-by or conduct individual risk assessment for welders. All welders should use the following procedures in order to minimize exposure to EMF fields from the welding circuit:

1. Keep cables close together by twisting or taping them, or using a cable cover.
2. Do not place your body between welding cables. Arrange cables to one side and away from the operator.
3. Do not coil or drape cables around your body.
4. Keep head and trunk as far away from the equipment in the welding circuit as possible.
5. Connect work clamp to workpiece as close to the weld as possible.
6. Do not work next to, sit or lean on the welding power source.
7. Do not weld whilst carrying the welding power source or wire feeder.

About Implanted Medical Devices:

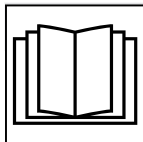
Implanted Medical Device wearers should consult their doctor and the device manufacturer before performing or going near arc welding, spot welding, gouging, plasma arc cutting, or induction heating operations. If cleared by your doctor, then following the above procedures is recommended.

SECTION 2 – SAFETY PRECAUTIONS – READ BEFORE USING

-  **Protect yourself and others from injury—read, follow, and save these important safety precautions and operating instructions.**

2-1. Dangers associés à l'utilisation de la caméra de soudage

-  The symbols shown below are used throughout this manual to call attention to and identify possible hazards. When you see the symbol, watch out, and follow the related instructions to avoid the hazard. The safety information given below is only a summary of the more complete safety information found in the Principal Safety Standards. Read and follow all Safety Standards.
-  Only qualified persons should install, operate, maintain, and repair this equipment. A qualified person is defined as one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project and has received safety training to recognize and avoid the hazards involved.
-  During operation, keep everybody, especially children, away.
-  L'utilisation de la caméra de soudage présente les mêmes dangers que ceux liés au soudage. Lire attentivement les manuels de l'utilisateur et les étiquettes sur la source de courant de l'appareil de soudure et le dévidoir pour en savoir plus sur les dangers associés au soudage à l'arc. Lire également la norme Z49.1 de l'American National Standard Institute (ANSI), Safety in Welding, Cutting, and Allied Processes (Règles de sécurité en soudage, coupage et procédés connexes) de l'American Welding Society (www.aws.org).



LIRE LES INSTRUCTIONS.

- Lire et appliquer les instructions sur les étiquettes et le Mode d'emploi avant l'installation, l'utilisation ou l'entretien de l'appareil. Lire les informations de sécurité au début du manuel et dans chaque section.
- N'utiliser que des pièces de remplacement provenant du fabricant.
- Effectuer l'installation, l'entretien et toute intervention selon les manuels d'utilisateurs, les normes nationales, provinciales et de l'industrie, ainsi que les codes municipaux.



UN CHOC ÉLECTRIQUE peut tuer.

Tout contact avec des pièces électriques sous tension peut causer des chocs mortels ou des brûlures graves.

- Ne pas toucher les pièces électriques sous tension.
- Couper le courant avant d'installer ou de faire l'entretien de cet équipement.
- Ne pas stocker ni utiliser l'équipement dans des conditions humides ou mouillées ou dans de l'eau stagnante.
- Les câbles doivent être exempts d'humidité, d'huile et de graisse; les protéger contre les étincelles et les pièces métalliques chaudes.
- Utiliser uniquement un équipement correctement entretenu. Réparer ou remplacer immédiatement les pièces endommagées. Entretenir l'appareil conformément au manuel.
- Vérifier toujours l'état du conducteur de terre — Vérifier et s'assurer que la fiche est connectée à une prise de courant correctement mise à la terre.



LES PIÈCES CHAUDES peuvent provoquer des brûlures.

- Ne pas toucher des parties chaudes à mains nues.
- Prévoir une période de refroidissement avant d'intervenir sur l'équipement.



LES RAYONS DE L'ARC peuvent provoquer des brûlures dans les yeux et sur la peau.

Le rayonnement de l'arc du procédé de soudage génère des rayons visibles et invisibles intenses (ultraviolets et infrarouges) susceptibles de provoquer des brûlures dans les yeux et sur la peau. Des étincelles sont projetées pendant le

soudage.

- Porter un casque de soudage approuvé muni de verres filtrants approprié pour protéger visage et yeux pendant le soudage (voir ANSI Z49.1 et Z87.1 énuméré dans les normes de sécurité).
- Porter des lunettes de sécurité avec écrans latéraux même sous votre casque.
- Avoir recours à des écrans protecteurs ou à des rideaux pour protéger les autres contre les rayonnements les éblouissements et les étincelles ; prévenir toute personne sur les lieux de ne pas regarder l'arc.
- Porter une protection corporelle en cuir ou des vêtements ignifuges (FRC). La protection du corps comporte des vêtements sans huile, comme des gants de cuir, une chemise solide, des pantalons sans revers, des chaussures hautes et une casquette.

2-2. California Proposition 65 Warnings

⚠ AVERTISSEMENT – This product can expose you to chemicals including lead, which are known to the state of California to cause cancer and birth defects or other reproductive harm.

For more information, go to www.P65Warnings.ca.gov.

2-3. Principales normes de sécurité

Safety in Welding, Cutting, and Allied Processes, American Welding Society standard ANSI Standard Z49.1. Website: www.aws.org.

Safety in Welding, Cutting, and Allied Processes, CSA Standard W117.2 from Canadian Standards Association. Website: www.csagroup.org.

Safe Practice For Occupational And Educational Eye And Face Protection, ANSI Standard Z87.1, from American National Standards Institute. Website: safetyequipment.org.

Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use — Part 1: General requirements, CAN/CSA Standard C22.2 No. 61010-1-12, from Canadian Standards Association. Website: www.csagroup.org.

Caméra 2025–04

2-4. EMF Information

Electric current flowing through any conductor causes localized electric and magnetic fields (EMF). The current from arc welding (and allied processes including spot welding, gouging, plasma arc cutting, and induction heating operations) creates an EMF field around the welding circuit. EMF fields can interfere with some medical implants, e.g. pacemakers. Protective measures for persons wearing medical implants have to be taken. For example, restrict access for passers-by or conduct individual risk assessment for welders. All welders should use the following procedures in order to minimize exposure to EMF fields from the welding circuit:

1. Keep cables close together by twisting or taping them, or using a cable cover.
2. Do not place your body between welding cables. Arrange cables to one side and away from the operator.
3. Do not coil or drape cables around your body.
4. Keep head and trunk as far away from the equipment in the welding circuit as possible.
5. Connect work clamp to workpiece as close to the weld as possible.
6. Do not work next to, sit or lean on the welding power source.
7. Do not weld whilst carrying the welding power source or wire feeder.

About Implanted Medical Devices:

Implanted Medical Device wearers should consult their doctor and the device manufacturer before performing or going near arc welding, spot welding, gouging, plasma arc cutting, or induction heating operations. If cleared by your doctor, then following the above procedures is recommended.

SECTION 3 – SPECIFICATIONS

3-1. Specifications

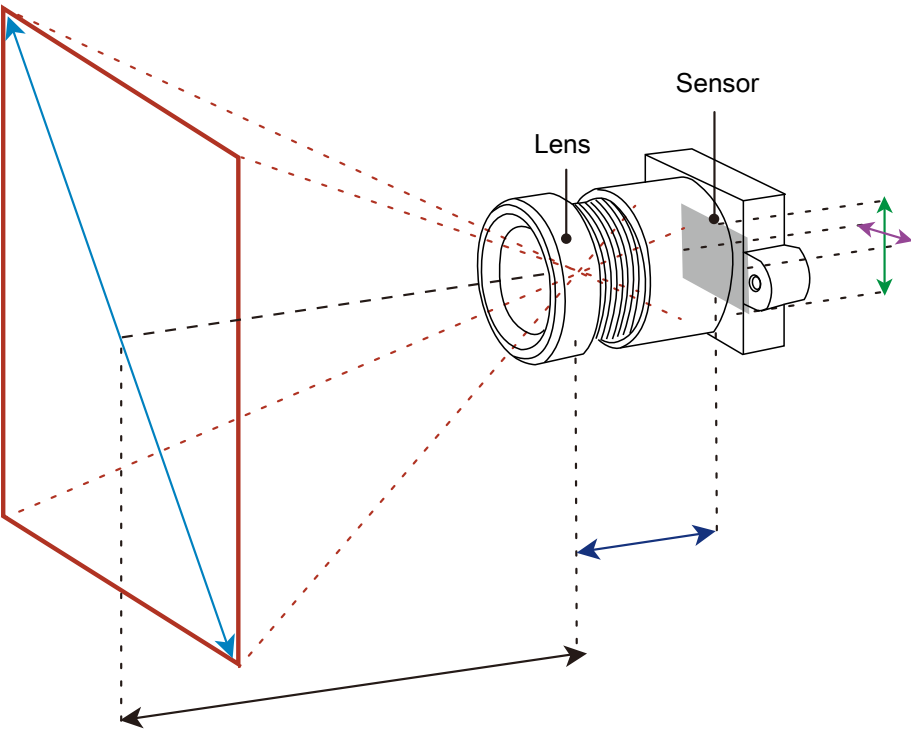
	ArcCapture	ArcCapture With Wifi
Dimensions	1.18 x 1.57 x 4.09 in. (30 mm x 40 mm x 104 mm)	2.0 x 2.28 x 3.27 in. (51 mm x 58 mm x 83 mm)
Resolution	1920 x 1080 (Full HD), Color	
Focus Type	Fixed Focus	
Shutter Type	Electronic Rolling Shutter	
Lens Mount	M12 Mount	
Filter	UV + IR Cut Filter (Internal)	
Dynamic Range	140 + dB	
Video Output	HD-SDI	
External Terminal	50 SMA Connector / Power control; 4pin round screw connector	
Wireless	n/a	WiFi 802/.11ax
Operating Temperature Range	14 to 140°F (–10 to 60°C)	
Power Consumption	Max 3W	
Power Supply	9V 1A Adapter	

3-2. Focus Lens Specifications

Imaging lenses with focal lengths of 8, 12, and 16 mm are provided. When these lenses are installed, the field of view varies depending on the distance from the camera to the welding target as shown below. Select a lens with an appropriate focal length and determine the distance between the camera and the welding object.

For the same working distance, the shorter the focal length, the larger the field of view (FOV). The relationship between FOV and pixel precision depending on the focal length and working distance of the lens is shown in [Fig 1]. It is recommended that users follow the procedure below to select an lens.

- Step 1.** Set the camera angle to avoid fumes and spatter.
- Step 2.** Ensure that the working distance is sufficient to avoid interference from nearby jigs or welding objects during the welding process.
- Step 3.** Set the FOV to ensure a clear video image for welding automation
- Step 4.** Using the tables below, select the closest lens for the set working distance and FOV.
- Step 5.** Equip the welding camera with the selected lens.
- Step 6.** Mount the welding camera to the torch or head of the automation device.
- Step 7.** Install the welding camera on the automation device and adjust the focus to suit the working environment.



A. 8mm Focal Length

Pixel	Working Distance (mm)	Field of View (H x V) (mm)	Pixel Resolution (um)
3MP	100	69.6 x 39.15	36.25
	200	139.2 x 78.3	72.5

	300	208.8 x 117.45	108.75
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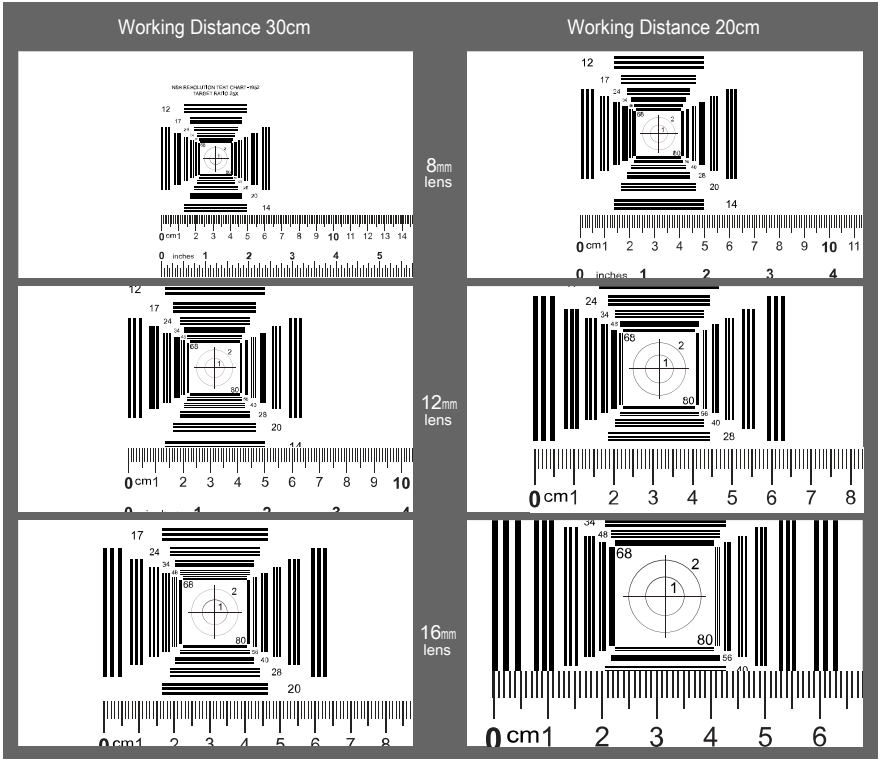
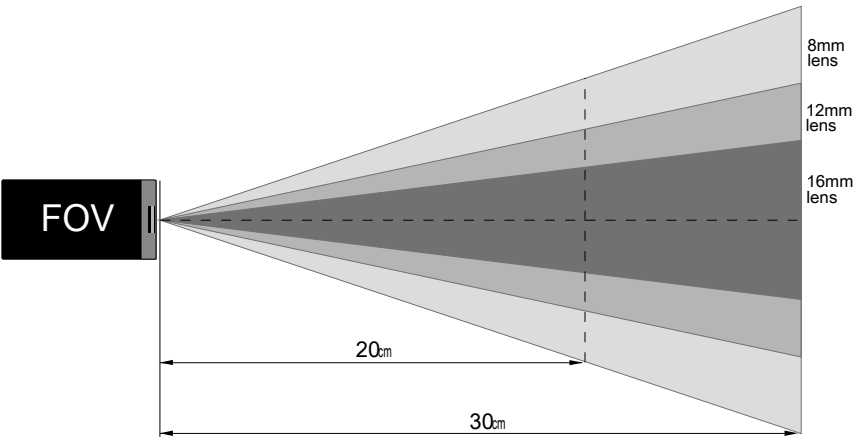
B. 12mm Focal Length

Pixel	Working Distance (mm)	Field of View (H x V) (mm)	Pixel Resolution (um)
5MP	100	46.4 x 26.1	24.17
	200	92.8 x 52.2	48.33
	300	139.2 x 78.3	72.5

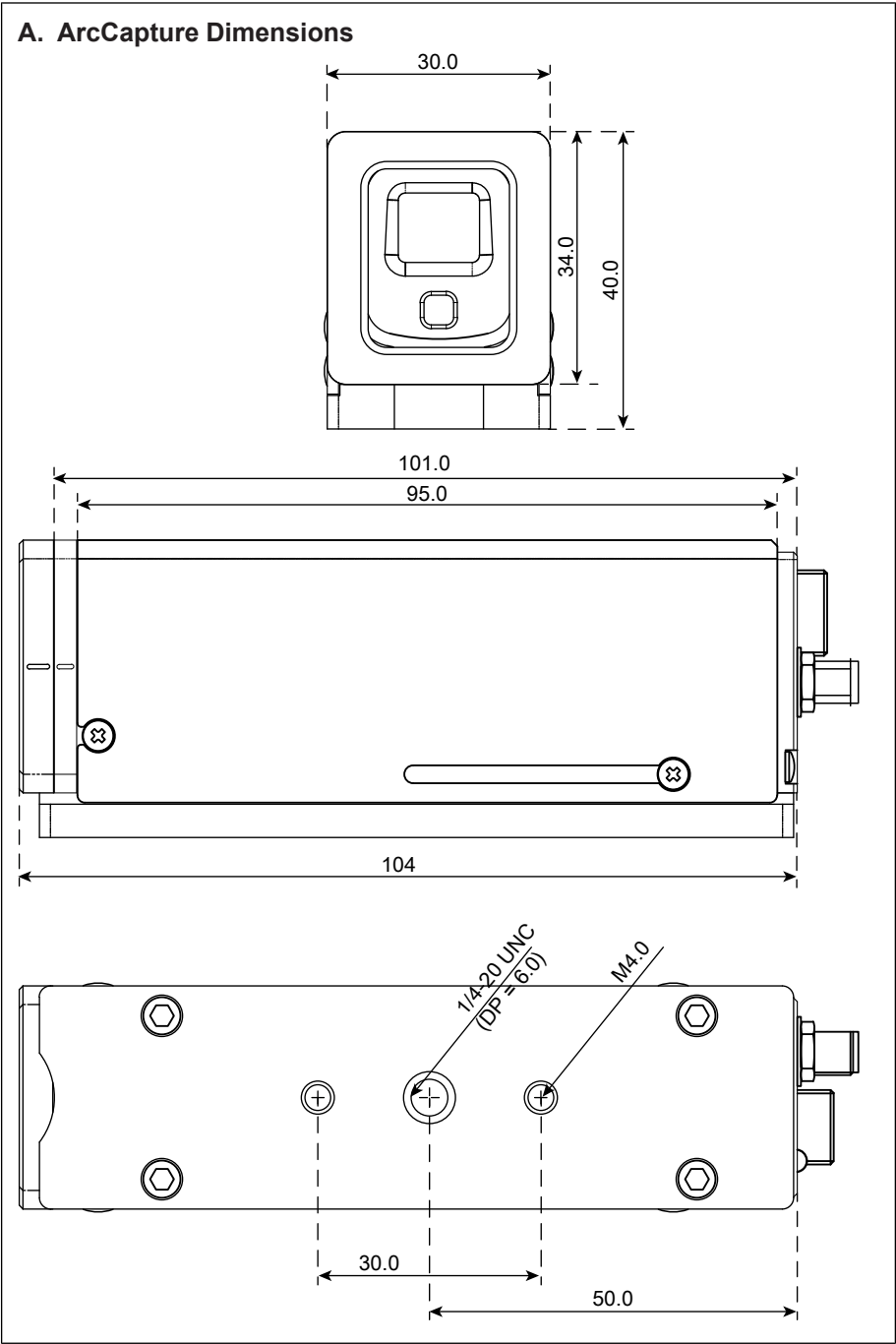
C. 16mm Focal Length

Pixel	Working Distance (mm)	Field of View (H x V) (mm)	Pixel Resolution (um)
5MP	100	34.8 x 19.58	18.13
	200	69.6 x 39.15	36.25
	300	104.4 x 58.73	54.38

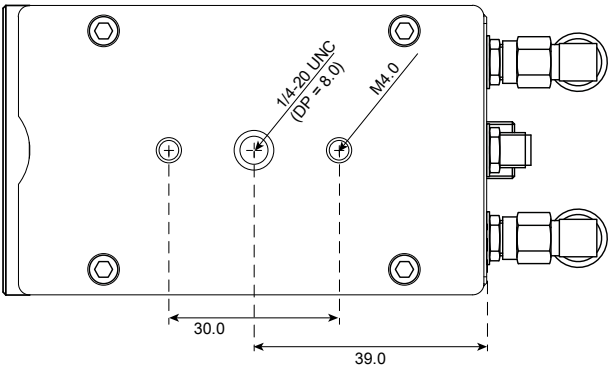
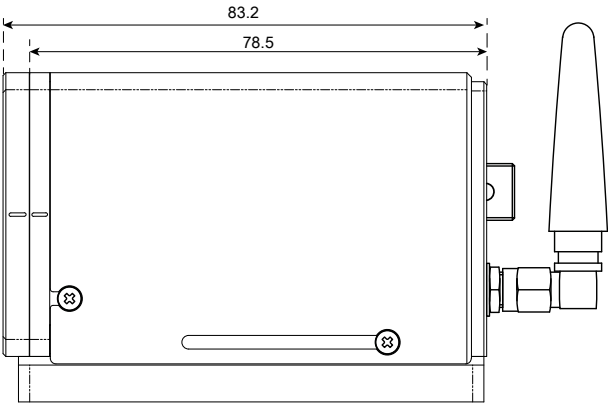
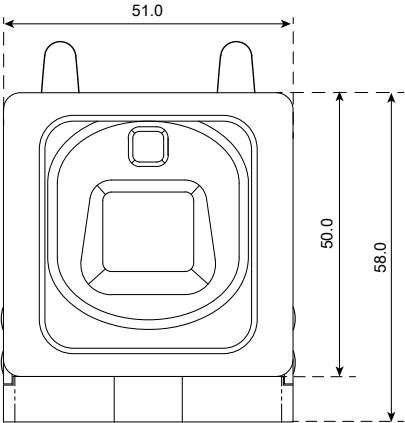
3-3. Field Of View Diagram



3-4. Dimensions



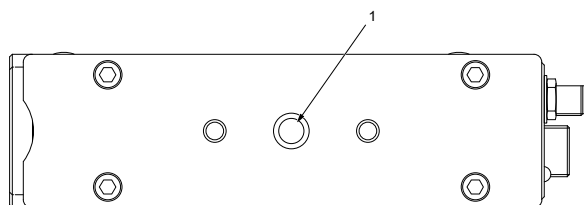
B. ArcCapture With Wifi Dimensions



SECTION 4 – INSTALLATION

4-1. Mounting Camera

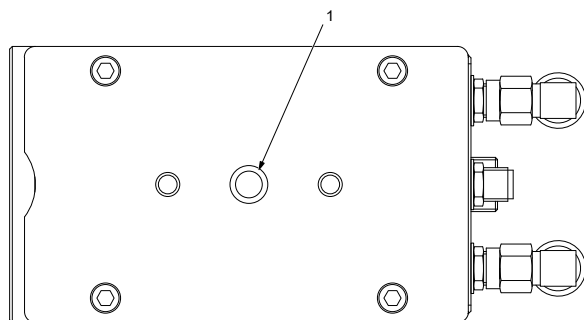
Bottom of ArcCapture



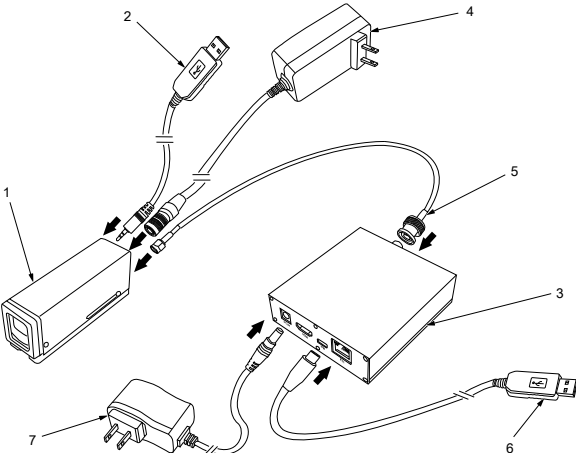
1 Mounting Hole

Standard thread size for camera mountings is 1/4–20 UNC.

Bottom of ArcCapture with Wifi



4-2. ArcCapture Connections



The diagram illustrates the connection setup for ArcCapture. A camera (1) is connected to an SVM converter box (3) via an SDI cable (2). A 4-pin power supply cable (4) connects the camera to a 120V input power source. An SVM USB cable (6) connects the converter box to a personal computer. An SVM power cable (7) connects the converter box to another 120V input power source. An SDI cable (5) also connects the converter box to the 120V input power source.

- 1 Camera
- 2 UART Cable
- 3 SVM Converter Box
- 4 4-Pin Power Supply Cable 299635
- 5 SDI Cable 299636
- 6 SVM USB Cable 296631
- 7 SVM Power Cable 299630

Connect SDI cable to rear of camera. Connect other end to SVM converter box.

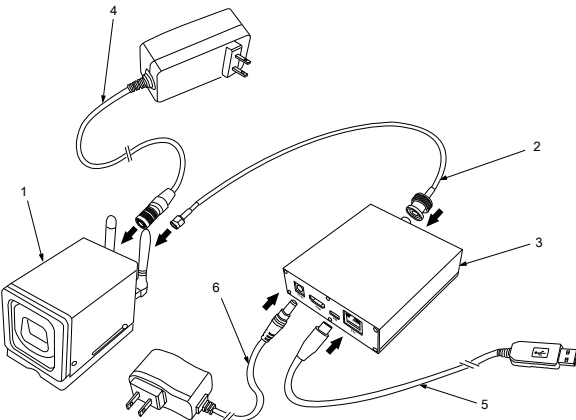
Connect 4-pin power supply cable to rear of camera. Connect other end to 120V input power.

Connect UART cable to rear of camera. Connect other end (USB) to a personal computer to adjust camera settings.

Connect SVM USB cable from SVM converter box to personal computer.

Connect SVM power cable from SVM converter box to 120V input power.

4-3. ArcCapture With Wifi Connections



The diagram illustrates the connection setup for ArcCapture with Wifi. A camera (1) is connected to an SVM converter box (3) via an SDI cable (2). A 4-pin power supply cable (4) connects the camera to a 120V input power source. An SVM USB cable (5) connects the converter box to a personal computer. An SVM power cable (6) connects the converter box to another 120V input power source.

- 1 Camera
- 2 SDI Cable 299636
- 3 SVM Converter Box
- 4 4-Pin Power Supply Cable 299635
- 5 SVM USB Cable 296631
- 6 SVM Power Cable 299630

Connect SDI cable to rear of camera. Connect other end to SVM converter box.

Connect 4-pin power supply cable to rear of camera. Connect other end to 120V input power.

Connect SVM USB cable from SVM converter box to personal computer.

Connect SVM power cable from SVM converter box to 120V input power.

SECTION 5 – WELDING VIDEO MANAGEMENT SYSTEM FOR PC

5-1. Installing Application

Insert USB drive into PC and view its contents. Double click **setup.exe**.

Name	Date modified	Type	Size
DotNetFX48	1/20/2025 12:49 PM	File folder	
vcredist_x64	1/20/2025 12:49 PM	File folder	
License KEY[USA].docx	1/16/2025 8:12 AM	Microsoft Word D...	14 KB
 setup.exe	1/20/2025 12:49 PM	Application	539 KB
 SetupWVMSB.msi	1/20/2025 12:49 PM	Windows Installer ...	247,846 KB
 WG3+_250117(EN).pdf	1/17/2025 8:38 AM	Adobe Acrobat D...	23,865 KB

Figure 5-1. Run Setup Application

The Setup Wizard opens. Click **Next**.

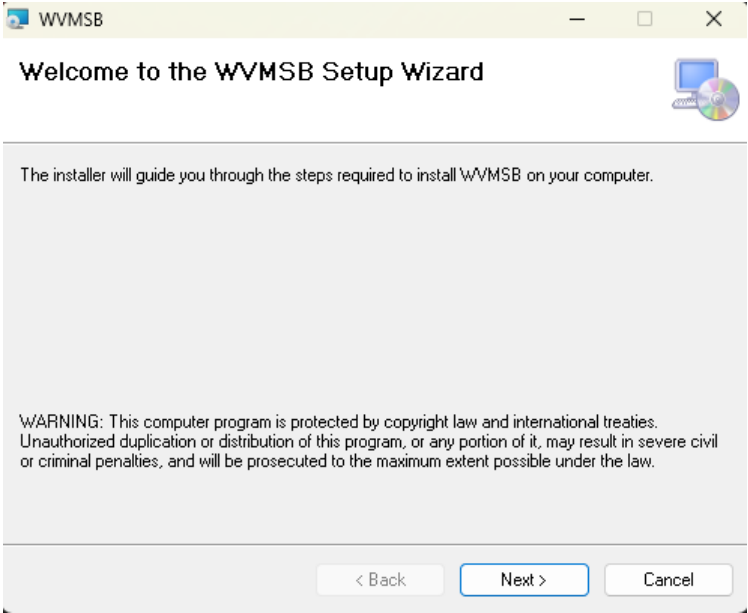


Figure 5-2. WVMSB Setup Wizard

The system will prompt you to select an installation folder. Click **Browse** to change the folder from the default option. Click **Disk Cost** to view available drives and the required amount of space. Choose whether to install the application for all users, or just yourself. When ready, click **Next**.

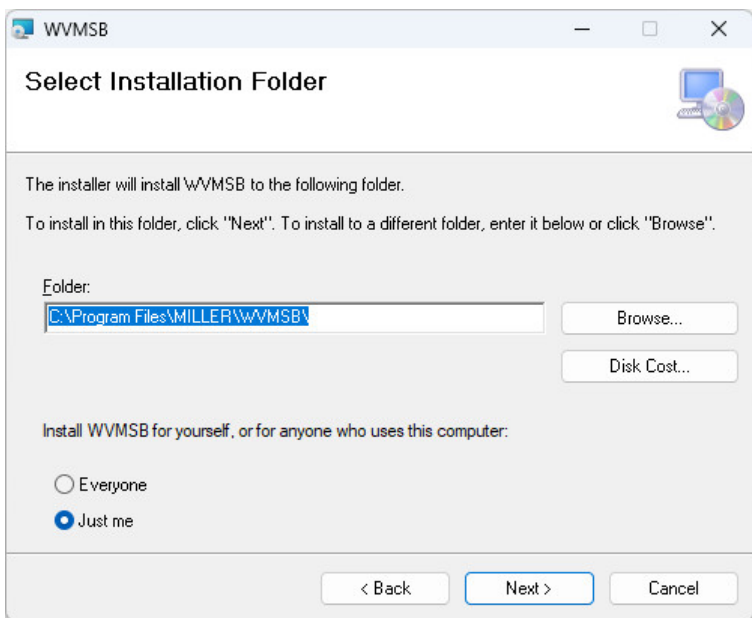


Figure 5-3. Select Installation Folder

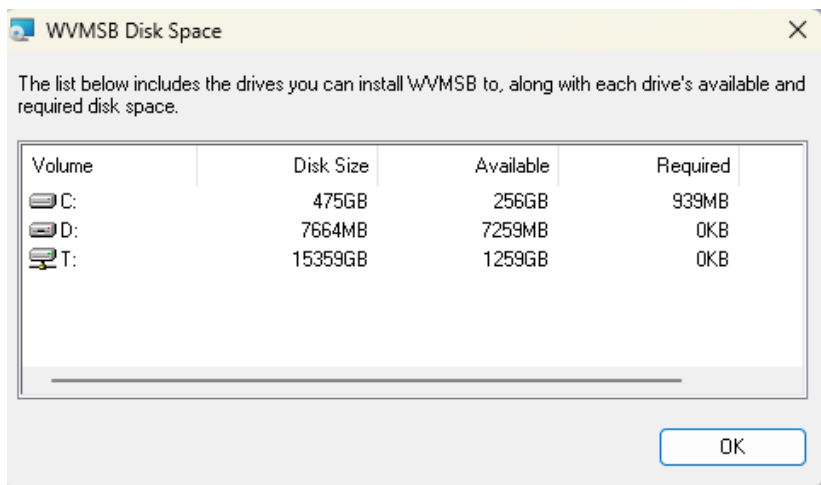


Figure 5-4. Disk Cost

On the Confirm Installations screen, click **Next** to begin installation.

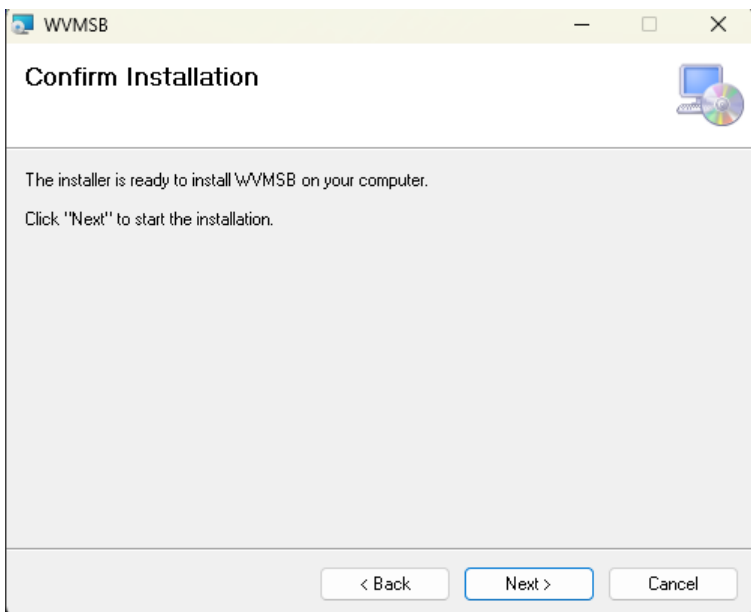


Figure 5-5. Confirm Installation

A screen appears to confirm installation, and a second screen appears to install Microsoft DirectX. **Do not click Close** on the first screen until DirectX installation is complete.

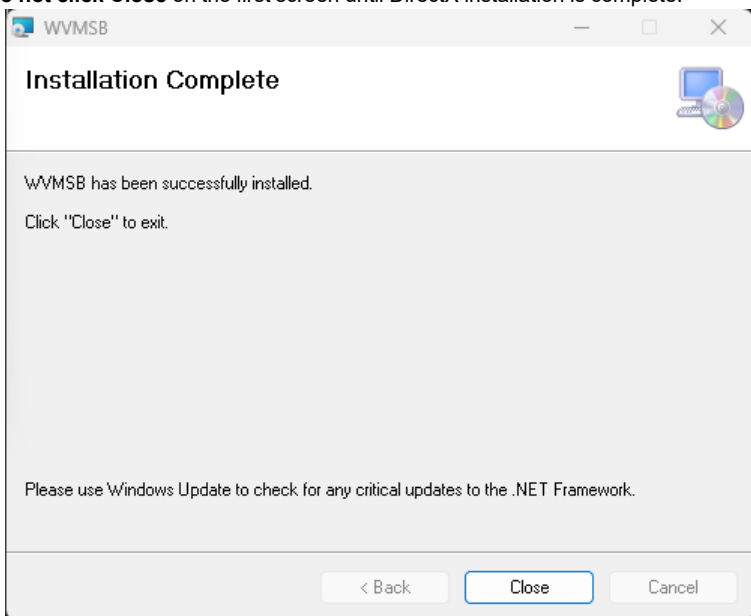


Figure 5-6. Installation Complete

On the DirectX setup screen, accept the agreement and click **Next**.

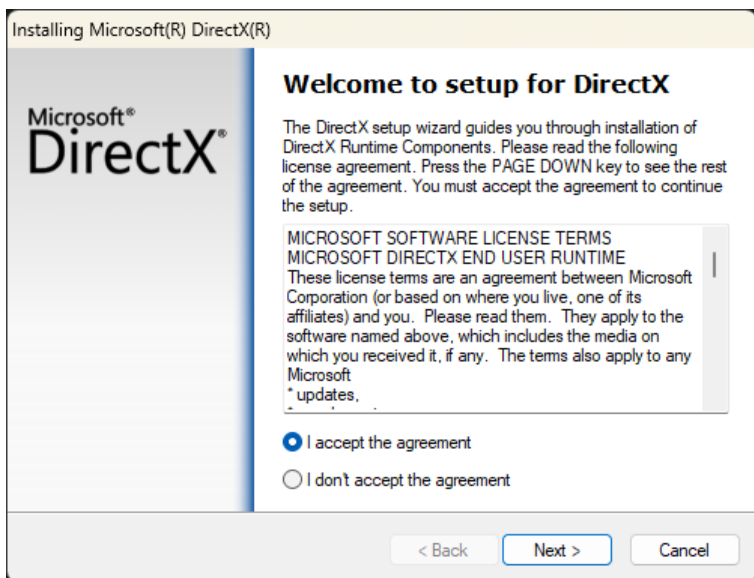


Figure 5-7. DirectX Setup

To confirm installation of DirectX, click **Next**.

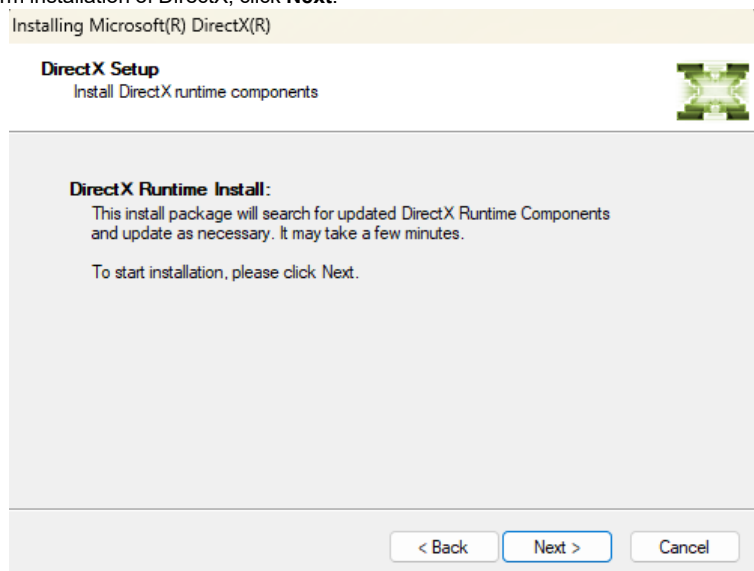


Figure 5-8. Installing DirectX

When the installation is complete, click **Finish**.

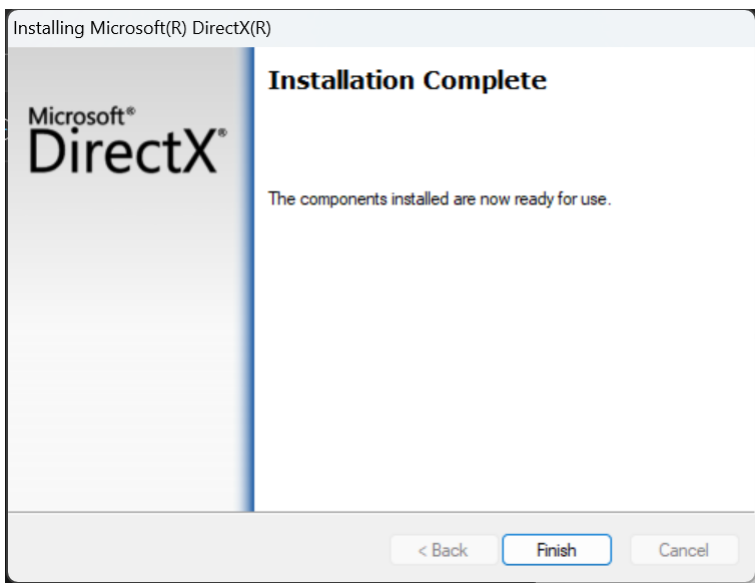


Figure 5-9. DirectX Installation Complete

If the WVMS installer window is closed before completing the DirectX installation, the DirectX installation will fail. In this case, fully uninstall the WMVS software, remove all associated file directories, and restart installation.

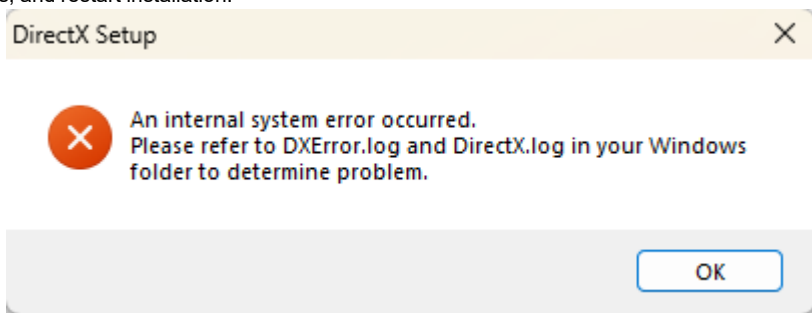


Figure 5-10. DirectX Installation Failure

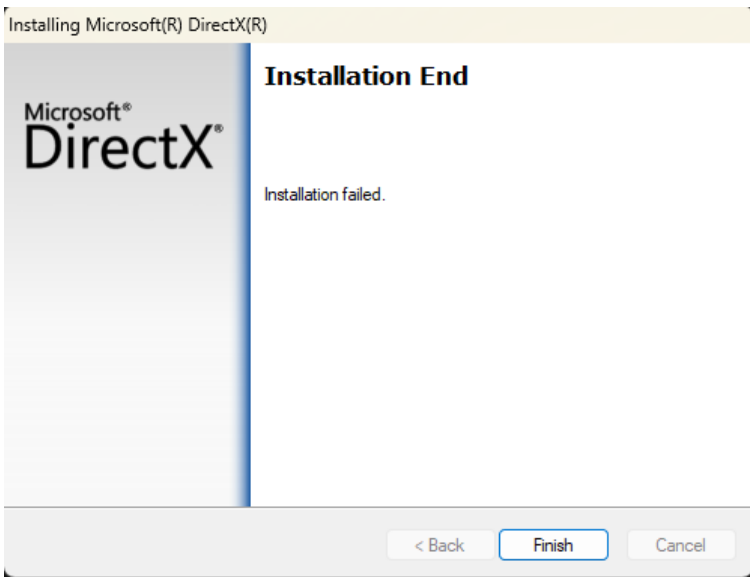


Figure 5-11. DirectX Installation Failure

5-2. License Registration

Launch the Weld Video Management Software by double clicking the desktop icon.

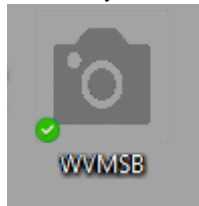


Figure 5-12. WVMS Desktop Icon

When the software opens, you will be prompted to register your license. Click **Yes**.

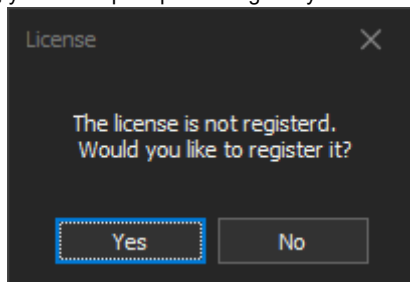


Figure 5-13. License Registration Prompt

On the USB drive, open the file titled **License Key[USA].docx**. The license key is in the file.

Type or paste the license key in the License field and click **Register**.

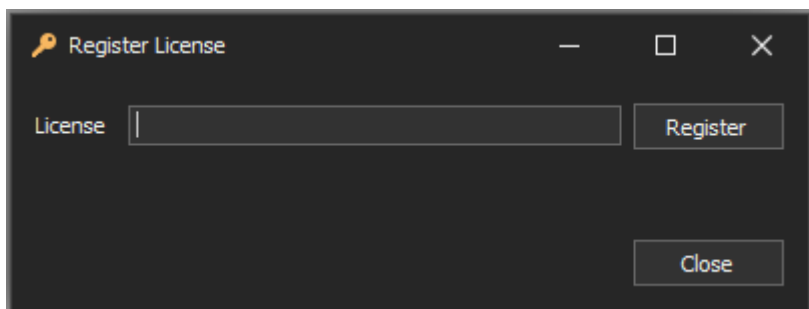


Figure 5-14. Register License

A successful registration screen will appear. Click **OK**.

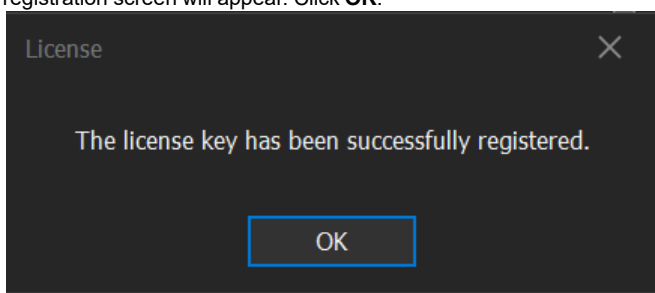
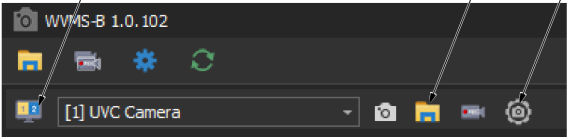


Figure 5-15. Successful Registration

5-3. Application Toolbar

	1 File Open Opens File Explorer to browse to a video file to view. 2 Video Record Starts video recording on all active cameras. 3 Settings Opens the video settings screen. See Section 5-9. 4 Refresh Updates the camera views.
--	--

5-4. Camera Toolbar



1 Split Screen

Toggles between single or dual camera view.

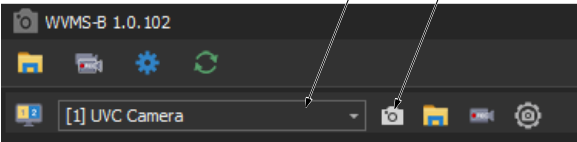
2 File Open

Opens File Explorer to browse to a video file to view.

3 Camera Settings

Opens the Camera Settings menu. See Section [5-7](#) for USB-connected models and Section [5-8](#) for Wifi models.

5-5. Connecting Camera Via USB



Ensure camera and converter box are connected as specified in Section [4-2](#).

Connect cable 299795 UART from camera to USB port of PC for ArcCapture (non-wifi) to adjust camera settings. Connect cable 299631 from converter box to USB port of PC for both ArcCapture and ArcCapture with Wifi.

1 Camera Dropdown

2 Camera Icon

Click the Camera dropdown and select the camera. Then click the Camera icon to show the camera view on the screen.

5-6. Connecting Camera To PC Via WiFi

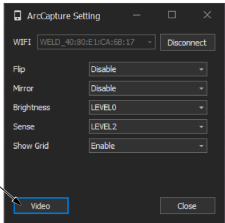
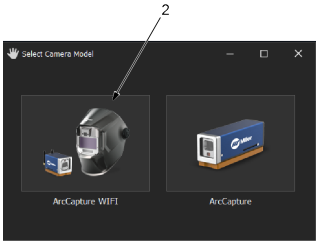
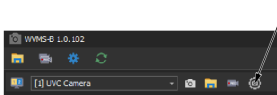
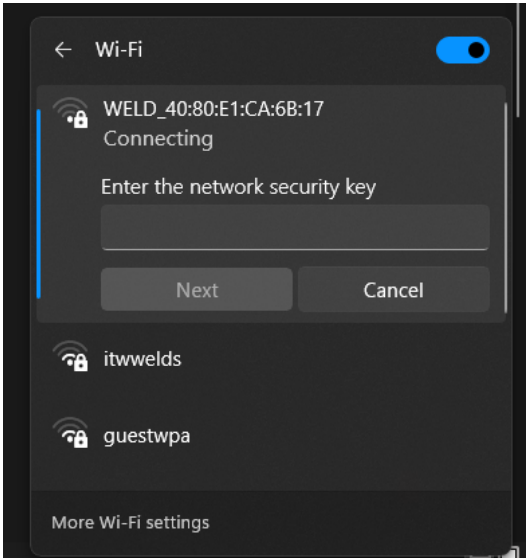
Ensure the weld camera and converter are connected and powered on as shown in Section 4-3.

On the PC, view the list of available WiFi networks and select WELD_XXXX. It may take a few moments after powering the camera on for the network to appear.

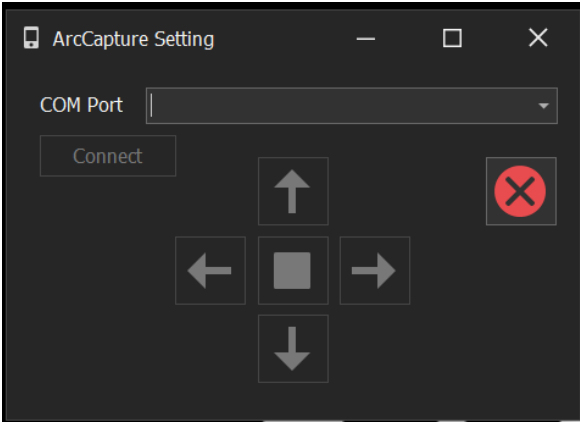
Enter the network security key and click **Next**. The default security key is 12345678.

- 1 Select Camera Settings Icon
- 2 Select ArcCapture WiFi
- 3 Select Video

Adjust camera settings if desired.



5-7. Adjusting Camera Settings for ArcCapture



Click the Camera Settings Icon. In the COM Port dropdown, select ArcCapture Model.

If the specified port is not listed in the dropdown, open Device Manager to check its status. You may need to install or update drivers or restart your computer.

Click **Connect**. Double click the square. The menu appears as an overlay on the camera image.



Click the up and down arrows to change the menu selection. Click the left and right arrows to adjust a setting.

Brightness: Adjustable from 0 to 9.

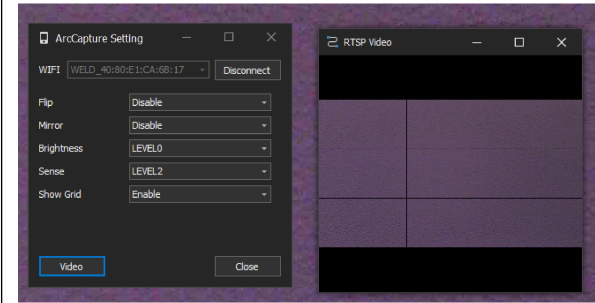
Sensitivity: Adjusts the sensitivity of the camera. Adjustable from 0 to 10.

Focus: On or Off.

Mirror: On or Off. Screen horizontal mirror.

Flip: On or Off. Screen vertical flip.

5-8. Adjusting Camera Settings for ArcCapture with WiFi



Click the Camera Settings Icon. The Settings window will open.

Flip: Disable or Enable. Screen vertical flip.

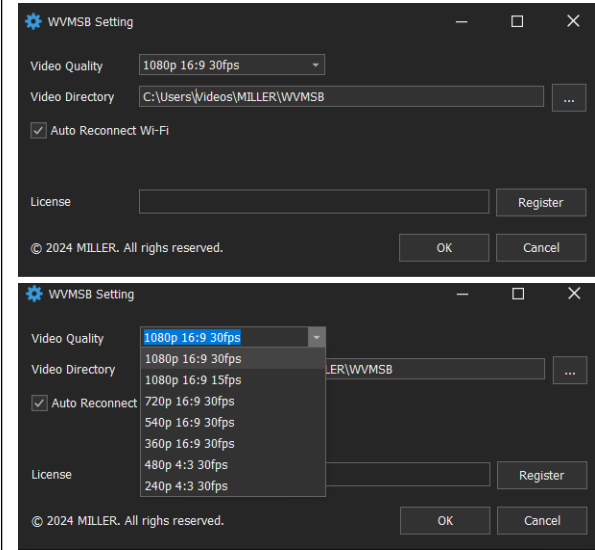
Mirror: Disable or Enable. Screen horizontal mirror.

Brightness: Adjusts screen brightness from Level 0 (brightest) to Level 9 (darkest)

Sense: Adjusts welding camera's photo sensor sensitivity from Level 0 (lowest) to Level 10 (highest)

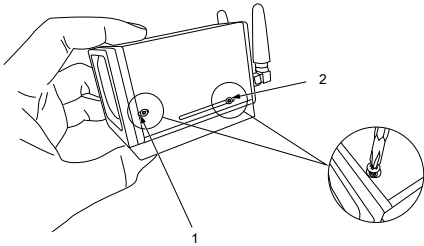
Show Grid: Displays grid lines in video to aid in camera alignment.

5-9. Adjusting Video Settings



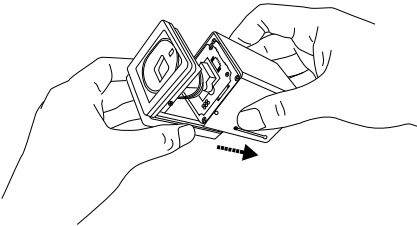
Click the Video Settings icon to adjust the video quality and to change the directory where videos are saved.

5-10. Adjusting Focus



The camera uses a focusing lens with a fixed focal length. The image can become out of focus depending on the distance between the camera and the arc. Fine-tune the focus by following these steps.

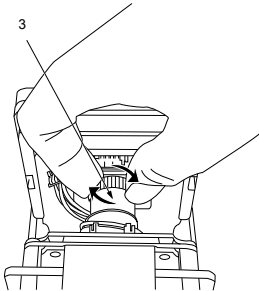
- 1 Front Bolt (2)
- 2 Rear Bolt (2)
- 3 Lens



Use a screwdriver to remove the front bolts and loosen the rear bolts. Slide the cover back as shown.

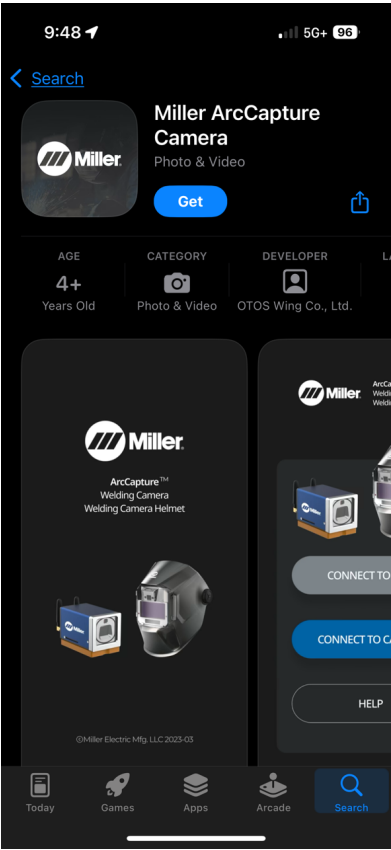
Adjust the focus by rotating the lens by hand as shown.

Reassemble camera.



SECTION 6 – SMARTPHONE APPLICATION SETTINGS

6-1. Installing the Camera Application



9:48 5G+ 96

< Search

Miller ArcCapture Camera
Photo & Video

Get

AGE: 4+ Years Old
CATEGORY: Photo & Video
DEVELOPER: OTOS Wing Co., Ltd.

Miller
ArcCapture™ Welding Camera Helmet

CONNECT TO
CONNECT TO C
HELP

©Miller Electric Mfg. LLC 2023-03

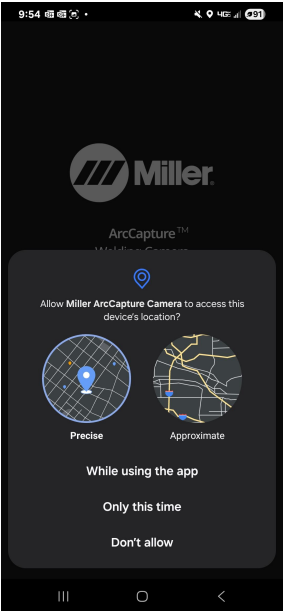
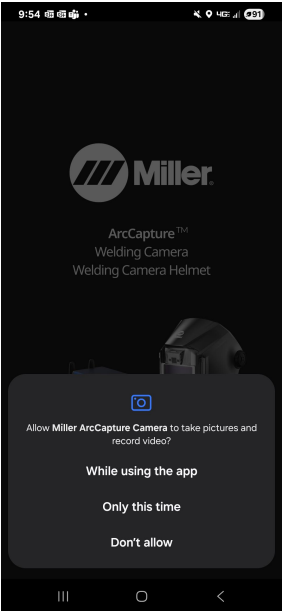
Today Games Apps Arcade Search

Search for Miller ArcCapture in App Store.

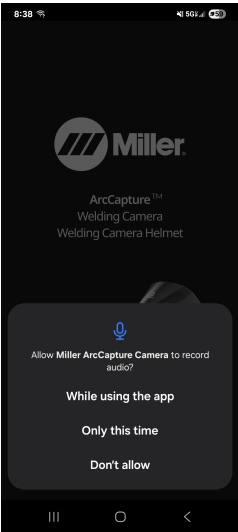
Download the application.

6-2. Camera Application Settings

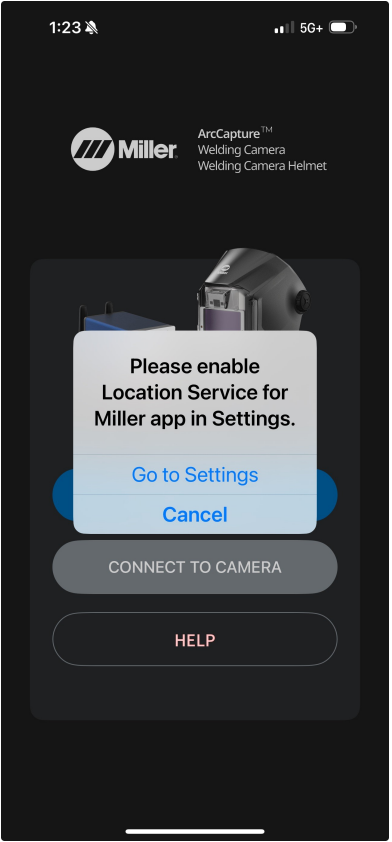
A. Android



The app requires permissions to continue. Prompts will appear to Allow Miller ArcCapture Camera to take pictures and record video, access the device's location, and record audio. Select **While using the app** for each prompt to continue.



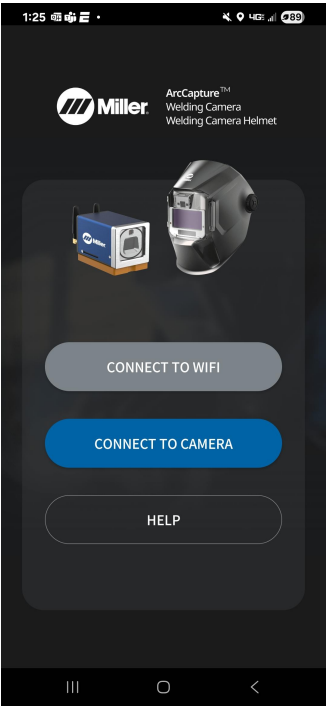
B. iOS



The app requires permissions to continue. A prompt will appear to enable location service. Select **Go to Settings** to continue.

6-3. WiFi Settings

A. Android

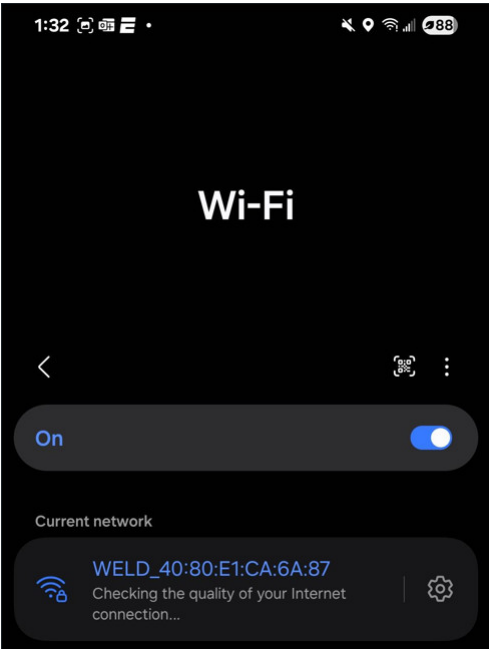


Choose **Connect to WIFI**.

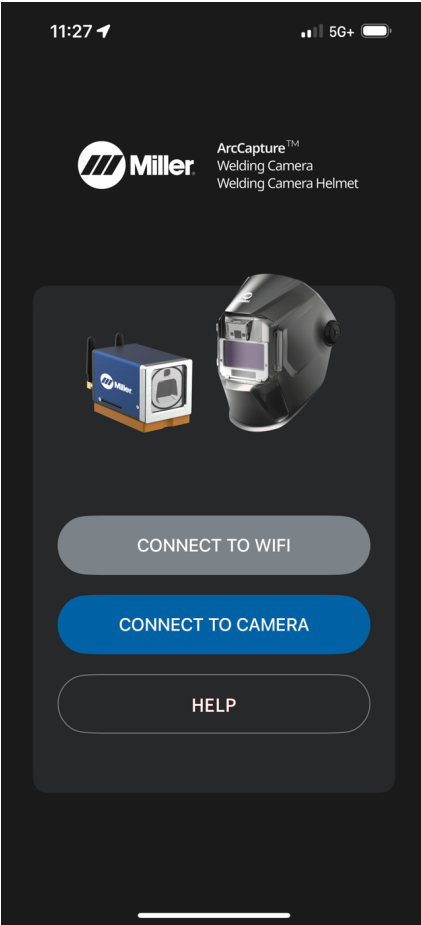
Select the camera Wifi from the available networks.

Enter password: 12345678.

Select **Connect**.



B. iOS

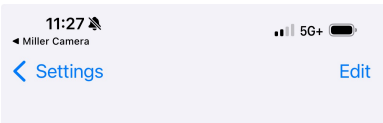


Choose **Connect to WIFI**.

Select the camera Wifi from the available networks.

Enter password: 12345678.

Select **Connect**.



Wi-Fi

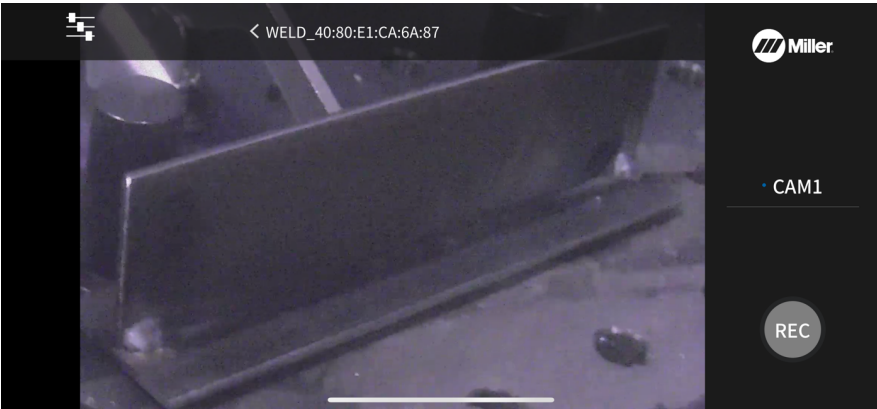
Connect to Wi-Fi, view available networks, and manage settings for joining networks and nearby hotspots. [Learn more...](#)

Wi-Fi



✓ WELD_40:80:E1:C7:57:51   

6-4. Recording And Saving Video

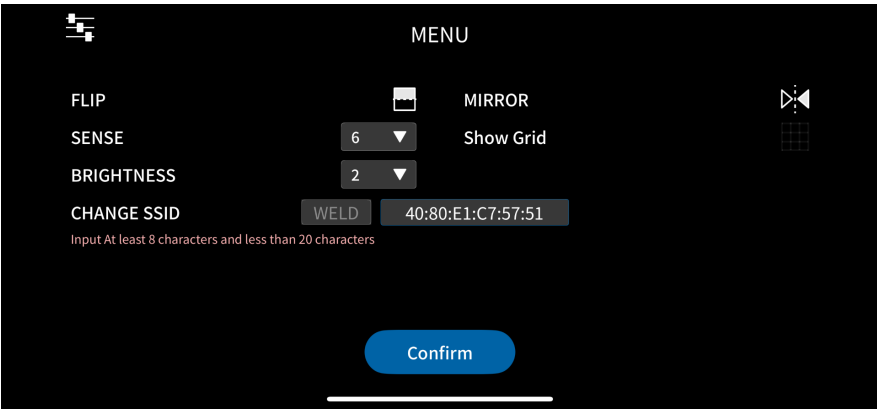


Tap the **Work** button to display the camera view.

Tap the **REC** button to begin recording video. Tap the **Rec** button again to stop recording.

Tap the Menu icon in the upper left corner to open the image quality settings. See [Section 6-5](#).

6-5. Using And Configuring The App



Flip: Disable or Enable. Screen vertical flip.

Mirror: Disable or Enable. Screen horizontal mirror.

Brightness: Adjusts screen brightness from Level 0 (brightest) to Level 9 (darkest)

Change SSID: Input a new SSID for the welding camera.

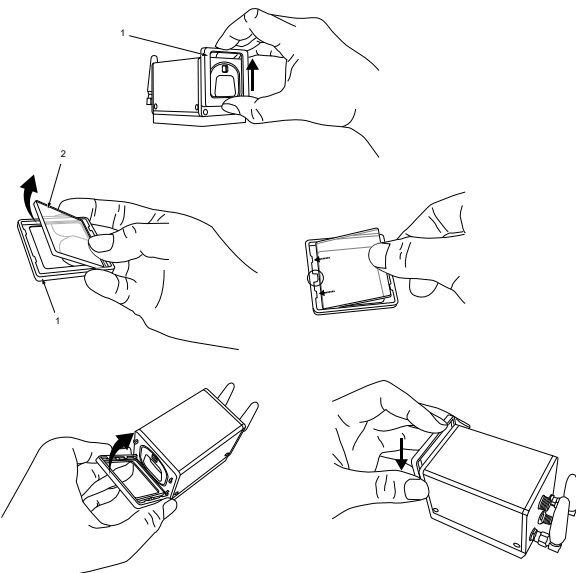
Sense: Adjusts welding camera's photo sensor sensitivity from Level 0 (lowest) to Level 10 (highest)

Show Grid: Displays grid lines in video to aid in camera alignment.

Select **Confirm** to save settings.

SECTION 7 – MAINTENANCE AND TROUBLESHOOTING

7-1. Replacing Protective Glass



The camera is equipped with a protective glass (polycarbonate) at the front of the camera to prevent contamination of the camera lens from fume or spatter during welding. This protective glass may become contaminated when welding continues for a long period of time. When excessive spatter adhesion or fume contamination occurs, replace the protective glass.

1 Protective Glass Mount
2 Protective Glass

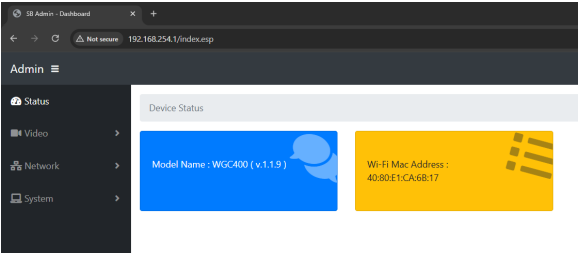
Slide up the protective glass mount.

Separate the glass from the mount as shown.

Remove protective film from surface of new protective glass and install the new glass into the mount.

Reassemble the protective glass mount to the camera.

7-2. Connecting To The Web Page



The screenshot shows a web browser window with the address bar displaying '192.168.254.1/index.asp'. The page has a dark sidebar menu with 'Admin' selected, showing sub-items: Status, Video, Network, and System. The main content area is titled 'Device Status' and contains two colored boxes: a blue box with 'Model Name : WGC400 (v.1.1.9)' and a yellow box with 'Wi-Fi Mac Address : 40:80:E1:CA:6B:17'.

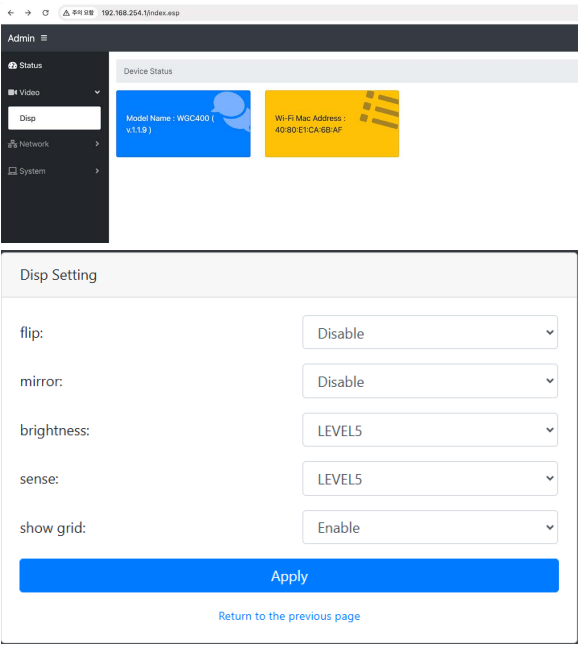
Connect the power adapter to the ArcCapture with Wifi and turn it on.

Connect the PC and welding camera via WiFi.

Open a web browser on the PC and enter `http://192.168.254.1` in the address bar. The camera web page opens with the following menus:

- **Status:** You can check the currently connected welding camera.
- **Video:** You can adjust the video image status of the connected welding camera.
- **Network:** You can change SSID (Network ID) of the ArcCapture with Wifi connected to the PC.
- **System:** Consists of three sub-menus including Firmware Upgrade, Device Reboot, and Restore Factory Settings.

7-3. Adjusting Image Quality Via Web Page



The screenshot shows the camera's web interface. On the left is an 'Admin' sidebar with a menu: Status, Video, Disp (selected), Network, and System. The main area is divided into two sections. The top section, 'Device Status', displays 'Model Name : WGC400 (v1.1.9)' on a blue background and 'Wi-Fi Mac Address : 40:80:E1:CA:6B:AF' on a yellow background. The bottom section, 'Disp Setting', contains five settings: 'flip' (Disable), 'mirror' (Disable), 'brightness' (LEVEL5), 'sense' (LEVEL5), and 'show grid' (Enable). Each setting has a dropdown arrow. At the bottom of this section is a large blue 'Apply' button and a smaller link 'Return to the previous page'.

On the camera web page, click **Video** to expand the menu. Then click **Disp** to open display settings.

Flip: Flip the image up or down

Mirror: Flip the image left or right

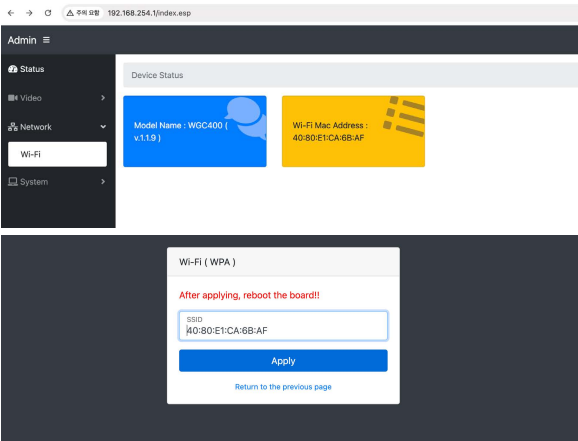
Brightness : Adjusts the screen brightness. Options are LEVEL 0 (lightest) to LEVEL 9 (darkest).

Sense: Adjusts the camera brightness sensitivity. Options are LEVEL 0 (least sensitive) to LEVEL 10 (most sensitive).

Show Grid: Displays grid lines on the video.

When all settings are complete, click **Apply** to save the settings.

7-4. Changing SSID



The screenshot shows the camera's web interface. The 'Admin' sidebar has 'Wi-Fi' selected. The main area shows the 'Device Status' section with the same model and MAC address information. Below it, a 'Wi-Fi (WPA)' dialog box is open. It contains a red warning message: 'After applying, reboot the board!!'. Below the message is a text field labeled 'SSID' containing the text '40:80:E1:CA:6B:AF'. At the bottom of the dialog are an 'Apply' button and a 'Return to the previous page' link.

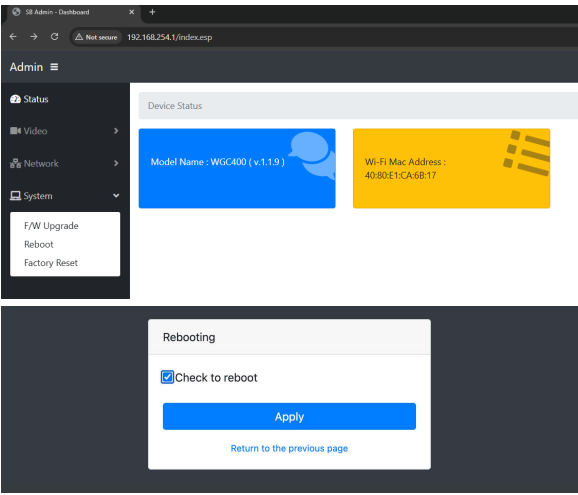
On the camera web page, click **Network** to expand the menu. Then click **Wi-Fi** to open Wi-Fi options.

Enter the SSID of the welding camera you want to change and click **Apply** to change the SSID.

Reboot the welding camera.

After changing the SSID, click **Return to the previous page** to return to the main menu.

7-5. Rebooting A Camera Remotely



The screenshot shows the camera's Admin Dashboard. On the left, the 'System' menu is expanded, showing 'F/W Upgrade', 'Reboot', and 'Factory Reset'. The 'Reboot' option is selected. The main area displays the 'Rebooting' window with a 'Check to reboot' checkbox (checked) and an 'Apply' button. A link 'Return to the previous page' is at the bottom.

If an unexpected situation occurs and the welding camera stops operating, follow the steps below to recover.

The SVM converter can stop communicating due to ambient noise. Reconnect the SMA connector and restart the camera.

Reconnect the power adapter to the welding camera. If the welding camera is installed out of reach, reboot the welding camera via the web page as shown below:

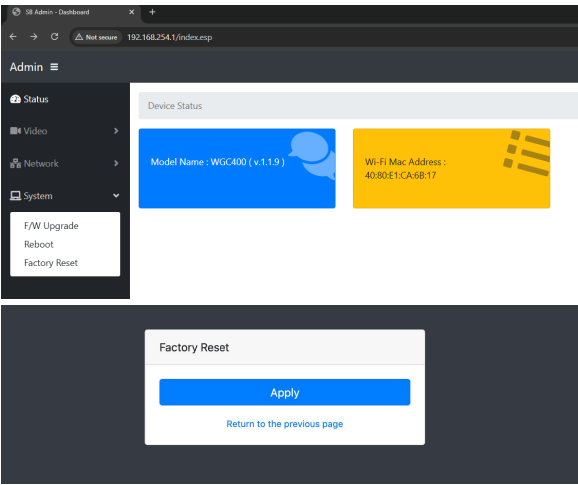
Connect the PC and the welding camera via Wifi.

Access the camera web page as shown in Section [7-2](#).

Click **System** on the left side of the screen to display three submenus.

Click **Reboot**. On the window that appears, check the checkbox to confirm. Then click to reboot the camera.

7-6. Resetting A Camera To Factory Settings



The screenshot shows the camera's Admin Dashboard. On the left, the 'System' menu is expanded, showing 'F/W Upgrade', 'Reboot', and 'Factory Reset'. The 'Factory Reset' option is selected. The main area displays the 'Factory Reset' window with an 'Apply' button. A link 'Return to the previous page' is at the bottom.

Click **System** on the left side of the screen to display three submenus .

Click **Factory Reset** to display the Factory Reset window.

Click **Apply** to return all settings of the welding camera to the factory settings.

7-7. Troubleshooting

Trouble	Remedy
Deterioration in image quality.	Clean or replace lens cover plate.
	Clean or replace camera lens.
Welding camera image brightness changes.	Compare the brightness of the image when the welding camera was first installed with the current brightness of the image. If the difference in the brightness of the welding image has occurred under the same welding conditions, contact the factory service due to a filter control problem.
Image freezes.	Reconnect all connections on the SVM converter (see Section 4-2 or 4-3).
	Reboot the welding camera (see Section 7-5).

SECTION 8 – REGULATORY/COMPLIANCE INFORMATION

8-1. Software Licensing Agreement

The End User License Agreement and any third-party notices and terms and conditions pertaining to third-party software can be found at <https://www.millerwelds.com/eula> and are incorporated by reference herein.

8-2. FCC/IC Compliance Statement

This device complies with Part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION : Any Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

CAUTION : Exposure to Radio Frequency Radiation. Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation. The antenna should not be contacted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit.

ATTENTION: L'exposition aux rayonnements à fréquence radioélectrique. Antenne doit être montée de telle manière à minimiser le risque de contact humain pendant l'utilisation normale. L'antenne ne doit pas être contacté pendant le fonctionnement pour éviter la possibilité de dépasser la limite de l'exposition aux fréquences radio de la FCC.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter."

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnant en conjonction avec une autre antenne ou transmetteur.

This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body"

Cet équipement doit être installé et utilisé à une distance minimale de 20cm entre le radiateur et votre corps.

IC Information

This device complies with Industry Canada license-exempt RSS standard(s). Operation in subject to The following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1) l'appareil ne doit pas produire de brouillage;
- 2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'encompromettre le fonctionnement.

This radio transmitter 32767-WGC400 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Dipole Antenna 0 & 1 : -1.20 dBi / Dipole Multiple Antenna : 1.81 dBi

SECTION 9 – LIMITED WARRANTY

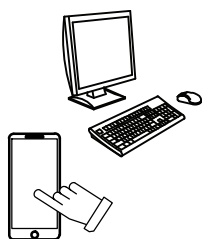
LIMITED WARRANTY— Subject to the terms and conditions below. Miller Electric Mfg. LLC, Appleton, Wisconsin, warrants to its original retail purchaser that the new Miller equipment sold after the effective date of this limited warranty is free of defects in material and workmanship at the time it is shipped by Miller. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

This welding camera is warranted for 1 year from the date of purchase. *Proof of purchase is required for warranty transactions so it is imperative that a copy of the original invoice or sales receipt be retained.*

This warranty provides specific legal rights, and other rights may be available depending on your state or province.

For warranty transactions, contact your Miller Distributor.

Effective January 1, 2025



For product information, Owner's Manual
translations, and more, visit

www.MillerWelds.com