



Vision 21™

Supervisory System

FEATURES

- Factory Mutual approved
- Modular design allows flexible configuration
- Built-in diagnostics
- Processes radio & hard-wire signals
- Calls automatically prioritized
- Monitors 1,000 devices - option for thousands more
- Interfaces with Rapid Response and WinPatrol CAD software
- Multi-level password protection
- Programmable relays for external control
- Selectable operating modes
- Optional signalling of 8MTJ-A-16C Command & Control Alarm Boxes
- Includes off-line database management software



Vision 21
System Processor with Radio Module

- Applications:
- Fire Protection
 - Security
 - Industrial
 - Environmental Control
 - Motorist Aid

OVERVIEW

Wherever fast, accurate signaling from remote locations is critical, a Signal Communications radio system is the right decision. The Vision 21 Supervisory System is the central piece of a versatile monitoring and control setup. A modular design, along with easily programmable features, allows the Vision 21 Supervisory System to be uniquely tailored for any installation.

While powerful features and options enable the range of operation to cover any sized region, the straight forward operation makes the Vision 21 ideal for an application as small as a single building. From municipal fire alarms to military aircraft hangars and barracks, industrial complexes and highway emergency systems, Signal Communications provides reliable solutions, backed by round-the-clock expert technical support.

COMPONENTS

The Vision 21 is designed to be highly modular. From the use of PC (personal computer) styled plug-in cards to the placement of mounted components within easy reach, the integrated mechanical, electrical, and software design simplifies any system changes, upgrades, and service needs.

The basic Vision 21 Supervisory System consists of three interconnected modules:

- System Processor
- Radio Module
- Charger Module

The System Processor continuously monitors any change to the hardware setup, including the status of key operating elements, such as backup power and module connections. Any changes are automatically reported.

Modules are mountable in a standard 19" rack. Interconnections are accessible on the back of each unit, allowing units to be mounted in separate housings. A desktop housing is also available when space is limited. Mounting slides enable servicing with the module remaining in operation.

System Processor

The Vision 21 System Processor is the central piece of the Supervisory System. A microprocessor based module, the System Processor provides an operator interface and is responsible for decoding all incoming information, including monitoring system troubles.

The front panel of the System Processor includes two vacuum-fluorescent displays and a touchpad. All system functions are controlled through the front panel. For database editing, a keyboard may be connected.

To notify the operator of an alarm or trouble conditions, the System Processor uses audible annunciators. Several tone combinations are available, allowing each priority to be assigned a different annunciator.

An on-board logging printer records all events and operator actions. Paper replacement of the on-board printer is quick and requires no tools. A Print Buffer automatically stores logging information while the printer is off-line. An external printer may be connected to one of the available ports.

OPERATION

The Vision 21 is easy to operate and requires minimal training. The layout of the System Processor keypad is logically grouped and makes use of colored keys to highlight frequently used functions. The displays are highly visible with a viewing angle of 150°, unlike the limited viewing of LCDs.

Operating procedures are structured in an organized hierarchy. This, along with activity summaries appearing on the display, eliminates the need for memorizing arcane codes and procedures.

Up to twenty operator login names and passwords are stored in the System Processor. Various operator activities may be password protected by the four password levels.

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Radio Module

The Vision 21 Radio Module includes two units; the Receiver Unit and Interrogation Unit.

The Receiver Unit receives and demodulates the incoming FM radio signals. A high-sensitivity receiver is incorporated into the unit, specially designed for reception of low-power Call Box signals. Two receivers can be placed in a single unit to ensure system integrity.

Features of the Receiver unit include:

- Front panel LEDs for power and transmitter status
- Remote radio channel test
- Signal strength meter
- RF activity alarm and LED
- RF carrier presence LED
- Speaker with volume control

The Interrogation Unit is an option used in systems which employ the 8MTJ-A-16C Command & Control Master Box. Signals are sent from the Interrogation Unit to the Master Box. These signals initiate Master Box self tests and control relays.

Charger Module

The Charger Module provides 24 Volt backup power to the Vision 21 Supervisory System. Depending on the selected option, the Charger Module supplies up to 72 hours of backup power.

Every minute the battery voltage is tested under load, providing a more accurate reading than a simple voltage measurement.

A current sensing circuit controls the rate of charge. When the battery is fully charged the over-voltage protection is activated.

The System Processor may operate in one of two modes; Dispatch or Logging Mode. Dispatch Mode sets the Vision 21 as the primary call processing center. Logging Mode sets the Vision 21 as a decoding center with call information passing to another device through an RS-232 cable. This allows the primary processing to be done on a computer with greater database capabilities.

Built-in diagnostics target hardware problems in both the Vision 21 and remote Master Boxes. Common hardware problems, such as a low battery or loose cable between modules, are continuously monitored. Master Box troubles and missing self tests are tracked by the System Processor, reducing maintenance time.