

**VITEK**

Industrial Video Products, Inc.

## **VTD-VPH**

### **Vandal Resistant Color Dome Camera Series Product Manual**



The VTD-VPH Vandal Resistant Dome Camera is a smaller, more attractive camera ideal for use in commercial or residential applications. It measures only 5" in diameter and comes with a 24 Volt AC power input for easy integration with standard cameras and power systems. Versatile mounting and lens options allow you to achieve perfect video images in virtually any environment. All VTD-VPH domes feature Sony Super-HAD and/or Ex-View Technology with Hi-Resolution of 480 Television Lines.

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- One Fully Assembled VTD-VPH Series Dome Camera
- One Additional Knock-Out Plug
- One Tamper-Proof Wrench
- One Rubber Sealer Mat
- One Instruction/Installation Manual
- Assorted Additional screws for Convenience

## INSTALLATION OVERVIEW

Your VTD-VPH Dome Camera is designed to be flush or ceiling mounted on a wall or ceiling and comes complete with a surface mount rear casing including conduit knockouts. Its patented 3-axis gimbal allows for perfect viewing angles on any vertical or horizontal surface. An optional goose neck wall mount (VT-VPHWM) is available if desired. The VTD-VPH Dome Camera is weather sealed for indoor or outdoor locations.

## WIRING CONNECTIONS

The VTD-VPH Dome Camera should be powered by 24 Volts AC. Polarity is not important but you should make sure that the power supply you are using is CSA Certified Class 2 Power Supply delivering a minimum of 2.5 Watts.

For optimum video signal, use 95% copper shielded coax cable. Twisted pair or CAT-5E cable may also be used with optional VT-TR1M Passive Video Transceivers. Maximum cable distance for 95% copper braid coax is approximately 800'; For Cat-5E or twisted pair, 2000' using VT-TR1M transceivers.

## FLUSH MOUNT INSTALLATION



Remove Top Bezel



Remove Inner Screws



Detach Casing

Begin by removing the three tamper proof screws in the outer bezel with the special wrench included and removing it. Continue by removing the tamper proof screws on the inner casing (you may want to remove and set aside the polycarbonate bubble to avoid scratching it). Remove the inner casing from the outer surface mount casing and set the outer casing aside. You may want to keep the surface mount box in case you decide to re-mount it at a later time.

Cut a hole in the ceiling or wall the exact size of the inner back box and set the camera into the hole securing it with anchors. When installing in a drop ceiling always attach a guy wire to a beam above the camera to hold the weight and secure the camera for safety reasons.

## SURFACE MOUNT INSTALLATION

Begin by removing the three tamper proof screws in the outer bezel with the special wrench included and removing it. Continue by removing the tamper proof screws on the inner casing (you may want to remove and set aside the polycarbonate bubble to avoid scratching it).

Remove the inner casing from the outer surface mount casing (back box) and temporarily set the inner casing/camera to the side.

Secure the outer back box directly to a wall or ceiling using wood screws or anchors. If installing outside, remember to glue the rubber matting to the wall and then attach the back box. Conduit may be attached to the rear or the side of the back box depending on the installation.

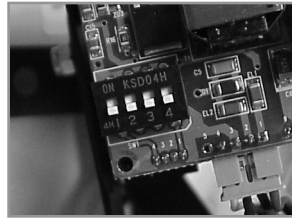
Re-secure the inner casing with the camera to the back box but remember to attach the wiring before doing so. You may also want to find a desirable angle of view and adjust the iris and focus before making the final wiring connections.

# CAMERA SETUP

Your VTD-VPH Dome Camera has been set at average default settings from the factory so the performance should be excellent right from the start. However, certain challenging environments may require additional set-up procedures to enhance the image.

## DIP SWITCH SETTINGS

There are four dip switches on the rear board of the camera. They should all be set to off from the factory. The following adjustments may be made:



Dip Switch Adjustments

**Dip Switch 1 =**

**Electronic Shutter Control**

Leave this switch in the “Off” position if your camera has an auto iris lens.

Switch to the “On” position when using a fixed lens version to enhance the camera’s ability to react to changing light.

**Dip Switch 2 =**

**Back Light Control**

Leave this switch in the “Off” position if your camera is being installed outdoors or if the installation is indoors in a controlled lighting environment.

Switch to “On” position when installing the camera indoors looking toward windows or doors or if outdoors looking into semi-direct sunlight. Never install camera looking into direct sunlight.

**Dip Switch 3 =**

**Flickerless On/Off**

Flickerless shutter speed for minimizing image flicker under fluorescent lighting.

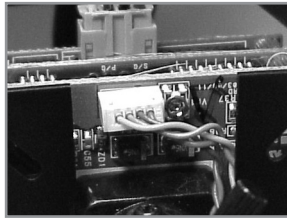
**Dip Switch 4 =**

**Auto White Balance**

Switch “On” if the image appears discolored or floats between colors. This will enable the camera to find “White”.

## AUTO IRIS LENS ADJUSTMENT

Your DC Auto Iris Lens should be set properly at default from the factory. However, if the picture appears too bright or too dark, the iris function can be adjusted by turning the small silver potentiometer located on the board above the lens.



Auto Iris Adjustment

## FIELD OF VIEW AND FOCUS ADJUSTMENT

On all varifocal versions, the width of view may be adjusted by turning the forward lever toward the smaller number for wider and toward the larger number for more telephoto.

The Focus may be adjusted by turning the rear lever toward the “W” for near and toward the “T” for far (or telephoto). After making these adjustments, tighten the levers to lock them in place.



Focus Adjustment

On the fixed version, the focus may be adjusted by simply screwing or unscrewing the lens. **Be careful not to over tighten the lens or you may damage the pick-up sensor.**

## ROUTINE MAINTENANCE

Use mild liquid cleaners to remove dirt and grime from the dome surface.

Do not use harsh or abrasive cleaners which can scratch the polycarbonate dome and reduce visibility for the camera.

If the camera view is obstructed by scratches, remove the front plate (bezel) and rotate the bubble to a portion that is not scratched.

If the dome becomes damaged or scratched beyond use, contact your distributor to order a replacement.

## OPTIONAL EQUIPMENT

### **VT-VPHWM**

Goose Neck Wall Mount w/Cable Feed thru.



VTD-VPH/WM

## DOME SPECIFICATIONS

Image Device	1/3" High Resolution Super HAD Color CCD
Effective Pixels	768 x 494
Resolution	480 TV Lines
Minimum Illumination	Standard Cameras: 0.7 Lux / F1.2 (AGC On) Day/Night Cameras: 0.03 Lux / F1.2 (AGC On) With Day/Night Function
S/N Ratio	More than 48dB (AGC off)
Electronic Shutter	1/60 to 1/100,000 Sec.
AGC	Built-In (On)
Lens	VTD-VPH3.6: Color Camera With 3.6mm Fixed Iris Lens VTD-VPH266: Color Camera With 2.6-6mm Varifocal Lens VTD-VPH3895: Color Camera With 3.8-9.5mm Varifocal Lens VTD-VPH412: Color Camera With 4-12mm Varifocal Lens VTD-VPH266DN: Day/Night Color Camera With 2.6-6mm Varifocal Lens VTD-VPH3895DN: Day/Night Color Camera With 3.8-9.5mm Varifocal Lens VTD-VPH412DN: Day/Night Color Camera With 4-12mm Varifocal Lens
Video Output	Composite: 1.0 Vp-p / 75 Ohm
White Balance	Auto White Balance (AWB)
Power Source	24VAC 60Hz
Power Consumption	220mA
Weight	750 g. / 26.46 Oz. / 1.65 Lbs.
Dimensions	160mm x 99mm / 6.29" x 3.89" (D x H)
Construction	Aluminum/Tin Base - Polycarbonate Bubble
IP Rating	IP66/68

# LIMITED LIABILITY WARRANTY

Your new Camera is guaranteed to be free from defects in materials and workmanship for a period of two years from the date of purchase.

The product must have been used only for its intended purpose, and not been subjected to damage by misuse, willful or accidental damage, caused by excessive voltage or lightning.

The product must not have been tampered with in any way then the guarantee will be considered null and void.

This guarantee does not affect your statutory rights.

Contact VITEK or your local distributor if servicing should become necessary.



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