Onboard Recording (SD card) with Smart View for video devices

Compatibility requirements

The following are required for Onboard Recording (SD card) with Smart View for video devices:

Service package that supports Onboard Recording

Service package that supports Onboard Recording

A service package that supports Onboard Recording is required in order to utilize this feature.

Compatible video device

Compatible video device

Note: The firmware for the camera is updated automatically when an Onboard Recording schedule is created for it.

Camera model	Minimum firmware version to use feature	Maximum SD card size and required firmware version
ADC-V515	0.0.5.096+	1.5 TB on firmware version 0.0.5.728+
ADC-V516	-	1.5 TB on firmware version 0.0.3.104+
ADC-V523/523X	0.6.1.151+	1.5 TB on firmware version 0.8.6.060+
ADC-V530	-	1.5 TB on firmware version 0.0.2.066+
ADC-V716	-	1.5 TB on all firmware versions
ADC-V723/723X	0.6.1.151+	1.5 TB on firmware version 0.8.6.060+
ADC-V724/724X	-	1.5 TB on firmware version 0.8.6.060+
ADC-V729/V729AC/VC729P	-	1.5 TB on firmware version 0.8.6.060+

Camera model	Minimum firmware version to use feature	Maximum SD card size and required firmware version
ADC-V730/VC730P	-	1.5 TB on firmware version 05009+
ADC-VC727P	-	1.5 TB on firmware version 0.8.6.060+
ADC-VC728PF	-	1.5 TB on firmware version 0.8.6.060+
ADC-VC7398PA	-	1.5 TB on firmware version 5.0.1+
ADC-VC827P	-	1.5 TB on firmware version 0.8.6.060+
ADC-VC8295P	-	1.5 TB on firmware version 5.0.1+
ADC-VC838PF	-	1.5 TB on firmware version 0.8.6.060+
ADC-VC847PF	-	1.5 TB on firmware version 0.8.6.060+
ADC-VC8498PA	-	1.5 TB on firmware version 5.0.1+
ADC-VC8498P	-	1.5 TB on firmware version 5.0.1+
ADC-VDB770*	02234+	512 GB on firmware version 02234+
ADC-VDB775	-	1.5 TB on firmware version 04016+

***Note**: The ADC-VDB770 is not compatible with audio recording and playback for 24/7 Onboard Recording. Live View and Cloud Recordings still work with audio as expected.

High-quality microSD card designed for surveillance

High-quality microSD card designed for surveillance

- Maximum of 1.5 TB storage for supported models
- For 4 MP recording schedules, a minimum of 128 GB storage
  - For recording schedules using 2 MP and lower resolutions, the minimum supported size is 32 GB
- Supported microSD cards:
  - Western Digital Purple microSD cards (64 GB to 1 TB)*
  - Micron Industrial Memory cards (32 GB to 256 GB)
  - Samsung Pro Endurance (128 GB and 256 GB)
  - SanDisk High Endurance (32 GB to 256 GB)

- SanDisk Max Endurance (32 GB to 256 GB)
- SanDisk Video microSD cards (32 GB to 1.5 TB)*
- Transcend 460T (64 GB to 256 GB)

***Note**: Western Digital Purple 1 TB cards and SanDisk Video microSD 64–512 GB cards are available to order through the Partner Portal.

For information about the amount of Onboard Recording footage that can be stored on a microSD card, see How much Onboard Recording footage can be stored on a microSD card?.

Onboard Recording Schedule created

Onboard Recording Schedule created

An Onboard Recording Schedule must be created for the camera in order for it to start recording. For more information, proceed to Configure Onboard Recording.

Onboard Recording features

Multiple viewing options	View recorded video on the local network (i.e., the same network as the camera) or remotely using a computer, smartphone, or tablet.
Activity timeline	System events, such as Video Analytic-triggered clips, are noted in the playback timeline on the Alarm.com customer website.
Rolling recordings	The oldest video content on the card is automatically deleted to make room for new recordings.
Data encryption	Recorded video is encrypted and can only be viewed when the SD card is in the camera that recorded the video. When a brand new Onboard Recording rule is created for a camera, the camera formats the microSD card. This deletes all data stored on the card including any video recordings from a camera that may have been previously used with the card. **Note**: Multi-Camera SD Video Playback and Recording allows customers to transfer microSD cards between compatible cameras on the same customer account without losing existing recordings. For more information about the microSD transfer process, see Multi-Camera SD Video Playback and Recording.

Localized recordings	Each microSD card records the video footage from the camera it is inserted into. The card can be removed from a camera and placed back in that same camera at a later date as long as it is not reformatted for other use. The original data will be retained until the card is full and the oldest data is deleted to make room for the new recordings.
Audio recording and playback for 24/7 Onboard Recording	With compatible Alarm.com cameras, audio recording is included in playback as part of their 24/7 Onboard Recording video system. For more information about 24/7 audio and playback included in Onboard Recording, see Audio recording and playback for 24/7 Onboard Recording. **Note**: The ADC-VDB770 is not compatible with audio recording and playback for 24/7 Onboard Recording. Live View and Cloud Recordings still work with audio as expected.

Configure Onboard Recording

SD card slot locations

Important: Verify the camera is upgraded to the latest firmware.
Search:

Camera model	SD card slot location instructions
	Expand to show SD card slot location instructions
ADC-V515	The SD card slot is located on the bottom side of the camera near the QR code and MAC address. Make sure to insert the SD card into the slot until it clicks.

Camera model	SD card slot location instructions
ADC-V516	Expand to show SD card slot location instructions The SD card slot is located on the bottom side of the camera near the QR code and MAC address. Make sure to insert the SD card into the slot until it clicks.
ADC-V523/523X	Expand to show SD card slot location instructions 1. Pull open the rubber tab on the bottom side of the camera near the QR code and MAC address. 2. Insert the SD card into the slot until it clicks. 3. Replace the rubber cover.
ADC-V723/723X	Expand to show SD card slot location instructions 1. Remove the 2 screws on either side of the door found on the bottom face of the camera near the QR code and MAC address. 2. Carefully lift and rotate the door to reveal the SD card slot. 3. Insert the microSD card until it clicks. 4. Replace the door and use the 2 screws to screw it firmly into place.
ADC-V724/724X	Expand to show SD card slot location instructions 1. Pull open the SD card door found on the bottom face of the camera to reveal the SD card slot located next to the speaker and WPS/Reset button. 2. Insert the microSD card until it clicks. 3. Replace the SD card door and verify it is securely in place.

Camera model	SD card slot location instructions
ADC-V730/VC730P	Expand to show SD card slot location instructions 1. Pull open the SD card door found on the bottom face of the camera to reveal the SD card slot located next to the speaker and WPS/Reset button. 2. Insert the microSD card until it clicks. 3. Replace the SD card door and verify it is securely in place.
ADC-VC727P	Expand to show SD card slot location instructions 1. Remove the 4 screws on the corners of the door found on the bottom face of the camera near the QR code and MAC address. 2. Carefully lift the door to reveal the SD card slot next to the reset button. 3. Insert the microSD card until it clicks. 4. Replace the door and use the 4 screws to screw it firmly into place.
ADC-VC827P	Expand to show SD card slot location instructions The SD card slot is located under the camera cowl and the *microSD* label.
ADC-VC728PF	Expand to show SD card slot location instructions 1. Remove the 4 screws on the corners of the door found on the bottom face of the camera, near the QR code and MAC address. 2. Carefully lift the door to reveal the SD card slot next to the reset button. 3. Insert the microSD card until it clicks. 4. Replace the door and use the 4 screws to screw it firmly into place.

Camera model	SD card slot location instructions
ADC-VC838PF	Expand to show SD card slot location instructions 1. Remove the 2 screws on either side of the door found on the side of the camera. 2. Carefully lift the door to reveal the SD card slot next to the reset button. 3. Insert the microSD card until it clicks. 4. Replace the door and use the 2 screws to screw it firmly into place.
ADC-VC847PF	Expand to show SD card slot location instructions The SD card slot is located under the camera cowl and *microSD* label.
ADC-V729/V729AC/VC729P	Expand to show SD card slot location instructions 1. Unscrew and pop open the SD card door found on the right side of the camera body to reveal the SD card slot location 2. Insert the microSD card until it clicks. 3. Replace the SD card door and screw back into place. Verify it is securely in place.
ADC-VDB770	Expand to show SD card slot location instructions **Note**: The ADC-VDB770 is compatible with microSD cards up to 512 GB. The SD card slot is located on the back of the doorbell near the bottom, below the housing for the battery. 1. Turn off power to the doorbell circuit (transformer). 2. Separate the ADC-VDB770 from the backplate. 3. Insert the microSD card into the slot until it clicks. 4. Re-attach the ADC-VDB770 to its backplate. 5. Restore power to the doorbell circuit (transformer).

Camera model	SD card slot location instructions
ADC-VDB775	Expand to show SD card slot location instructions When looking at the doorbell from the front, the SD card slot is located on the left side of the doorbell under the SD card slot cover. 1. Turn off power to the doorbell circuit (transformer). 2. Separate the ADC-VDB775 from the backplate. 3. Locate and slide off the SD card slot cover. 4. Insert the microSD card into the slot until it clicks, then re-attach the SD card slot cover. 5. Re-attach the ADC-VDB775 to its backplate. 6. Restore power to the doorbell circuit (transformer).
ADC-V530	Expand to show SD card slot location instructions 1. Pull open the silicon tab on the bottom side of the camera near the QR code and MAC address. 2. Insert the SD card into the slot until it clicks. 3. Replace the silicon cover.
ADC-VC7398PA	Expand to show SD card slot location instructions 1. Remove the 2 screws from the door on the bottom face of the camera, near the QR code and MAC address. 2. Carefully lift the door to reveal the SD card slot next to the reset button. 3. Insert the microSD card until it clicks. 4. Replace the door and use the 2 screws to screw it firmly into place.

Camera model	SD card slot location instructions
ADC-VC8498P/8498PA	Expand to show SD card slot location instructions 1. Remove the 4 screws that secure the camera's cowl to the base. 2. Remove the camera's cowl from the base to reveal the labeled SD card slot. 3. Insert the microSD card into the slot until it clicks. 4. Re-install the cowl and re-tighten the screws that secure the cowl to the base.
ADC-VC8295P	Expand to show SD card slot location instructions 1. Remove the 4 screws that secure the camera's cowl to the base. 2. Remove the camera's cowl from the base to reveal the labeled SD card slot. 3. Insert the microSD card into the slot until it clicks. 4. Re-install the cowl and re-tighten the screws that secure the cowl to the base.
ADC-V716	Expand to show SD card slot location instructions 1. Remove the 2 screws on either side of the door found on the bottom face of the camera near the QR code and MAC address. 2. Carefully lift and rotate the door to reveal the SD card slot. 3. Insert the microSD card until it clicks. 4. Replace the door and use the 2 screws to screw it firmly into place.

Create an Onboard Recording rule

Note: This rule may automatically be created during camera installation if an SD card is detected in the camera.

To create an Onboard Recording rule using the Alarm.com customer website:

1. Verify that the SD card is inserted into the camera.
2. Log in to the Alarm.com customer website.
3. Click **Video**.

4. Click **Recording Rules**.
5. Click **Local Recordings**.
6. Click **Add New Schedule**.
7. Click **Onboard**.
8. Using the *Record from this camera* dropdown menu, select the desired device.
9. Using the *Recording quality* slider, select the desired quality.
10. In *Time Frame*, click to select either **At all times** or **Only during the following times**.
    - If **Only during the following times** is selected:
        a. Click to select the desired days to record.
        b. Using the *Starting at* and *Ending at* dropdown menus, select the time period to record in hours.
11. For additional configuration options, click to expand **Advanced Options**.
    - To limit the number of days that recordings are kept:
        a. Click the *Retention Time* toggle switch to enable a limit.
        b. Using the dropdown menu, select the desired number of days to limit the recordings to.
12. Click **Save**.

To create an Onboard Recording rule using the Alarm.com app:

1. Verify that the SD card is inserted into the camera.
2. Log in to the Alarm.com app.
3. Tap .
4. Tap .
5. Tap **Recording Rules**.
6. Tap **Local**.
7. Tap **Add**.
8. Tap **Onboard** if there are multiple options to choose from.
9. Using the *Record from this camera* dropdown menu, select the desired device.
10. Using the *Recording Quality* slider, select the desired quality.
11. In *Time Frame*, click to select either **At all times** or **Only during the following times**.
    - If **Only during the following times** is selected:
        a. Tap to select the desired days to record.
        b. Using the *Starting at* and *Ending at* dropdown menus, select the time period to record in hours.
12. For additional configuration options, click to expand **Advanced Options**.
    - To limit the number of days that recordings are kept:
        a. Tap the *Retention Time* toggle switch to enable a limit.
        b. Using the dropdown menu, select the desired number of days to limit the recordings to.
13. Tap **Save**.

Automatically created Onboard Recording schedules

Onboard Recording schedules will be automatically created if the camera was installed within the last 12 hours and has a new SD card inserted. When the 24/7 Onboard Recording schedule is created, the primary account holder will be notified by email.

If the schedule is not created on the first attempt, make sure to:

1. Verify the SD card is a supported model.
2. Verify the SD card is brand new.
3. Remove and reinsert the card within 12 hours of the camera installation to reinitiate the process.

Note: If the Onboard Recording schedule is not created automatically after these steps, you must manually create the rule.

Automatic video clip recording of SD card removal

When an SD card is removed from its video device, a clip will automatically be recorded and uploaded to the cloud regardless of whether or not an Onboard Recording schedule has been configured for the device. This clip appears on the *Saved Clips* page, and is clearly labeled as an *SD Card Removed* event for easy identification and review.

Important: The recorded clip counts toward the customer account's monthly clip quota. If the account has already reached its quota, no clip is generated for the event.

Compatibility requirements

- This feature is automatically included on accounts with the *Onboard Recording with Smart View* service package add-on
- The following video devices are compatible with this feature as long as they meet the listed firmware version requirements:

Device model	Firmware version
ADC-V515	0.0.5.754+
ADC-V516	0.0.3.104+
ADC-V523/523X	0.8.6.060+
ADC-V530	0.0.2.001+
ADC-V723/723X	0.8.6.060+
ADC-V724/724X	0.8.6.060+
ADC-V730	05024+

Device model	Firmware version
ADC-VC727P	0.8.6.060+
ADC-VC827P	0.8.6.060+
ADC-VC847PF	0.8.6.060+
ADC-VC838PF	0.8.6.060+
ADC-VC728PF	0.8.6.060+
ADC-V729/V729AC/VC729P	0.8.6.060+
ADC-VC7398PA	5.0.2+
ADC-VC8498PA	5.0.2+
ADC-VC8498P	5.0.2+
ADC-VC8295P	5.0.2+
ADC-VDB775	04020+

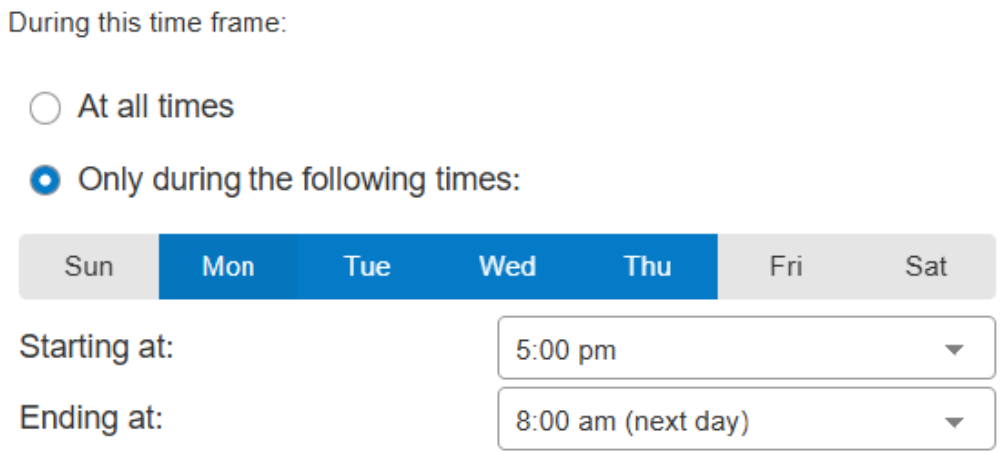
How it works

1. When an SD card is physically removed from the camera, the system detects the removal and triggers an SD Card Removed event. The camera triggers a recording with or without an Onboard schedule.
2. At the moment the SD card is removed, the camera automatically records a short video clip. The clip length follows the camera's standard recording duration.
3. The recorded footage is uploaded and stored securely in the cloud, ensuring it remains available even if the SD card is taken.
4. The clip appears on the Saved Clips page and is clearly labeled as an SD card removal event for easy identification and review.
5. Event and notifications are generated:
    - An SD Card Removed event is created and links directly to the recorded clip.
    - Users receive an email notification with a link to view the clip.
    - Push notifications can be enabled for immediate alerts.
    - Both primary and secondary users may receive notifications.
6. If multiple SD card removal events occur within a 30-second window, they are all linked to the same recorded clip.

Configure an SD Card Removed recording rule

Users can create and edit SD Card Removed recording rules using the Alarm.com customer website.

1. Log in to the Alarm.com customer website.
2. Click **Video**.
3. Click **Recording Rules**.
4. Click **Add New Rule**, or click ✎ to edit an existing SD Card Removed rule.
5. Click **SD Card Removed Recording Rule**.
6. Using the *Select a camera* dropdown menu, select the desired camera to create the rule for.
7. In *During this time frame*, click to select *At all times* or *Only during the following times* to determine when the rule will be active.
   - If *Only during the following times* is selected, fill out the days of the week and times of the day for the rule to be active.



8. Using the *Minimum delay between camera-triggered clip uploads* dropdown menu, select the desired delay between camera-triggered clip uploads for this rule.
9. In *Video Clip Recipients*, click **Add** to select recipients for the saved clip.
   - Use the dropdown menu to select the notification style for each recipient.
10. Click **Save Rule**.

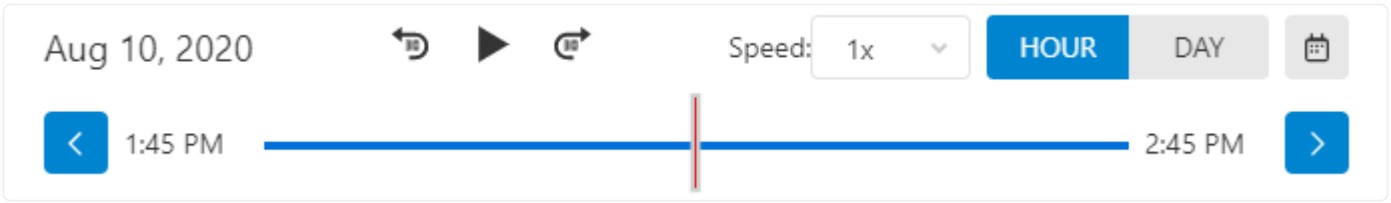
View SD card recorded video

For a detailed list of all available Smart View timeline features, see View onboard recordings from a camera using Smart View.

For an additional option to search recorded video, see Thumbnail Search for SVR and Onboard Timeline.

Note: By default, the Smart View timeline will automatically display footage starting from 30 minutes prior to when it is accessed.

To view Smart View using the Alarm.com customer website:



1. Log in to the Alarm.com customer website.
2. Click **Video**.
3. Click **Onboard Timeline**.
4. Using the video device dropdown menu, select the desired device to play back.
5. Click ⊙ to stream the device's recorded video.

To view Smart View using the Alarm.com app:

1. Log in to the Alarm.com app.
2. Tap **Video**.
3. Tap to select the desired camera.
4. Tap ■ on the desired camera to view SVR/CSVR/Onboard Recording footage.

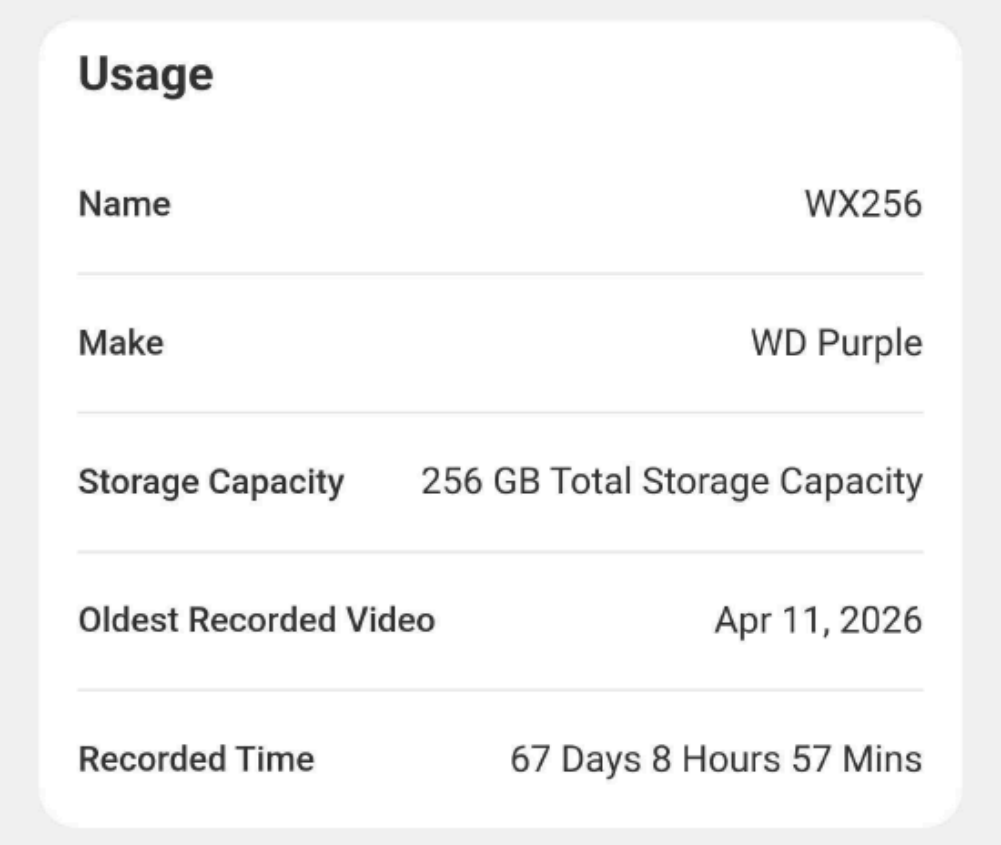


View SD card information

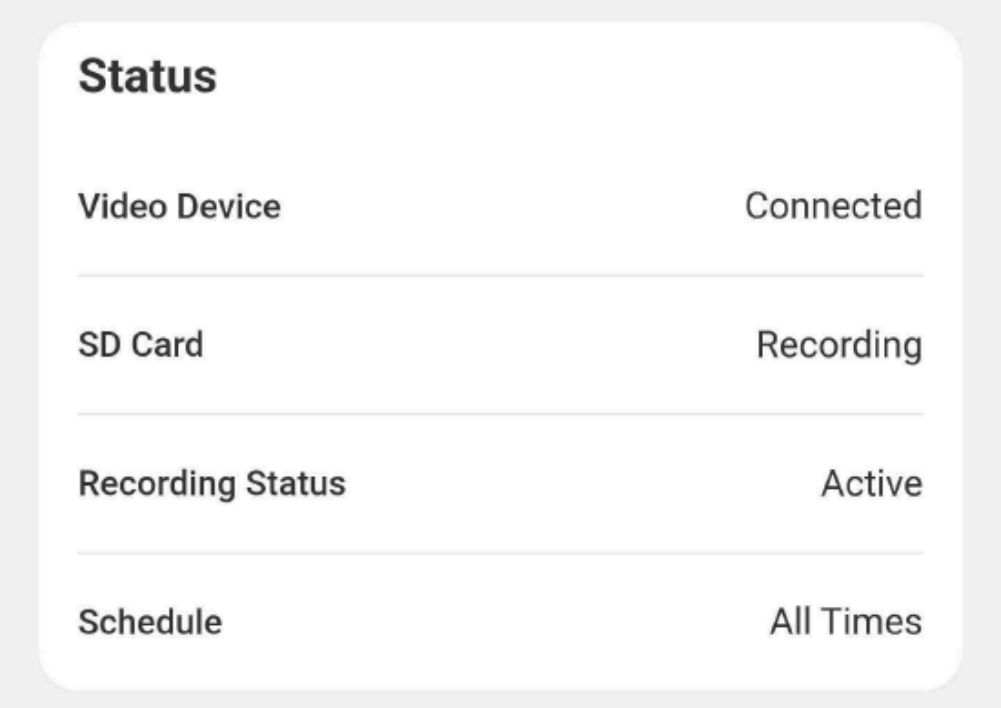
You can verify the SD card is properly inserted and recording, as well as view other usage information and settings, using the Alarm.com app and Alarm.com customer website.
Alarm.com app steps Alarm.com customer website steps

Using the Alarm.com app:

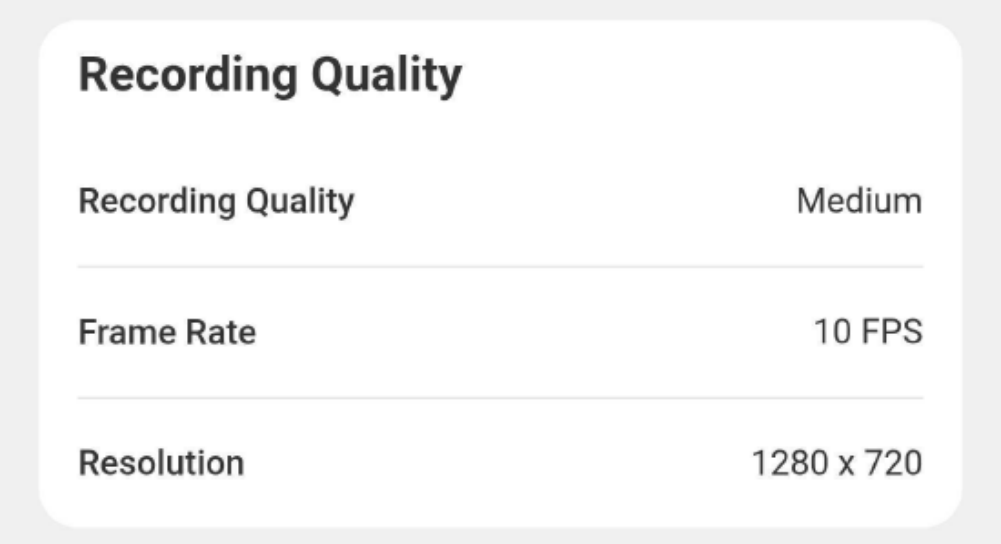
1. Log in to the Alarm.com app.
2. Tap .
3. Tap .
4. Tap to select the desired device.
5. Tap **Video**.
6. In *Recorded Video Settings*, tap **SD Card Info**:
   - In *Usage*, you can view the *Name*, *Make*, *Storage Capacity*, *Oldest Recorded Video*, and *Recorded Time*.



   - In *Status*, you can verify the associated video device is communicating with Alarm.com, the SD card is formatted and actively recording, and the associated Onboard Recording schedule's times.



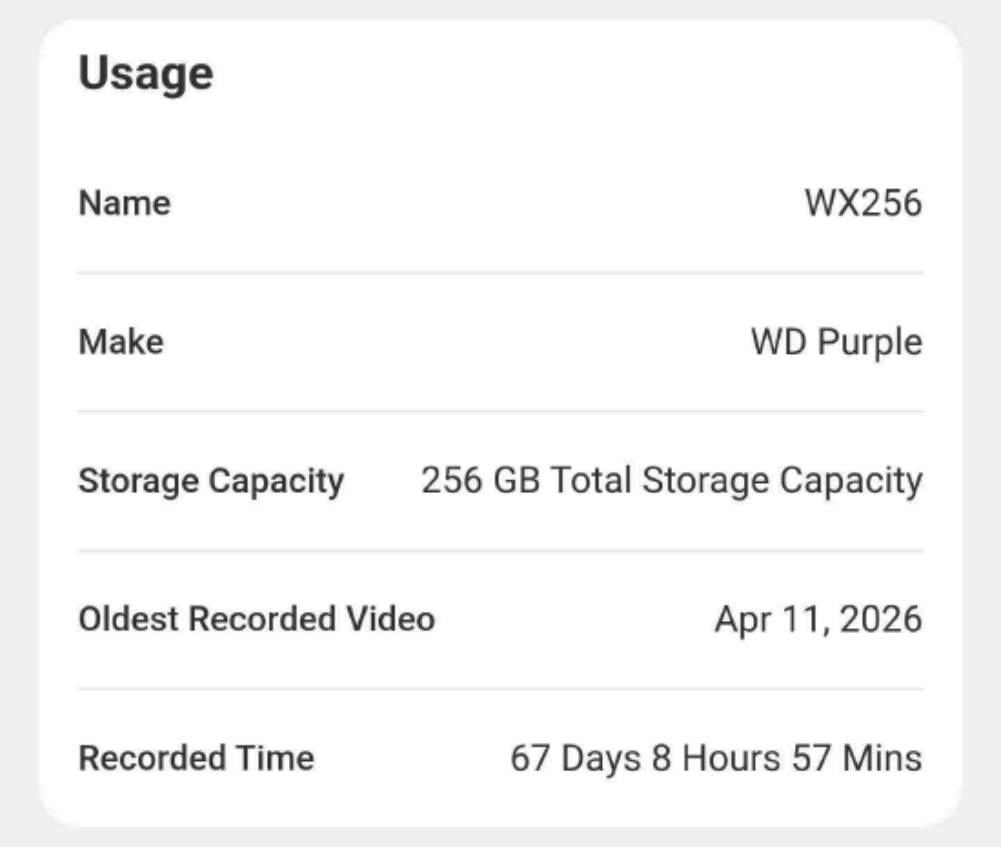
- In *Recording Quality*, you can view the current *Recording Quality* setting, *Frame Rate*, and *Resolution*.



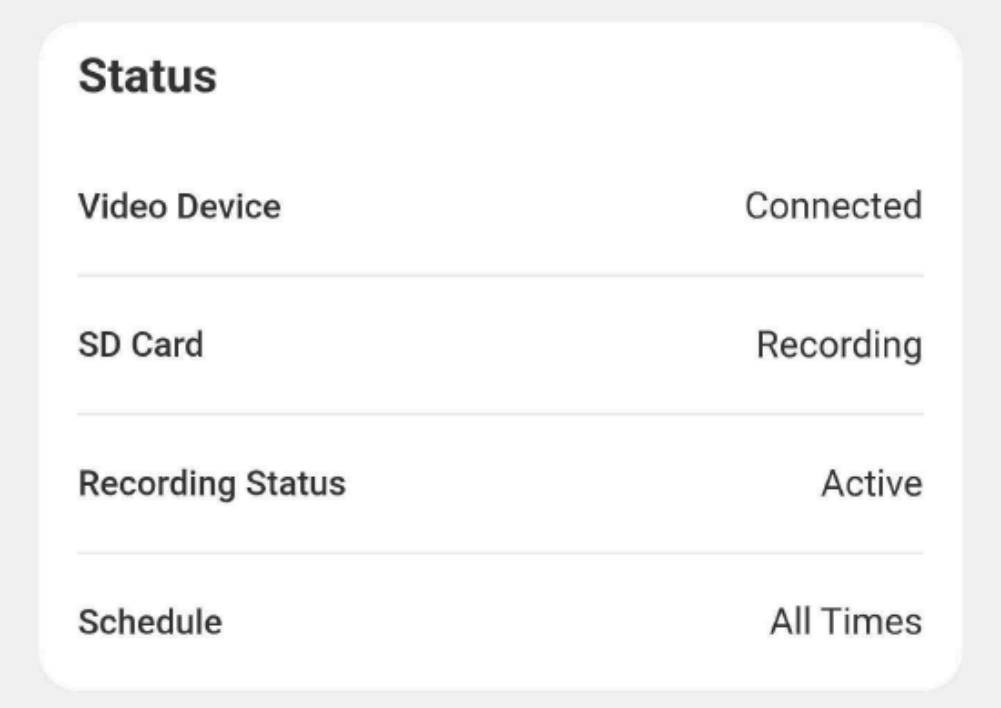
- Tap **Onboard Schedule** to edit the Onboard Recording schedule. For more details about configuring the Onboard Recording schedule, proceed to Create an Onboard Recording rule.
- Tap **Reformat Card** to begin reformatting the SD card. For more details about the reformatting process, see Reformat an SD card installed in a video device.

Using the Alarm.com customer website:

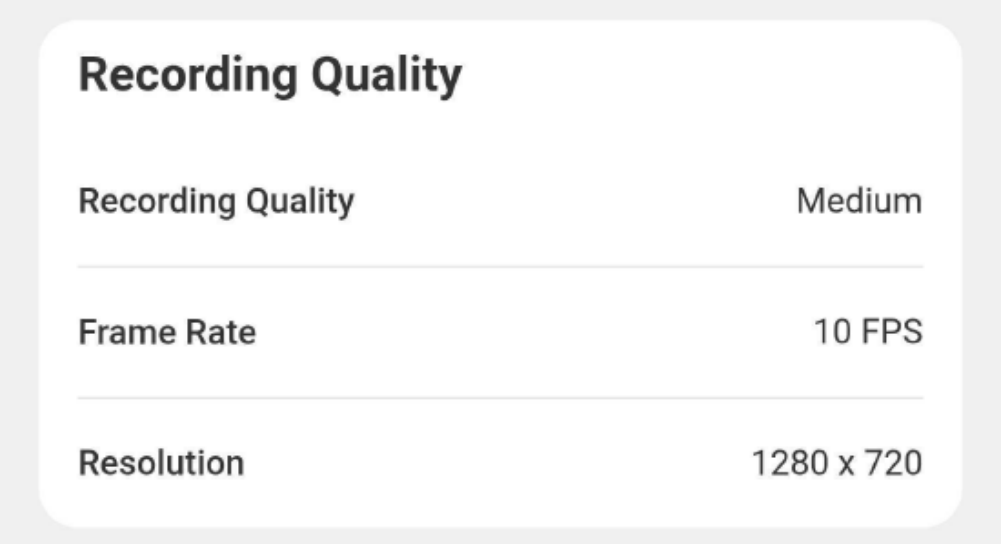
1. Log in to the Alarm.com customer website.
2. Click **Video**.
3. Click **Settings**.
4. Select the desired video device.
5. Click **Video**.
6. In *Recorded Video Settings*, click **SD Card Info**:
    - In *Usage*, you can view the *Name*, *Make*, *Storage Capacity*, *Oldest Recorded Video*, and *Recorded Time*.



    - In *Status*, you can verify the associated video device is communicating with Alarm.com, the SD card is formatted and actively recording, and the associated Onboard Recording schedule's times.



- In *Recording Quality*, you can view the current *Recording Quality* setting, *Frame Rate*, and *Resolution*.



- Click **Onboard Schedule** to edit the Onboard Recording schedule. For more details about configuring the Onboard Recording schedule, proceed to Create an Onboard Recording rule.
- Click **Reformat Card** to begin reformatting the SD card. For more details about the reformatting process, see Reformat an SD card installed in a video device.

Frequently asked questions

Can a single SD card record video from multiple devices?

No. The SD card can only record video from the device inside of which it is currently installed.

Are there local network requirements for recording to an SD card like there are for the SVR?

No. The SD card can record video as long as the video device is enrolled and operational.

Can video continue to record to an SD card through network disruptions?

Yes. As long as the video device has power, it can record to an SD card through a network disruption.

Can the SD card continue to record while live view playback is being viewed?

Yes. The SD Card continues to record video during live view playback. If the user attempts to view playback using the Onboard timeline, the account may need to be refreshed before the footage can become available.

Can the SD card continue to record while exporting footage?

Yes. The SD Card continues to record while exporting footage.

Is audio recorded for cameras with Two-Way audio?

Yes. For more information about recording audio, see When does live or saved video contain audio?.

Can a camera use an Onboard and SVR Recording Schedule simultaneously?

Yes. A camera can record continuously to an Onboard Recording schedule and SVR recording schedule at the same time.

Is the microSD card automatically formatted when inserted into a compatible camera?

^

Yes. The microSD card is automatically formatted and encrypted when inserted into a compatible camera.

Do I need to create an Onboard Recording rule to begin recording 24/7?

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No. A 24/7 Onboard Recording rule is automatically created upon successful installation and can be edited by the customer at any time.

If a microSD card is formatted to a camera, can it be used in a different one?

^

Yes, a microSD card can be used in a different camera, but would need to be reformatted. This would remove all of the recorded footage on the microSD card. The microSD card encryption keeps video recordings private, so the video footage can't be viewed on other devices once the card is removed from the camera.