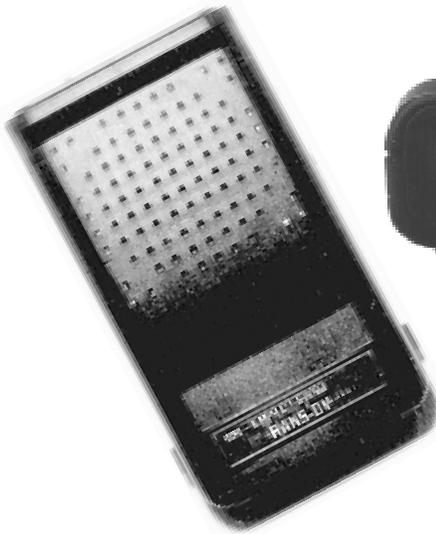




PRELIMINARY

EMPACT SERIES
Communications & Control Equipment

Communications & Documentation Technologies



TOP VIEW



RANS- ULTIMA

DIGITAL AUDIO ALARM ANNOUNCEMENT SYSTEM

Revolutionary advances in digital technology have allowed us to produce the new standard for alarm announcement systems. *RANS-Ultima* utilizes a very short duration digital signal to produce a high-quality natural voice alarm message on portable alarm receivers, worn by roving personnel. The short duration digital radio transmission (less than 1/2 second) can be transmitted over an existing audio radio channel without interference with current radio operations.

Typical voice radio systems produce audio of poor quality when the signal strength is low. This means that if the signal fades, such as when you are in an enclosed area, the voice message is difficult or impossible to understand. *RANS-Ultima* provides a natural voice alarm message independent of the radio transmission, therefore the message will always be clear and easy to understand.

Supervision of radio transmission is provided by periodic transmissions of a coded radio signal. If the supervisory transmissions are not received, the supervision lamp will flash. If the supervision signals are not received for a preprogrammed period of time, a supervision voice message will be heard.

RANS-Ultima can be used in conjunction with your existing radio system because the RANS encoder "listens" to your radio channel and waits for a clear channel. Duplicate transmissions of alarm signals ensure receipt of the alarm message.

- High-Quality Digital Voice Regardless of Radio Signal Strength
- Solid-State Storage of Current and Prior Alarm Messages
- "Piggy-back" Operation on Existing Radio Systems
- Facility-wide or City-wide Operation
- Utilizes Standard AA-size Batteries
- High-Power Audio Output

An optional output allows *RANS-Ultima* use with a city-wide or nation-wide paging service. Alarm messages are processed with the same speed as a digital numeric pocket pager providing the same range and coverage.

Each *RANS-Ultima* portable alarm receiver features simple push button controls:

- **VOLUME pushbutton**—Pressing the button increases the sound level step-by-step to the maximum volume. At each step, the word "louder" is heard indicating the audio output level. A second press of the button decreases the sound level step-by-step to the minimum volume. The word "softer" is heard to indicate the audio output level. The volume cannot be turned below a minimum volume level.
- **PLAYBACK pushbutton**—Pressing the button allows the playback of past voice messages. Momentarily pressing the button will produce the most recent message. Holding the button for about one second will produce the past four messages. The playback function will be overridden at any time by new alarm messages.

- **ACKNOWLEDGE pushbutton**—Pressing the button extinguishes the flashing alarm lamp and stops the periodic repeating of the alarm message(s). Alarm messages will continue repeating every minute for three minutes if not acknowledged.
- **TEST**—Pressing both reset and playback buttons simultaneously for 3 seconds will enter the test mode. The test mode will test alarm tones and each voice word/phrase.
- **ALARM TONES**—Four sharp/loud beeps in succession (approx. 1000 Hz). High priority alarm tone preceding all priority alarm messages.

—One sharp/loud beep (approx. 1000 Hz). Normal priority alarm tone preceding all normal alarm messages.

—One short/muted tone (approx. 400 Hz). Battery low indication to be repeated every two minutes.

- **INDICATOR**—There is one two-element LED (red/green). Flashing red indicates an alarm message has been received and not acknowledged yet. A glowing green signifies a low battery low. Flashing green indicates that the supervision signal has not been received.

Accessories:

- Soft Leather Case
- Hard 650 MaH Ni-Cad Battery Pack
- 800 MaH Ni-Cad Battery Pack
- Spare Belt Clip
- External Antenna
- Drop-in Battery Charger/Amplifier

SPECIFICATIONS

Alarm Encoder

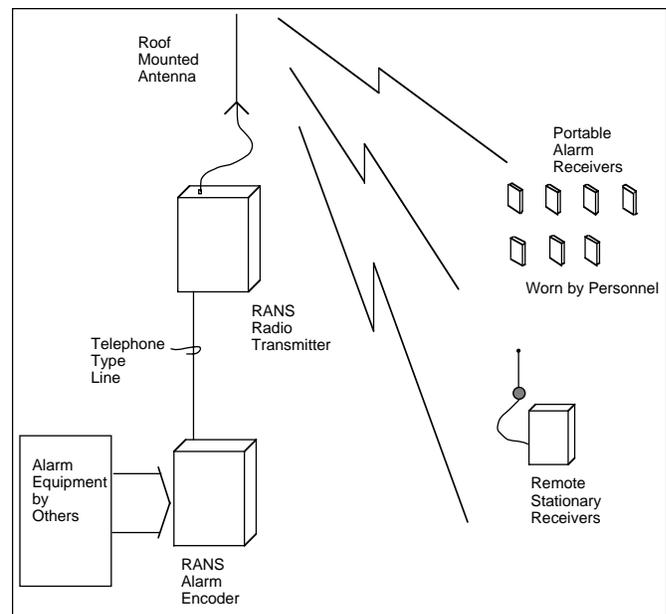
- Alarm Messages:** 48 alarm inputs. Expandable in groups of 48 to 192 inputs.
- Alarm Inputs:** RS-232 serial input. Closed contacts or solid state input from other alarm systems.
- Outputs:** Closed contact (24VDC, .25 amp.)
Current loop, 1000-ohm maximum loop resistance.
- Indicators:** Green power-on LED.
Red message-transmit LED.
- Controls:** Test switch.
Output level control.
- Power Required:** 24VDC, 120 ma. provided by external UL-listed wall transformer.
- Enclosure:** 12"W X 12"H X 4"D.
- Weight:** 4.5 lbs.

Transmitter

- Frequency:** VHF; 148-174 MHz, UHF 450-470 MHz. Other frequency ranges on special order. Consult factory.
- Power Output:** 2 watts or 5 watts (optional), 50-ohm load.
- Power Required:** 12 VAC or 12 VDC, 1 amp, provided by UL-listed wall transformer.
- Enclosure:** 12"W X 12"H X 4"D CRS wall-mount enclosure, with hinged cover and key lock.
- Weight:** 16 lbs.

Portable Alarm Receiver

- Frequency:** VHF; 148-174 MHz, crystal controlled.
UHF 450-470 MHz.
- Sensitivity:** 12 dB SINAD, 12 microvolts per meter.
- Audio Level:** 90 dB SPL average from 300 Hz to 3000 Hz at 12 inches.
- Battery Life:** Nickel-Cadmium rechargeable battery.
- Dimensions:** 3.5"W X 2.6"H X 1.0"D with heavy-duty, wide belt clip.
- Weight:** 5.5 ounces with battery (w/o holster).



Typical RANS-DV Installation