

**RG&A Project #:** N/A  
**Client:** Difinitron, Inc.  
**Project Name:** VM417 video meter  
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As part of an ongoing product evaluation agreement with Difinitron, Inc. we were asked to review and critique the VM-417 video meter. This device is a hand-held test meter designed to assist a technician in the installation of a video source in the field. The unit is powered by two internal AA batteries and has two BNC connectors located on the unit's top. The unit is encased in black plastic and has a 75 ohm terminator cap to be used in end-of-line video testing.

The unit has five functions to measure the quality of the video signal being generated by a camera, including Sync Pulse, Video Level, Luminance, Color Burst and Focus. It is the fifth function, Focus, that this meter would be most helpful to a field technician when installing a camera. One of the biggest problems with performing an installation in the field is the lack of a quality monitor to properly focus the camera. Today's small LCD test monitors are fine for getting the basic field of view lined up but they are far from adequate when it comes to fine tuning the focus of a camera's lens. It is also impractical to carry around a CRT/LCD monitor of sufficient size to perform this task, let alone worry about dropping and breaking the monitor during this process. The VM-417 allows the field technician to obtain his desired field of view by using a hand-held monitor to establish the basic view and then fine tune the focus by using the metering function of the VM-417.

During the field installation of a dome camera the VM-417 was utilized to optimize the focus of the camera with very good results. The image was initially established using a small monitor and then the VM-417 was used to fine tune the video. As with most metering devices it took a little getting used to the refresh rate of the meter's reading to properly set the lens. Once this was learned the process was fairly easy to complete. One small "quirk" that was noticed during use was when the VM-417 auto-powered down the video image on the monitor showed a tear in the video, similar to a hum bar's distortion. Initially it was thought that something had gone wrong with either the camera or the monitor but once power was re-established to the VM-417 the picture returned to its' proper display.

The unit is compact and easy to use with functions that field technicians will find useful. I would say that the unit would be mostly utilized for fine tuning the video image from cameras initially set up with small LCD handheld monitors. This function will most likely drive the request for this product in this evaluator's opinion.