SmartVu IP Camera

Dome

Installation Guide

Version 1.0

Table of Contents

Important Safeguards

Read Instructions
All the safety and operating instructions should be read before the unit is operated.

Power Sources
This unit should be operated only from the type of power source indicated on the manufacturer's label.

Servicing
Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards.

Refer all servicing to qualified service personnel.

Ventilation
Ensure unit is properly ventilated to protect from overheating.
All the safety and operating instructions should be read before the unit is operated.

To prevent fire or shock hazard, do not expose this equipment to rain or moisture. The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user of this equipment that there are dangerous voltages within the enclosure which may be of sufficient magnitude to constitute a risk of electric shock.

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.

This section contains the regulatory declarations for the EU for the Camera.
This product is marked with the CE symbol and indicates compliance with all applicable Directives. A "Declaration of Conformity" is held at Dedicated Micros Ltd, 1200 Daresbury Park, Daresbury, Cheshire WA4 4HS http://www.dedicatedmicros.com
Hereby, Dedicated Micros LTD, declares that this Unit Camera is in compliance with the essential requirements and other relevant provisions of Directive 95/5/EC.
Marking by the symbol CE indicates compliance of this Dedicated Micros product to the Electromagnetic Compatibility Directive 89/336/EEC, and the Low Voltage Directive 73/23/EEC of the European Union. Such marking is indicative that this system meets the following technical standards
• EN 62000-3-3 Limitations of voltage changes, fluctuations and flicker in public low-voltage supply systems for equipment with rated current up to 16A.
• EN 61000-3-2 Limits for harmonic current emissions for equipment with rated current up to 16A.
• EN 55024:2010.
Further details about these applicable standards can be obtained from Dedicated Micros Ltd., 1200 Daresbury Park, Daresbury, Cheshire WA4 4HS
1.01002

RF Interference warning
This is a class A product. In a domestic environment this product may cause radio frequency interference, in which case the user may be required to take adequate measures.
1.01003

Regulatory Notes and FCC and DOC Information
(USA and Canadian Models Only)

Warning: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

If necessary, the user should consult the dealer or an experienced radio/television technician for corrective action. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems".

This booklet is available from the US Government Printing Office, Washington, DC20402, Stock No. 004-000-00345-4.

This reminder is provided to call the CCTV system installer's attention to Art. 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

$$C \in$$

CE Mark
If this product is marked with the CE symbol it indicates compliance with all applicable directives.,Directive 89/336/EEC.,A 'Declaration of Conformity' is held at Dedicated Micros Ltd.,1200 Daresbury Park, Daresbury, Cheshire, WA4 4HS, UK.

Installing the Unit

Before you start check the contents of the box

The dome camera can be mounted in two ways: ceiling mount for installation into a tile ceiling; surface mount for installation directly to a hard surface or mounting structure.

Parts Supplied Vandal Dome

• 3 x 70 mm (2.8") screws
• 3 x 30 mm (1.2") screws
• 3 x 40 mm (1.6") anchors
Surface mounting template
Junction box plate screw kit
Mounting screw kit
Allen key
RJ45 coupler
BNC test cable
Vandal dome camera
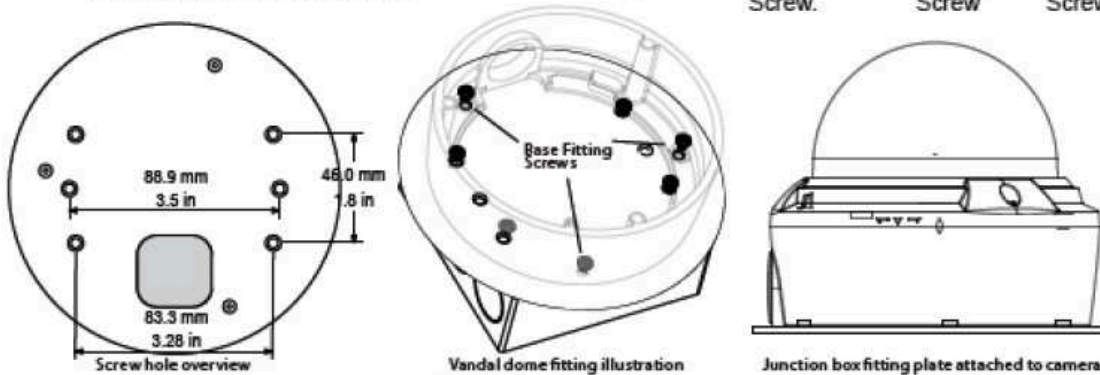
Parts Supplied Internal Dome

• 3 x 70 mm (2.8") screws
• 3 x 30 mm (1.2") screws
• 3 x 40 mm (1.6") anchors
Mounting template
Allen key
RJ45 coupler
BNC test cable
Internal dome camera

Junction box plate allows fitting of either Vandal dome or Indoor dome to standard 2S, 4S and Octagon junction boxes.

NOTE: Flush side of junction box plate should be attached to junction box

Junction Box fitting plate accessories:

Junction Box Fitting plate ------------------------1
2S / 4S plate screws (KM3.5 Type) -----------4
Octagon fitting screws (KM4 Type)-------------2
Base Fitting Screws PWM3 --------------------3

Base Fitting Screw.   Octagon Screw   2S / 4S Screw

88.9 mm
3.5 in

46.0 mm
1.8 in

Base Fitting Screws

83.3 mm
3.28 in

Screw hole overview   Vandal dome fitting illustration   Junction box fitting plate attached to camera

Internal Dome

Surface Mount Installation

Refer to the Templates and quick guide for more information.
1 To remove the dome cover, press the release tab, lift slightly to clear the catch and rotate it counter-clockwise and gently pull it away from the camera body. The inner liner can now be removed.
2 Using the template supplied at the box, mark and drill the holes required for fixing. If performing a direct attach install use the three 70 mm mounting screws, attach the dome camera to the surface as shown on the template. Do not over tighten the fixing screws. The screws can be used on their own if the surface is of a suitable material (e.g. wood), but plastic anchors must be used where the surface is of brick or masonry construction. Run the ethernet cable to the camera. Cable may be fed through the ceiling or through the cut out in the side of the camera shroud. Remove the cut out plug.
3 If using the base install method remove the base as per the recess mount instructions, and attach using the 3 x 30mm screws. The screws can be used on their own if the surface is of a suitable material (e.g. wood), but plastic anchors must be used where the surface is of brick or masonry construction. Run the ethernet cable to the camera. Cable may be fed through the ceiling or through the cutout in the side of the camera shroud. Remove the cutout plug.
4 Connect the ethernet cable to the RJ45 using the coupler supplied. If the camera is connected to a switch that is not POE capable, refer to 'POE Injector Cable' and install the POE injector cable as described.

Recess Mount Installation

Refer to the Templates and quick guide for more information.
1 To recess mount the camera, the shroud must be removed. To remove the dome cover, press the release tab, lift slightly to clear the catch and rotate it counter-clockwise and gently pull it away from the camera body. The inner liner can now be removed.
2 Undo the screws holding the shroud as shown in the diagram in the quick guide(with the padlock markings) and using the template supplied in the box, mark and cut a hole using the supplied template. A suitably sized hole saw can also be used.
3 To prepare for installation use a suitable screwdriver to loosen the three fixing clamps sufficiently to accommodate the thickness of the tile or ceiling.
4 Insert the camera ensuring the mounting arms are not extended
tighten the screws on the mounting arms until contact is made with the inner mounting surface. Do not over tighten the clamps.
5 Connect the ethernet cable to the RJ45 using the coupler supplied. If the camera is connected to a switch that is not POE capable, refer to 'POE Injector Cable ' and install the POE injector cable as described.

Vandal Dome

Surface Mount Installation

Refer to the Templates and quick guide for more information.
1 To remove the dome cover, undo the three security screws using the allen key provided, the camera body. The inner liner can now be removed.
2 Using the template supplied at the rear of this manual, mark and drill the holes required for fixing. If performing a direct attach install use the three 70 mm mounting screws, attach the dome camera to the surface as shown. Do not over tighten the fixing screws. The screws can be used on their own if the surface is of a suitable material (e.g. wood), but plastic anchors must be used where the surface is of brick or masonry construction. Run the ethernet cable to the camera. Cable may be fed through the ceiling or through the cutout in the side of the camera shroud. The base can be removed by unscrewing the screws marked with the padlock to allow cable routing through the side. Unscrew the cutout plug and feed the cables through the hole.
3 If using the base install method remove the base instructions above, and attach using the 3 x 30mm screws. The screws can be used on their own if the surface is of a suitable material (e.g. wood), but plastic anchors must be used where the surface is of brick or masonry construction. Run the ethernet cable to the camera.
4 Connect the ethernet cable to the RJ45 using the coupler supplied. If the camera is connected to a switch that is not POE capable, refer to 'POE Injector Cable' and install the POE injector cable as described. Re stall the cover making sure that the arrows on the base are aligned.

Connections

The camera is supplied with the following connections

RJ45 Network interface

Audio input (RCA)
Audio output (RCA)
DC12V (1A) 12V DC power terminal. Make sure the correct polarity (+/-) marked on the power connector when connecting to power.
      Minimum power requirement is 550mA / 6.6W (With IR)
      Minimum power requirement is 450mA / 5.4W (Without IR)

Configuring the Unit

Using the Unit with Secure Closed IPTV

1) Connect the camera to a Closed IP Network switch using Cat5 network cable. The POE version of this camera will draw power from with the DM/NSW/CPP model switch, or with DM/NSW/CP model switch if connected to a POE injector and separate power supply.
2) Ensure that the Closed IP NVR or Console that the switch is connected to is in Configuration mode to allow new cameras connect.
3) Power up the camera and wait for the on-screen acknowledgement on the monitor attached to the Closed IP NVR or Console. Alternatively check the Camera Overview web page on the Closed IP NVR or Console to determine out the camera status.
4) Once the camera has been detected and added, remember to secure the switch by moving out of Configuration mode, failure to do this will leave the Closed IPTV system unsecured.
Locating the Unit IP address
The unit is configured using on-board webpages. This can be done remotely once the unit has been installed in its chosen location, using the web browser on a PC in the same subnet as the unit.
The unit configuration pages can be accessed using the unit IP address or DNS name. The unit has DHCP factory enabled. When the unit is connected to a DHCP network for the first time, an IP address is automatically assigned by the network switch or router it is connected to. Most routers will have the facility to enable DHCP and DNS, if it is not available, contact your network administrator.
The default DNS address for each unit is factory set as the serial number. This address can be found on the serial label on the unit or via the packaging the unit came in.
If DHCP and DNS are not available, the IP address can be found by connecting an analogue monitor to the BNC connection of the camera. The unit IP address is displayed on the analogue video output for 10 minutes from powering the unit on.
The DNS or IP address can be typed directly into the address bar of a web browser.
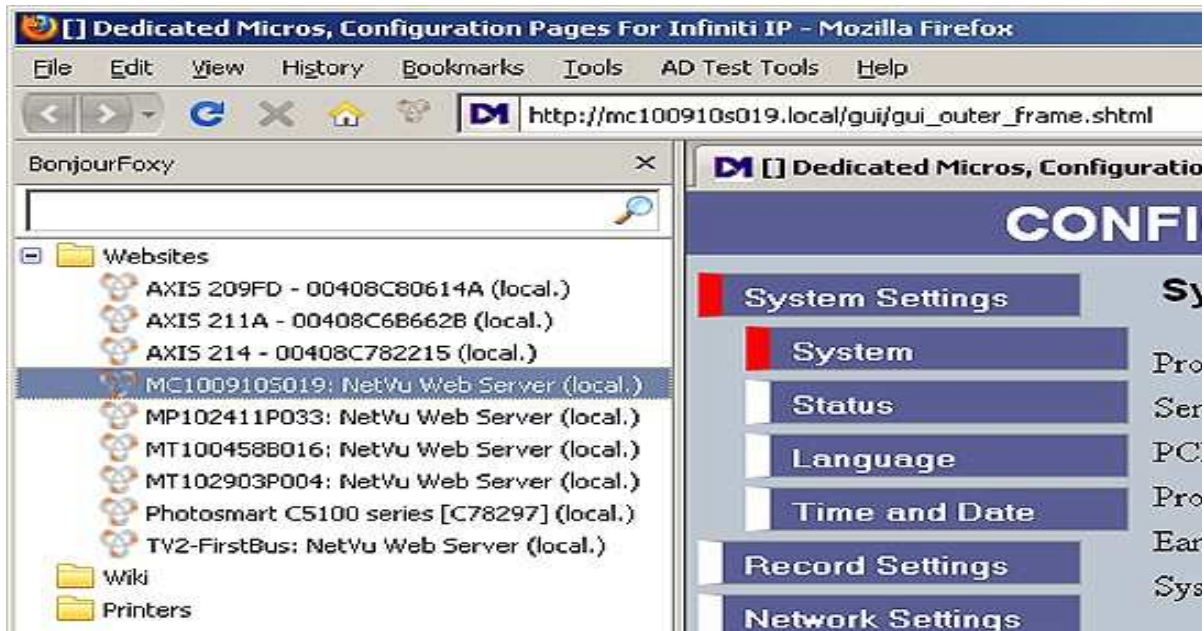
Note: *The unit's DNS address can be changed subsequently to something more memorable or meaningful than its serial number by editing the System name option in the System configuration page.*

Zero_conf configuration

If a permanent IP address is not assigned to the unit, it will attempt to contact the DHCP server every time it starts up, and periodically thereafter. The unit support zero-configuration networking (sometimes known as Bonjour), this enables automatic discovery of computers, devices, and services on IP networks. Zero-configuration uses industry standard IP protocols to allow devices to automatically discover each other without the need to enter IP addresses or configure DNS servers. By loading a suitable free add-on to your web browser such as Bonjour for Windows for Internet Explorer or BonjourFoxy for FireFox zero configuration devices such as this unit can easily be discovered and accessed.

Accessing the Configuration Pages

The unit is configured using the on-board configuration pages. To access these:
1. Launch a web browser, preferably on a PC on the same subnet as the unit.
6.12
2. Type the IP address (or DNS name if there is no fixed IP address) of the unit into the address bar.
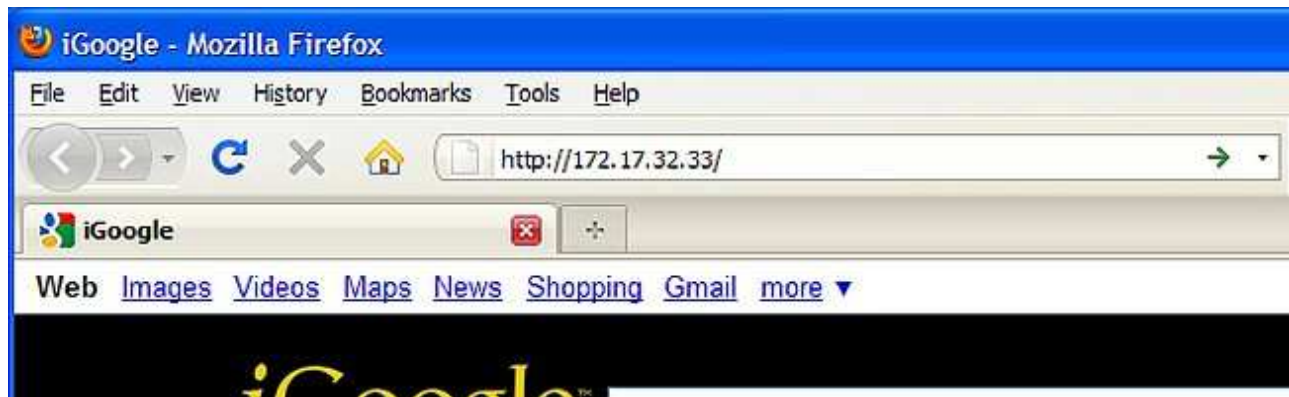
3. If prompted, enter a username and password. The default settings are; username:dm and password:web.
4. The Main Menu page will be displayed.

System Settings

The menus under the System Settings heading allow the unit's core settings to be viewed, changed and the system software upgraded.

The Attributes option displays details about the unit including the IP address, unit serial number, MAC address and software version.

The Status page displays information about the unit's operating condition, shows how long the unit has been operating and the reason for the last reset. It also shows the camera status.

The Language page allows the system language to be set. The language can also be changed for the current session only.

The Time and Date page allows the unit time and date settings to be adjusted, including setting the timezone.

The Features page allows control of the different features that are available within the software including control of the display resolution.

The Maintain page allows the current configuration to be saved, and for previously saved settings to be loaded.

Attributes

This menu shows the general information about the unit including the version of software installed, the unit's serial number and the allocated DHCP IP address.

The system will display a warning if user accounts have not been set up. These can be eliminated by setting up accounts in 'Display->User Accounts'.

Product Descriptor Details the product model.
Serial Number Identifies the serial number of the specific unit.
PCB Serial Number Displays the PCB (Printed Circuit Board) serial number of the unit.
Product Code Displays a code identifying the unit's specification.

Earliest Recording Displays the date/time of the earliest recording held on the unit.
System Name This field can be edited to allocate a name to the unit, which can be typed directly into a browser to access the configuration pages. This is displayed when the unit is accessed via NetVu ObserVer and is sent when transmitting information to a Remote Video Response
Centres (RVRC).
MAC Address This is the MAC address assigned to the unit.
IP Address This is the IP address allocated to the unit.
Sub Net This is the subnet mask for the unit
Gateway This is the IP address of the default gateway (router) assigned by the DHCP server.
Number of Cameras Shows the number of camera channels on the unit i.e 1
Global PPS Details the unit Global PPS (Pictures Per Second) recording rate.
Video Storage Gbytes Highlights the available video storage capacity in Gigabytes.
Video Standard Displays the video standard adopted by the unit i.e. PAL, NTSC.
Software (Red) Links to the System Settings->Software details page
Time/Date (Green) Links to the System->Time and Date page
Accounts (Yellow) Links to the Viewer Settings->User Accounts details page
Network (Blue) Links to the Network Settings->Network details page
Refresh (Purple) Refreshes the current page

Software

This page details the installed software and may be needed if calling Technical Support.

Software Revision	
Software Revision	6.6 (12.0081) NBMB 2011-05-04 11:11
Loader Revision	6.9 (12.0026)
Webpage Revision	wp8 1.0 (5630) ns
Boot Software Rev.	NBMB version 02.3 ecos ancestory v2_0_65 - built Nov 11 2010
Cam CFG Version	0.0
Applet Version	6.19
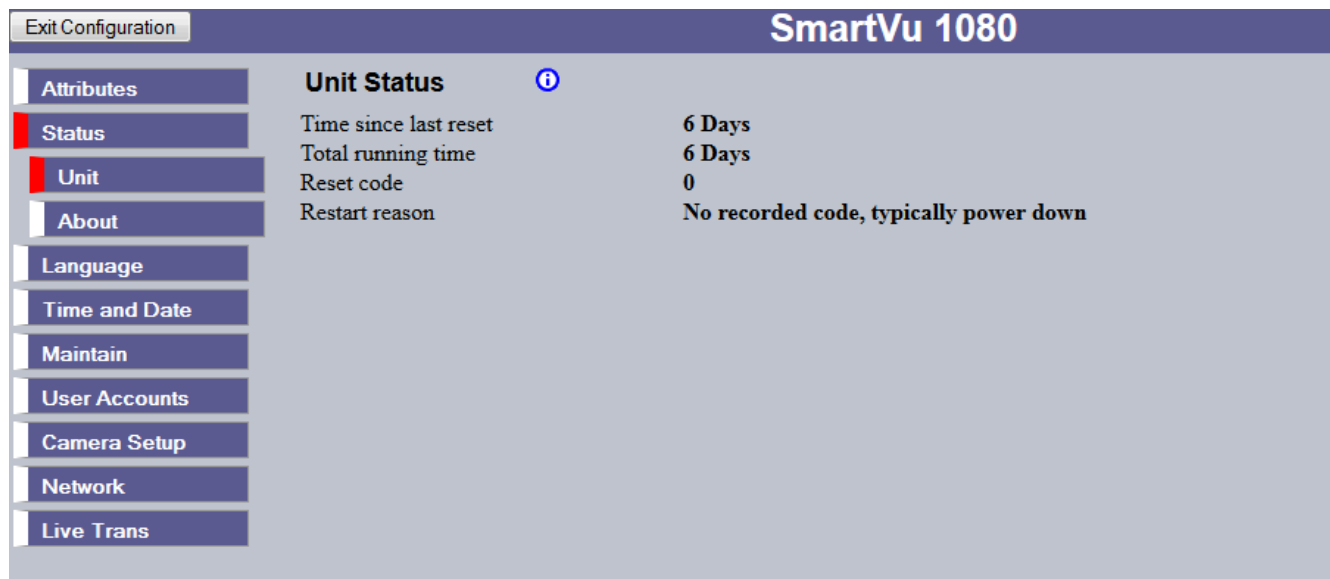
System | | | About | Refresh

System (Red) Links back to the System Settings page
Diagnostics (Blue) Opens the *Status->Diagnostics* page.
Refresh (Purple) Refreshes the current page

Status

Unit Status

This menu details information regarding the status of the unit, including the total time the unit has been operating and the time since its last reset.

Time since last reset Details the time since the unit was last reset.
Total running time Details the total time the unit has been operational.
Reset code The last reset code used is displayed.
Restart reason The reason for the last restart is displayed i.e. Controlled User Reset.
Refresh (Purple) Refreshes the current page

About

This page provides quick links to the pages required to fault find.
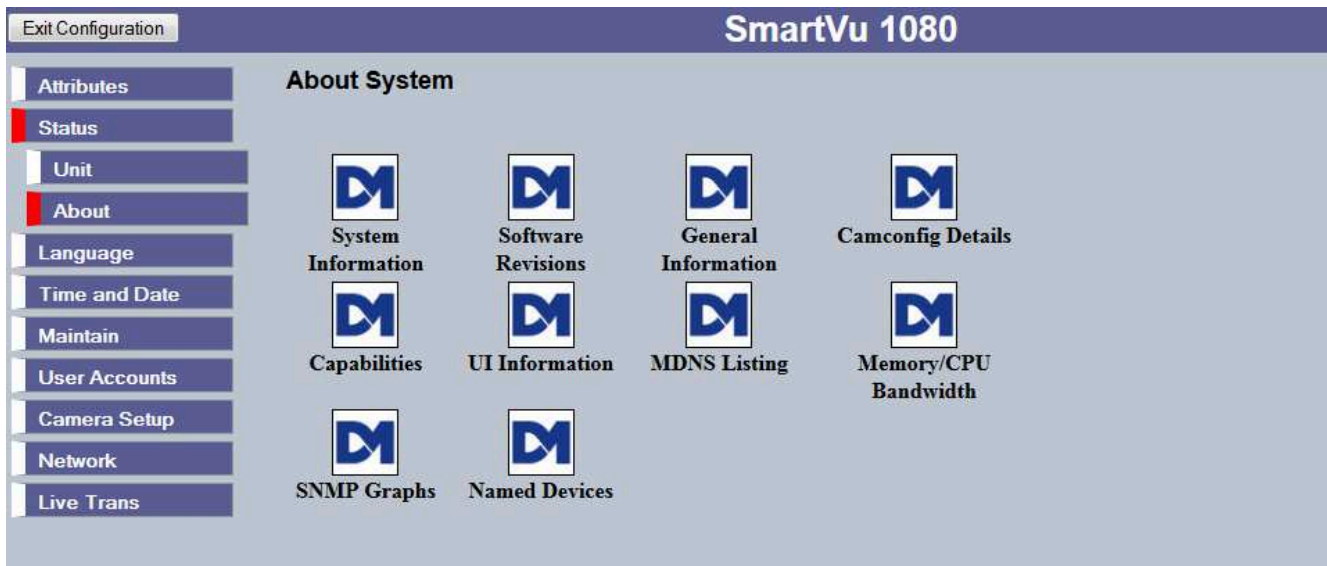
System Information Opens the *System Settings->System* page.
Software Revisions Opens the *System Settings->Software* page.
General Information Opens the *General Information* page (refer to *'General Information'*).
Memory / CPU Bandwidth Opens the Memory / CPU Bandwidth *Details* page (refer to *'Memory / CPU Bandwidth '*).
Camconfig Details Opens the *Camconfig Details* page (refer to *'Camconfig Details'*).
Capabilities Opens the *Capabilities Details* page (refer to *'Capabilities Details'*).
UI Information Opens the *UI Information* page (refer to *'UI Information'*).
MDNS Listings Opens the MDNS listings page (refer to *'MDNS Listing'*).
Named devices Opens the Named devices page (refer to *'Named devices'*).

General Information

This page gives an overview of the units current settings including IP address, connections to the camera, the locations that data is being read from and written to, and which recording profile is active.

General Information

Useful Information

Setting	Value
Current recording profile	UNSET Mode
Features enabled	Text in Image EMail Reporting Remote Reporting Automatic FTP Download Webcam support SMB server support Camera Masking
App drive	mdd0
Data drive	mdd10
FTP drive	mdd0
NVR drive	nvd0
Web drive	mdd0
Log drive	mdd10
PC apps drive	mdd0
Video drives	mdd10
Connected clients	No clients currently connected
Your IP address	172.17.52.21
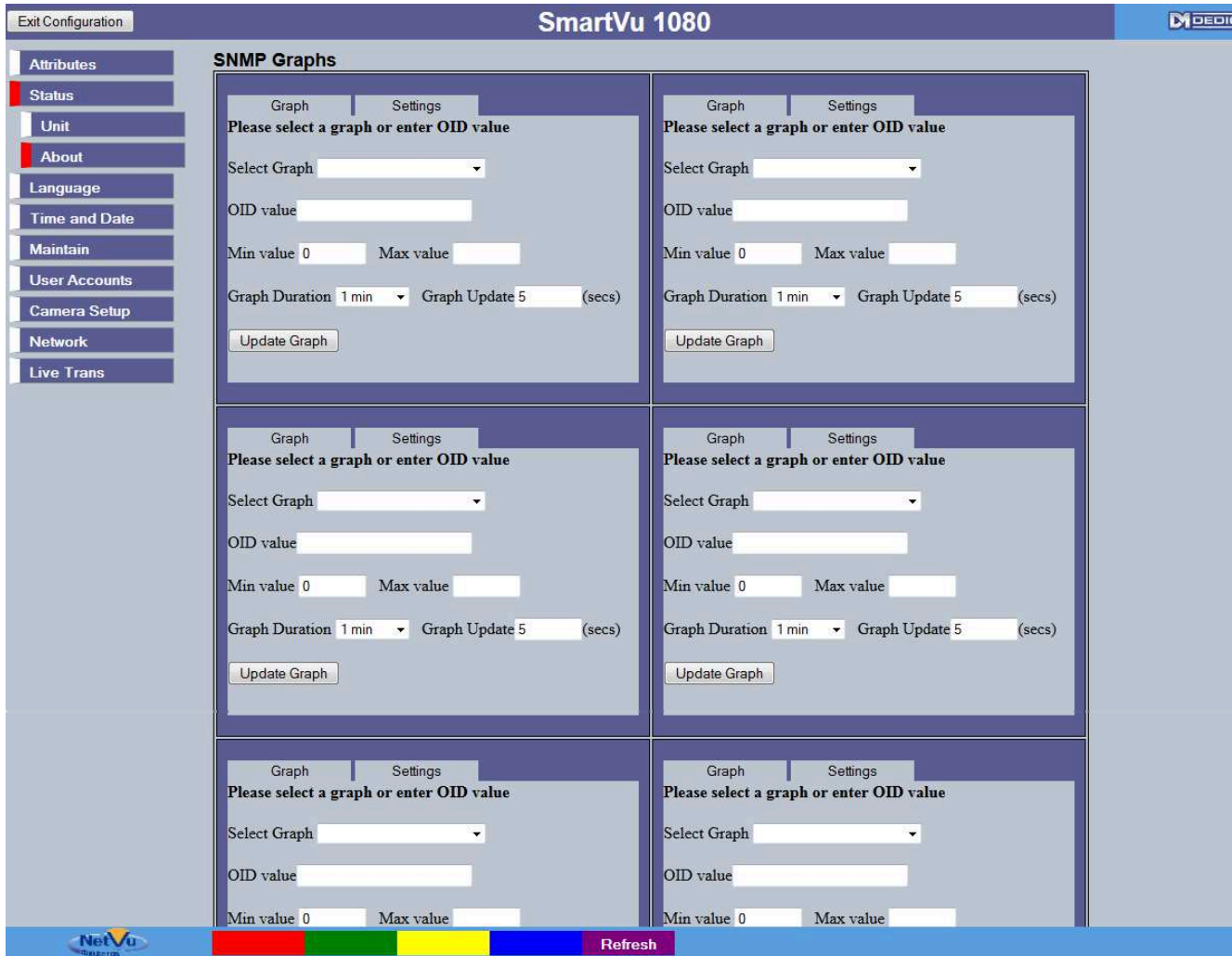
About   Refresh

About (Blue) Opens the *About* page
Refresh (Purple) Refreshes the current page

SNMP Graphs

Refresh (Purple) Refreshes the current page

Named Devices

Refresh (Purple) Refreshes the current page

Memory and CPU Bandwidth
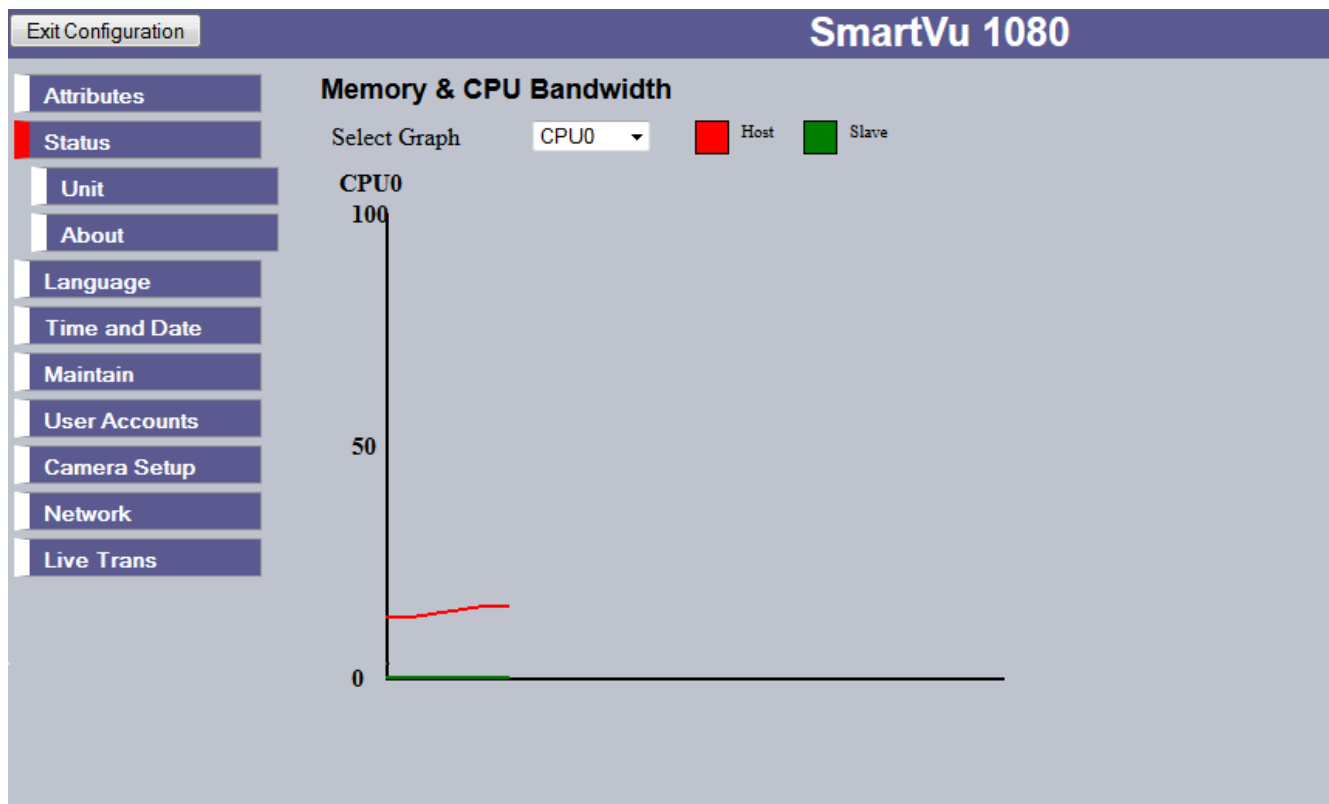
This page allow selection of the memory and CPU graphs to see the current load on the system. This can be used to see how changing settings are loading the camera.

Refresh (Purple) Refreshes the current page

Camconfig Details

This page displays the capabilities of the camera in terms of resolution and supported compression formats. This camera does not support audio, alarms, relay or lens de-warping so all these parameters return 0.

About (Blue) Opens the *About* page
Refresh (Purple) Refreshes the current page

Capabilities

This information page shows the capability settings for the camera. These parameters determine how the camera performs and what options are available on the configuration pages.

This page shows the capabilities that are enabled in this product

About (Blue) Opens the *About* page
Refresh (Purple) Refreshes the current page

UI Information

The UI page shows the settings stored in the camera which configure the user interface.
Profile Record Tables
This page shows the different settings available in the record configurations. The current default settings are indicated by crosses.
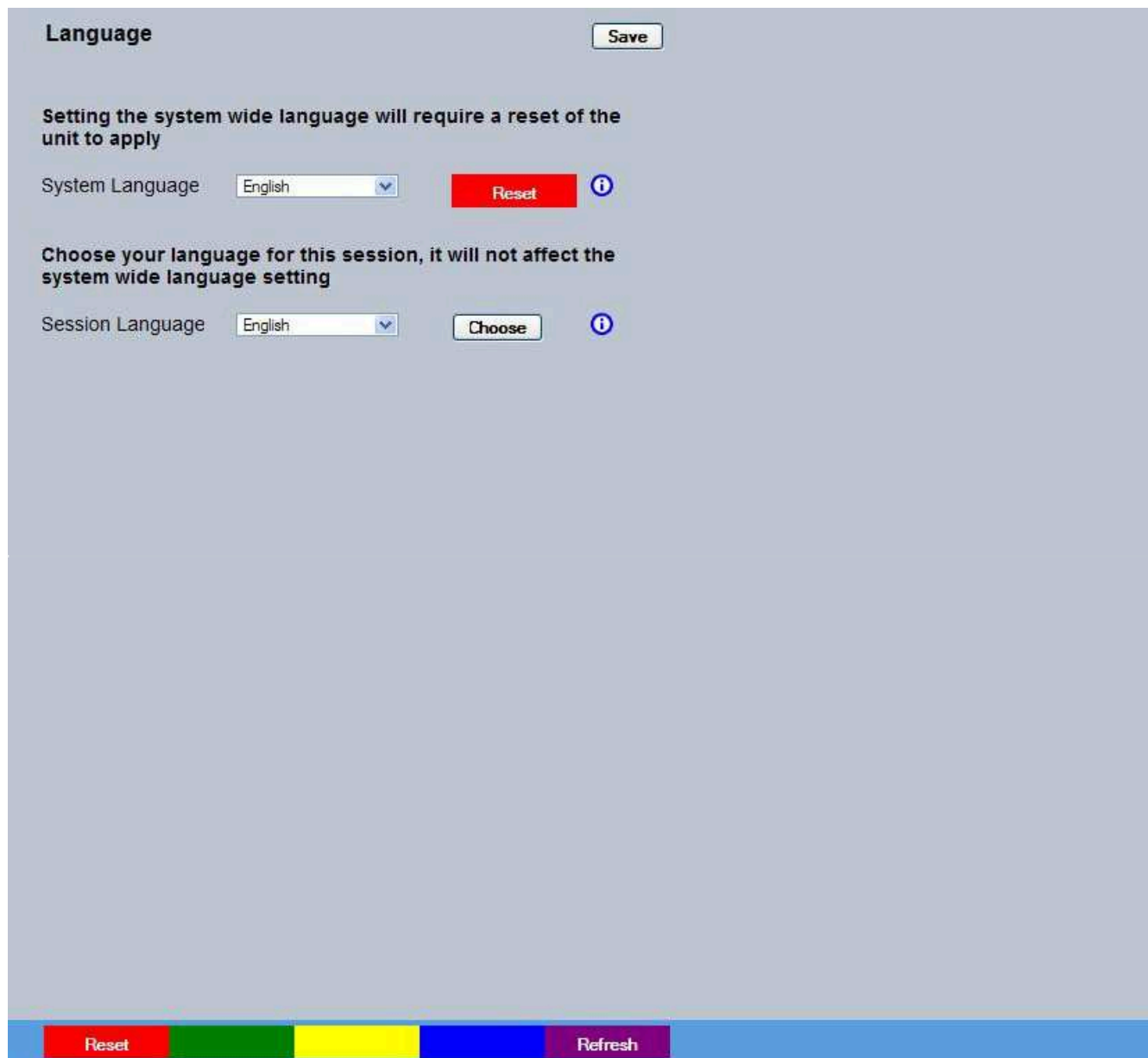

Refresh (Purple) Refreshes the current page

Language

This menu allows the system language to be set. Changing the System Language will effect all menu pages. If required, the language can also be changed for the current session only.

System Language Select to change the system language setting.
Note: *A server reboot will be required to implement system language changes. The unit can be rebooted via System Settings->Maintain->Reset, or by pressing 'Red' while on this page.*
Session Language Select to change the language settings for the current session only.
Choose Select to immediately activate session language changes.

Reset (Red) Resets the unit
Refresh (Purple) Refreshes the current page

Time and Date

Time and Date   [Save]

System Time   **Tue, 19 Oct 2010 1:16:55 PM (+0)**

Current time zone   **GMT**

Time zone   [No Daylight Savings ▼] ⓘ

Time zone changes will only take effect after a system reset.

Date format [ddmmyy ▼]   [**Reset**]

Time format [12hr ▼]

SNTP Server [169.254.44.16]   ⓘ

You must click the green button to set the time and date.

Set Time   [01] : [16] [PM ▼]   [**Set Time**]

Set Date   [19/10/10]

PC Time   **Tue Oct 19 2010 02:16:39 PM (+60)**   [**Sync Time**]

[Reset] [Set Time] [System] [Sync Time] [Refresh]

System Time The current system time and date is displayed.
Current Time Zone Displays the currently selected time zone settings.
Time Zone Select the relevant timezone offset from the accompanying drop down menu.
Date Format As default, the date is entered dd/mm/yy. It can also be displayed as mm/dd/yy or yy/mm/dd.

Reset (Red) Resets the unit

Time Format As default, the time displayed is in 12 hour format. This can be changed to 24 hour if required.

SNTP Server A Simple Network Time Protocol (SNTP) server allows external devices to connect and set their current date and time settings to that of the SNTP. If required, enter the SNTP server IP address here.

Set Time Allows current unit time to be updated.

Set Time (Green) Applies the new time.

Set Date Allows current unit date to be updated.

PC Time Displays the system time of the PC currently being used to view the webpages.

Sync Time (Blue) Use this button to synchronise the time of the unit to that of the PC being used to view the webpages.

Note: *The PC Time and Sync Time options will only be available if viewing the menu via the webpages.*

System (Yellow) Opens the *System Settings->System* page

Refresh (Purple) Refreshes the current page

Maintain
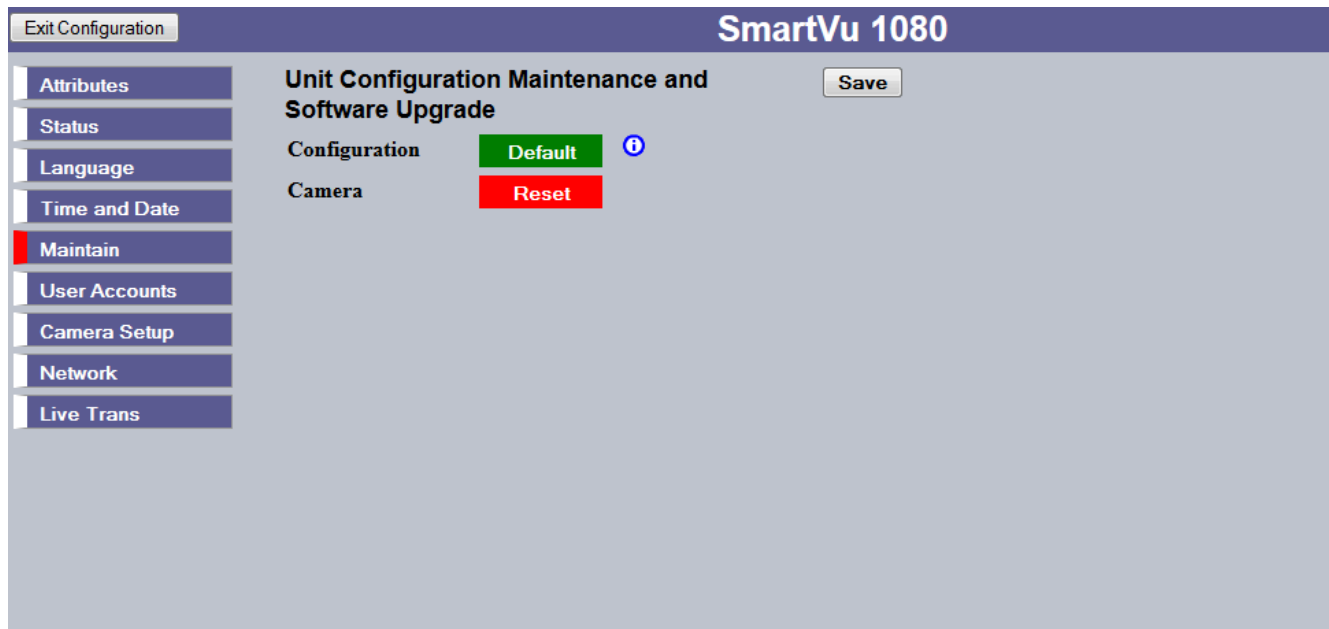
The page allows for the unit to be reset or changed back to the default settings as supplied from the factory.

User Accounts

User Account Administration

Account Types

Admin FTP
Video FTP
Telnet
Serial
Menu Configuration
Local Users
Remote Users

Account List

Add   Modify   Delete   Account Info

Add   Modify   Delete   Account Info

The unit can protect configuration procedures by limiting access via usernames and passwords. By default, no usernames and passwords are configured for any account type.

Camera Setup

Camera Title This title can be edited to allocate a name to the unit. This is displayed when the unit is accessed via NetVu ObserVer and is set when transmitting information to a Remote Video Response Centre (RVRC)

Exposure Time Exposure time defaults to 1/25 which prevents blurring of the recorded image. For views containing high speed images, the setting can be increased (to a max of 1/100[PAL] or 1/120[NTSC]). For views containing static images, the setting can be decreased (to a min of 1)

Exposure Level Sets the target exposure level that the electronic iris will try to attain. This can be used to adjust the brightness of the image.

Flip Video Used to invert the image when the camera is mounted upside down.
Mirror Video Select to 'mirror' the camera image (horizontal flip).

AWB Tuning

AWB Tuning can be used to adjust the colour of the image to suit requirements. The camera will automatically balance the colour. If Enable custom white balance is selected then a manual level for each can be created. Current levels are shown on screen.

Network Settings

The Network Settings menus allow configuration of the unit's network functionality. Key network settings can be established such as 'fixing' the unit's IP address and maximum transmission rate. E-mail, remote reporting on alarm and FTP download can also be configured, refer to the individual menus for further details.

The Network page allows configuration of the unit's network connections such as the name assigned to the unit and its IP address.

The Live Trans(mission) page enables JPEG and MPEG profiles to be created for transmitting images via a High, Medium or Low quality network connections to any viewing software or to another unit using this one as an IP source.

The Multicast page allows recordings from the unit's camera input to be forwarded to a port address; enabling multiple viewers to view live data using a suitable media player without the need to directly connect to the unit.

The Email page allows configuration of the Email feature. The unit can automatically transmit an e-mail to an SMTP Server following an event i.e. on receipt of an alarm or a camera failure notice.
The Remote Reporting page allows a Remote Video Receiving Centre's (RVRC) configuration details to be entered. The RVRC will then be contacted following a selected event occurring i.e. reported alarm or camera failure.

The Web Cam page allows the video input to be made available for transmission to a webserver via a designated webcam server. The image can then be incorporated into a web page and accessed via a standard web browser.

The FTP Download page allows data to be archived to a central FTP server. This could be on receipt of an alarm, Activity activation or at a scheduled time to back-up recorded video.
The Firewall page allows configuration of the onboard firewall.
The Connections page displays the current live connections to the unit.

Network

This menu allows network settings to be configured if required. The unit is DNS compliant, and can be referenced on the network using the configured server name (or serial number) if a DNS server is available

Network Setup   Save

Server Name	CDT-D720	ⓘ
IP Address	0.0.0.0	ⓘ
Sub Net	0.0.0.0	ⓘ
Gateway	0.0.0.0	ⓘ
Primary DNS	0.0.0.0	ⓘ

	Address	Sub Net	Gateway	DNS ⓘ
DHCP	172.17.36.19	255.255.252.0	172.17.36.254	CDT-D720.dmicros.com

Max Transmission Rate kbits/sec [0] = No limit ⓘ

Tx Image Buffers	3 ▾	ⓘ
Ethernet MTU Bytes	1500	ⓘ
Max Transmission Timeout ms	250	ⓘ

This will require a reset

| Reset | Rem Report | Webcam | E-Mail | Refresh |

Server Name This field can be edited to allocate a name to the unit. This would be used if accessing the unit via a Domain Name Server (DNS).It will initially default to the serial number of the unit.

IP Address An IP address can be manually allocated to the unit.

Sub Net A Subnet address of the unit network can be manually allocated.
Gateway This is the IP address of the default gateway (router).
Primary DNS This is the primary DNS server IP address for applications utilising domain names.
DHCP If DHCP is being utilised, the assigned IP address will be displayed here.

Note: If no IP address is manually configured, DHCP will automatically assign one. The unit interrogates the network for a DHCP server, which assigns an available IP address. This IP address can change every time the unit is powered up. If DNS is not available, it is recommended that DHCP be disabled by entering a suitable, free, static IP address.

Tip: Use DHCP to locate a free IP address, then fix the unit IP address to the free one by entering the details into the IP address, subnet and gateway fields.

Max Transmission Rate kbits/sec This shows the maximum transmission speed for the network type being used. If set to '0', transmission speed is not limited in the camera.

Note: This setting will limit and override any higher transmission rate entered in the Video Transmission menu (Configuration menu->Live Trans).

Force 10BaseT operation The unit supports 10 or 100BaseT half duplex transmission. Selecting this option will force the unit to operate at a 10BaseT connection.

Tx Image Buffers This is used in order to improve the picture delivery over Ethernet when using a slow connection i.e. 256Kbps. A buffer setting of 1,2 or 3 is available (default setting is 1).
Ethernet MTU Bytes This is the maximum transmit unit for the Ethernet packet. The MTU is the largest physical packet size measured in bytes that the network can transmit. By default this figure is set to 1500bytes.

Max Transmission Timeout ms This is the time (in milliseconds) the unit will wait to re-send a packet if an acknowledgement is not received.
Reset (Red) Resets the unit to apply changes.
Rem Report (Green) Opens the Network Settings->Remote Reporting page.
Webcam (Yellow) Opens the Network Settings->Web Camera Configuration page.
Email (Blue) Opens the Network Settings->Email page.
Refresh (Purple) Refreshes the current page.

Live Trans

The unit transmits live images using JPEG or MPEG formats. The NetVu Connected remote viewing software will use the settings configured on this page as the defaults for JPEG & MPEG; High, Medium and Low settings.

High LAN/Medium WAN/Low VLBR This shows the transmission settings configured for a High quality LAN (Local Area Network) connection, Medium quality WAN (Wide Area Network) connection or a Low quality VLBR (Very Low Bit Rate connection).

Comp Settings can be established for JPEG and MPEG compression.

Res For MPEG and JPEG transmission, select image resolution settings (1080p, 720p, 576p, 288p, 144p.

Size_rate For JPEG, the figure entered will be the size of the JPEG transmitted (in Kbytes).

JPEG file sizes can be configured in the range of 5-45Kb.
For MPEG4 the figure will be the bit rate allocated. A higher rate will provide better quality picture display. MPEG bit rates in the range of 45-3000Kbits/second.

PPS This shows the number of pictures transmitted per second. For JPEG, the actual images transmitted will depend on the bandwidth of the link, increasing the pictures sent per millisecond may introduce time lag if bandwidth is not sufficient *i.e. this forces the same quality image through the available connection*. On MPEG transmission, increasing the pictures sent will also reduce the quality of the images *i.e. this forces more images but maintains the defined bit rate*.

MPEG Type & Quality Select whether transmitted MPEG4 images are sent as RAW data or in GOV (Group of Video) format. RAW mode transmits a single I frame and then a sequence of P frames (until a change in transmission is detected). GOV mode sends I and P frames in a standard format i.e. I to P frame ratio as set by the record parameters.

CBR maintains a Constant Bit Rate, selectable from a range of 2 - 31. Select a suitable level of details from the drop down list. Constant Bit rate allows the storage requirements to be calculated with more accuracy.
I Frame Ratio Select the ration of I Frames recorded between each P Frame.

Note: An MPEG I-frame is considerably larger than a P-frame. Therefore the higher the I-P ratio, the higher the disk space required to store recorded images.
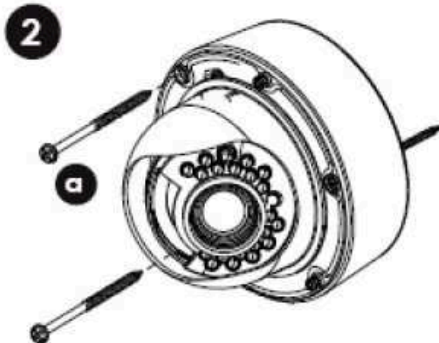Refresh (Purple) Refreshes the current page.

Vandal Dome Quick installation guide

①
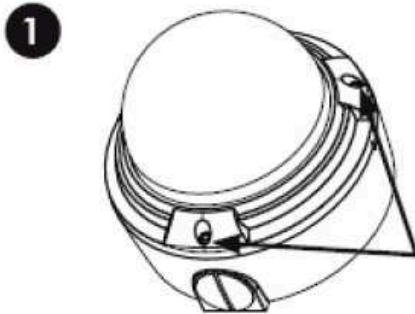
1) Remove the three tamper screws using the provided allen key. Size is standard T-15

Note: If you plan to use conduit fitting, remove conduit cap using the prodivded conduit key.

②

a

b

Method 1 - Direct Attach Install

2a) Use included mounting template to mark and pre-drill the required holes. Use 2pc of the 2.8" screws to mount the camera directly to the mounting surface.

Remove (one base locking screw, used for shipping purposes) and install the 3rd 2.8" screw.
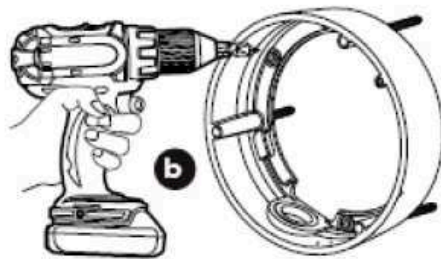
Go to step **④** on page 7 to complete installation.

OR

Method 2 - Camera Base Install

Note: Use this method if installing onto junction box plate.

2b) Remove the camera base by unscrewing the base locking screw, and turn camera module approx. 5 degrees counter-clockwise to detach camera base from the camera module. Now you install the base to the correct holes as indicated on the mount template using the 1.2" screws.

③

a

b
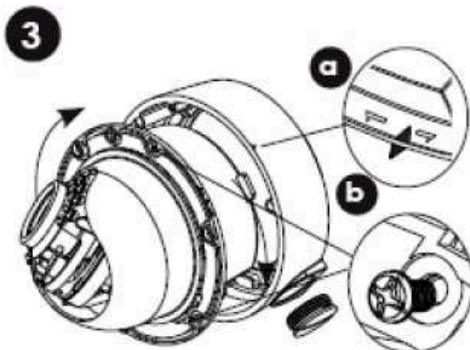
Note: If you plan on installing onto a junction box, attach provided fitting plate first to the junction box and then you attach the camera base to the fitting plate.

3a) Reinsert camera module into camera base by ligning up the arrow notches, and turning camera module clockwise to lock into place.

3b) Use the supplied three base locking screws to secure camera base to camera module.
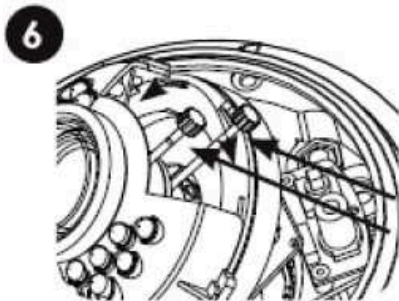
4
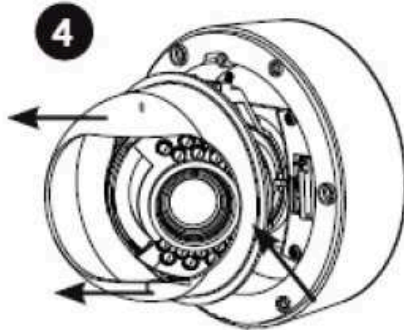
4) Remove camera cover by squeezing the back and front of the cover as indicated by the "PRESS" indicators at the same time and lifting it up and away from the lens.

5
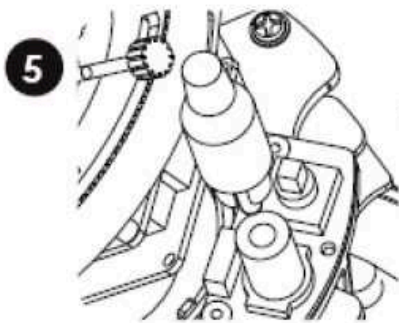
5) Insert the included video test cable into the RCA jack and connect to a test monitor to set up camera.

6

6a) Adjust camera viewing angle and secure into place by tightening thumb screw using a flat head screwdriver.

6b) Adjust lens and OSD as required.

6c) Re-attach the camera cover, using the thumb screw as a guide, until it snaps into place.

Note: Lens adjustment levers are by default in the locked position. Turn counter clockwise to unlock. Tighten levers to secure lens setting.

7
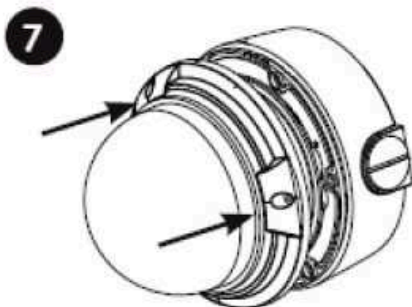
7a) Re-attach the camera cover. Line up arrows as shown in figure 3a on page 6 as a guide

7b) Use the allen key to tighten the tamper screws to create a proper weatherproof seal.

Note: Make sure dome cover cord does not get caught in the rubber seal.

Internal Dome Quick installation guide
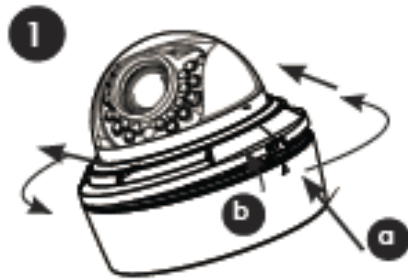
Initial camera removal

1a) Press down on the tab marked with

an arrow to lift up the dome cover slightly

1b) While pressing on tab, twist the dome cover counter clockwise just a few degrees to release dome cover from back clips.
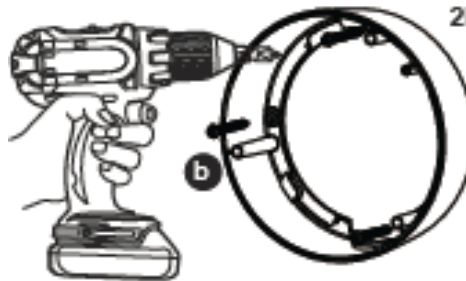Lift off the cover.
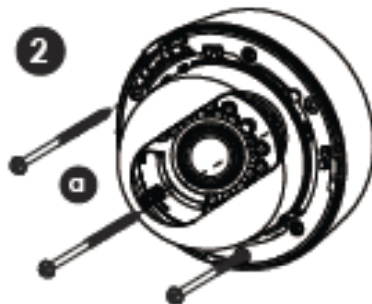
Method 1 - Direct Attach Install

2a) Use included mounting template to mark and pre-drill the required holes. Use included 2.8" screws to mount the camera directly to the mounting surface.

Skip next page to finalise installation

OR

Method 2 - Camera Base Install

2b) Use the included mounting template (Installation Option 1) to mark and pre-drill the required holes. Remove the camera base by unscrewing the base locking screws (indicated by padlock markings) and turn camera module approx. 5 degrees counterclockwise to detach camera base from the camera module. Install the base as indicated using the 1.2" screws.
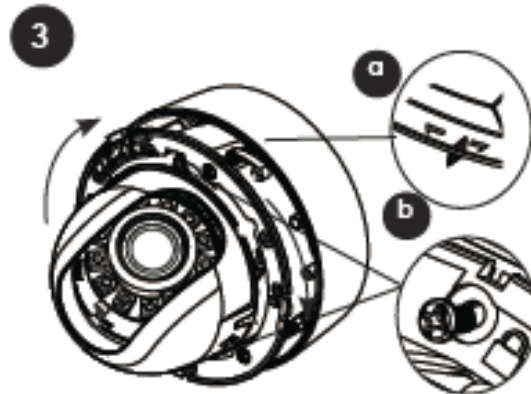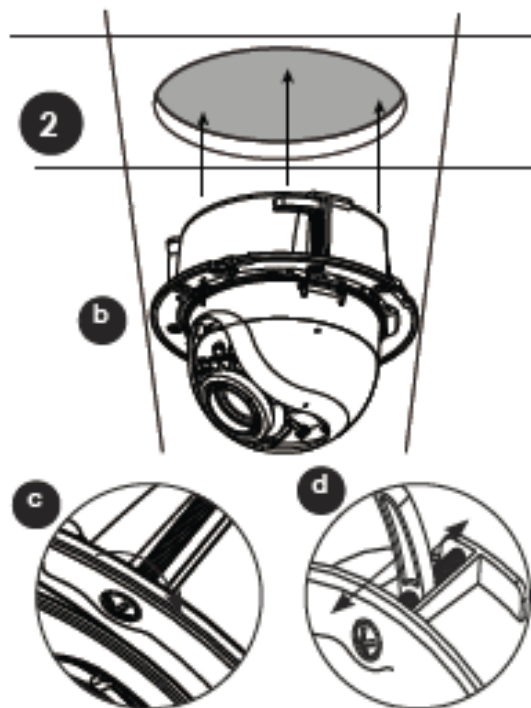
3a) Reinsert camera

module into camera base by aligning the arrow notches, and turning camera module clockwise to lock into place.

3b) Reinstall the base locking screws. (indicated by padlock markings)

Skip to next Page

Method 3 - Recess Mount

a) Cut semi flush mounting hole into surface using provided Semi-flush Mount Cut-out Template.

Note: Always cut using the inside line of the cutout template

b) Insert camera into cutout. Make sure that the mounting arms are not extended.

c) Turn screwdriver clockwise to unlock all of the 3 mounting arms.

d) Continue turning clockwise to move mounting arms down until they make contact with inner mounting surface.

Note: Once mounting arms have made contact with the inner mounting surface, do not apply too much pressure to avoid damaging surface.

③

Thumb Screw

Zoom

Focus
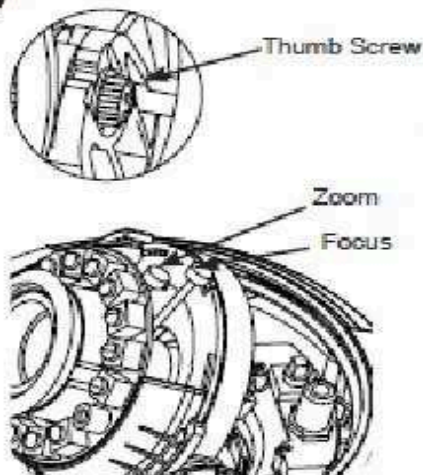
a) Remove camera cover by squeezing the back and front of the cover as indicated by the arrow indicators at the same time and lifting it up and away from the lens.

b) Insert the included video test cable into the RCA jack and connect to a test monitor to set up camera set below.

c) Adjust camera viewing angle and secure into place by tightening thumb screw using a flat head screwdriver. Adjust zoom and focus as required.

Note: Lens adjustment levers are by default in the locked position. Turn counter clockwise to unlock. Tighten levers to secure lens setting.

④

a) Re-attach the camera cover, using the thumb screw as a guide, until it snaps into place.

b) Reattach dome cover.
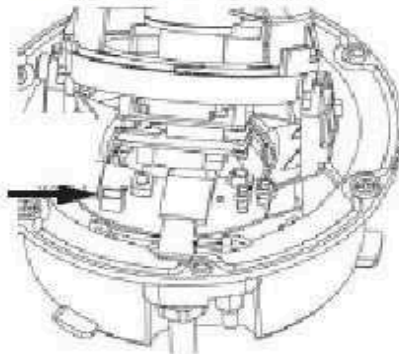
Addition

Insert a video test cable into the video test cable terminals and connect to a test monitor to set up camera

Video Test Cable

Specification

The following product specifications are produced with the best efforts for accuracy, for product improvements these can be subject to change; always check requirements with your sales manager before ordering.

	720 Dome Model	1080 Dome Model
Models available with and without IR illumination and with internal and vandal domes options		
	1/2.8" Sensor Aptina	1/2.8" Sensor Sony
Lens	Vari-focal IR corrected DC Auto Iris 2.8 – 12mm	Vari-focal IR corrected DC Auto Iris3.3 – 12mm
Max. Res / Max frame rate	1280×720 / 30fps	1920×1080 / 30fps
Horizontal field of view	79.3 deg ~ 29.8 deg	
Aspect ratio	16:9	
Light Sensitivity	0.1 Lux @ F1.2 (Colour), (0 lux with IR) High powered IR LEDs	
Shutter	Auto/user 1/5 – 1/50,0000 ; 50/60Hz software selectable	
	1 Ethernet (10/100 Base-T) RJ45, Audio 1 x RCA input / 1 x RCA output: @1V line level,	
Power	12V DC / PoE Class 3	
Network protocols supported	HTTP, TCP/IP, UDP/IP, RTSP, FTP, CHP, NTP, PoE, Unicast and Multicast supported	
Operating Temperature	Operating -10C to 55C Storage -20C to 60C	
Operating Humidity	10% - 85% RH	
Approvals	CE, FCC, RoHS, Vandal Resistant version IK10 & IP66 Weatherproof	

Notes

**For more information about Dedicated Micros' products or
for details of your local Dedicated Micros office, please visit:**

www.dedicatedmicros.com/contact