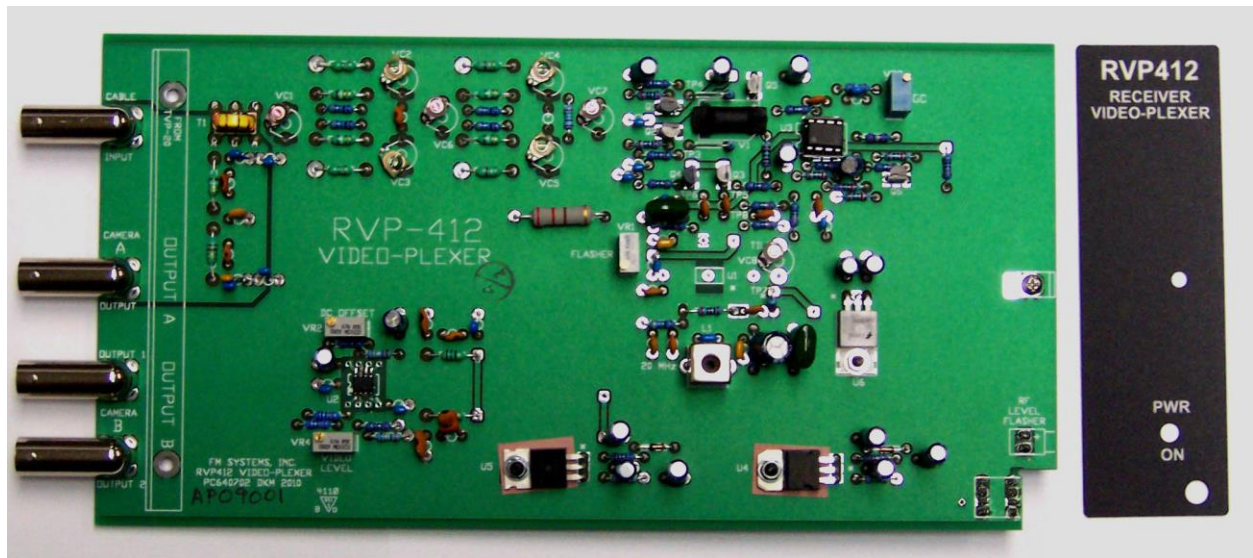


TVP-20 / RVP-412



CCTV VIDEO-PLEXER

INSTRUCTION BOOK

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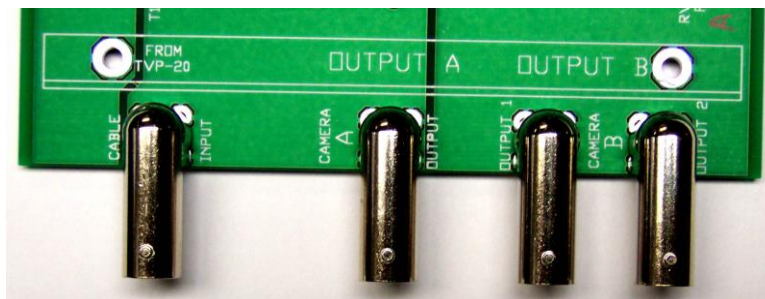
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DESCRIPTION

These devices are used to transmit two CCTV Camera signals over a single Coaxial Cable at the same time. This system can be used to Add-On a second camera in an existing Coaxial camera system without the need to run additional cable. It can also be used to improve transmission of CCTV pictures over long cable runs. The system is simple to install and convenient. It will save you the expense of running a new cable back to the monitor point just to add one more camera to your system. Any video cable in your system can carry two video signals back to the monitor location.

The TVP-20 TRANSMITTER VIDEO-PLEXER is the transmitter module used to Encode and transmit the two video signals. Simply connect the two cameras to the input connectors, connect the power supply and use a single cable back to the monitor site.

The RVP412 RECEIVER VIDEO-PLEXER is the receiver module used to receive and decode the two video signals. Simply connect the cable coming from the TVP-20 to the cable input connector, then take camera A and B outputs to your Quad, Switcher, Monitors, etc. Connect the power supply and you are ready to go. The RVP412 also has an additional (DA) Distribution Amplifier output for the "B" channel marked "OUTPUT 2" to go to other monitors or equipment to view the "B" channel at another location. Both the Camera "B" outputs 1 and 2 are identical video signals.



The TVP-20 unit is housed in a black ABS enclosure that has a UL flame rating of 94-VO and is powered by any 24VAC power transformers. The system has an LED power indicator light to help installation.

The RVP-412 is a slide in rack mounted card that is identical in operation to the RVP-20. The rack mounted card version mounts into the RMS-400 mainframe and power supply.

TVP-20 MOUNTING INSTRUCTIONS

The rugged one-piece mounting structure allows you to mount the unit firmly in place with two screws. Select a place to mount the unit away from harsh or wet environments indoors is recommended. The TVP-20 should be located near the coaxial cable you wish to use and the RVP412 near your monitors or the place you wish to bring the video signal to. Select a position that gives you the best access to cable the system and reduces the labor in installation.

RVP-412 MOUNTING INSTRUCTIONS

The RVP-412 card slides into one of the nine positions in the RMS-400 power supply and mainframe. Select a place to mount the RMS-400 away from harsh or wet environments indoors is mandatory. The RVP-412 should be located near the monitor equipment or the place you wish to bring the video signal to. Select a position that gives you the best access to cable the system and reduces the labor in installation.

Select one of the un-used nine positions in the RMS-400 to be occupied by the new RVP-412 circuit board module. Remove the blank label in that position by peeling it off of the front panel. Peel the label slowly to remove all of the label and adhesive. Any remaining adhesive may be removed by rubbing the surface with your thumb. **WARNING: DO NOT USE SOLVENTS TO REMOVE THE LABEL ADHESIVE.** The solvent could damage the equipment cards or cause a fire.

Peel the backing off the new label and apply it to the front panel of the RMS-400 rack in the position of the new card. Align the new label with the screw head in the hole in the lower right-hand corner of the label then align the center thumbscrew hole with the clearance hole in the front panel. This should cause the label to be straight and vertical. When the label is in place press firmly to secure the label.

Then remove the thumb-screw retainer from the RVP-412, it is located at the front of the card and is removed by rotating the knob counter-clock-wise.

Next slide the card into the card guides at the rear of the RMS-400. Be sure that the notch in the circuit card is facing forward and down. Push the card all the way to the front of the rack until it stops. **DO NOT APPLY EXCESSIVE FORCE TO THE CARD.**

Insert the thumb-screw that was previously removed while rotating it in a clock-wise direction. When it begins to thread into the card, continue until it is finger tight. **CAUTION TIGHT BY HAND ONLY, DO NOT USE TOOLS TO TIGHTEN THE THUMB-SCREW. OVER TIGHTENING WILL DAMAGE THE CIRCUIT CARD.**

CAUTION:

Most circuit board modules have several adjustments which are carefully factory set with precision instruments for optimum performance. Change only those which must be adjusted, some controls when mis-adjusted produce little change under normal operating conditions, but can seriously reduce the ability of the unit to function correctly under other conditions which may be encountered. Therefore, if you must adjust a control, place a mark on it before moving it, so that it may be returned to its original setting with reasonable accuracy.

This system must have a direct cable connection between the TVP-20 and the RVP12. Because the system requires 25MHz of bandwidth to transmit the "B" channel of video. Do not use amplifiers between the TVP-20 and the RVP412.

HOW TO CABLE THE TVP-20

Connect the video cable from camera A to the "CAMERA A INPUT" BNC connector and connect a cable going to the RVP412 to the "CABLE OUTPUT" BNC connector. It is not necessary for power to be on at this time the video path will only be interrupted during the cable attachment. Next connect the Second camera video output to the "CAMERA B INPUT". The Camera B input is internally terminated. Connect a 24 VAC power source to the Green power screw terminals and the unit should turn on. If you have connected the B video camera the power LED will be on solid, if the B camera is not connected the LED will be flashing.

HOW TO CABLE THE RVP412

Connect a video cable from the TVP-20 to the "CABLE INPUT" BNC on the RVP412 then another cable goes from the "CAMERA A OUTPUT" BNC to the monitor, recorder, or other video equipment, this is the camera A output connector. Connect a cable from the RVP412 output "CAMERA B" to your monitor, recorder or other video equipment. **BE SURE TO TERMINATE THE END OF THE VIDEO CABLE WITH A 75 OHM TERMINATION OR PROPERLY TERMINATE INTO OTHER EQUIPMENT.** It is not required to terminate the un-used "B camera OUTPUT 2" if it is not in use. Termination of un-used video ports will only increase power supply current consumption without need.

POWER SUPPLY INSTALLATION

The TVP-20 and RVP412 are powered by a 24 VAC wall mount power transformers. Connect the 24 VAC power transformer to the Green terminal block marked AC 24V. At this time, you will see the Green LED turn on to indicated power up.

OPERATION

The unit provides the ability to transmit two real time video signals over a single coaxial cable. It uses Video-Plexer technology to encode one video signal on top of the other. One transmitter and one receiver is required to complete the system.

CARE AND MAINTENANCE

There is no routine maintenance or calibration required with this equipment. There are no field adjustable controls inside the box. Opening the box will void your warranty.

APPLICATIONS (WHERE TO USE THE SYSTEM)

This system can be used anywhere that a video signal in coax cable exists. Some uses are in a CCTV camera original build, or in an add on camera installation.