

Prosecutor – Portable Speed DVR System
 Standard Setup and Alignment Guideline with Stalker Lidar



OPERATION

Portable Speed DVR System
 Operational Range up to 200 meters

- Rugged and portable speed DVR system.

Option Parts and Accessories

- Velbon DV7000 Fluid Head with smooth panning and tilting action.
- Stalker Lidar.
- Digital Day / Night Camera.
- 160 ~ 400mm zoom lens.
- Camera Pan & Tilt Adapter with Lens Support.
- Custom mounting plate.

IMPORTANT

Please use proper tooling for the assembly of all parts to prevent damage on the screws and nuts.

Do **NOT** use chemical or cleaning solvent otherwise specified to clean the metal case.

Any parts that are damaged or cannot be assembled or do not conform to the specification as specified, please email us at ave@avethailand.com for help or information required. Do **NOT** try to modify or assemble by yourself, this will cause severe damage and inconsistent quality of the parts.

FEATURE – OPERATION VIEW

Identify the following Assemblies & Parts



Operation Location – In choosing an operating location is important. Selecting an area where the officer is safe and vehicles can be stopped, out of harms way, is an important consideration. Clear line of sight to the targeted traffic. Make sure there are no obstacles such as trees, sign and telephone poles between the radar gun and the traffic. If working from the patrol car, locate the vehicle where the Stalker Lidar radar gun can be used through an open side window. Greater sensitivity can be achieved by monitoring traveling away from (rather than towards) the Stalker Lidar radar gun. This type of operation requires more than one officer.

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SETUP



Radar Gun Positioning Setup – Look into the view finder – Shown **Figure 1.0** (HUD – Head up Display) and locate a known distant in a convenient location. Aim the red dot to a sign or a pole, press the trigger to transmit confirm the target. A distant reading should display on the HUB. Once the target distant confirm e.g. 150 meters and now is ready to adjust the camera to this known spot (location) distant. Use the Pan and Tilt fluid head on the tripod to adjust the position for the Lidar radar gun.

◀ **Figure 1.0** Stalker Lidar Speed Gun



Camera Positioning Setup – The camera will be mounted on the same tripod with the horizontal axis inline with the sight view finder of the Lidar radar gun. Install all cable as Shown in **Figure 2.0**. Power up the Portable Speed DVR System by pressing the Power switch on the right side bottom of the unit, the system software text display on LCD will include Time, Date, Location, Officer Name, Speed Measured & Speed Distant. The text information can be adjusted to be either on the top or below the LCD display.

Pre focus and adjust the camera to the position of the point distant of the Lidar radar gun is aiming at. Use the fine adjustment See **Figure 3.0** of the camera pan and tilt attachment under the camera to adjust the position to be capture, centre the camera view to the cross hair display on the LCD screen. Final adjust the focus on the point of distant target and now it is ready for used.

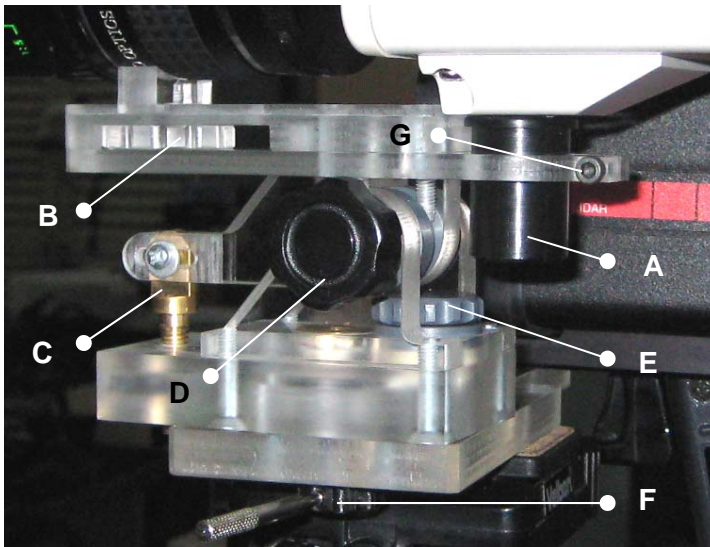
◀ **Figure 2.0** Portable Speed DVR System

Once the target is selected, squeeze the trigger to transmit. To lock a target in tracking mode, simply release the trigger. To “Lock” a target in single shot mode, simply press the trigger and wait a moment for the Beep. The “Locked” LCD display will stay on until the trigger is squeezed again. The Locked HUB display will clear again. Once transmitting has end both Speed and Distant will appear on the LCD of the Lidar radar gun and the Portable Speed DVR System.

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OTHERS



Camera Pan & Tilt Attachment

- A :** Camera Pole Mount c/w ¼-20 threading L 10mm.
- B :** Adjustable lens mount support.
- C :** Camera Tilt Adjustment.
- D :** Camera Tilt Adjustment Lock.
- E :** Camera Pan Adjustment.
- F :** Camera Pan Adjustment Lock.
- G :** Camera Pole Mount Lock.

← **Figure 3.0** Camera Pan & Tilt Attachment



■ **Sample of View Capture**

■ **Sample of View Capture**

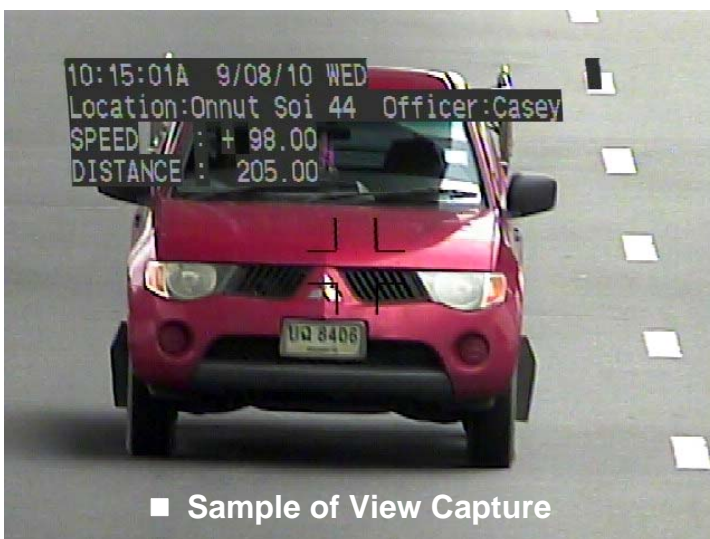
Zoom Lens Setting :

- ⊙ Zoom lens at 160mm.
- ⊙ Distant target set at 200mm (Max).

Camera Setting :

- ⊙ Camera IE set using a manual or fixed iris lens.
- ⊙ Auto Gain Control set to Normal Sensitivity.
- ⊙ Aperture Compensation set to Sharp Outline.
- ⊙ Backlight Compensation set to Center Zone Metering.

← **Figure 4.0**



■ **Sample of View Capture**

■ **Sample of View Capture**

Zoom Lens Setting :

- ⊙ Zoom lens at 320mm.
- ⊙ Distant target set at 200mm (Max).

Camera Setting :

- ⊙ Camera IE set using a manual or fixed iris lens.
- ⊙ Auto Gain Control set to Normal Sensitivity.
- ⊙ Aperture Compensation set to Sharp Outline.
- ⊙ Backlight Compensation set to Center Zone Metering.

← **Figure 5.0**

Note : All the above setting and sample of picture been capture is base on the condition of the lighting from the day changes, type of camera use & speed and location of target. Target Distant Capture is based on fixed distant point of 200 meters.

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SPECIFICATIONS

**Portable Speed DVR System
General Specifications**

VSI-PRO INTERFACE

- All popular GPS Data Formats NEMA0183, AIR, NORTHM2.
- All popular Speed Radar Units, Decatur, MPH, Kustom, Stalker, Targetron, Tribar, Municipal.
- All popular Speed Laser Units, LTI, Laser Atlanta, Stalker, Kustom.
- Intoxilyzer and Alcolmeter Alcohol Meters.
- RS232C AND TTL Interface.
- Serial output of all data or exceptions to printers, computers, modems and DVRs.
- Cross Hair Programmable for vehicle targeting.
- Universal time/date format.
- 100 lines exception history buffer.
- 16 triggered texts associated with 16 alarms.
- Large data buffers for input/output to accommodate newer, faster registers.
- Powerful data filtering algorithms.
- Easy on-screen menu-driven setup and programming.
- Auto baud rate detection.
- 24 field programmable exceptions with numeric range.
- On-screen flagging of exceptions with asterisk or reverse text.
- Programmable alarm outputs.
- Programmable delayed screen blanking.
- Choice of 1 to 11 lines displayed on-screen.
- On-screen tiller up to 40 characters.
- Gray scale and border selection from front panel.
- Built-in test mode.
- Upload/download programming to a PC or another VSI-Pro.
- Data captured either to the memory or to the serial port.
- Local Firmware Downloadable.
- Local / Remote Programming via PC Software.

RECORDING

- External SD Card up to 2 GB recording Media.
- Selectable Video/ Photo Recording.
- 640 x 480 Pixel for JPEG in Photo Recording standard JPEG.
- 320 x 240 Pixel MJPEG Compression for AVI @10fps.



■ Sample of View Capture

COLOR CCD CAMERA

Scanning system	NTSC / PAL standard 625 lines, 50 fields/sec.
Image sensor	1/3" interline transfer method CCD
Number of pixels	795 (H) x 596 (V)
Horizontal resolution	540 TV lines (typical)
Minimum illumination	Gain High: 0.01 lx (F1.2, B/W mode) / 0.45 lx (F1.2, color mode) Gain Normal: 0.02 lx (F1.2, B/W mode) / 0.60 lx (F1.2, color mode)
Video output	1.0 V (p-p)/75 ohms, composite, BNC
Video S/N ratio	More than 48 dB (AGC off: More than 50 dB)
Backlight compensation	OFF Multi-spot metering (High/Normal), Centre-zone metering
White balance	ATW / Manual
Gain control	Normal / High
Light control	Optical auto iris lens / Electronic iris (indoor use)
Lens mount	CS mount
Flange back	12.5 mm +/-0.5 mm adjustment
Electronic shutter	1/50, 1/120, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
Aperture compensation	Sharp / Normal
Synchronizing system	Internal sync / Line-lock
Day/Night mode	Auto (High/Low), Manual (at control terminal)
Power supply	12 to 15V DC / 24V AC +/-, 50Hz
Power consumption	3.7 W (approx.)
Weight (approx.)	400 g (without lens)

Note : The appearance and specifications are subject to change without prior notice or obligations.

DISPLAY

- TFT LCD Screen Size 5.6 Inches (Diagonal).
- Display Mode Normal White.
- Input signal 1.0Vpp composite video (meet EIA's RS-170A standard and PAL standard).
- White Chromaticity X = 0.30, Y = 0.35 at view angle 0.
- Active Display Area 113.31mm x 84.7mm (W x H).
- Display Resolution 960 (W) x 234 (H).
- Dot Pitch 0.118mm (W) x 0.362mm (H).
- Gray Scale Analog.
- Backlight CCFL x 1.
- Front Surface Anti-Glare hard coating.
- Brightness 300 cd/m2 typical (250 cd/m2 min.).
- Contrast Ratio 150 typical (100 min.) (At optimized viewing angle).
- Viewing Angle Left/Right ± 45 Deg. (H) (at CR >10) Top/ Bottom ± 10/30 Deg. (V) (at CR >10).
- Humidity 10% RH-90%RH.
- Vibration (with Carton) 5-200 Hz Sweep Frequency.
- Drop (with Carton) 60cm at 1 corner, 3 edges, 6 surfaces.

Power Input	12VDC +/-10% @ 1.25A on 4P DIN Connector
Video Output	1Vpp 75 Ohm BNC Connector
Brightness Control	Potentiometer
Dimensions	240mm (L) x 158mm (W) x 100mm (H)
Weight	1 kg or 2.2 lbs

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Last update 22092010
Printed in Thailand

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