

Video Verification for Burglar Alarms

Sponsor: CSAA



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Foreword

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CS-V-02 Video Verification Procedures for Burglar Alarms

Introduction

This standard defines methods for using video as just one of many different technologies by which false dispatches can be reduced. It has been proven that verification of alarm signals regardless of the method used by a monitoring central station will considerably reduce false dispatches to municipal authorities or others responsible to take such like actions.

This standard focuses on how to use video to verify alarm signals and to increase the possibility of visually identifying the source of the alarm event. While it is a goal of this standard to help in reducing the number of false dispatches; it also is a goal to provide enhanced information when available and when an alarm needs to be reported to authorities.

While there are a multitude of positive applications for video surveillance, and though it may be useful in selective alarm system accounts, it is not effective in enough scenarios to use as a global dispatch reduction tool, and shall not be a requirement for police dispatch alone.

The field of Video Verification is an evolving technology. It is not the intent of this standard to prohibit or limit new verification technologies or advancements provided the minimum requirements in this standard are met.

Alarm Verification and Notification Procedures

1 Video Verification Scope

This standard has been prepared under the direction of the Security Industry Standards Council (SISC) members with the participation of the Central Station Alarm Association (CSAA) members, and the Security Industry Association (SIA) members.

The standard is recommended for use by alarm monitoring facilities and by State and Local governments as a minimum industry standard for good practice in the use of video for alarm monitoring applications to aid in alarm verification.

New technologies and efforts to reduce false alarms through other enhanced verification techniques have led to this standard. In summation video verification shall be considered one of the methods used by the industry to enhance existing verification techniques but not as a standalone requirement in order to request police response.

2 General

If differences exist between this standard and other written Special Instructions with the monitored premises; the Special Instructions shall take precedence.

3 Definitions

3.1 Alarm Verification - reference ANSI/CSAA CS-V-01

3.2 Video Verification

Video Verification is the pairing of video data with alarm events generated from protected premises. This pairing may assist in determining the response protocol to be followed for the alarm event.

3.3 Standard Verification - reference ANSI/CSAA CS-V-01

3.4 Enhanced Verification - reference ANSI/CSAA CS-V-01

3.5 Remote Video Investigation

Remote Video Investigation is the procedure where monitoring facility personnel uses a live video connection or recorded video clips, pictures, and other data to remotely view the premises as a follow up method after an alarm event has been transmitted. The viewing of video and associated information of the premises occurs after the initial alarm. In effect the facility personnel may or may not be viewing the actual activity that initiated the alarm but are reviewing the video information provided after receiving the alarm event in an attempt to observe activity that may provide information about the alarm event. This method can add information to the Alarm Verification but is not considered verifying an alarm as the video may not contain information that is captured at the time of the alarm or directly associated with the alarm event.

3.6 Captured Video Information

Captured Video is associated video information aligned with the alarm event and/or identified by the monitoring facility personnel while viewing video. Examples include the following: the presence of video aligned with the alarm, the identification of a human or humans, or any other information germane to the alarm scene (broken window, smashed door, or other physical characteristics) at the time of the alarm event.

3.7 Special Instructions

A written, separate document from the monitoring contract document, that specifies a specific set of instructions to be followed in the event of an alarm, between the monitored premises and the alarm/monitoring company. This may also be made available to the operator on screen automatically on activation of the alarm.

3.8 Notification Call - reference ANSI/CSAA CS-V-01

3.9 Captured Frame Video

The minimum number of alarm event frames made available to the operator shall be that necessary on each alarm for a reasonable person to successfully identify the cause of the alarm.

In applications in which video capture, recording and transmission cannot be assured to begin within 300 milliseconds (300msec) of the actual time of the alarm event, then at least 2 (two) frames shall

be captured before the event, 1 (one) at the time of the event and 2 (two) after the event.

The minimum amount of time of captured video shall be 5 (five) seconds.

As an example if the minimums are implemented, at least 5 frames of captured video spanning five seconds starting no more than 100 milliseconds after the actual alarm event will be captured and transmitted. Alternately, in applications where the time between alarm initiation and recording of the first of the required five frames cannot be assured to be within 100 milliseconds, then 5 (five) frames would be distributed over 5 (five) seconds – (1 (one) second between full frames) with two frames containing pre alarm video, the event frame being the third, and two frames of post event video

4 Standard Video Verification Procedures

4.1 Identification of a Video Verification System

Each alarm signal with Video Verification shall be identified by the monitoring facility personnel that additional video information is associated with the standard alarm signal received. The use of Video Verification shall only be used to enhance other alarm verification methods.

4.2 Procedure for Alarm Signals Received from Systems

In accordance with ANSI/CSAA CS-V-01 standard, unless Special Instructions exist, the monitoring facility personnel shall make contact with the protected premises for authorized identification and verification upon receiving an alarm unless the cause of the alarm can be ascertained with a degree of certainty by the operator through use of the received pre-recorded or live video.

4.3 When to Use Video Verification

Video information shall be combined with other verification techniques to identify personnel or zone patterns that may verify that no emergency exists.

Video information does not need to be considered in the case when an alternative method of verifying that no emergency is present supersedes the viewing of the video, such as if the initial

contact with the protected premise finds authorized personnel at the premises and/or the person states that no emergency exists.

4.4 Reviewing Video

Video information will be reviewed by the monitoring facility prior to initiating a Notification Call if no other approved alternative method can verify that an emergency does not exist

4.4.1

Monitoring facility personnel should spend no more than 2 minutes reviewing video information and attempt to verify.

4.4.2

If the video feed is unavailable or not viewable, monitoring facility personnel should proceed with alternate verification methods.

4.5 Notification Call

The Notification Call detail will include information that has been reviewed by the monitoring facility personnel to indicate whether or not there is Captured Video Information associated with the alarm event; to indicate information has been gathered to indicate if an emergency exists. The details shall include a statement to the effect that the protected premises does support Video Verification but either no video was associated with the alarm or the Captured Video Information did not reveal conclusive information about the alarm.

5 Video Implementation Techniques

The quality of the video received shall be of a nature that a person will at a minimum, be able to decipher between a human and non-human based on the attributes of human form or any other information germane to the alarm scene (broken window, smashed door, or other physical characteristics) at the time of the alarm event.

5.1 Monitoring Facilities

It is recommended that the Captured Video be transmitted and available to the monitoring facility when the alarm event is transmitted. The alarm event and captured video do not need to be transmitted over the same medium.

The monitoring facility personnel shall have the Captured Video presented in a manner that is easily accessible.

5.2 Premises Camera Position

The camera should be placed to provide a clean view of the protected area. Care should be taken to avoid Cameras that can be repositioned for other purposes (ex. Review product displays or check customer traffic).

5.3 Field of View

It is required that the Captured Video field of view include the area covered by the sensor that triggered the alarm event. If the sensor is a motion sensor then the captured video shall be aligned with the motion sensors coverage area. The field of view may also be more than one camera with more than one alarm event.

ANNEX:

The type of camera, video transmission, placement of equipment and views provided by such video equipment may serve different needs for the consumer. If determined by the consumer that a different configuration is desired, deviation from the placement and functionalities described in this standard should not prohibit the central station from utilizing such video information in its course of performing a notification to the law enforcement agency if appropriate.