



Matrix Keyboard Controller Manual



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1 Safety and Precautions

1. Please read these notes before attempting to operate the 360 Vision Matrix Keyboard, and keep for future reference.
2. All servicing and repairs must be handled by 360 Vision Technology.
3. Installation should be carried out by suitably qualified personnel, in accordance with local codes of practice and regulations.
4. 360 Vision Technology Limited accept no liability for any damage caused by incorrect or improper installation.
5. Use only 360 Vision Keyboard power supplies.
6. Always ensure that this product is installed in a location that will not expose it to environmental conditions that are outside of its IP rating. This product is for indoor use only.

2 Matrix Mode Keyboard Operation

2.1 Keyboard Lock

The VisionKeyboard can be locked/unlocked, press and hold  and then press 9, 3, 0, 3 and then release the  button to toggle lock. The display will then change from the below.

[Locked]

2.2 Keyboard Modes

The VisionKeyboard operates in two modes:-

- Matrix - Control of 360 Vision Matrix cameras.
- DVR - DVR control of 360 Vision DVR's.

To toggle between two modes use the  button.




Matrix: *

CAMERA 1


DVR:1 Avalon T 16ch

Cameras: 1 - 16


2.3 Keyboard Buzzer

To toggle operation of keyboard button press buzzer, press and hold  and then press  and then release the  button.


2.4 Camera Select (Monitor must be connected to 360 Vision Matrix)

To select a camera, press the camera number required using the grey number buttons and then the  button.

2.5 Monitor Select (Monitor must be connected to 360 Vision Matrix)

To select a monitor, press the monitor number required using the grey number buttons and then the  button.

2.6 Auto Sequence (Monitor must be connected to 360 Vision Matrix)


To select an auto sequence, press the sequence number required using the grey number buttons and then the  button. To setup auto sequence camera schedule see section pg7.

Monitor screen will show a S1→01:

S1 indicates auto sequence number 1, 4 are available,

→ indicates auto sequence is running,

01: shows the current camera being shown.

To toggle auto sequence run or pause press the  button, text will then change to S1 || 01:
|| shows that the auto sequence is paused.



When in this paused state the next camera in the sequence can be selected by pressing the  button.

To stop the auto sequence operate the joystick, the auto sequence needs to be running e.g. S1→01:

2.7 Operator Alarm

To toggle a manual alarm (trigger the matrix relay output), press and release the  button.

2.8 Alarm acknowledgement

To acknowledge an external alarm (an alarm created via the matrix or matrix alarmcard), press the  button to silence the keyboard alarm buzzer and then the  button again to acknowledge the alarm.

2.9 Pan/Tilt/Zoom Control

To operate the camera Pan, Tilt control use the joystick up, down, left, right operation. The joystick has proportional speed control of the camera, i.e. the more you move the joystick the faster the camera will move.

To operate the camera zoom, twist the joystick.

To zoom in, twist the joystick clockwise.

To zoom out, twist the joystick anti-clockwise.

2.10 Iris and Focus Control

Manual adjustments can be made to both Iris and Focus of the camera.

Close Iris



Focus Near



Auto Iris



Auto Focus



Open Iris





Focus Far



Take care storing presets when the camera is in manual iris/focus mode, as this may not suit all environments/ time periods.


2.11 Preset Seek

To seek a preset (Stored View), press the grey numeric buttons to suit the preset and then the  button or use the quick 1 - 5 preset seek buttons .

The LCD will show:

Matrix:	*
CAMERA 1	P1

2.12 Preset/Mimic Tour Recall

To activate a preset or mimic tour, press the grey numeric buttons to suit the tour and then press the  button.

Preset Tours are numbered 1 - 4.

Mimic Tours are numbered 5 - 8.

2.13 Auto-Flip

To spin the camera 180° use the  button.


360 Vision camera can also be configured to spin 180° automatically when using the tilt down function on the joystick.


Two options available are:


- Mode 1/Semi - When the 360 Vision camera has been fully tilted down, let go of the joystick and tilt down again, the camera will spin 180°.
- Mode 2/Full - When the 360 Vision camera has been fully tilted down, the camera will spin 180°.

2.14 Predator/Centurion Auxiliary Functions

Aux modes can be used to activate the extra functions of the 360 Vision Predator or Centurion camera.




Press  to toggle white light (if dark).

Press  to activate the wiper (double wipe).

Press and hold  to activate wash function (not available on Centurion).

2.15 Camera Auxiliary Functions

Aux modes can be used to activate extra functions on all 360 Vision cameras.

Press and hold  and then press  then release  to toggle colour/mono test function.

Press and hold  and then press  then release  to toggle colour/mono.


Press and hold  and then press  then release  to toggle fast shutter mode.




Take care using fast shutter mode, as this will disable the automatic colour/mono changeover process.

3 DVR Mode Keyboard Operation


3.1 Camera select

To select different cameras via the DVR, press the camera number required using the grey numeric buttons and then the  button. Choosing a camera higher than the current selected DVR will automatically select the correct video channel on the relevant DVR (keyboard needs to be configured to the DVR size) e.g. Selecting ch17 will automatically select channel 1 on DVR 2, if DVR 1 is a 16 channel unit.



3.2 DVR select

To select different DVR units, press the DVR number using the grey numeric buttons and then the  button.

3.3 Multi-Screen display

Use the  button to toggle between all the multi-screen display options available.

3.4 PTZ control

To control a PTZ camera via the DVR, select the required camera and then press the  button. This will allow the user to use the keyboard joystick to operate the PTZ camera. To exit PTZ mode press the  button.

DVR:1	Avalon T	16ch
Cameras:	1 - 16	PTZ


3.5 Auto Sequence

To toggle the DVR auto sequence, press the  button.


3.6 Menu access


Use the  button to gain access to the DVR settings/menu. Use the joystick pan and tilt to navigate the menus while using zoom in to select.

3.7 Search screen access






Use the  button to access the DVR search options. Use the joystick pan and tilt to navigate and zoom in to select.

3.8 Emergency Record



To activate emergency record use the  button.

 Take care using Emergency record as your HDD storage will be used up quickly and will reduce the amount of days that are stored.

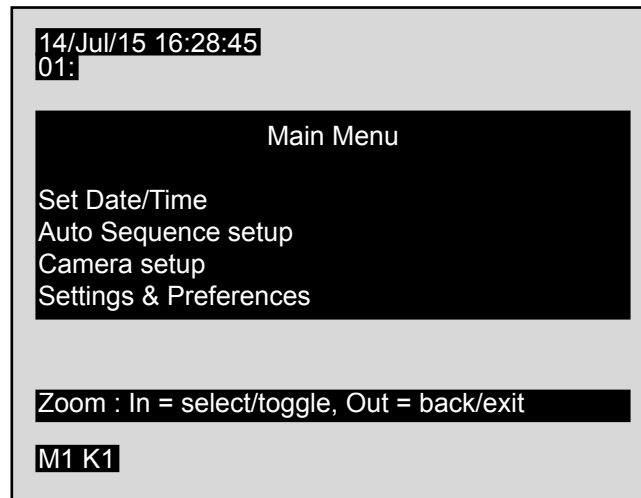
3.9 Playback, Pause, Stop, Fast Forward, Rewind

Use play  button to start playback, and then use the standard fast forward , rewind , pause , and stop  button as required.

4 Matrix menu access (Controller level) (Monitor must be connected to 360 Vision Matrix)

To access the matrix menu, press and hold  and then press 1, 3, 7, 9 and then release the  button.

The matrix screen will then show the below menu screen.



Use the joystick up and down to highlight the required option, and twist the joystick clockwise (zoom in) to select. Twisting the joystick anti-clockwise (zoom out) to save and exit out of the current menu page.

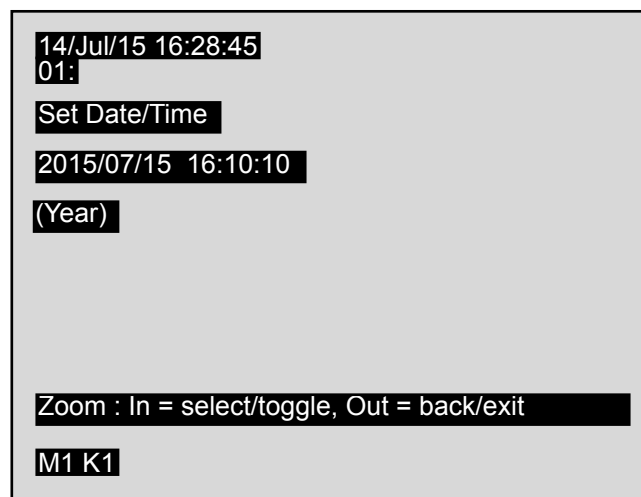
Menu pages will automatically exit after 1 minute of no operation.

Twist joystick anti-clockwise (zoom out) to save and exit the menu setup pages.

4.1 Set Date/Time

Enter the matrix menus, and then use the joystick to enter the Set Date/Time setup page.

The matrix screen will then show the below menu screen.



Enter the required date using the grey number buttons. The cursor will automatically move along the date and then time. If a mistake is made use the joystick left and right to highlight the parameter that needs changing.

Twist joystick clockwise (zoom in) to set date and time.

Twist joystick anti-clockwise (zoom out) to save and exit the menu setup pages.

4.2 Auto Sequence setup

Enter the matrix menus (see pg 7), and then use the joystick to enter the Auto Sequence setup page.

The screen will then show

14/Jul/15 16:28:45				
01:				
Edit Sequence 1 (AUTOSEQ) key to change				
Step	On/Off	Cam	Dwell	Preset
1	On	1	2	0
2	On	2	2	0
3	On	3	2	0
4	On	4	2	0
5	On	5	2	0
6	On	6	2	0
Zoom : In = select/toggle, Out = back/exit				
M1 K1				

There are 4 auto sequences available, use the  button to select the required sequence. Each auto sequence consists of:-

Step - Order of next camera in the sequence.

On/Off - Used to set if the selected step is shown in the sequence or not.

Cam - Camera to be displayed on the selected step (does not need to run in order and can contain repeated cameras).

Dwell - The time in seconds that the current step will be displayed.

Preset - The specific preset the camera will be at, when the step is shown. Use preset 0 if camera is performing a tour.

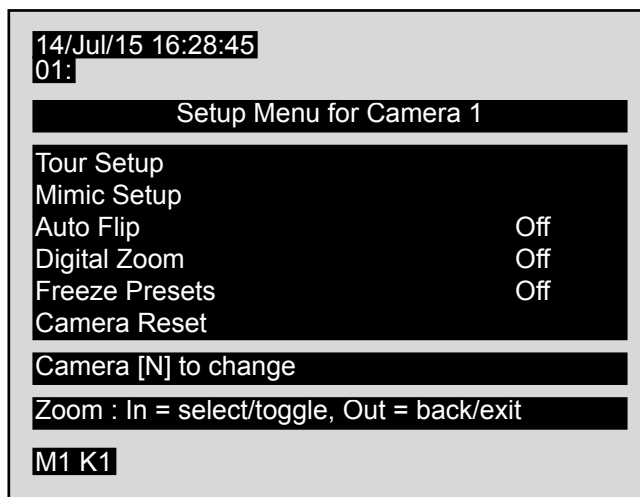
Use the joystick to highlight the required option that is being changed and then use the grey number buttons to alter the setting.

Twist joystick anti clockwise to save and exit the menu page.


4.3 Camera Setup

Enter the matrix menus (see page 7), and then use the joystick to enter the Camera setup page.

The screen will then show



Use the joystick up and down to highlight the required option, and twist the joystick clockwise (zoom in) to select.

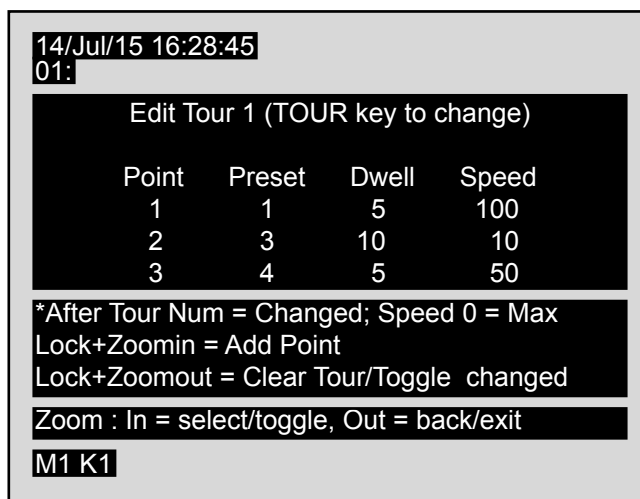
To change camera while in the camera setup page, press and hold the  button and then the camera number required using the grey number buttons.


4.3.1 Tour Setup


A tour is stored in the camera as a list of tour points. Each tour point consists of a preset number, the dwell time for which the camera will pause and the speed parameter that will be used to seek the preset.

Enter the matrix menus (see page 7), and then use the joystick to enter the Camera setup page and then the Tour setup page.

The screen will then show



 In some applications it is not possible for the 360 Vision PTZ camera to send data back to the VisionMatrix. Under these circumstances the parameter is shown in the menu as --- or <->. When these parameters are adjusted, the appropriate commands are sent the camera but the menu will not be updated with the data from the 360 Vision PTZ camera.

To change the number of the tour that you are programming press the  button until the correct tour number is displayed.

To program a preset tour:

Enter the preset number, the dwell time (how long it will stay at this position for in seconds) and then the speed (how fast it will move to this position, 10 is slow, 100 is fast, 0 is maximum speed), for each point using the grey number buttons.

To alter a preset tour:

Highlight the parameter to be changed using the joystick and change the setting using the grey number buttons.

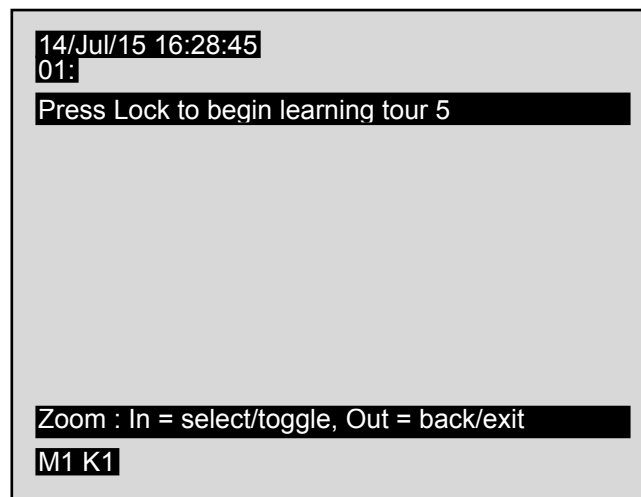
To save and exit the tour setup page twist the joystick anti-clockwise (zoom out).


4.3.2 Mimic Setup

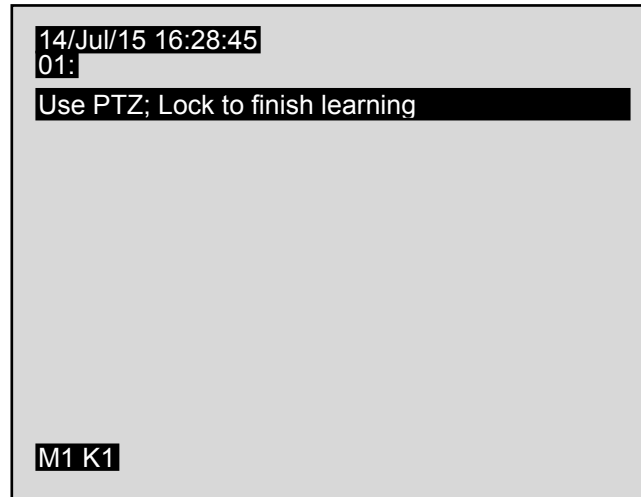
A mimic is stored in the camera. When a mimic tour is started, the camera will perform all the actions which were defined when the mimic was programmed.

Enter the matrix menus (see page 7), and then use the joystick to enter the Camera setup page and then the Mimic setup page.

The screen will then show



To change the number of the tour that you are programming press the  button until the correct tour number is displayed.



When finished press the  button.

Twist joystick anti-clockwise (zoom out) to save and exit the menu.

4.3.3 Auto Flip

Auto Flip is how the camera will function when full tilt down is used, the camera can automatically spin 180° if required.

Enter the matrix menus (see page 7), and then use the joystick to enter the Camera setup page, and then highlight auto flip.

Twist the joystick clockwise to change the setting.

- Auto Flip - Off
When the camera is tilted fully down, it will not auto flip.
- Auto Flip - Semi-Auto
When the camera is fully down and the joystick is released and then used again to tilt down the camera, it will automatically spin 180°.
- Auto Flip - Full-Auto
When the camera is tilted fully down the camera will spin 180° automatically.

Twist joystick anti-clockwise (zoom out) to save and exit the menu.

4.3.4 Digital Zoom

Digital Zoom is used at the end of the optical zoom. The image is zoomed in digitally, the magnification is increased. Image quality maybe reduced.

Enter the matrix menus (see page 7), and then use the joystick to enter the Camera setup page, and then highlight digital zoom.

Twist the joystick clockwise to change the setting.

- Digital Zoom - On
The camera will use digital zoom at the end of the optical zoom, if the joystick is twisted clockwise (camera is zoomed in) is released and then twisted clockwise again.
- Digital Zoom - Off
The camera will not enter digital zoom mode.

Twist joystick anti-clockwise (zoom out) to save and exit the menu.

4.3.5 Freeze Presets

Freeze presets function will freeze the current image when seeking presets at maximum speed.

Enter the matrix menus (see page 7), and then use the joystick to enter the Camera setup page, and then highlight freeze presets.

Twist the joystick clockwise to change the setting.

- Freeze Presets - On
Camera will freeze the current view when seeking preset position at maximum speed.
- Freeze Presets - Off
Camera will not freeze the current view when seeking a preset.

Twist joystick anti-clockwise (zoom out) to save and exit the menu.

4.3.6 Camera Reset

Camera reset function will perform a remote power reset on the camera, no settings will be lost. This option requires telemetry control.

Enter the matrix menus (see page 7), and then use the joystick to enter the Camera setup page, and then highlight camera reset.

Twist the joystick clockwise to power reset the selected camera.

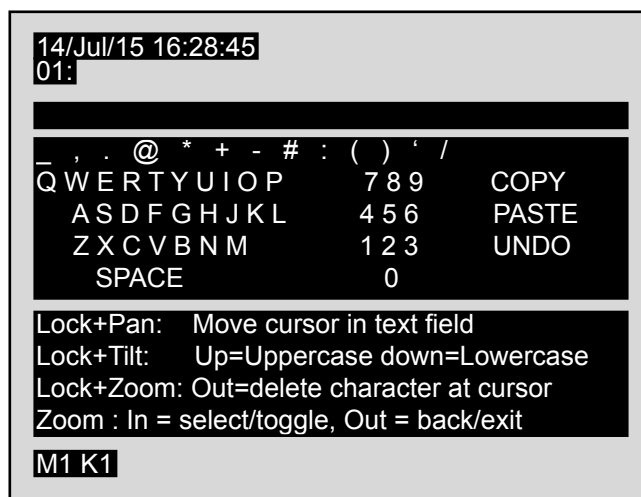
Twist joystick anti-clockwise (zoom out) to save and exit the menu.

4.3.7 Camera Title

The matrix can be used to display camera title text to help identify the camera.

Enter the matrix menus (see page 7), and then use the joystick to enter the Camera setup page, and then highlight camera title.

The screen will then show





There are 20 characters per camera available for titles.



Creating Camera Titles

Move the joystick around the on screen keyboard and twist the joystick clockwise to select the highlighted character.



Amending Titles

Press and hold the  button, move the cursor using the joystick left or right until the character in the title is selected and then release the  button. Then use the joystick to select the required character using the on screen keyboard and select by twisting the joystick clockwise (zoom in) to amend.


To delete a character

Press and hold the  button, move the cursor using the joystick left or right until the character in the title is selected and twist anti-clockwise (zoom out), then release the  button.

Upper and Lower case characters

Press and hold the  button, and use the joystick up and down to select upper or lower case characters. Release the  button when complete.

Copying Titles

To copy the current title, move the cursor to copy and twist the joystick clockwise (zoom in) and then twist the joystick anti-clockwise (zoom out). To change camera while in the camera setup page, press and hold the  button and then the camera number required using the grey number buttons. Select paste using the joystick and twist clockwise (zoom in) the text that was copied will then be displayed in the current camera title. Use the amend title process to make any alterations.

Undo

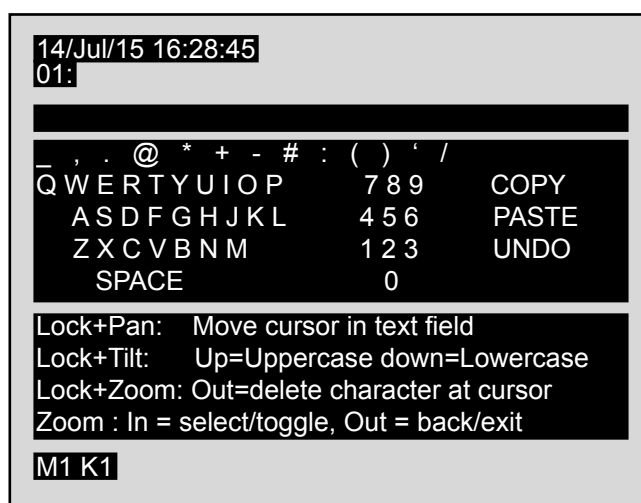
Selecting undo will remove any changes and display the last saved camera title.

4.3.8 Preset Titling

The matrix can be used to display preset text to help identify the preset.

Enter the matrix menus (see page 7), and then use the joystick to enter the Camera setup page, and then highlight preset titling.

The screen will then show





There are 20 characters available for titles.



Creating Preset Titles

Move the joystick around the on screen keyboard and twist the joystick clockwise to select the highlighted character.



Amending Titles

Press and hold the  button, move the cursor using the joystick left or right until the character in the title is selected and then release the  button. Then use the joystick to select the required character using the on screen keyboard and select by twisting the joystick clockwise (zoom in) to amend.


To delete a character

Press and hold the  button, move the cursor using the joystick left or right until the character in the title is selected and twist anti-clockwise (zoom out), then release the  button.

Upper and Lower case characters

Press and hold the  button, and use the joystick up and down to select upper or lower case characters. Release the  button when complete.

Copying Titles

To copy the current title, move the cursor to copy and twist the joystick clockwise (zoom in) and then twist the joystick anti-clockwise (zoom out) once. To change camera while in the camera setup page, press and hold the  button and then the camera number required using the grey number buttons. Select paste using the joystick and twist clockwise (zoom in) the text that was copied will then be displayed in the current preset title. Use the amend title process to make any alterations.

Undo

Selecting undo will remove any changes and display the last saved preset title.

4.3.9 Home Function

Camera can be set to move to a preset position or preset/mimic tour after a period of inactivity.

Enable or disable home function as required, twist the joystick clockwise (zoom in) to set action as required.

Twist joystick anti-clockwise (zoom out) to save and exit the menu.

4.3.10 Home Action

Set action for home function, options are preset, preset tour or mimic tour.

Highlight home action and then twist the joystick clockwise (zoom in) to set action as required, Options are preset, preset tour and mimic tour. To change preset or tour number use the grey numeric buttons.

Twist joystick anti-clockwise (zoom out) to save and exit the menu.

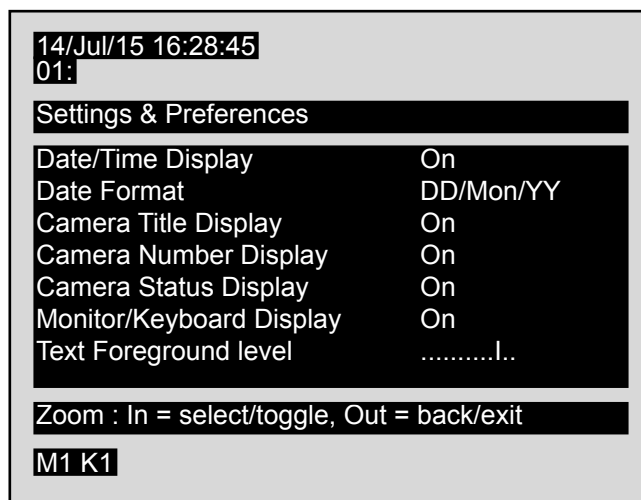
4.3.11 Home Delay

Used to set the time period of inactivity for the home function. Use the grey numeric buttons to enter the time required. Time is in seconds.

4.4 Settings and Preferences

Enter the matrix menus (see page 7), and then use the joystick to enter the Settings and Preferences setup page.

The screen will then show



Use the settings and preferences page to set what information is shown on the matrix monitor screen.

Options are:-

- Date/Time Display - Set if the date/time will be displayed on screen.
- Date Format - Choose the format of the date to be displayed.
- Camera Title Display - Set if the camera title is to be displayed on the screen.
- Camera Number Display - Set if the camera number is to be displayed on the screen.
- Camera Status Display - Used to show the camera status on the screen. This will show preset and tour information.
- Monitor/Keyboard Display - Set if the monitor and keyboard information will be displayed on screen.
- Text Foreground level - Used to adjust the level of the text foreground.
- Text Background level - Used to adjust the level of the text background.
- Menu Highlights level - Used to adjust the level of the highlight text cursor.
- Alarm Beep - Switch on/off the alarm buzzer, keyboard button press beep is not affected.
- Dead Cameras in Sequences - Used when auto sequence option is activated, choose if missing cameras will be skipped or shown as missing cameras.

5 Warranty

This information and/or any technical information – whether received verbally or writing – is given in good faith but without warranty and this also applies where proprietary rights of third parties are involved. The information provided does not release you from your obligation to check its validity and to test the products suitability for the intended purpose(s) and use(s). The application, use and installation of the products either in isolation or in conjunction with other products used, provided and installed by you on the basis of the technical advice issued are beyond our control and therefore remain entirely your own responsibility.

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