VERBATIM® MODULAR SERIES VSS

The Verbatim sets the standard for remote monitoring and alarming. The hardware has a modular design with a variety of configurations that meet even the most demanding industrial application. Built for the toughest environments and backed up by battery, the Verbatim has passed the test of time. It has proven reliability and performance to let you sleep easy at night, knowing that your critical infrastructure and equipment is running properly.

1. Description and Phone Number Dialing:

The dialer shall be a solid-state component capable of dialing up to sixteen (16) telephone numbers, each up to sixty (60) digits in length. Phone numbers and Standard pulse dialing or Touch Tone® DTMF dialing are user programmable via the system's keyboard or remotely via Touch Tone telephone. In addition, the dialer shall:

A. Group Alarm Calls - On alarm, the system shall selectively call the correct phone number according to the specific alarm(s).
B. Detect Telephone Line Fault and indicate condition with Front Panel LED.
C. Automatically select Tone versus Pulse Dialing.
D. Monitor Call Progress - Detect Busy and Ringing Signals, Abandon Call if Busy, wait until phone is answered to Annunciate Voice Reports.
E. Provide Numeric Pager Support
F. Provide PBX Support

2. Solid State Voice Message Recording and Playback:

The unit shall have two different categories of speech message capability, all implemented with permanent non-volatile solid-state circuitry with no mechanical mechanisms. The unit shall allow for message recording from a remote telephone as well as from the front panel.

A. User Field Recorded Messages:
The user may record and re-record his own voice messages for each input channel and for the Station ID.

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a. There shall be no limit on the length of any particular message within the overall available message recording time, which shall vary from 26 to 635 seconds, depending upon the number of input channels selected, and the recording rate used.
b. The unit shall allow selective recording of both Normal and Alarm advisory messages for each input channel.
c. The unit shall provide for automatic setting of the optimum speech recording rate for the total set of messages recorder, to achieve optimum recording sound quality.
d. Circuit board switches or jumper straps shall not be an acceptable means of manipulating message length or recording rates.

B. User Field Recorded Messages:
Permanent built-in messages shall be included to support user programming operations, to provide supplemental warning messages such as advising that the alarms have been disabled, and to allow the unit to be fully functional even when the installer has not recorded any messages of his own.

3. Input Monitoring Function:

The basic unit shall continuously monitor the presence of incoming power and the status of four (4) contact closure inputs. Power failure, or violation of the alarm criteria at any input shall cause the unit to go into alarm status and begin dial-outs. The unit shall, upon a single program entry, automatically accept all input states as the normal non-alarm state, eliminating possible confusion about Normal Open versus Normally Closed inputs. Further, as a diagnostic aid, the unit shall have the capability of directly announcing the state of any given input as currently "Closed Circuit" or "Open Circuit" without disturbing any message programming. Each input channel shall also be independently programmable, without the need to manipulate circuit board switches or jumpers, to any of the following:

A. Normally Open, Normally Closed, or for No Alarm (Status Only).
B. Run Time Meter - to accumulate and report the number of hours a particular input circuit has been closed. Any channel so configured will never cause an alarm call; rather, on inquiry it will recite its message according to the status of the input and then report the closed-circuit time to the tenth of an hour. The input will accumulate and report in tenths of

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hours up to a total accumulated running time of 99,999.9 hours. The initial value of the Run Time Meter shall be programmable to agree with existing electromechanical Run Time Meters. Up to a total of eight Runtime Meters may be programmed.

C. Pulse Totalizer - to count the accumulated number of pulses (momentary contact closures) occurring at the input so programmed. Any input channel may be programmed for a Totalizer Function, up to a maximum of eight. Maximum Input pulse rate is 100 Hz, with a 50% Duty Cycle. The spoken scaled value will not "rollover" to zero until a value of 4,294,967,294 has been exceeded.

4. Input/Output Expansion Capability:

The standard unit shall be modular in design, permitting it, therefore, to accept "plug-in" expansion circuit boards to incorporate any of the following:

A. Contact Closure Expansion Capability to a total of 8, 16, 24, or 32 total dry contact inputs.
B. Analog Input Capability to a total of 1, 4, 8, or 16 total analog inputs.
C. MODBUS RTU – 232 Serial Communications

5. Modbus Communications:

The unit shall accept an expansion card which enables it to communicate directly with devices utilizing Modbus RTU Protocol. A unit so configured shall be capable of "reading" and "writing" to 32, 64, or 96 data registers via Touch Tone Telephone. No modem or host computer shall be required. Interface shall consist of a single RS-232.

6. Printer Communications:

The unit shall be equipped with a Centronics parallel printer port, enabling the user to print alarm reports, download programming data, and generate scheduled status reports as required. Alternatively, the unit shall be able to accept an optional modular, plug-in asynchronous communications card to permit any of the following:

A. Local Data Logging - Permits a single dialer to communicate with a local Serial printer to log routine status reports, alarm reports, and programming data.

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7. Alarm and Inquiry Messages:

Upon initiating an alarm call, the system is to "speak" only those channels which are currently in "alarm status." Inquiry phone calls can be made directly to the unit at any time for a complete status report.

8. Acknowledgement:

Alarms are acknowledged either by pressing a Touch Tone "9" as the call is being received, or by calling the unit back after having received an alarm call.

9. Nonvolatile Program Memory Retention:

User-entered programming and voice messages shall be kept intact, even during power failures or when all power has been removed, for up to ten (10) years. This shall be accomplished through inclusion in the system of a lithium battery separate from the unit's backup rechargeable gel cell battery.

10. Local and Remote Programming Capabilities:

The user may optionally elect to alter the following parameters from their standard normal default values via keyboard entry or remotely from any Touch Tone telephone.

A. Alarm Response Delay: 0.1 to 999.9 seconds, with different delays being assignable to different alarms.
B. Delay Between Alarm Callouts: 0.1 to 99.9 minutes.
C. Alarm Reset Time: 0.1 to 99 hours, or "No Reset".
D. Incoming Ring Response (Answer) Delay: 1 to 20 Rings.
E. Number Of Message Repetitions: 1 to 20 Repetitions.
F. Auto call Test: When enabled, the unit shall place a single round of test calls, both at the time this function is enabled, and at regular subsequent intervals until this function is disabled.
G. Remote System Microphone Activation.
H. Remote Arming and Disarming of System.

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11. Phone Line, FCC approvals:

The unit is to use a standard rotary pulse or Touch Tone "dial-up" phone line (direct leased line not to be required) and is to be FCC Part 68 approved with a valid registration number. Connection to the telephone is through a standard modular jack (RJ-11). The unit shall conform to FCC Part 15B for EMC emissions. Voice Over Internet Provider VOIP Interface via powered VOIP Switch.

12. Speakerphone:

The unit shall be capable of dialing any phone number on command and functioning as a speakerphone.

13. Real Time Clock:

The unit shall be equipped with a real time clock thereby making the following possible:

A. Alarm Ready Schedule - The dialer shall be user programmable to follow a specific schedule of operations. This shall include the flexibility to set a weekday, weekend, and holiday schedule. With this feature the dialer shall arm and disarm itself according to the schedule programmed.

B. In the event any of the printer configurations outlined in Section 6 are utilized, all alarm reports will be time and date stamped. Routine scheduled status reports can also be programmed.

14. Power/Battery Backup:

Normal power shall be 12 VDC. Power Supply shall be UL rated and regulated AC /DC Switching Power Supply 110-240 VAC, to 12 VDC 2.08A 25 watts. UL Rated power supply shall be provided by the manufacturer with Dialer Hardware. The product is to contain its own gel cell rechargeable battery which is automatically kept charged when DC power is present. The system shall operate on battery power for a minimum of twenty (20) continuous hours in the event of AC / DC power failure. A shorter backup time shall not be acceptable. The built-in charger shall be precision voltage controlled, not a "trickle charger," to minimize recharge time and to maximize battery life available.

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15. Integral Surge Protection:

Phone line, and analog signal inputs shall be protected at the circuit board to IEEE Standard 587. category B(6,000 volts open circuit/3,000 amps closed circuit). Gas tubes followed by solid state protectors shall be integral to the circuit board for each line.

16. Technical/Customer Support:

All users shall be provided and/or shall have access to the following support resources.

A. Each autodialer shall be shipped with an Easy Start Guide and QR tag viable to the user, which details all features of the product and provides an in-depth step-by-step video programming guide. A superficial marketing overview will not be acceptable.
B. Manufacturer of equipment must have manufactured specified product for not less than 20 years with expertise in specified industry as applied.
C. Free Live Chat support on RACO's website staffed with trained technicians shall be available for 12 hours during the manufacturer's normal working day.
D. A free comprehensive web-based support center with over 600 FAQs shall be available for customers to retrieve copies of all available technical information directly onto their own computer. The support center shall have an optimized user interface for smartphones at http://www.racomobilesupport.com, allowing users to quickly navigate to the desired support topics. This service shall be available on a 24-hour basis.
E. A toll free 800 number shall be available during the manufacturer's normal working day to permit users to talk directly with technical service personnel and resolve problems not solved by the RACO web-based Support Center.

17. Warranty:

The dialer shall be covered by a Five (5) year warranty covering parts and labor performed at the factory.

18. Additional Features: Sealed Switches. LED Indicators. Alarm Disable Warning. Talk through:

All keyboard and front panel switches shall be sealed to prevent contamination. Front panel LEDs shall indicate: Normal Operation, Program Mode, Call-in Progress, Status for each Channel, AC Power present, AC Power failure, and Low, Discharging, or Recharging Battery. On any inquiry telephone call, or

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On-Site status check, the voice shall provide specific warning if no dial out phone numbers are entered, or if the unit is in “alarm disabled“ mode, or if primary power is off or has been off since last reset. A built-in microphone shall allow anyone at a remote site to listen to local sounds and to have a two-way conversation with personnel at the dialer.

19. Miscellaneous Special-Order Items:

The following options shall be available on specific order:

A. CLOUD Connected Communications Interface
B. Various NEMA 4X (sealed) Enclosures
C. Cellularm POTS to Cellular Communications Systems
D. VOIP Interface
E. Solar Powered Package

Specifications subject to change without notice.

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