Series 3000
Model R-159A

SYNC SENSOR SWITCH

INSTRUCTION MANUAL

Monroe Electronics
100 Housel Ave | Lyndonville | NY | 14098
800-821-6001 | 585-765-2254 | fax 585-765-9330
monroe-electronics.com

P/N 1340172
102804

TABLE OF CONTENTS

Accessories included:

3000R-159A Manual
3000R/22M Rack Mounting Kit
Wall mount power supply

WARRANTY

Monroe Electronics, Inc. warrants to the owners, each instrument and sub-assembly manufactured by them to be free from defects in material and workmanship for a period of one year after shipment from factory. This warranty is applicable to the original purchaser only.

Liability under this warranty is limited to service, adjustment or replacement of defective parts (other than fuses or batteries) on any instrument or sub-assembly returned to the factory for this purpose, transportation charges prepaid.

This warranty does not apply to instruments or sub-assemblies subjected to abuse, abnormal operating conditions, or unauthorized repair or modification.

Since Monroe Electronics, Inc. has no control over conditions of use, no warranty is made, or implied as to the suitability of our product for the customer's intended use.

THE WARRANTY SET FORTH IN THIS ARTICLE IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESS, IMPLIED OR STATUTORY INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. Except for obligations expressly undertaken by Monroe Electronics, in this warranty, Owner hereby waives and releases all rights, claims and remedies with respect to any and all warranties, express, implied or statutory (including without limitation, the implied warranties of merchant ability and fitness), and including but without being limited to any obligation of Monroe Electronics with respect to incidental or consequential damages, or damages for loss of use. No agreement or understanding varying or extending the warranty will be binding upon Monroe Electronics unless in writing signed by a duly authorized representative of Monroe Electronics.

In the event of a breach of the foregoing warranty, the liability of Monroe Electronics shall be limited to repairing or replacing the non-conforming goods and/or defective work, and in accordance with the foregoing, Monroe Electronics shall not be liable for any other damages, either direct or consequential.

RETURN POLICY TO FACTORY:

Materials returned to Monroe must have a Return Material Authorization number. To obtain a RMA number, contact our A/V Switching & Control Customer Service at 585-765-2254 or fax 585-765-9330. Customers have 30 days to determine that the product ordered fills their need and performs as described in Monroe's literature. Units returned for approved repair or credit, must be in the original packaging including all parts and paperwork plus be in very good physical condition. If not, the customer is billed the cost to refurbish the unit and for missing accessories and merchandise. No products may be returned for exchange or credit after 12 months of the shipment date. Monroe reserves the right to repair or replace units under warranty.

Specifications

Video Input Level:
0 dBmV +3dBmV

Composite Audio Input Level:
0 dBmV +3dBmV

Video Output:
Unity gain, 2 buffered outputs

Audio Output:
Unity gain, 2 buffered outputs

Power Requirement for External Power Supply:
Input: 120 VAC 60 Hz (240 VAC available)
Output: 9V AC 1.9A

Physical:
19” W x 3.5” H x 4” D
Weight: 4 lbs.

General Description

Monroe Model R159A Sync Sensor Video Backup Switch monitors composite baseband video sync from a single channel, for 3 separate channels. It outputs each baseband video signal and its accompanying composite audio, to two separate output connectors.

When baseband video loses sync or its level decreases by more than 3 dBmV, the R159A switches to a secondary baseband input with composite audio. When the original signal returns, it switches back to the original signal pair.

At the same time, the switch change activates a remote indicator solid-state switch on the back panel, for status monitoring systems, as well as an LED on the front panel, for local troubleshooting.

Each switch section can be overridden by an external contact closure to ground.

INSTALLATION

MOUNTING:
The R159A requires a minimum of 3.5 vertical inches of space in a standard 19-inch wide EIA equipment rack. Slide the unit into the rack frame and secure it, using the 3000R/22M mounting hardware supplied with the unit.

CONNECTIONS:
For each of the three sections, the primary video is connected to the primary video F connector and the secondary video to the secondary video F connector. Make sure the video at the primary input is 0 +3 dBmV, and that the secondary input is 0 +3 dBmV. The two output F connectors may be connected to whatever input the user desires. If one of the outputs is not used attach a 75Ω terminator to that F connector.

For each of the three sections, the primary composite audio is connected to the primary 4.5 MHz F connector and the secondary composite audio is connected to the secondary 4.5 MHz F connector. The outputs from the 4.5MHz switch are connected to the desired inputs. If one of the outputs is not used attach a 75Ω terminator to that F connector.

OPERATION:
Whenever the video signal on the primary video connector drops below –3 dBmV the video output is switched to the secondary input. At the same time, the composite audio input is switched to the secondary input. When the switch occurs, a solid-state contact closure to ground occurs at the alarm output connector pin and the red LED on the front panel illuminates. When in alarm condition, the operator may force the switch back to primary inputs by closing the test switch input on the connector to ground. This enables the operator to check the status of the primary inputs manually.

POWER:
The R159A requires 9 VAC. Attach the power pack's wires to the appropriate screw terminals on the back of the R159A and plug it into a 120 VAC outlet.