

CLEARER, SHARPER, PICTURES, EVERY TIME

All video cables in CCTV systems cause some loss of brightness and picture detail. The longer a cable is, the greater the loss. Even a few hundred feet of cable will measurably degrade a picture, while a thousand feet or so will seriously reduce picture detail and brightness. There is a way to reduce cable loss to ZERO on any length of cable and completely eliminate this source of picture impairment! It is done by cancellation of all cable losses with an Equalizer/Amplifier at the Monitor location.

If every cable in a CCTV system were to have zero loss, then the only limitation to picture quality would be the terminal equipment (the Camera, Monitor, and Recorder). Under this condition, it is only necessary to buy good Cameras, Recorders, and Monitors in order to have sharp and clear pictures.

As we all know, loss in the cable always reduces the picture quality, no matter how good the quality of the terminal equipment is. There is a way around this problem. Create zero loss cable by cancellation of all of the cable loss with Cable Equalizers. The GB464 Cable Equalizer corrects both the high frequency loss, which is responsible for loss of definition and detail in the picture and low frequency loss, which reduces the brightness in a picture. However it is important to exactly cancel the cable loss, and not just crank in lots of cable correction.

Cable loss correction can be over-done and too much correction is as bad as no correction at all. The ZERO CABLE LOSS condition can be created in a cable of any length, simply by adding equalizers in tandem as necessary. The correct setting for Amplifiers and Equalizers is now an exact science, so that all cameras, both near and distant can now look sharp and clear at the Monitor.

That is where the CABLE GENIE comes in. The CABLE GENIE consists of one VLTG-800 Video Line Test Generator and one CM-2 Camera Master working together. With this video test generator and meter all components of a cable system can be tested for quality and correctly set to ZERO CABLE LOSS. Once the cables have been adjusted to Zero Loss, the CABLE GENIE test equipment is removed from the CCTV system to be used again on the next system! Buy one CABLE GENIE and use it to create zero loss cable on every one of your CCTV systems. The GB464 cable equalizers are available to work with Coaxial Cable and also UTP (Unshielded Twisted Pair) cables.

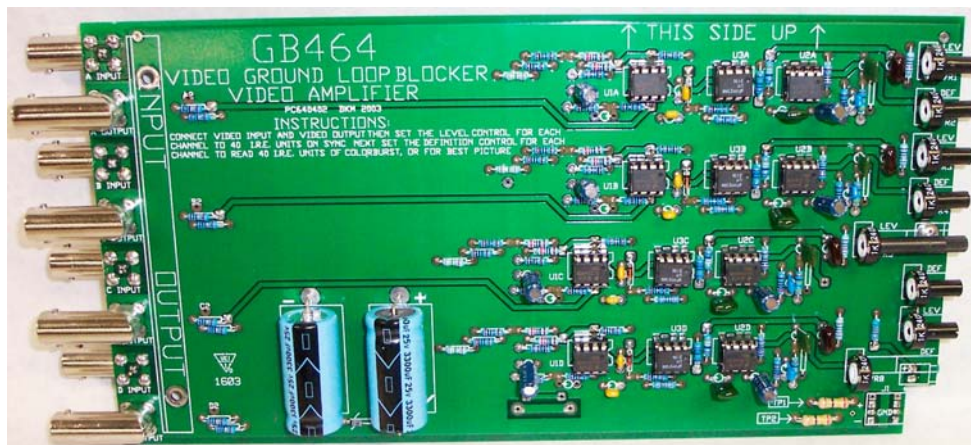
In addition to creating a test signal to equalize cable to the ZERO CABLE LOSS condition, the VLTG-800 Video Line Test generator is also used to test Recorders and Monitors for the number of LINES OF DEFINITION they are capable of displaying. Simply connect the VLTG-800 to the input of the Recorder, record and play back to see how many of the lines in the display are clear and at full brightness on the Monitor. The display will show vertical lines in groups of 100, 200, 300, 400, 500, 600, 700, and 800 Lines. To test a Recorder, observe both recorded and direct-to-Monitor signals.

Any loss of definition when viewing the recorded signal is due to DVR recorder loss. It is important to use a high line resolution Monitor to see the difference. The VLTG-800 is excellent for comparison testing of various parts of your CCTV systems, and for precision alignment of Cable Equalizers.

In addition to measuring the amplitude of the Sync Pulse and the amplitude of the Color Burst in order to create a Zero Loss cable, the CM-2 Camera Master also detects incorrect Terminations, excess cable loss, and accurately measures the focus of cameras! Since some cameras put out a high level signals while others deliver moderate amplitudes and it is desirable to have all of the pictures the same brightness at the Monitor location, you should measure the output of each camera and set the iris and AGC controls for optimum. To do this the CM-2 Camera Master can be connected inline at the Monitor or DVR after the equalizer, then set all CCTV cameras to exactly the same level (preferably 100 IRE Units of the Luminance by adjusting the LEVEL control on the GB464 Equalizer/amplifier.

The GB464 Equalizer/Amplifier is a Circuit Card containing four individual sets of Equalizer/Amplifiers that fit into an RMS400 Mainframe. Each Mainframe can hold up to nine GB464 Circuit Cards, so one Mainframe can handle up to 36 CCTV channels. The GB464-UTP is intended for use on Unshielded Twisted Pair (UTP) facilities. The GB464/D has Dual Outputs where it is desirable to drive two sets of equipment at once.

Once you start up-grading picture quality of new CCTV installations, you may wish to offer picture quality up-upgrades to customers of prior CCTV installations. That way you will never have to cringe when you see a crime re-play on the Nightly News taken at one of your installations!



GB464
GROUND LOOP BLOCKER AMPLIFIER EQUALIZER