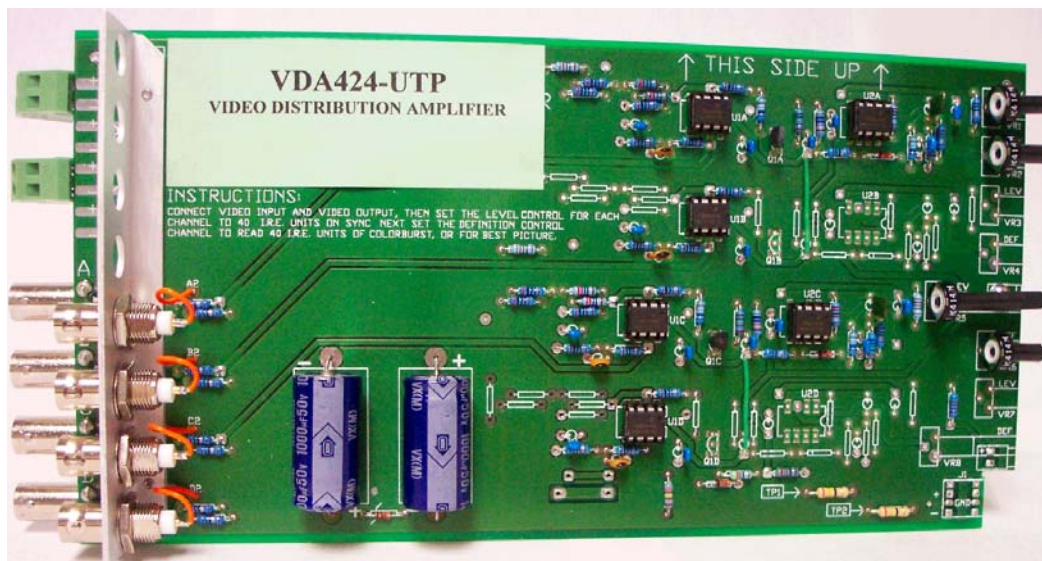


VDA424-UTP



VIDEO DISTRIBUTION AMPLIFIER

INSTRUCTION MANUAL

IB 6409-01

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SHIPPING INSPECTION

Remove from shipping container and inspect for shipping damage. The VDA424-UTP is a Slide in Card that fits into the RMS-400 Mainframe and Power Supply. The card is supplied with a retaining screw (attached to the PC Board), a Front Label Designator and this instruction book. If an RMS-400 Mainframe and Power Supply have been purchased with Card, the Card will be installed into the Mainframe with labels attached and the retaining screw engaged and locked.

HOW AND WHERE TO MOUNT THE UNIT

Select a position for the RMS-400 that is near the video signal or other equipment that needs video distribution. The placement is not critical. Then install the VDA424-UTP PC CARD in any unused CARD SLOT that is empty. Follow the instructions for card installation, be sure not to apply excessive force to the card during installation.

MODULE CARD INSTALLATION

1. Select one of the un-used nine positions to be occupied by the new circuit board module.
2. 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.
3. Peel the backing off of 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, and then align the center thumbscrew 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 the secure the label.
4. Then remove the thumb-screw retainer from the product card, it is located at the front of the card and is removed by rotating the knob counter-clock-wise.
5. Select any and all product options on the specific card.
6. 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.**

MODULE CARD INSTALLATION (cont.)

7. Insert the thumb-screw that was removed in step 5 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.
8. Attach any cables or wires necessary for operation. If it is easier, you can attach the cables before inserting the PC card into the rack.

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.

HOW TO CABLE THE VIDEO AMPLIFIER

Connect the Unshielded wires from your video source's to the "A and C" video inputs on the back of the unit. The "VIDEO INPUT" is internally terminated by precision 105 Ohm termination's to match standard UTP wires.

Next connect a BNC cable from the "A-D" output connectors on the VIDEO AMPLIFIER to the equipment you wish to have video supplied to. The "VIDEO OUTPUTS" of the VIDEO DA have a 75 Ohm output impedance to match standard video cable. Be sure the equipment being driven is properly terminated with a precision 75 Ohm termination to insure correct video level.

POWER SUPPLY INSTALLATION

Power for the VDA424-UTP is supplied by the RMS-400 Mainframe. It supplies the card with +/- 12 VDC to power the card.

SET-UP OF THE VIDEO AMPLIFIER

The VDA424-UTP is set to unity gain 1 Volt in and 1 Volt out at the factory. A front panel Video Level control may be adjusted to set the level for optimum performance. The picture sharpness can be adjusted using the Definition control on the front panel.

OPERATION

The VDA424-UTP Video Distribution Amplifier is used to amplify and distribute any B/W or color NTSC, PAL, or CCTV video signal. The unique design allows Two channels of video to be distributed to as many as four separate 75 Ohm video loads.

The video level for each input channel is adjustable to allow the user to set the proper level for the down stream equipment. This adjustment is useful when feeding signals to a DVR (Digital Video Recorder) or other digital devices. DVR's and digital devices are very sensitive to over and under video level, so the ability to adjust the level prior to the device is sometimes necessary.

FRONT PANEL CONTROLS AND INDICATORS

A green "PWR ON" indicator on the front panel shows that the video DA is active. The adjustable control on the front panel set the video level output. Clock-wise rotation increases the video output. The Definition control allows you to improve the picture quality and sharpness of image. Adjusting the control clock-wise will increase the sharpness of the picture. Be aware that the system can compensate for up to 2500 feet of UTP wire and as such has a large amplification range. If you turn the definition control up too high it can cause picture distortion. If this occurs reduce the control counter clock-wise until the distortion is eliminated.

CARE AND MAINTENANCE OF THE UNIT

Care should be taken not to subject the VDA414/C to extreme moisture or temperatures outside normal operating range. There are no periodic maintenance adjustments to be made on the VDA414/C other than the front panel video level set control and Clipper control if you have the VDA414C option. If the unit does not function properly it should be returned to the factory for repair.