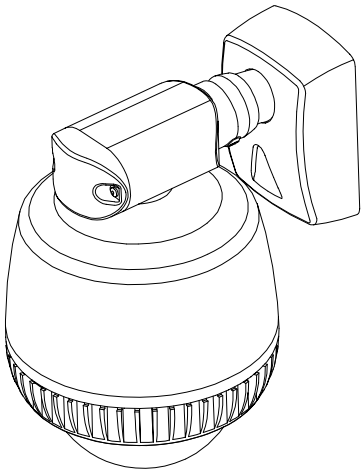
Sensormatic

SpeedDome® Optima Programmable Dome Camera

Quick Reference Guide



RASO and RASI Series

Contents

About this Guide

This Quick Reference Guide explains the functions supported by the SpeedDome Optima programmable dome camera. It is intended to supplement information included in the operator's manual for your video controller or matrix switching system.

If you need assistance...

Contact your dealer, distributor or Sensormatic sales representative.

Dome Features

The SpeedDome Optima programmable dome camera provides the following features:

- 16X optical zoom
- >450 lines horizontal resolution
- Zoom Adjusted Programming (ZAP)
- Auto Focus / Auto Iris
- Auto White Balance
- Automatic Gain Control (AGC)
- Line-lock
- Up to 96 presets (system dependent)
- Three patterns
- Apple Peel
- Dome Flip (rotate 180°)
- One alarm input
- One auxiliary output
- Power-on functional tests
- LED diagnostics

In addition, the dome may be used with the Manchester, RS-422, RS-485, or SensorNet protocols.

Although SpeedDome Optima does not provide on-screen programming via the dome firmware, the connected controller may be used to configure many settings. These settings include:

- Programming presets and patterns
- Vertical phase adjustment (V-phase)
- Auxiliary output control

The following table provides additional information about the supported controller functions with the protocol used. The actual features supported may differ for your controller.

Feature	SensorNet	RS-422	Manchester
Maximum Presets	96 ♦	96 ♦	64
Maximum Patterns	3	3	3
Resume Auto Focus / Auto Iris	Yes	Yes	Yes
Dome Reset	Yes	Yes	Yes
V-Phase adjustment	Yes	Yes	Yes
Auxiliary output control	Yes	Yes	Yes

For specific information about the features supported, see the operator's manual for your controller.

♦ The actual number of available presets may differ based on the controller used.

Supported Controllers and Matrix Switching Systems

SpeedDome Optima may be used with the following controllers and matrix switching systems. See notes below for specific limitations or restrictions.

Feature	VM16 / ADTT16 Series	VM32 / AD32 Series	VM96 Series	AD2150 / AD2350 (1, 2)	MegaPower 48 (1, 2)	AD1650 (1, 2)	AD168 (1, 2)	AD2050 (1, 2)	AD MegaPower 1024 (1, 2)
Supported Protocols	SensorNet	SensorNet	RS-422 SensorNet	Manchester RS-422	Manchester RS-422 SensorNet	Manchester RS-422	Manchester RS-422 SensorNet	Manchester RS-422	Manchester RS-422
Maximum Available Presets	96	96	Unlimited (3)	**64** Manchester **16** RS-422	**64** Manchester **96** RS-422 (5) **96** SensorNet	**64** Manchester **16** RS-422	**64** Manchester **64** RS-422 (5) **64** SensorNet	**64** Manchester **16** RS-422	**64** Manchester **16** RS-422
Maximum Available Patterns (4)	3	3	3	3	3	3	3	3	3

NOTES:

(1) For the list of compatible keyboards, see ***Supported AD Keyboards*** on page 4.

(2) RS-422 is supported with the appropriate code converter.

(3) Preset information is stored at the host, not the dome.

(4) Patterns are limited by time and the number of available dome commands. Total time for the patterns cannot exceed 6 minutes 50 seconds. Total number of dome commands used in the patterns cannot exceed 99.

(5) If the RS-422 Code Converter is used, only 16 presets are supported.

Supported AD Keyboards

For systems using AD keyboards, the following keys are used when **Set Preset** or **Call Preset** is referenced:

Keyboard Model	Call Function	Set (Define) Function (1)
AD1678C/M	**Shot**	**Set Shot** (2)
AD2078	**Call**	**Set**
AD2078A	**Call**	**Set**
AD2079	**Shot**	**Shot**
AD2088	**Shot**	**Shot**
ADTTE	**Shot**	**Shot**
ADTT	**Call**	**Set**

NOTES:

(1) Keyboard must be in programming mode to use the set functions. See the keyboard operation manual for information.

(2) Recessed pushbutton switch.

Supported Dome Commands

Some dome commands are supported through special keystroke combinations. This section summarizes those commands for specific controllers.

AD2083-02A Code Converter

See **Supported AD Keyboards** for button names used on specific keyboards.

Verified with AD168 (v. 3.01) and AD2083-02A (v. 11Y9).

Dome Function	Keyboard Command
Define Preset 1 - 16	**1 - 16 Set Shot**
Recall Preset 1 - 16	**1 - 16 Call Shot**
Define Pattern #1	**17 Set Shot**
Define Pattern #2	**18 Set Shot**
Define Pattern #3	**19 Set Shot**
End Pattern Definition	**33 Set Shot**
Accept (save) New Pattern	**34 Set Shot**
Go to Pattern #1	**17 Call Shot**
Go to Pattern #2	**18 Call Shot**
Go to Pattern #3	**19 Call Shot**
Run Pattern #1	**21 Call Shot**
Run Pattern #2	**22 Call Shot**
Run Pattern #3	**23 Call Shot**
Review Temporary Pattern	**24 Call Shot**
Auto Repeat Pattern #1	**25 Call Shot**
Auto Repeat Pattern #2	**26 Call Shot**
Auto Repeat Pattern #3	**27 Call Shot**
Flip (rotate dome 180°)	**40 Call Shot**
Clear Pattern #1	**41 Set Shot**
Clear Pattern #2	**42 Set Shot**
Clear Pattern #3	**43 Set Shot**
Reset Dome	**66 Set Shot**
Enter V-Phase Adjust Mode	**67 Set Shot** followed by multiple **Iris Open** or **Iris Close**
Exit V-Phase Adjust Mode	**68 Set Shot**
Return to Auto-Iris/Auto Focus	**69 Call Shot**
Reset Iris	**69 Set Shot**

In addition, the following commands ***are not*** supported.

- Set Switch 1 Normal Closed (51 Set Shot)
- Set Switch 1 Normal Open (52 Set Shot)
- Set Switch 2 Normal Closed (53 Set Shot)
- Set Switch 2 Normal Open (54 Set Shot)
- Set Switch 3 Normal Closed (61 Set Shot)
- Set Switch 3 Normal Open (62 Set Shot)
- Set Switch 4 Normal Closed (63 Set Shot)
- Set Switch 4 Normal Open (64 Set Shot)

MegaPower 48 Matrix Switcher/ Controller System

See **Supported AD Keyboards** for button names used on specific keyboards.

Dome Function	Keyboard Command
Define Pattern # 1	**121 - F2**
Define Pattern # 2	**122 - F2**
Define Pattern # 3	**123 - F2**
End Pattern Definition	**120 - F2**
Save New Pattern	**130 - F2**
Go to Pattern # 1	**31 - F1**
Go to Pattern # 2	**32 - F1**
Go to Pattern # 3	**33 - F1**
Run Pattern # 1	**21 - F1**
Run Pattern # 2	**22 - F1**
Run Pattern # 3	**23 - F1**
Auto Repeat Pattern # 1	**41 - F1**
Auto Repeat Pattern # 2	**42 - F1**
Auto Repeat Pattern # 3	**43 - F1**
Clear Pattern # 1 (SpeedDome RS-422)	**131 - F2**
Clear Pattern # 2 (SpeedDome RS-422)	**132 - F2**
Clear Pattern # 3 (SpeedDome RS-422)	**133 - F2**
Flip (Rotate dome 180º)	**19 - F1**
Reset Iris	**20 - F1**
Return to Auto Iris / Auto Focus	**69 - F1**
Reset Dome	**30 - F1**
Enter Vertical Phase Adjust Mode	**38 - F2**
Exit Vertical Phase Adjust Mode	**39 - F2**

In addition, the following commands ***are not*** supported:

- *Set Auxiliary 4 OFF (70-F1)*
- *Set Auxiliary 4 ON (71-F1)*

AD168 Matrix Switcher/ Controller System

See **Supported AD Keyboards** for button names used on specific keyboards.

Dome Function	Keyboard Command
Define Pattern # 1	**121 - F2**
Define Pattern # 2	**122 - F2**
Define Pattern # 3	**123 - F2**
End Pattern Definition	**120 - F2**
Save New Pattern	**130 - F2**
Go to Pattern # 1	**31 - F1**
Go to Pattern # 2	**32 - F1**
Go to Pattern # 3	**33 - F1**
Run Pattern # 1	**21 - F1**
Run Pattern # 2	**22 - F1**
Run Pattern # 3	**23 - F1**
Auto Repeat Pattern # 1	**41 - F1**
Auto Repeat Pattern # 2	**42 - F1**
Auto Repeat Pattern # 3	**43 - F1**
Clear Pattern # 1 (SpeedDome RS-422)	**131 - F2**
Clear Pattern # 2 (SpeedDome RS-422)	**132 - F2**
Clear Pattern # 3 (SpeedDome RS-422)	**133 - F2**
Flip (Rotate dome 180º)	**19 - F1**
Reset Iris	**20 - F1**
Return to Auto Iris / Auto Focus	**69 - F1**
Reset Dome	**30 - F1**
Enter Vertical Phase Adjust Mode	**38 - F2**
Exit Vertical Phase Adjust Mode	**39 - F2**

In addition, the following commands ***are not*** supported:

- *Set Auxiliary 4 OFF (70-F1)*
- *Set Auxiliary 4 ON (71-F1)*

Manchester Commands

These commands are supported by systems using the Manchester protocol.

See **Supported AD Keyboards** for button names used on specific keyboards.

Verified with AD2050, AD2091, and AD168 with CCM (v. 3.01)

Dome Function	Keyboard Command
Program Presets 1 - 64	**1- 64 Set Preset**
Call Presets 1 - 64	**1- 64 Call Preset**
Program Pattern 1	**70 Set Preset**
Program Pattern 2	**71 Set Preset**
Program Pattern 3	**72 Set Preset**
Save Pattern Programming	**69 Set Preset**
Cancel Pattern Programming	**68 Set Preset**
Repeats following pattern	**69 Call Preset**
Run Pattern 1	**70 Call Preset**
Run Pattern 2	**71 Call Preset**
Run Pattern 3	**72 Call Preset**
Reset Dome	**65 Set Preset**
Resume Auto Focus / Auto Iris	**66 Call Preset**
Flip (Rotate dome 180º)	**67 Call Preset**
Activate / Deactivate V-phase delay setting adjustment	**67 Set Preset**

Declarations

Regulatory Compliance

Emissions .....47 CFR, Part 15
ICES-003
EN55022 Class B (CE)
Immunity .....EN50130-4 (CE)
Safety.....UL1950
CSA C22.2 No 950
EN 60 950
Outdoor model meets NEMA 5 and IP-66

FCC COMPLIANCE: This equipment complies with Part 15 of the FCC rules for intentional radiators and Class A digital devices when installed and used in accordance with the instruction manual. Following these rules provides reasonable protection against harmful interference from equipment operated in a commercial area. This equipment should not be installed in a residential area as it can radiate radio frequency energy that could interfere with radio communications, a situation the user would have to fix at their own expense.

EQUIPMENT MODIFICATION CAUTION: Equipment changes or modifications not expressly approved by Sensormatic Electronics Corporation, the party responsible for FCC compliance, could void the user's authority to operate the equipment and could create a hazardous condition.

Other Declarations

WARRANTY DISCLAIMER: Sensormatic Electronics Corporation makes no representation or warranty with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. Further, Sensormatic Electronics Corporation reserves the right to revise this publication and make changes from time to time in the content hereof without obligation of Sensormatic Electronics Corporation to notify any person of such revision or changes.

CISPR 22 CLASS A WARNING: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

LIMITED RIGHTS NOTICE: For units of the Department of Defense, all documentation and manuals were developed at private expense and no part of it was developed using Government Funds. The restrictions governing the use and disclosure of technical data marked with this legend are set forth in the definition of “limited rights” in paragraph (a) (15) of the clause of DFARS 252.227.7013. Unpublished - rights reserved under the Copyright Laws of the United States.

TRADEMARK NOTICE: SpeedDome, Sensormatic, and the Sensormatic logo are registered trademarks of Sensormatic Electronics Corporation. Other product names (if any) mentioned herein may be trademarks or registered trademarks of other companies.

BSL 11/2000