



FEATURES

- Standard: 8 x 4 Matrix
- Option 1: 16 x 8 Matrix
- Option 2: 16 x 8 Matrix and an independent 8 x 4 Matrix
- Option 3: 2 independent 16 x 8 Matrices
- Extends the SMR-1641 Display to selectively view any of 16 channels
- Switch Bandwidth Response of 5 MHz
- RS-422 Compatible
- Built-In-Test (BITE)

DESCRIPTION

The SMR-1651 Switch Matrix was designed to enhance the flexibility of the SMR-1641 Digital Scan Display. It allows observation of any four of eight or sixteen separate swept tuners utilized in the SMR-1600 Microwave Receiving System.

The SMR-1651 is a switch matrix which connects any of up to 16 inputs to any of up to 8 selected outputs. The SMR-1651 may be configured to accommodate up to 32 inputs and 16 outputs by installing two independent 16 x 8 matrices in the main frame. Digitized video inputs are derived from SMR-1629 or SMR-1660 Series Tuners, and the outputs may be connected to selected SMR-1641 Displays. The SMR-1651 may be connected to one SMR-1641 or the output may be spread out over a number of displays allowing more operators to have access to the channels connected to the inputs of the switch matrix.

A Motorola 68000 16-bit microprocessor is resident within the SMR-1651 handling all communications to the SMR-1600 System via the SMR-1615 System Interface Unit. Additionally, the microprocessor controls internal switching and internal tests (BITE) without operator assistance.

The front panel is easily removed permitting access to local controls to initialize the SMR-1651 in the SMR-1600 System. Each of the input and output channels may be then verified on several LED displays on the control panel. An additional test function allows the operator to manually configure the inputs and outputs independent from the system controller. This provides for easy operational verification or for use as a stand alone switch matrix.

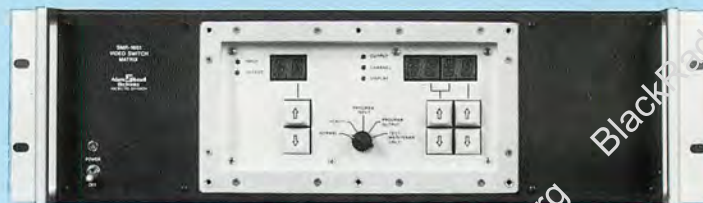
SERVICEABILITY

The SMR-1651 Switch Matrix was designed for optimum reliability and serviceability. Extensive use of Built-In-Test (BITE) permits expeditious instrument checkout and provides for easy fault isolation in the event of an instrument failure.

Another built-in feature provides the ability to monitor and log actual operating hours through the resident microprocessor. This permits easy verification of usage and system reliability.



REAR VIEW



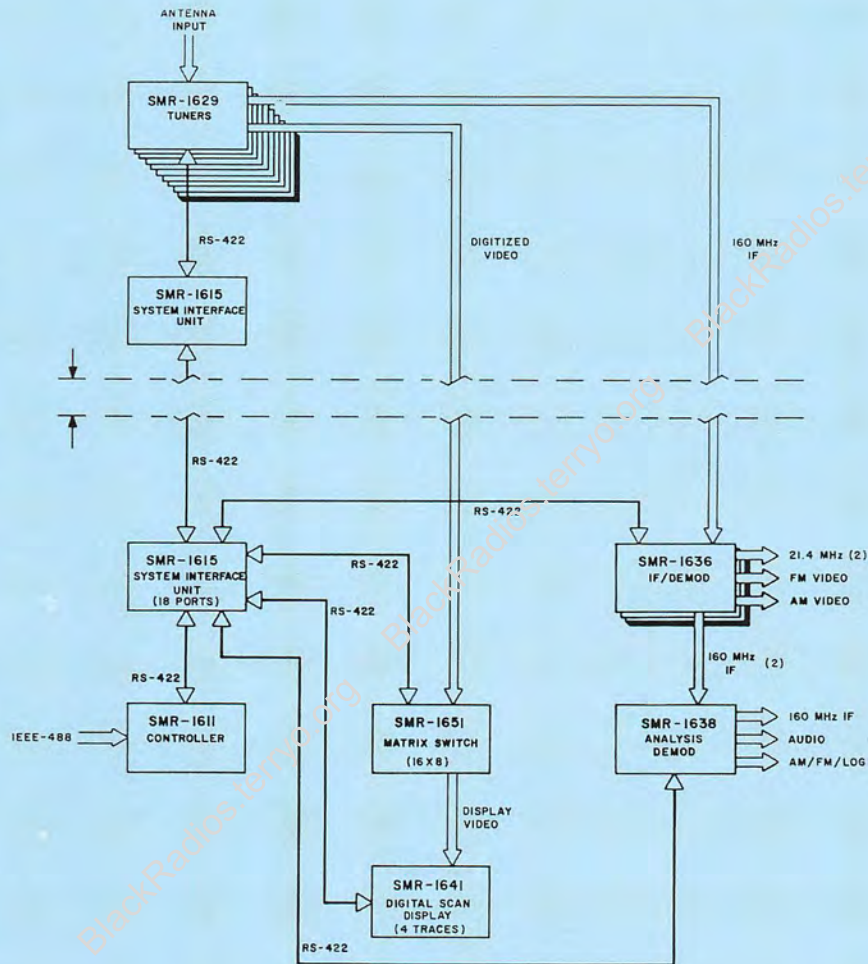
FRONT VIEW

SMR-1651 SWITCH MATRIX SPECIFICATIONS

Input Channels	8-Standard, 16, 24, 32-Optional
Input Impedence	10 kilohms
Input Connectors	BNC
Output Channels	4-Standard, 8, 12, 16-Optional
Output Impedence	50 ohms, nominal
Output Connectors	BNC
Digital Control	RS-422 (Serial)
Frequency Response	dc to 5 MHz
Local Control	Keypad switches and LED Displays
Temperature	0 to 50° C
Cooling	Forced Air
AC Power	115/230 Vac ± 10%; 47-420 Hz, 80 watts, maximum
Size	5¼" (H) x 17" (W) x 20" (D)
Weight	28 lbs., nominal

ORDERING INFORMATION

- SMR-1651 Switch Matrix (8 x 4)
- Option 1: 16 x 8
- Option 2: 16 x 8 and 8 x 4, independent
- Option 3: Two 16 x 8, independent



TYPICAL SMR-1600
SYSTEM CONFIGURATION

SMR-1600 SYSTEM OVERVIEW

The SMR-1600 Broadband Microwave Receiving System incorporates the latest in technologies to provide previously unavailable performance and flexibility. The SMR-1600 system may include up to seven different instruments, each containing a Motorola 68000 sixteen-bit Microprocessor.

The figure above represents a typical SMR-1600 multi-channel receiver configuration. This configuration includes multiple tuners which are located close to the antenna to provide for maximum sensitivity, multiple controllers for multiple users (each having access to the full system) and a variety of demodulation and display capabilities. The system may be expanded to handle up to 64 channels consisting of tuners, demodulators and digital displays.

SMR-1600 FAMILY OF INSTRUMENTS

- SMR-1611 Large Screen Controller
- SMR-1615 System Interface Unit
- SMR-1629 Tuner, 100 MHz-18 GHz
- SMR-1660 Tuner, 0.5-18 GHz, with wide bandwidth capability
- SMR-1635 IF/Demodulator Tray
- SMR-1636 IF/Demodulator Mainframe
- SMR-1638 Analysis Demodulator
- SMR-1641 Digital Scan Display
- SMR-1651 Switch Matrix

WARRANTY

All Micro-tel products are unconditionally warranted for a period of one year except for physical damage, provided the equipment is returned to the plant in Hunt Valley.



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