The new 27x NitePlus PTZ module for the Pan, Tilt and Zoom ranges of domes.

Camera Instruction Manual.

Superior Auto Focus

Superior Backlight Compensation

1. OSD Navigation.

The way to navigate to the menu options is dependant on the model of PTZ that the module has been installed in.

1.1 The PTZ500 Series.

When the module is installed in the PTZ500 series the OSD menu is accessed by **CALL 57** from a keypad that is connected to the PTZ via RS485 comms. Navigation by keyboard is generally done by the **TELE & WIDE** buttons and selection is made with the **NEAR & FAR** buttons. To exit the OSD menu use **CALL 57** on the keypad.

Using the Alien DVR, navigation is by the Zoom - and Zoom +, selection is by the Focus - and Focus + and enter is by the Iris -

1.2 The PTZ600 Series.

When the module is installed in the PTZ600 series the OSD menu is accessed by **CALL 63** from a keypad that is connected to the PTZ via RS485 comms.
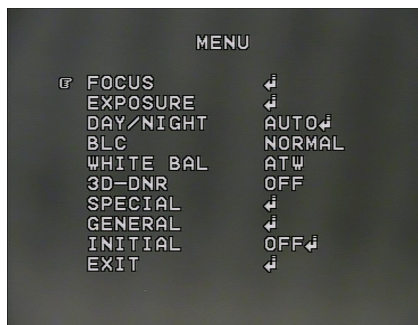
Navigation by keyboard is generally done by the **TELE & WIDE** buttons and selection is made with the **NEAR & FAR** buttons. To exit the OSD menu use **CALL 63** on the keypad or **EXIT**.

Using the Alien DVR, navigation is by the Zoom - and Zoom +, selection is by the Focus - and Focus + and enter is by the Iris -

NOTE: If using the PTZ700 keypad it will be necessary to enter the 63 CALL twice.
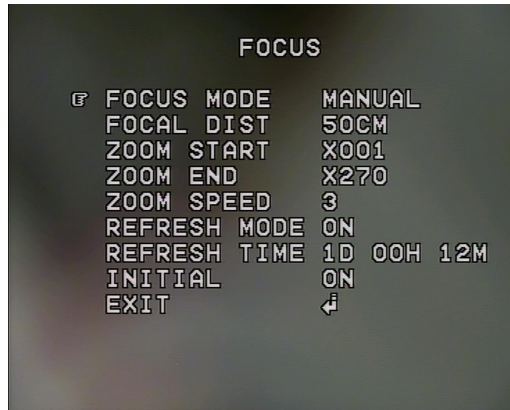
2. The module Menu Structure.

Once in the menu system of the camera module the following sub-menus are available.

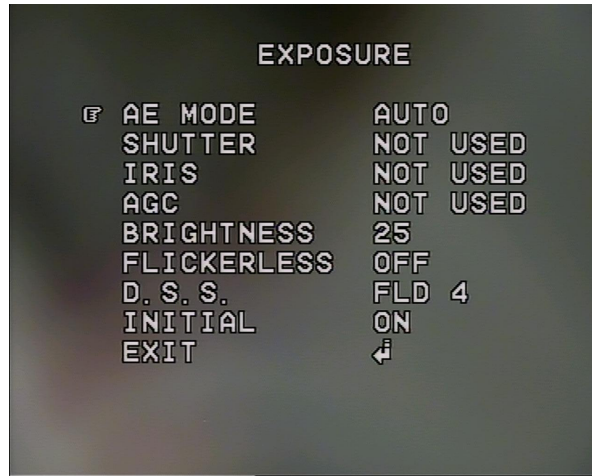|	
FOCUS<	Focus Mode - Focus Dist - Zoom Start - Zoom End Zoom Speed - Refresh Mode - Refresh Time ID - Initial - Exit<
EXPOSURE<	AE Mode - Shutter - Iris - AGC - Brightness - Flickerless - D.S.S. - Initial - Exit<
DAY/NIGHT<	D&N Mode - Dwell Time - Initial - Exit<
BLC	Normal - C1 - C2 - L1 - L2 - U1 - U2 - D1 - D2 - R1 - R2
WHITE BAL	ATW - Manual< - Indoor - Outdoor - Push<
3D-DNR	Off - Low - Middle - High
SPECIAL<	D-Effect - Sharpness - Freeze - Color - Motion< - Privacy< - Initial Off< - Exit<
GENERAL<	CAM ID - Display< - Cam Title< - Language - Protocol - Baudrate - Version - Initial< - Exit<
INITIAL	Off<
EXIT<	

2.1 The FOCUS menu.

This menu is for setting camera zoom and focus.

```
              FOCUS

 ☞ FOCUS MODE    MANUAL
   FOCAL DIST    50CM
   ZOOM START    X001
   ZOOM END      X270
   ZOOM SPEED    3
   REFRESH MODE  ON
   REFRESH TIME  1D 00H 12M
   INITIAL       ON
   EXIT          ↵
```

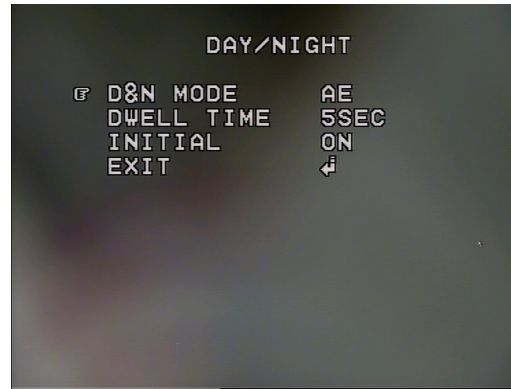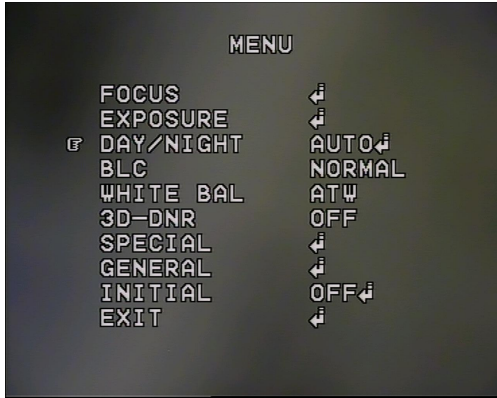|	
FOCUS MODE	Set up of automatic focus option. This allows the user to control the adjustment of the focus automatically by the module (AUTO) or to allow the operator to adjust the focus manually using the NEAR & FAR buttons on the keypad (MANUAL). PUSH allows for temporary automatic focus only when Menu button is pressed.
FOCAL DISTANCE	This option is to set the range of focus distance that the camera will focus to when performing an auto focus. The options are 150cm, 2m, 3m, 1cm, 10cm, 50cm, 1m. For example if the focal distance is set to 50cm the module will try to focus within 50cm of the focused object. On long runs use higher settings.
ZOOM START	This option is the setting of the minimum zoom that the module will allow x001 to x270. For example if this is set to x005 the operator will not be able to use the x001 to x004 modes when using the WIDE & TELE buttons.
ZOOM END	This option is the setting of the maximum zoom that the module will allow x1 to x270. For example if this is set to x27 the operator will only be able to zoom to the limit of the optical zoom and not the digital zoom up to x270.
ZOOM SPEED	This setting is the speed of the modules optical zoom function (x1 ~ x27) providing three speed options. 1 = 7.5 secs, 2 = 6 secs and 3 = 4 secs. 1 is the slowest and 3 is the fastest.
REFRESH MODE	This automatically adjusts the focus according to the Refresh Time set.
REFRESH TIME	This is the period set for automatically adjusting focus Eg. 1D 00H 12M Once daily 12 minutes after Refresh Mode switched to ON. There are a selection of time periods from 44 secs to 7 days.
INITIAL	When switched ON this option will reset all of the options within the FOCUS menu back to their default setting.
EXIT	Closes the sub-menu and returns to the Main menu.

2.2 Exposure Menu
This menu is for configuring the following exposure settings;

```
            EXPOSURE

☞ AE MODE        AUTO
  SHUTTER        NOT USED
  IRIS           NOT USED
  AGC            NOT USED
  BRIGHTNESS     25
  FLICKERLESS    OFF
  D.S.S.         FLD 4
  INITIAL        ON
  EXIT           ↵
```

AE MODE	**AUTO:** Automatically adjusts brightness according to available light. **Note: No manual adjustments when DAY/NIGHT in AUTO mode.**
SHUTTER	Not used. Only used when in Manual and Shutter Manual mode
IRIS	Not used. Only used when in Manual and Iris Manual mode
AGC	Not used. Only used when in Manual and AGC Manual mode
BRIGHTNESS<	This alters the brightness of the image output by the module from 0 to 48, where 0 is the darkest and 48 the brightest.
FLICKERLESS<	This setting turns the flickerless mode ON or OFF. Use near fluorescent light fittings.
D. S. S.< Digital Slow Shutter	Used in low light conditions for full colour surveillance. OFF switches off Digital Slow Shutter function. Can be adjusted from FLD2, 4, 6, 8, 12, 16, 24, 32, 64 and FLD128. This is the NiteDevil feature.
INITIAL<	When switched ON this option will reset all of the options within the Exposure menu back to their default setting.
EXIT	

2.3 Day/Night Menu

This menu is for configuring the following Day/Night settings;

AUTO<

The AUTO option sets colour during the day and switches to black & white at night.

NIGHT<

The NIGHT option stays in black & white.

DAY<

The DAY option stays in colour.

Select AUTO for colour during the day and switching to black & white at night, or NIGHT for staying in black & white day and night, or DAY for staying in colour day and night. The same parameters are detailed below.

D & N MODE   AE automatically adjusts brightness according to the available lighting. EXT.L and EXT.H operates by external signal. CDS uses sensor to determine light level.
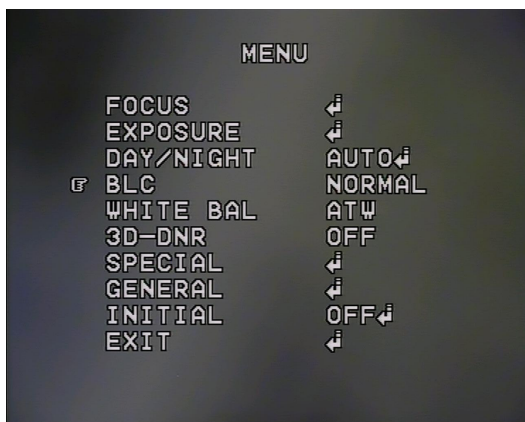
DWELL TIME   This setting allows you to determine the time delay of the switch over from day to night mode, or night to day mode, once the switching point has been reached. 1 to 10 seconds.

INITIAL   When switched ON this option will reset all of the options within the D & N menu back to their default setting.

2.4 BLC (Backlight Compensation)

This menu is for configuring the following BLC settings;

```
            MENU

         FOCUS       ↵
         EXPOSURE    ↵
         DAY/NIGHT   AUTO↵
      ☞  BLC         NORMAL
         WHITE BAL   ATW
         3D-DNR      OFF
         SPECIAL     ↵
         GENERAL     ↵
         INITIAL     OFF↵
         EXIT        ↵
```
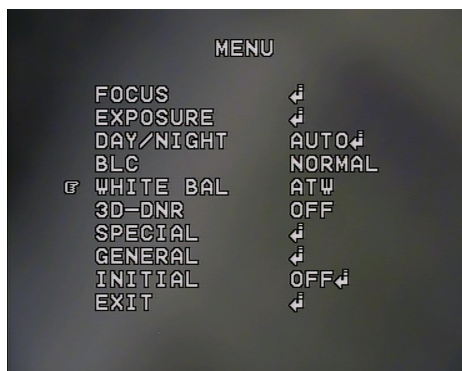
BLC OPTIONS

**NORMAL - C1 - C2 - L1 - L2 -U1 - U2
D1 - D2 - R1 - R2**

The backlight compensation provides areas that can be
adjusted for backlight compensation.

2.5 WHITE BAL (White Balance)

This menu is for configuring the following White Balance settings;

```
            MENU

         FOCUS       ↵
         EXPOSURE    ↵
         DAY/NIGHT   AUTO↵
         BLC         NORMAL
      ☞  WHITE BAL   ATW
         3D-DNR      OFF
         SPECIAL     ↵
         GENERAL     ↵
         INITIAL     OFF↵
         EXIT        ↵
```

ATW
This automatically adjusts colour according to the available lighting.

MANUAL<
Colour can be corrected manually by setting red and blue controls.

INDOOR
Use indoors to set colour temperature to 5400°K.

OUTDOOR
Use to set outdoor colour temperature to 3200°K.

PUSH<
Colour is automatically adjusted while the menu button is pressed in this temporary mode.

MANUAL<

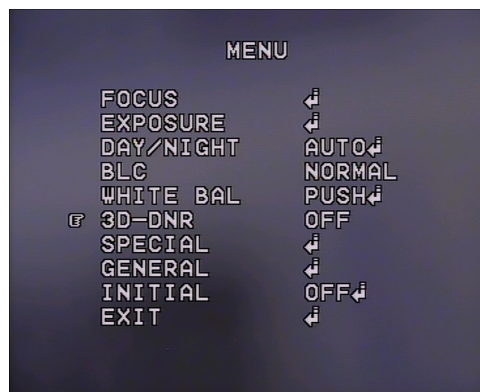|	
RED CONT	When the WB mode is set to MANUAL this option is used to control the amount of the RED image output by the module. Setting is from 0 (0% red) to 255 (100% red).
BLUE CONT	When the WB mode is set to MANUAL this option is used to control the amount of the BLUE image output by the module. Setting is from 0 (0% blue) to 255 (100% blue).

2.6 3D-DNR (Digital Noise Reduction)
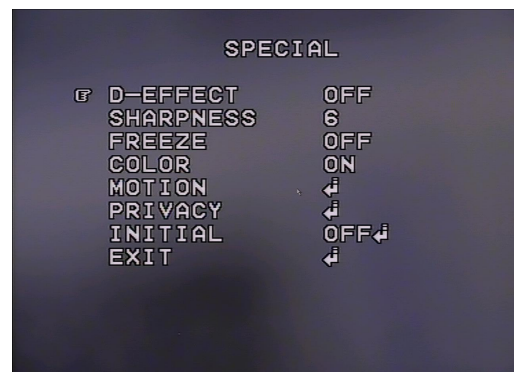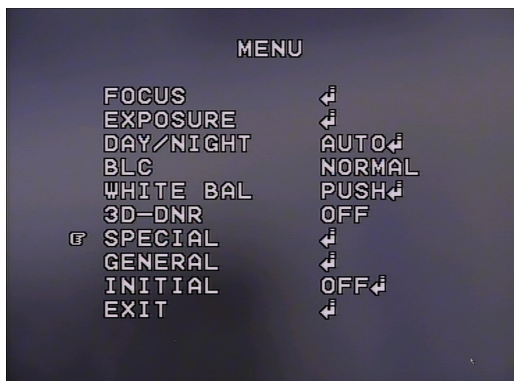This menu is for configuring the following Digital Noise Reduction settings;

3D-DNR can reduce image noise especially during low ambient light conditions when used with the D.S.S function in the Exposure menu.

You can select from the following options: OFF, LOW, MIDDLE or HIGH using the NEAR/FAR button.

2.7 SPECIAL (Picture settings & Motion options)
This menu is for configuring the Special settings;
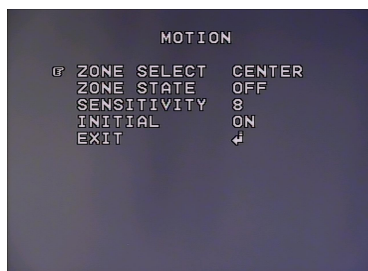
DEFFECT	Select from OFF, VFLIP, ROTATE or MIRROR. VFLIP turns picture upside down. ROTATE moves picture 90 degrees. MIRROR produces horizontal flip.
SHARPNESS	Adjusts sharpness of outlines. Can be set from 1 ~ 16.
FREEZE	Press to freeze picture.
COLOUR	Switch colour ON or OFF.
MOTION<	This option can be set so that when there is movement on the screen, the letters MD will be displayed on the screen.

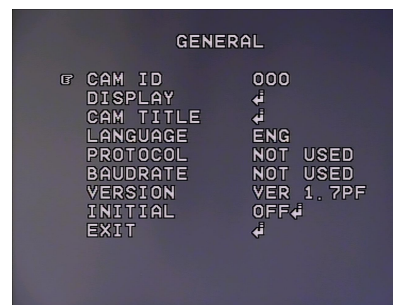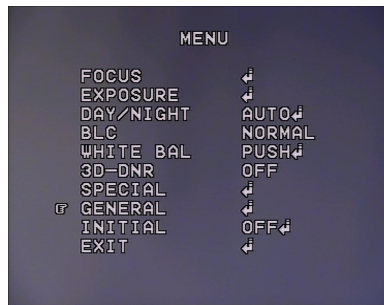|	

ZONE SELECT	Select from CENTER (centre of screen)
	          WHOLE (across whole screen)
	          UPPER (top half of screen)
	          OUT (perimeter of screen)

ZONE STATE	Enables or disables motion detection facility.
SENSITIVITY	Sets sensitivity level from 1 (low) to 15 (high sensitivity)
INITIAL	Defaults MOTION settings.
EXIT	Closes menu and returns to main menu.
PRIVACY<	The PRIVACY function is not compatible in this PTZ camera. Only available using the SONY N module.
INITIAL	When switched ON this option will reset all of the options within the SPECIAL menu back to their default setting.

2.8 GENERAL (Camera RS485, Display, Language & Title options)
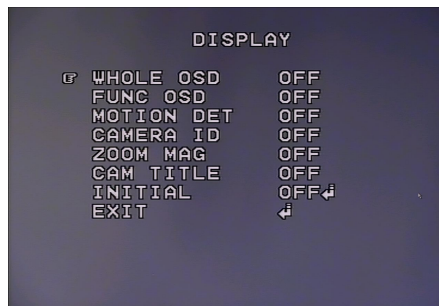This menu is for configuring the General menu settings;

CAMID   Sets the camera ID from 000 ~ 255 for addressing using RS485.

DISPLAY<   Displays camera information on the screen.

WHOLE OSD   Sets all display functions to ON.

FUNC OSD   Switches FUNC OSD display ON or OFF.

MOTION DET   Switch Motion Detection display ON or OFF.

CAMERA ID   Switches CAMERA ID display ON or OFF.

ZOOM MAG   Switches ZOOM MAGnification display ON or OFF.

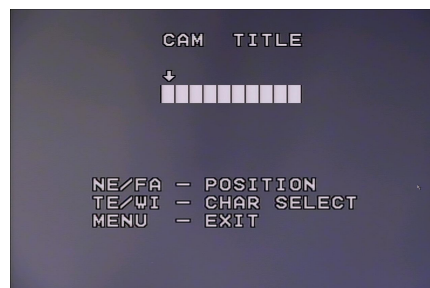**CAM TITLE**   Switches CAM TITLE display ON or OFF.

INITIAL<   Initialises default DISPLAY settings.

CAM TITLE<   Allows text to be displayed at the bottom of screen up to 10 characters. **Note will only work if you have switched CAM TITLE display to ON.**

You can select a title from the 48 characters shown below. Use the TELE/WIDE (Zoom) button to move the downward arrow to the character required which will flash. Select the character using the NEAR/FAR (Focus) button, then move to the next character. Finally press the Enter/Menu (Iris-) button to exit.

■	&	-	.	/	0	1	2	3	4	5	6	7	8	9	0
←	↑	↓	→	~	↵	A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

NOTE: The ■ character denotes a blank space.

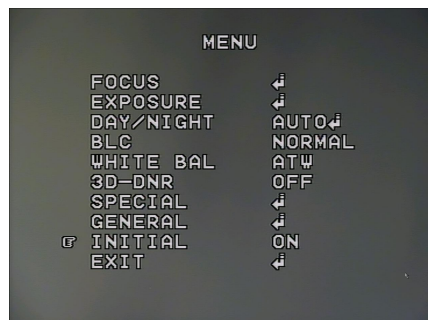| **LANGUAGE**	Displays language which can be set from ENG (English) to CHN (Chinese)
PROTOCOL	Not Used – Set in PTZ unit
BAUD RATE	Not Used – Set in PTZ unit
VERSION	Displays camera version
INITIAL	Defaults just the General menu settings
EXIT	Returns to the main menu

2.9 INITIAL (Defaults all menus and settings)

```
            MENU

    FOCUS         ↵
    EXPOSURE      ↵
    DAY/NIGHT     AUTO↵
    BLC           NORMAL
    WHITE BAL     ATW
    3D-DNR        OFF
    SPECIAL       ↵
    GENERAL       ↵
  ☞ INITIAL       ON
    EXIT          ↵
```

INITIAL< This defaults all menus and settings back to manufacturer's settings **except** the following: CAMID, CAM TITLE, LANGUAGE of **GENERAL** menu. Use this option with caution.

EXIT Press EXIT (IRIS-) to close menu.

Technical Specifications

Signal System	PAL
Scanning System	2:1 Interface
Scanning Frequency (H)	15.625kHz
Scanning Frequency (V)	50Hz
Image Sensor	¼" Sony Super HAD CCD
Sync. System	Internal
Total Pixels	795(H) x 596(V) 470K
Effective Pixels	752(H) x 582(V) 440K
Horizontal Resolution	500TVL
Video Output Level	1.0v p~p (75Ω, Composite)
S/N Ratio	More than 48dB (AGC Off)
Digital Zoom Ratio	10 x
Lens	27 x zoom Video AF (F1.6(W), F3.2(T) f=3.6 ~ 97.2mm)
Minimum Illumination	Day Mode 1 Lux (30IRE) Night Mode 0.5 Lux (30IRE) DSS 0.001 Lux (128FLD, 30IRE)
Day & Night System	IR Cut Filter & Digital Slow Shutter
White Balance	Auto/Push Auto/Outdoor/Indoor/Special
AGC	Auto/Manual (0~255)
Backlight Compensation	9 Backlight Compensation Zones
Flickerless	On/Off
Digital Slow Shutter	2 FLD ~ 128 FLD / Off
OSD Menu	On / Off
Focus Mode	Auto / Manual
Input Output Connections	Power: 2 Pin Terminal RS485: 2 Pin Circle Connector PTZ Control: 3 Pin Circle Connector Video Output: BNC Connector
Electronic Shutter Speed	1/50 ~ 1/10,000s (Manual, 8 steps)
Supplied Voltage	12v DC
Power Consumption	Max 4.56W / 380mA
Dimensions	48(W) x 51.5 (H) x 86.6 (D) mm
Weight (Net)	Approximately 250g