

ANNOUNCING THE NEW AUTOMATIC PICTURE REJUVENATOR APR-474

It is now possible to transmit clear pictures over new, and existing coaxial cable for up to a mile with no picture detail degradation using the new APR-474 AUTOMATIC PICTURE REJUVENATOR at the receiving end of the coaxial cable. This will open up many picture transmission opportunities that formerly required expensive Fiber-Optic equipment at a far greater cost than direct transmission on coaxial cable.

If the camera can produce the picture, the Automatic Picture Rejuvenator can deliver that picture up to a mile from the camera without picture detail losses. Fiber optic transmission requires special expensive equipment at both ends of the cable, whereas the Picture Rejuvenator requires only low cost equipment at the receiving end of the cable. No in-the-field installation is required at the camera end of the system.

When CCTV pictures are transmitted on Coaxial Cable or Unshielded Twisted Pair Cable (UTP), the quality of the picture will deteriorate on long cable runs. Not only will the picture degrade in longer cables that do not contain APR-474 Automatic Picture Rejuvenators, but the quality of the picture will also degrade over time because of aging of cable insulation and moisture being absorbed by the cable insulation over time. This picture deterioration is evidenced by a reduction in picture detail, color brightness and contrast as well as picture brightness as observed at the receiving end of the system over time. Even short cables runs can reduce color brightness and detail enough to make it difficult to identify facial features that are so crucial to identifying individual people. Being able to accurately identify facial features is one of the important purposes behind installing a CCTV system in the first place.

After an extended period of time, the picture will normally not be as good as it was when the system was first turned on. With the APR-474 at the receiving end of the system, the picture will always be as good as the camera can produce at all times, even when the coaxial cable ages and deteriorates with the passage of time. Furthermore, considerable installation time will be saved since picture brightness and crispness will be automatically corrected without the operator having to spend any time adjusting the brightness and picture crispness compensation.

In addition, this automatic compensation will continue to compensate for changing conditions as they occur, and not require any attention from the system operator because the APR-474 is entirely automatic in operation.

The APR-474 Automatic Picture Rejuvenator will re-establish the original quality of picture that the camera was able to produce, even after traversing many thousands of feet of cable, that would otherwise have rendered a video picture so blurry as to be un-useable. The APR-474 when connected at the receiving end of the cable effectively cancels the losses incurred by the cable, and produces the effect of having a zero length cable, even though the actual cable length may be many thousands of feet long.

The APR-474 Automatic Picture Rejuvenator will automatically adjust to any incoming video signal assuring correct video waveform brightness on all incoming signals.

Some cameras are shipped from the factory with an intentionally high video output level in an effort to help overcome anticipated possible cable loss. Unfortunately this also causes some video recording systems to overload and blank out and fail to record the picture on the recorder for short cable runs.

The Automatic Picture Rejuvenator effectively cancels all cable loss and will also detect any excess video signal that is originating from the camera and enable the operator to compensate for this common defect. This will insure that the correct level is being delivered to the cable terminal and prevent the VCR from overloading and blanking out pictures due to excess camera video level.

A red LED on the front panel will light if there is any excess video level present. This indicator can be used to set the iris on the camera to assure the correct brightness level for that camera. Simply increase brightness with the iris setting until the red LED illuminates, then back down to where it just goes out. The video level is then set just right no matter how long the cable is up to 6,000 feet long for coaxial cable and 2,500 feet long for UTP cable.

The Automatic Picture Rejuvenator will also automatically cancel all low frequency distortion and 60-cycle common mode interference caused by power line induction into the picture by clamping the sync tip. The 60-cycle interference can even be substantially greater than the video signal and still clamp the interference out of the picture.

In large-scale systems, the cameras connected to long cables will show dimmer and less detailed pictures with weaker colors than the cameras connected to short cables. When all cameras in a system are connected to APR-474 Automatic Picture Rejuvenators, every picture will be displayed at the highest quality that the camera is capable of producing with uniform brightness and detail on all channels.

Coaxial Cable can be expected to transmit excellent pictures up to 6,000 feet, while Twisted Pair Cable can transmit about 2,500 feet when connected to the APR-474 Automatic Picture Rejuvenator. The APR-474, will automatically correct for any length of cable within the above limits automatically without any adjustment being made to compensate for the cable length being used while at the same time presenting the best picture that the camera is capable of producing.

The picture compensation is entirely automatic, and does not require any attention from the system operator. This fact enables a system operator to switch between various cameras in a system, and have only one APR-474 connected at the receiving location. As each camera is switched on line, the APR-474 will automatically correct for the losses incurred by any given cable, thereby correcting for any loss incurred by that particular cable.

Day/Night type cameras that switch from color to black-and-white CCTV pictures during dim lighting conditions often suffer from brightness and contrast-loss when connected through a long cable. The APR474 Automatic Picture Rejuvenator will insure that both the black-and-white and color pictures are the best that they can be, by canceling the cable loss effect on the color and black-and-white picture.

The APR-474 is a circuit board that contains four individual Automatic Picture Rejuvenators that fit into an RMS-400 Main Frame that can hold up to nine APR-474 Circuit Boards, or a Single Circuit Board can be plugged into the SAM400 "Stand Alone Mount". The RMS-400 can accommodate up to 36 camera systems in one 5.25 inch high (19 inch) Main Frame. The APR-474 is available in two models, one for use with 75-Ohm Coaxial Cable, and the other for Unshielded Twisted Pair (UTP) wire. Each Automatic Picture Rejuvenator is available with an optional dual video output so they can be used as distribution amplifiers as needed. This makes it possible to view the camera at two locations without double terminating the video.

The AUTOMATIC PICTURE REJUVENATOR is available from F M SYSTEMS, INC. at 3877 South Main Street in Santa Ana, California. Call to learn more about this revolutionary new device that can improve the picture that you can deliver to your customers and also save you lots of money at the same time. Place your order today by calling 1-800-235-6960.