**The new 36x 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 PTZ645 / PTZ600 series

When the module is installed in the PTZ645/600 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.
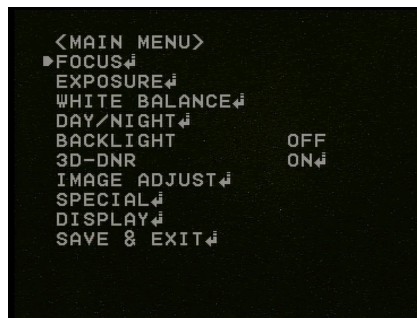
Navigation by keyboard is generally done by the **TELE & WIDE** buttons and selection is made with the **NEAR & FAR** buttons. To exit the OSD menu use **CALL 63** on the keypad or **EXIT**.

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.
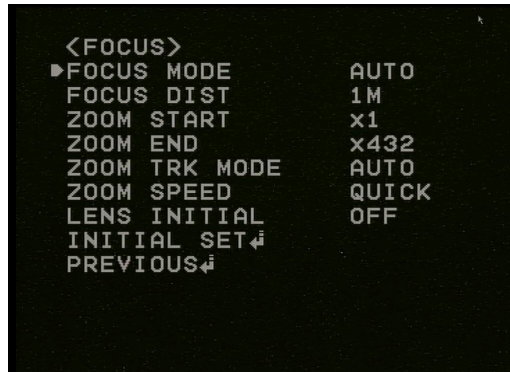
2. The module Menu Structure.

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

```
<MAIN MENU>
►FOCUS↵
 EXPOSURE↵
 WHITE BALANCE↵
 DAY/NIGHT↵
 BACKLIGHT          OFF
 3D-DNR             ON↵
 IMAGE ADJUST↵
 SPECIAL↵
 DISPLAY↵
 SAVE & EXIT↵
```

FOCUS<   Focus Mode - Focus Dist - Zoom Start - Zoom End
                    Zoom Track Mode – Zoom Speed – Lens Initial -
                    Initial Set - Previous<

EXPOSURE<   Brightness - Iris – Shutter - AGC – SENS- Up – Initial
                    Set - Previous<

WHITE BALANCE< WB Mode – Anti Rolling – Initial Set - Previous<

DAY/NIGHT<   D/N Mode – D/N Level – D/N Delay – Initial Set - Previous<

BACKLIGHT<   Off – BLC - WDR – ECL>

3D-DNR<   Off>

IMAGE ADJUST<   D-Effect - Image Freeze - Color - Sharpness - Gamma – Initial
                    Set - Previous<

SPECIAL<   Comm Adjust – Motion Det – Privacy Mask - Stabilizer – L/L
                    Sync – Factory Initial - Reboot - Previous<

DISPLAY<   Cam Title – Camera ID – Zoom Mag – Motion Det – Function
                    – Language – Initial Set - Previous
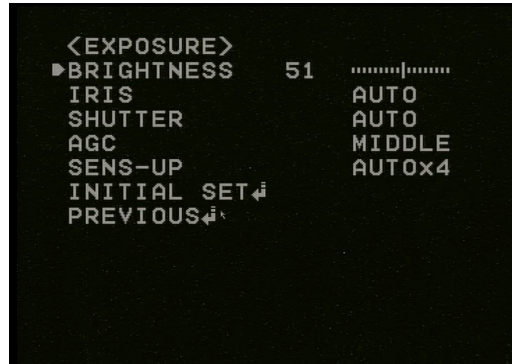
SAVE & EXIT<

2.1 The FOCUS menu.

This menu is for setting camera zoom and focus.

```
<FOCUS>
▶FOCUS MODE      AUTO
 FOCUS DIST      1M
 ZOOM START      x1
 ZOOM END        x432
 ZOOM TRK MODE   AUTO
 ZOOM SPEED      QUICK
 LENS INITIAL    OFF
 INITIAL SET↵
 PREVIOUS↵
```

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.

ZOOM TRACK MODE Off > Auto> Manual

ZOOM SPEED   Quick > Slow> Normal

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

PREVIOUS   Closes and returns to the previous menu.
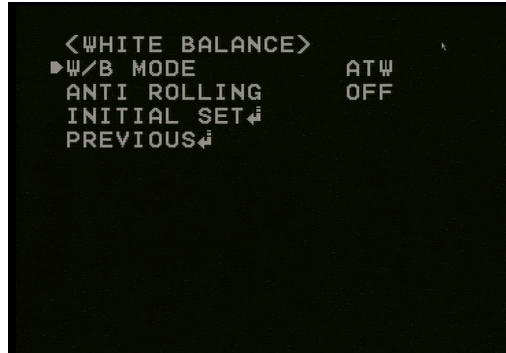
2.2 Exposure Menu

This menu is for configuring the following exposure settings;

BRIGHTNESS<	This alters the brightness of the image output by the module from 1 to 100, where 1 is the darkest and 100 the brightest.
IRIS<	Auto / Manual. Only used when in Manual mode
SHUTTER	Off / Auto/ A-FLK /Manual< A-FLK This setting turns the flickerless mode ON for use near fluorescent light fittings.
AGC	Low / Middle / High
SENS UP<	Used in low light conditions for full colour surveillance. OFF switches off SENS UP function. Can be adjusted from x2, 4, 8, 16, 32, 64 and 128. This is the NiteDevil feature. This slows down the shutter speed to grab more light.
INITIAL SET<	When switched ON this option will reset all of the options within the Exposure menu back to their default setting.
PREVIOUS	Return to previous menu.

2.3 White Balance

This menu is for configuring the following White Balance settings;

W/B MODE   ATW **/** Indoor /Outdoor / Push

This automatically adjusts colour according to the available lighting. ATW (Alternating White Balance) is for general outdoor use as it is for changing colours and is the popular setting. Alternatively use the Indoor or Outdoor setting. Use Push to automatically adjust colour whilst the menu button is pressed in this temporary mode.

ANTI ROLLING   OFF / ON

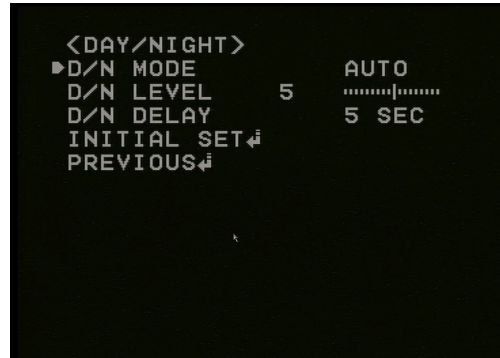Standard anti rolling technology initiated.

INITIAL SET<   When switched ON this option will reset all of the options within the White Balance menu back to their default setting.

PREVIOUS   Return to previous menu.

2.4 Day/Night Menu

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

D/N MODE   AUTO / DAY / NIGHT /EXT /CDS
The AUTO option sets colour during the day and switches to black & white at night.
The DAY option sets colour during the day and at night.
The NIGHT option sets black & white during the day and at night.
The EXT option operates by external signal.
CDS uses sensor to determine light level.

D/N LEVEL<
This option sets the detection level when switching from day to night.

D/N DELAY   5 / 10 / 15 / 30 / 60 seconds
This setting allows you to determine the time delay of the switch over from day to night mode, or night to day mode, once a sustained light level is reached for the delay time set from 5 to 60 seconds.

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

PREVIOUS
Return to previous menu.

2.5 Backlight Menu   OFF / BLC / ECL

This menu is for configuring the following backlight compensation settings.
The settings allow for higher light levels detected in the picture frame to be dumbed
down allowing for a more evenly spread of light

OFF
Backlight switched off

BLC   MIDDLE / HIGH / LOW
This sets the level of backlight compensation applied by the camera.

ECL   AREA SETTING / ALL AREA SET / MASK COLOR / ECL LEVEL
This sets backlight compensation according to area in picture frame that has higher
light level.

  AREA SETTING OFF / ON
  The area or areas that are defined in the 16 x Area Setting display screen.

  ALL AREA SET   OFF / ON
  Allows all 16 areas to be switched on and off.

  MASK COLOR   GREY / DARK GREY / BLACK
  Allows area/s to be given a masking colour.

  ECL LEVEL 1 ~ 100
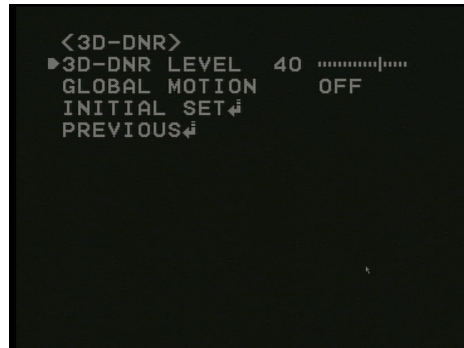 Adjust overall light compensation level.

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

PREVIOUS
Return to previous menu.

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 SENS-UP function in the Exposure menu.

3D-DNR LEVEL 0 ~ 63

This option allows you to set the level of digital noise reduction. Start at approximately 32 half way.

GLOBAL MOTION OFF / ON

INITIAL SET

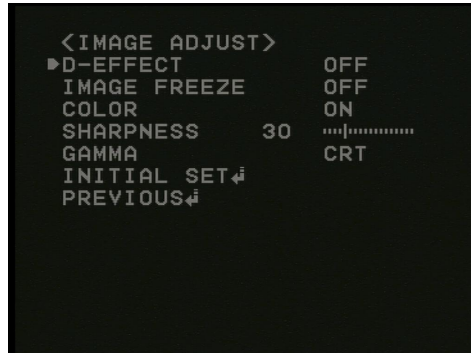When switched ON this option will reset all of the options within the 3D-DNR menu back to their default setting.

PREVIOUS

Return to previous menu.

2.7 IMAGE ADJUST

This menu is for configuring the Image settings.

```
<IMAGE ADJUST>
▶D-EFFECT          OFF
 IMAGE FREEZE      OFF
 COLOR             ON
 SHARPNESS     30  ▯▯|▯▯▯▯▯▯▯▯▯
 GAMMA             CRT
 INITIAL SET↵
 PREVIOUS↵
```

DE-EFFECT   Select from OFF, VFLIP, ROTATE or MIRROR.
                             VFLIP turns picture upside down.
                             ROTATE moves picture 90 degrees.
                             MIRROR produces horizontal flip.

IMAGE FREEZE   OFF / ON   Press to freeze picture.

COLOUR   Switch colour ON or OFF.

SHARPNESS   Adjusts sharpness of outlines.   Can be set from 1 ~ 100.

GAMMA   CRT / LCD / USER
                             Sets monitor type and Gamma level.
            USER   Adjusts Gamma level between 0.45 ~ 1.0

INITIAL SET
When switched ON this option will reset all of the options within the Image Adjust
menu back to their default setting.

PREVIOUS
Return to previous menu.

2.8 SPECIAL

This menu is for configuring the Special settings.
These include COMM ADJUST (do not change), Motion, Privacy Mask, Stabilizer,
L/L Sync, Factory Initialise, Reboot and Previous.

```
<SPECIAL>
▶COMM ADJUST↵
 MOTION DET          OFF
 PRIVACY MASK        OFF
 STABILIZER          OFF
 L/L SYNC            INT
 FACTORY INITIAL↵
 REBOOT↵
 PREVIOUS↵
```

COMM ADJUST   Do not change these menu settings as can stop module access.
These are set in the PTZ menu using a CALL 95 or via dipswitch settings.

MOTION OFF / ON
This option can be set so that when there is movement on the screen, the letters MD
will be displayed on the screen. Not generally used on PTZ cameras that constantly
move.

```
<MOTION DET>
▶ZONE NUMBER      ZONE1
 ZONE STATE       OFF
 WIDTH         30  ▪▪▪|▪▪▪▪▪▪▪▪▪
 HEIGHT        30  ▪▪▪|▪▪▪▪▪▪▪▪▪
 MOVE X        30  ▪▪▪|▪▪▪▪▪▪▪▪▪
 MOVE Y        25  ▪▪|▪▪▪▪▪▪▪▪▪▪
 MOTION ZOOM      OFF
 SENSTIVITY       50
 MD ALARM OUT     ON
 INITIAL SET↵
 PREVIOUS↵
```

```
<MOTION ZOOM>
▶TARGET ZOOM      X1.5
 D-WELL TIME      15 SEC
 PREVIOUS↵
```
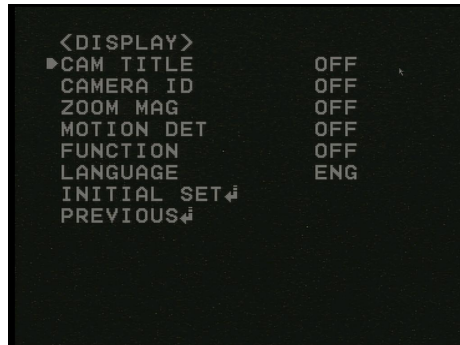
> MOTION ZOOM allows the camera to zoom in when motion detected. Note
> that as most PTZs are in constant movement this camera module option is
> rarely used.

PRIVACY MASK   The PRIVACY function only compatible if this is available in
the PTZ menu also.

```
<PRIVACY MASK>
▶MASK NUMBER      ZONE1
 MASK STATE       OFF
 MASK COLOR       GRAY
 WIDTH         20  ▪|▪▪▪▪▪▪▪▪▪▪▪
 HEIGHT        20  ▪|▪▪▪▪▪▪▪▪▪▪▪
 MOVE X        0   ▪▪▪▪▪▪|▪▪▪▪▪
 MOVE Y        0   ▪▪▪▪▪▪|▪▪▪▪▪
 MASK CENTRALIZE↵
 INITIAL SET↵
 PREVIOUS↵
```

MASK NUMBER   Select from 1 ~ 8 privacy zones

MASK STATE   Switches the mask number selected to OFF or ON.

MASK COLOR   Mask State ON then select from GREY, YELLOW, GREEN, RED, BLUE, BLACK or WHITE.

WIDTH & HEIGHT   Use arrow keys to determine size of this mask

MOVE X or MOVE Y   Use arrow keys to position this mask.

MASK CENTRALIZE   Selecting this moves the mask area to a central position.

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

PREVIOUS   Return to previous menu.

STABILIZER   **OFF / ON**
This option helps reduce the effects of vibration.

L/L SYNC   **INT / L/L**
This is normally set as INT internal. If using Line Lock this can halt a rolling picture.

FACTORY INITIAL Use to return camera back to default settings.

REBOOT   Use to reboot camera module.
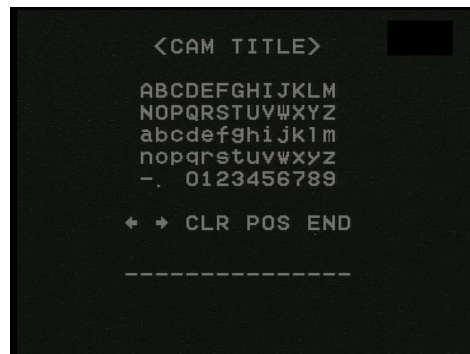
PREVIOUS   Return to previous menu.

2.9 DISPLAY (Camera Title, ID and Display options)

CAM TITLE   **OFF / ON**
This option if switched to ON allows you to display a camera title. If you enter the camera title menu you can enter up to a 15 character title. The POS option allows you to select the position where the title is displayed.

CAMERA ID   **OFF / ON**
This option allows you to set a 3 character ID position.
Press the menu key to enter and set position using arrow keys.

ZOOM MAG   Switches ZOOM MAGnification display ON or OFF.

MOTION DET   Switch Motion Detection display ON or OFF.

FUNCTION   Switches FUNCTION display ON or OFF.

LANGUAGE   **ENG** Displays language used.

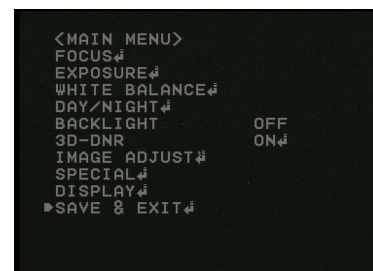**INITIAL**   Initialises default DISPLAY settings.

PREVIOUS   Return to previous menu.

2.10 SAVE & EXIT   Enter to save and exit menu.

Technical Specifications

Signal System	PAL
Scanning System	2:1 Interlace
Scanning Frequency (H)	15.625kHz
Scanning Frequency (V)	50Hz
Image Sensor	¼" IT CCD
Sync. System	Internal
Electronic Shutter Speed	1/50 ~ 1/90,000 sec
Effective Pixels	752(H) x 582(V) 440K
Horizontal Resolution	540TVL (B/W 600TVL)
Video Output Level	1.0v p~p (75Ω, Composite)
S/N Ratio	More than 52dB (AGC Off)
Digital Zoom Ratio	12 x
Lens	36 x zoom Video AF (f=3.4~122.4mm, F1.6(W)-F4.5(T)
Minimum Illumination	Day Mode .1 Lux / Night Mode 0.0002 Lux (DSS ON)
Day & Night System	IR Cut Filter & Digital Slow Shutter
White Balance	AWB / ATW/Push /Manual /Indoor / Outdoor
AGC	Off / High / Middle / Low / Manual
Backlight Compensation	High / Middle / Low
Eclipse	On/Off / (16 zones)
Digital Slow Shutter	2 FLD ~ 128 FLD / Off
OSD Menu	On / Off
WDR	Front / Centre / Rear / User Long & Short
D-Effect	Mirror / V-flip / Rotate
Privacy Mask	On / Off (8 Zones)
Supplied Voltage	12v DC
Power Consumption	Max 6W
Dimensions	50(W) x 57.5 (H) x 87.4 (D) mm
Motion Detection	On / Off (4 Zones)