



Getting Started

D7 180 Camera

Included in this package:

Quantity	Product Description
1	D7-180 Digital Window Camera
1	Camera Decorative Cover
2	Mounting Screws
2	O-rings
1	Tamper Proof Screwdriver
1	Tamper Proof Screw
1	12V DC Power Supply w/adapters
1	Angled Wall Mount Bracket
1	Vertical Extend Mount Bracket
1	Flush Wall Mount Bracket
1	Surface Wall Mount Grommet
1	4 inch sq. Microfiber Sheet
1	Registration Form
1	Replacement Policy Form
1	Video Surveillance Label
1	Getting Started Manual

Scallop Imaging's 7 megapixel Digital Window® D7-180 video surveillance camera is the first stand-alone computational imaging system. The imaging task is distributed among five powerful microsensors. The D7-180's embedded CPUs synthesize the image data into one seamless 180° field of view. The embedded web server will service connection requests and provide clients two simultaneous video streams:

- A standard 15 fps HD frame comprised of a 1280 x 320 situational awareness (SA) window plus a 1280 x 400 sub window allocated to up to four detail windows;
- 5120 x1280 full resolution stream at 1 fps.

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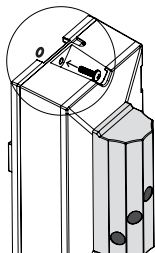
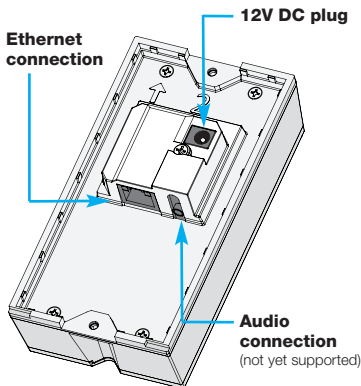
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Connecting the Camera

You can set up and operate the D7-180 Camera using a standard JavaScript-enabled browser (IE8, Firefox) on Windows platforms XP and Windows 7. The camera is not yet compatible with Mac operating systems.

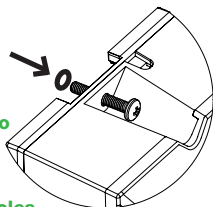
PoE Operation

The D7-180 can be connected over a network by a CAT-5 Ethernet cable plugged into the rear of the camera. If the network supports PoE, power is supplied directly via the Ethernet cable. The camera can also be powered by a 12volt power supply that is included if the network does not support PoE.



Two O-rings have been included to aid in installations, if needed.

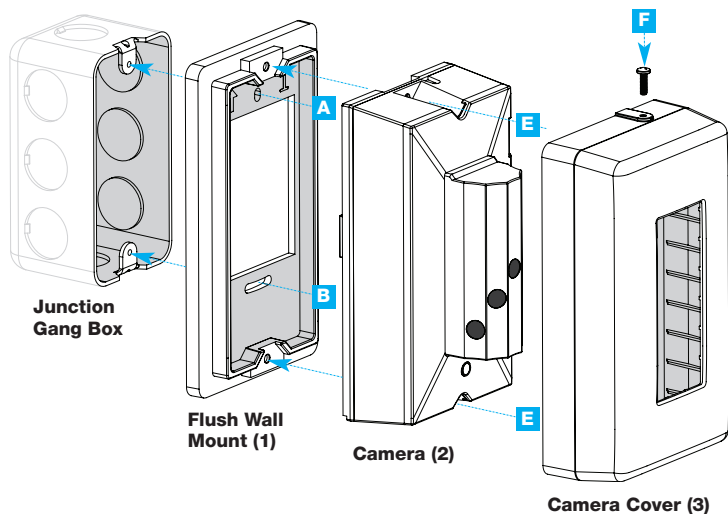
The O-rings are intended to secure the screws before attaching the camera to the wall mount. Insert the screw into the mounting holes at the top and bottom of the camera. Rolling the O-ring over the tip of the screw will hold it in place allowing for easier installation.



Installing the Camera

- A.** Place wall mount bracket (1) against gang box and attach top screw, leaving screw slightly loose.
- B.** Attach bottom screw.
- C.** Using bubble level, level mounting bracket, then finish tightening both screws.
- D.** Feed Ethernet cable through hole of mounting bracket, and connect to Camera (2).
- E.** Place camera on mounting bracket, and secure with screws.
- F.** Slide camera cover (3) over camera and secure with provided tamper-proof screw.

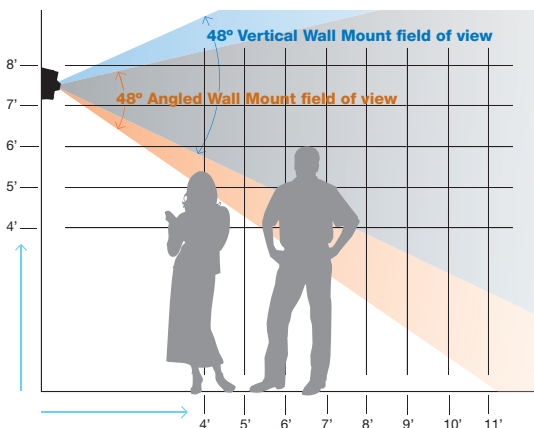
Note: Do not overtighten or use power tools when attaching wall mounts. Disassembling the Camera (2) will invalidate the Limited Warranty.



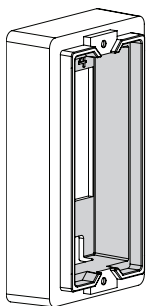
Positioning the Camera

The diagram below illustrates the approximate close-in coverage of the Camera when positioned vertically at 7½ feet. Exact coverage will vary depending on the vertical height of the camera.

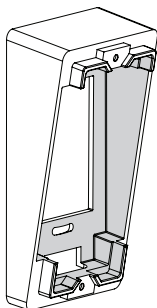
The Angled Wall Mount angles the camera downward allowing for more elevated positioning of the camera while still covering close-in subjects.



Optional included mounts:



Vertical Wall Mount (4)



Angled Wall Mount (5)

If no Junction Gang Box is available, the Vertical Wall Mount (4) for straight ahead viewing, or the Angled Wall Mount (5), for angled-down viewing may also be mounted flush to the wall.

Be sure to use appropriate wall anchors (not included) to secure the mount to a drywall surface.

Installing the Software

On a network

In order to get the camera operating on a network, software will need to be installed on a computer that meets the minimum system requirements.

Minimum System Requirements:

- Windows® XP (SP3), or Windows 7
- 2.0 GHz CPU (Dual-core 1.8GHz or higher CPU with 2 GB RAM or higher recommended)
- 2 GB RAM or higher
- 200 MB hard drive space
- Display adapter capable of 32-bit color depth or higher, 256 MB or higher video memory
- Minimum display resolution 1280 x 720
- 10/100 Mb Ethernet adapter
- 10/100 Router (Gigabit Router recommended)*
- POE Switch*
- Internet Explorer 8 or higher or Mozilla FireFox 3.6.1 or higher

* Optional depending on deployed network topology

Software installation

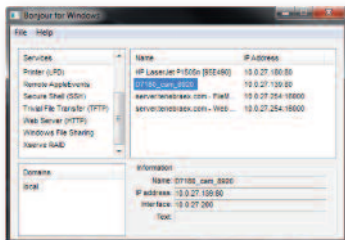
It is necessary that you register your camera as soon as possible at **customer.scallopmaging.com** so that you can download and install the D7-180 Software Installation Driver files.

It is critically important that you download and install these drivers before operating the D7-180. The D7-180 camera will not operate without installing these files on your computer.

All registered D7-180 users will be able to remotely download and install all future D7-180 software upgrades from the customer.scallopmaging.com site. We can notify you when future software enhancements become available.

Also provided is a Bonjour for Windows discovery utility.

This stand-alone program has been provided for easy access to the D7-180 camera.



To use it, simply start the application and a window (above) will appear.

Click on Web Server (HTTP) on the left column and devices with the Bonjour naming protocol will be shown on the right hand column. Each D7-180 camera will be named "D7180_cam_****." The **** will be the last 4 digits of the MAC address of the camera. The MAC address can be found printed on the rear plate of each camera.

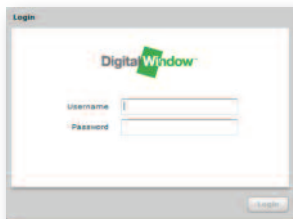
Note: The Bonjour networking protocol sends and receives network packets on UDP port 5353. The Bonjour installer will configure the Windows firewall appropriately during installation on supported systems, but if you have a separate "personal firewall" enabled, you will need to ensure that UDP port 5353 is open for Bonjour to work correctly. The Bonjour for Windows discovery utility is subject to change. Its functionality will still be the same, but further development will provide a more user friendly interface for the end user.

Once you have found the D7-180 camera in the Bonjour for Windows program simply click on its name and your default browser will open the camera's built-in web interface.

The first window that will appear will be the login screen.

You can log on to the camera using the default username and password.

- The default user name is: **admin**.
- The default password is: **password**.



Live Feed Screen

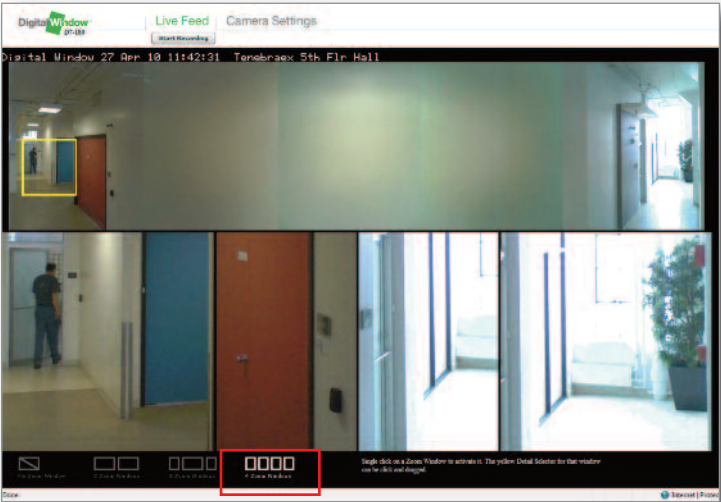
After logging in, you will be brought to the Digital Window browser site. By default, the "Live Feed" tab will be activated

If your browser has multiple tool bars open, and the display resolution is close to the minimum system requirements, the bottom of the live view page will be cut off.

To obtain the full view of the camera and to avoid scrolling, set the browser to full screen mode. This can be done by clicking "view" then clicking full screen, or pressing F11 on the keyboard.

Once you initially log on to the camera, you can set up user accounts.

Setting up user accounts is discussed in more detail later in The Camera Settings section on page 10.



Selecting Zoom Window Views

At the bottom of the page you will find options to configure the zoom windows. You can choose 0, 2, 3 or 4 zoom windows to appear on the screen at once.

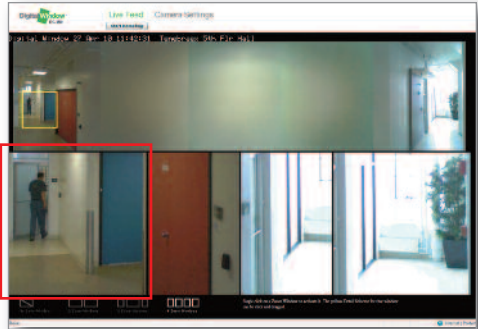
Live Feed Screen (continued)

To choose the number of zoom windows you would like to appear on the screen click on the icons at the bottom of the screen. Once chosen the video will change to the zoom window configuration you have chosen.

Note: The video will stop playing for 2-3 seconds while the new zoom windows appear.

Positioning the zoom windows:

Click on the zoom window in the bottom half of the live feed window that you wish to reposition. Once you have clicked in the desired zoom window a yellow box will appear in the Situational Awareness

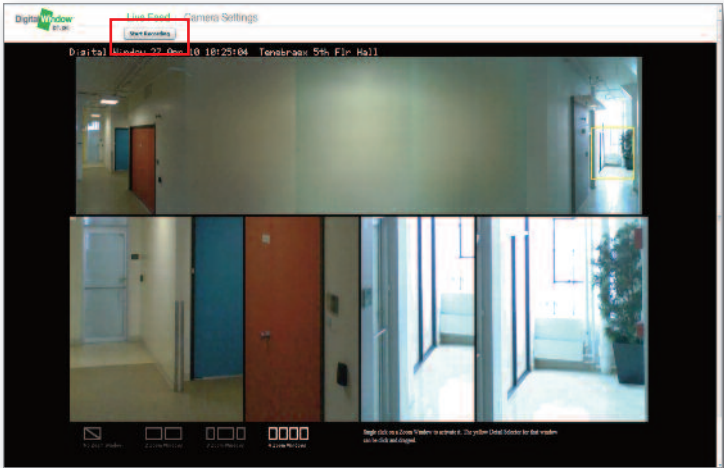


Window (180 degree view) where the current position of the zoom window is located (see above):

Once the yellow box appears, you can drag the box to reposition it by holding down the mouse button and dragging and dropping the box to the position you want the zoom window to be positioned. Once you release the mouse button, the zoom window will reposition to that position. Do this for each zoom window to obtain views of the area of interest. You can change the positions of the zoom windows at anytime.

Video Recording

At the top of the screen under the Live Feed tab you will also find a "Start Recording" button.



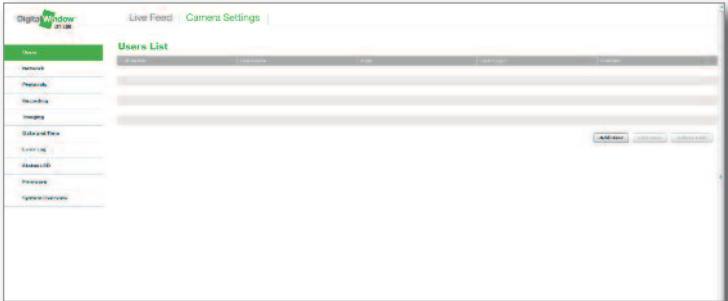
Video recording using the web browser interface will save an .flv file to your computer and before recording is started, you will be prompted to set the location and name of the file to be saved. Choose your location and click OK.

Once recording starts, you will see a progress bar appear next the recording button with a percentage of completion. If the user needs to stop the recording for any reason, click the stop recording button and the recording will write an .flv file up until the stop button is hit.

Recording can be setup to run from 1 minute to 12 hour increments under the Recording tab under Camera Settings.

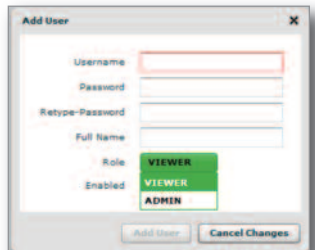
Camera Settings

Under the Camera Settings tab, administrators will be able to access the following options: Users, Network Setup , Protocol, Recording, Imaging, Date and Time, Error Logs, Status LED, Firmware, and System Overview



Users List

Once you click the Add User button on the right hand side the window to the right will appear. Here you may add new users by entering the user name, password, full name, the role the user will perform and the option of enabling the user to access and modify the camera setting.



The Admin role will give full access to the camera setting and the Viewer role will have only the option to view the stream and modify the zoom positions.

Other options on this tab is Editing and Removal of added users. Once user have been added and the users “Admin or Viewer” have logged in you will be able to see an overview of the last log in time and date.

Network Settings

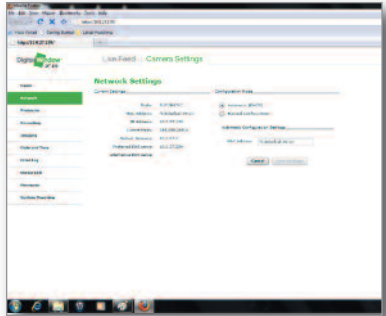
In the Network Settings tab you have the option to change how the camera will function on the network.

The D7-180 camera is shipped from the factory in DHCP mode. In this mode, an established network will automatically assign an IP address and Subnet mask to the camera.

In some situations the user may desire to change the camera into Static mode (Manual) to match the existing network. To do this click the Manual Configuration mode and enter the IP Address, Subnet mask, default gateway and any preferred and alternative DNS if needed.

Once you have entered the information of your network, click the SAVE SETTINGS button. When this button is clicked, close your browser, reopen in a new browser window, and enter the new IP address that you have assigned to the camera.

Note: Take care to enter the information accurately. If the information has been entered incorrectly, and the camera is not accessible with the data the user has supplied, you will need to use a crossover cable to access the camera again. This is done by connecting the camera directly to your computer via a crossover cable and changing the computer's IP address to static mode. For more information with this type of connection please contact your System Administrator.



Camera Settings (continued)

Protocols Settings: SMTP, UPnP, and Bonjour

SMTP settings:

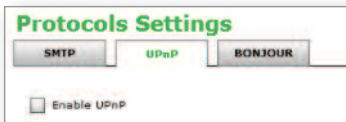
In the SMTP settings, you can add your email's SMTP settings and email address to send any error logs created by the camera. If problems occur with your

camera these logs can be sent to email addresses for troubleshooting purposes. You will need to obtain the hosting IP address from your email provider or your system administrator.



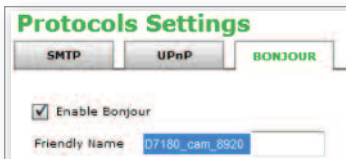
UPnP

The D7-180 camera has the UPnP (Universal Plug and Play) protocol installed. By default this feature is turned off. If your network uses this protocol you can enable it here.



Bonjour

The D7-180 camera also includes the Bonjour protocol. This feature is enabled by default, and is used in the initial setup of the camera. Bonjour by Apple, also has plugins for Internet Explorer and Firefox that can be downloaded from the apple.com website.

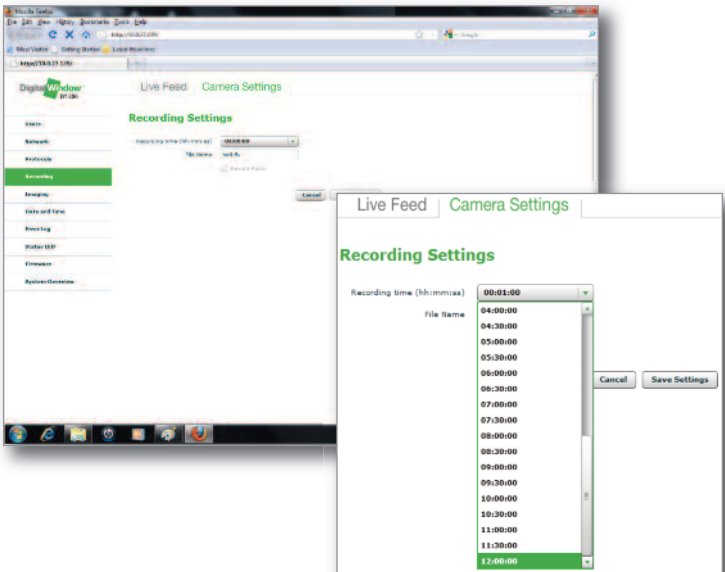


Recording Settings

The D7-180 has the ability to record video through the web browser interface to a specified location. The Recording Settings tab is used to set up a recording session.

There is a drop-down menu that allows the recording time to be set anywhere from 1 minute to 12 hours, along with the filename for the recorded video. As stated earlier, you can specify the time the camera records to your hard drive.

Once the recording session has been set up, recording can be started or stopped by pressing the Start Recording button on the Live Feed window.

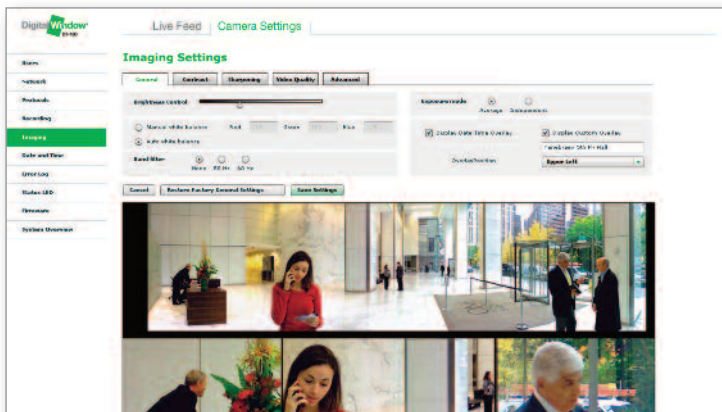


Camera Settings (continued)

Imaging Settings

The D7-180 Imaging Settings has multiple functions that the user can use to obtain the best picture quality for each camera location that may have unique lighting characteristics.

The Imaging Settings has 5 sections: General, Contrast, Sharpening, Video Quality and Advanced.



The screenshot shows the 'Digital Window D7-180' interface. At the top, there are tabs for 'Live Feed' and 'Camera Settings'. The 'Camera Settings' tab is selected, and the 'Imaging Settings' sub-tab is active. The interface includes a sidebar on the left with navigation options like Home, Network, Playback, Recording, Imaging (highlighted), Audio and Video, OFFLINE, Rules/LED, Firmware, and System Overview. The main area contains several control panels: 'Brightness Control' with a slider and radio buttons for 'Manual white balance' and 'Auto white balance'; 'Auto White Balance' with 'None', 'E2.0', and 'E2.0+' options; 'Exposure Mode' with 'Average' and 'Spot/Spotless' options; and 'Spot/Spotless' with 'Spotless' and 'Spotless' options. At the bottom of the settings area are buttons for 'Cancel', 'Restore Factory General Settings', and 'Save Settings'. The main video feed shows a large, bright lobby with people, and a smaller inset shows a close-up of a woman on a phone.

General:

Brightness Control

The D7-180 camera utilizes autoexposure that is optimized for average scenes. If the live video appears either too bright or too dark, you can adjust the autoexposure brightness target by adjusting the slider to darker or brighter settings. Once you have set the desired brightness, click the Save Settings button at the bottom of the tab.

Autoexposure Mode

The D7-180 supports two different modes of autoexposure: Average and Independent. The Average mode measures light levels over the entire field of view and calculates a fixed exposure for the entire 180° field of view. Average mode is good for most scenes.

Once you have changed the settings to your liking, click “Save Settings” and your settings now become the default values.

The Independent mode of autoexposure allows each image sensor to set its own best exposure. Independent mode is best for scenes with very high dynamic range. The Autoexposure mode can be set by clicking on the button adjacent to the desired exposure mode.

White Balance

The D7-180 supports both auto white balance and manual white balance. Auto white balance is the best choice for most scenes. If the scene has mixed lighting or very unusual lighting conditions, setting the white balance manually may result in a better looking image.

In Manual White Balance mode, the color channel gains can be set manually by clicking in each of the boxes adjacent to the R, G, and B channels and entering a value between 100 and 200. Entering higher values for channel gains makes the color channel more intense.

Note: In order for you to see the color changes you will need to enter the desired value into each color then click to the next color. If the cursor is still in the box being modified the color will not change until you move to the next. If a value is entered outside of the 100 to 200 range the box will turn red until a number fitting that range is entered.

Camera Settings (continued)

Band Filter

The band filter is used when the lighting has temporal modulation, such as many fluorescent lights. For many fluorescent lights the video will show banding artifacts that come from the lighting modulation. The artifacts can be eliminated by enabling the banding filter that will adjust the exposure of the camera to avoid these artifacts. The 60 Hz filter should be chosen for lights with 60 Hz power modulation. The 50 Hz filter should be chosen for lights with 50 Hz power modulation.

The camera is shipped from the factory with default settings.

Clicking the “Restore Factory Settings” button will override any changes you may have made and revert to the original default settings for that particular Image Settings tab.

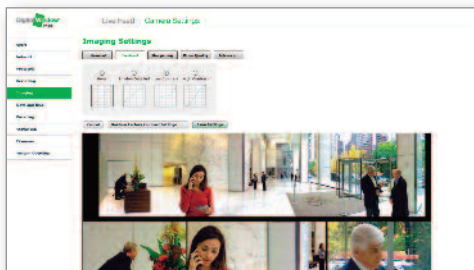
Date/Time Overlay

The D7-180 can display a date and time overlay on the video feed. The position of the overlay can be set using the drop down menu. There is also the feature that a custom text string can be added to the overlay by selecting the custom text option, and typing in the desired text.

Contrast:

Adjusting the image contrast and dynamic range will get better video quality.

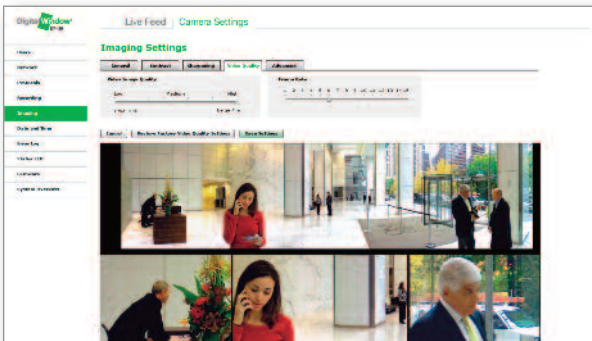
Once you have changed the settings to your liking, click save and your settings now become the default values.



Video Quality

The Video Quality tab allows the video compression quality and frame rate to be adjusted.

The default setup of the D7-180 camera is set at **15 frames per second**, and **video quality is set to high**. The image quality slider will adjust the compression of the video. Modification of the video quality and frame rate should be made if network bandwidth does not meet the minimum system requirements.



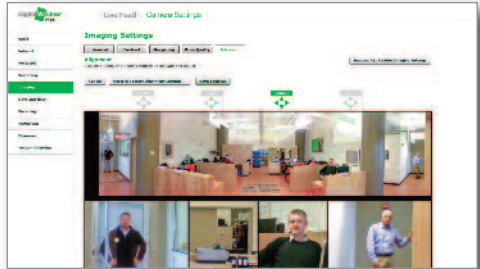
Camera Settings (continued)

Advanced

There are two functions that can be performed on the Advanced Settings tab: **Image Alignment** and **Restore ALL Factory Imaging Settings**.

Image Alignment

The camera is shipped from the factory with sensor alignments set for average distances. If you modify the sensor alignments and would like to return them to these settings, click **Restore Factory Alignment Settings**.



Adjusting Image “Seams.” The Seam ‘flags’ and control arrows should all be grey except for one: the Seam 1 flag and arrows should be default green. Clicking on a flag or arrow will activate that seam’s control, turn it green and turn off any other seam’s control.

Date and Time

In the Date and Time tab you can set the time to 24h or 12h standards. You can also click the use local time button and the camera will configure itself to the time of your computer.

Note: When clicking the Use Local time and then clicking Save settings, the camera will produce a popup with a countdown for the camera to restart. This is done to get “RTC” (Real Time Clock) to store into the hardware of the camera. Once the countdown is complete, you will be brought back to the **login screen** of the camera.

Error Log

In the Error log tab you can modify how error logs are sent to you, You can choose **critical, warnings, information** or **all** to be emailed to you on a regular basis. They can be sent daily, weekly or monthly mailing intervals.

The **recipient** email address is based on the information setup in the SMTP protocol tab.

You may also view the log here by clicking **View Log**. A pop up screen will appear with the log inside. You can copy and paste this log into an email and sent to Scallop Imaging if there is an issue that needs technical support.

Status LED

On the front of the D7-180 camera, is a bright green Status LED, You have the ability to turn this light on and off depending on your requirements, Once the modification has been made click **Save Settings**.

Camera Settings (continued)

Firmware

When new firmware (software embedded in the camera) is released by Scallop Imaging, you may upgrade your camera from this page. Depending on your network you “may or may not have internet access”. You can manually or automatically update the camera.

To automatically update (If you have internet access), click the automatic button and fill in the correct information.

To manually update, save the firmware to your computer, Click Browse for Firmware Files, and locate the file on your computer. Once the upgrade starts, a status window will pop up and give you the progress. Once the camera is upgraded the camera will automatically restart and you will need to log back into the camera.

Note: this tab will change by official release to obtain security of your FTP information.

System Overview

The system overview tab, will give you a quick snapshot of all the cameras settings. Network Configurations, Protocols, Recording, Imaging, Date Time, Error Logs, Status LED, And Firmware version.

No modifications can be made from this tab.

Warranty

Tenebraex Corporation D7 Digital Camera Limited Warranty

1. Standard Limited Warranty. Tenebraex Corporation (“Tenebraex”) has developed the Digital Windows® Digital Camera (the “Camera”), which consists of equipment components from Tenebraex and third parties (“Hardware”), software developed by Tenebraex (“Software”) and third party open source software (“OS Software”).

Tenebraex undertakes different commitments for each of these items, as described below.

2. Conditions. A copy of a valid bill of sale, receipt or other proof of purchase from an authorized reseller or distributor containing the date of original purchase must be presented to obtain warranty service. In addition, the Camera must be protected from exposure to direct sunlight and halogen light (which may damage sensors) and must be suitably protected when used outdoors or in dusty, humid or other hostile environments. There is no warranty coverage if these rules are not observed.

3. Hardware

a. Limited Warranty: Tenebraex warrants that the Camera’s Hardware components shall be free of defects in design, material and workmanship for a period of 2 years from the date of purchase, provided the Hardware is operated under the normal operating conditions for which it was designed. Tenebraex’s sole liability, and customer’s exclusive remedy, under this warranty shall be the following: Provided Tenebraex receives written notice during the 2-year warranty period that a Hardware component does not conform to this warranty and the Camera or component is returned to Tenebraex within 30 days thereafter (accompanied by proof of purchase), Tenebraex shall, in its sole discretion, either repair the defective Hardware, replace the defective component (or entire Camera) with new or refurbished Hardware, or provide a full refund of the price paid. All repaired or replaced Hardware carries a warranty equal to the remainder of the original warranty or, if greater, 90 days. Any replaced components shall become the property of Tenebraex.

b. Return Process: Hardware may only be returned with the prior approval of Tenebraex. All approvals shall reference a Return Material Authorization (RMA) number issued by authorized Tenebraex service personnel. To obtain a valid RMA number, please contact the Tenebraex Technical Assistance Center (TAC) Monday through Friday 9am–5pm EST. See below for the most convenient way to reach the TAC. RMA numbers are vital to ensure the proper handling and repair/replacement of your returned product. Cameras returned to Tenebraex without a valid RMA number may be refused and returned to the shipper’s address. Cameras or components returned for warranty service must contain dated proof of purchase, be properly packaged to prevent damage, and be delivered to a common carrier FOB Tenebraex’s facility in Boston, Massachusetts.

Warranty (continued)

You must register your camera(s) at customer.scallopimaging.com in order to obtain an RMA number.

Then contact the Tenebraex Technical Assistance Center (TAC) in one of the following ways:

- Call **+1-617-849-6400**, or;
- Send an email to **support@scallopimaging.com**

When requesting an RMA number, be sure to include the following information to expedite your request.

- Camera type
- Camera Serial number
- Return Shipping address
- Contact name (must be located at the shipping address)
- Contact Phone number
- Contact Email address

Transportation costs, if any, incurred in returning a defective Hardware to Tenebraex shall be paid by Tenebraex. However, if Tenebraex determines that the item is not defective, or if the dysfunction results from an Uncovered Condition (see below), Tenebraex may charge the customer for transportation costs. Any shipping costs incurred for Hardware returned after the Warranty Period has expired shall be the responsibility of the customer.

4. Software. The embedded Tenebraex Software incorporated in or accompanying the Camera and any separate magnetic media on which it may be contained are warranted to perform in substantial compliance with the specifications contained in the User's Documentation for 90 days from the date of purchase. Tenebraex's sole liability, and customer's exclusive remedy, for any breach of this warranty is that, if the problem is described in writing during the 90-day warranty period, Tenebraex will repair or replace the item, or at its election provide a full refund in exchange for return of the Camera.

5. OS Software. The OS Software incorporated in or accompanying the Camera, and any separate magnetic media on which it may be contained, ARE PROVIDED AS-IS AND WITHOUT ANY WARRANTY, REPRESENTATION OR CONDITION (WHETHER BY TENEBRAEX OR A THIRD PARTY).

6. Limited Warranty; Exclusive Remedy. THE LIMITED WARRANTIES FOR THE HARDWARE AND SOFTWARE DESCRIBED IN THIS DOCUMENT ARE THE ONLY WARRANTIES MADE FOR THE CAMERA, INCLUDING ALL COMPONENTS, SOFTWARE AND ACCOMPANYING MATERIALS. TO THE EXTENT ALLOWED BY LAW, NO OTHER WARRANTY, REPRESENTATION OR CONDITION APPLIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, OF FITNESS FOR A PARTICULAR PURPOSE, OR OF NON-INFRINGEMENT.

IN NO EVENT SHALL TENEBRAEX BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL OR PUNITIVE DAMAGES OF ANY KIND, OR FOR DAMAGE TO ANY EQUIPMENT, LOSS OF REVENUE, LOSS OF BUSINESS, COST OF COVER, REPLACEMENT GOODS, OR FOR ANY OTHER LOSS RESULTING FROM THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF THE CAMERA.

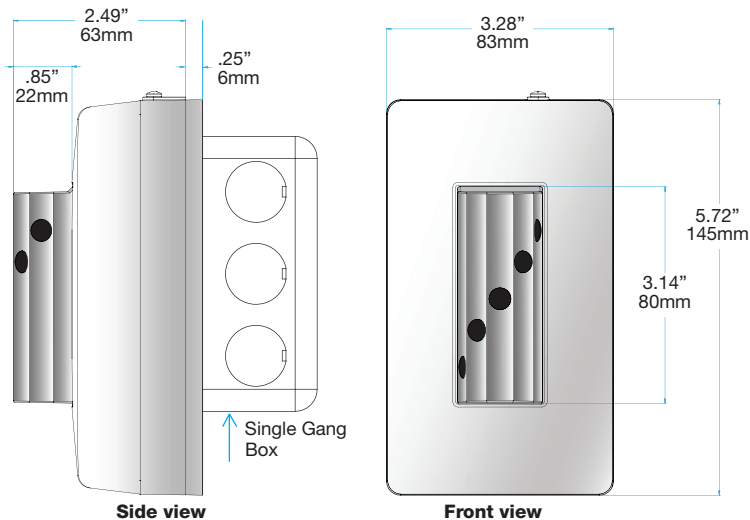
THE REMEDIES OF REPAIR, REPLACEMENT OR REFUND FOR WARRANTED COMPONENTS AND SOFTWARE, AS STATED IN THIS DOCUMENT, ARE THE EXCLUSIVE REMEDIES, AND TENEBRAEX'S SOLE LIABILITY, FOR ANY BREACH OF WARRANTY.

Certain jurisdictions do not allow the disclaimer of implied warranties or the exclusion of consequential damages, so the above limitations and exclusions may not apply to you in all cases.

7. Uncovered Conditions. In no event shall the limited warranty cover, or shall Tenebraex be liable to repair or replace, Hardware, Software or components that encounter problems or fail to function properly due to (i) accident, act of God, neglect or misuse, or deterioration due to ordinary wear and tear; (ii) use with items not provided or approved by Tenebraex, (iii) unauthorized modifications, adjustments, repairs or servicing; (iv) cosmetic damages; (v) operation under other abnormal conditions; or (vi) failure to observe the above Conditions.

8. Law. This Limited Warranty is governed by the laws of the Commonwealth of Massachusetts, USA.

Specifications



SPECIFICATIONS

DIGITAL WINDOW® D7-180 CAMERA

Camera:

Image Device
Number of effective pixels
Shutter
Gain Control
Exposure control
Depth of Field
Minimum illumination

(5) 1.3 Mpixel CMOS
6,553,600 pixels
Electronic rolling shutter
Automatic gain control
Average, 5 zone independent
1 ft. to infinity
.5 lux

Image:

Image size (HxV)

2 simultaneous video streams:
• A standard 15 fps HD frame comprised of a 1280 x 320 situational awareness (SA) window plus a 1280 x 400 sub window allocated to up to four zoom windows;
• 5120 x 1280 full res stream at 1 fps

Field of view	180° x 48° 28 pixels per degree of field of view
Image resolution	Everywhere within the field of view equivalent to resolution of a 1.3 MP camera with a 33.7mm lens
Compression	H.264
Maximum frame rate	15 fps for SA and zoom, 1 fps for full res window
Compression ratio	User selectable

Bandwidth requirements* using H.264 at good quality compression:

HD Window:	At 15 fps, less than 2.0 Mbit/sec
Full Res Image:	At 1 fps, less than 1 Mbit/sec

*Bandwidth requirements are scene dependent. Your results may vary.

Audio:

Audio in/out with firmware upgrade

Network:

Protocols	TCP/IP, HTTP, SMTP, DHCP, RTP/RTSP, DNS, BONJOUR
Interface	Internet Explorer, Firefox

Interface:

Ethernet	10Base-T/100Base
COMM ports	Ethernet
Audio line in	Mini-jack (stereo)
Audio line out	Mini-jack (monaural)

General:

Weight	11.6 oz. (329 g)
Dimensions (WxHxD)	3.28 x 5.72 x 2.49 inches (83 x 145 x 63 mm)
Power requirements	48V PoE, 12V DC
Power consumption	< 7 W
Operating temp.	-40°F to 140°F (-40°C to 60°C)
Storage temperature	-40°F to 185°F (-40°C to 85°C)

Supplied Accessories:

12V DC power supply, surface mount kit, angle mount kit

Warranty: 24 months

Digital Window®

Digital Window is a registered trademark of Scallop Imaging,
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U.S. Patent No.: 7,262,789 Other patents pending.



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www.scallopimaging.com