

## Main Benefits:

- Wireless Transmission
- Panic Button for Officer Safety
- Miniature packaging
- Records as .wav file
- Removable Micro SD card
- Download Option
- Concealment options
- Up to 8 hrs recording capacity (with on-board battery)
- Excellent sound quality
- Easy to use

## Recommended Uses:

- Body worn surveillance
- Fixed installations
- Concealments

## Ideal Users:

- Live surveillance teams
- Technical investigators
- Intelligence and counterintelligence operators
- Military LE groups
- IG offices

For more information or to receive a price quote, visit our website at [www.nexo-tek.com](http://www.nexo-tek.com) or send us an email at [sales@nexo-tek.com](mailto:sales@nexo-tek.com).



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# SCALE RF

*Miniature wireless audio recorder / transmitter*



Highly concealable with wireless transmitting capabilities, the SCALE RF brings cutting-edge technology to any operation. SCALE RF utilizes a simple software interface to easily customize the unit for any application and offers removable media cards or a download option for easy transfer of files.

With easily configured parameters, live audio transmission, and remote download capabilities available; the SCALE RF is one of the best recorder/transmitter units on the market today.

## Product Characteristics:

- **Wireless Transmission**- SCALE RF uses digital encrypted transmission. The receiver unit allows real-time monitoring of the Scale RF and can remotely set up, turn the unit on and off and pick up the panic button signal.
- **Removable Media Card** - The recorded audio files are stored on a minute MicroSD / SDHC card format. SCALE II dimensions are incredibly small: 1.181 x 0.838x 0.307 inches with the casing, battery and the SD card.
- **No Special Download Software Necessary** - The recorder maintains FAT-16/32 compatible file system and WAV data format compatibility. The memory card can be formatted directly by the recorder.
- **Uncompressed Audio Recording** - Audio is stored using uncompressed linear PCM format, 2-law telecommunication standard or the common IMA ADPCM compression algorithm.
- **Rechargeable Li-Ion Battery** - A miniature rechargeable Li-Ion battery is used for standard powering of the recorder. Capacity is 8 hours for default settings.
- **Manual or Auto Recording** - SCALE II records either manually (via button or external controller) or automatically, via real-time clock scheduler or VOX operation.
- **Time & Date Stamp** - Whenever a recording is created, it is stored in a separate file with time and date stamp.
- **Concealable** - SCALE II can be purchased as a board level module, in a car key housing, or in black compound casing for multiple-use operational requirements.

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# SCALE RF

## SPECIFICATIONS

**Storage medium:** Removable Micro SD/SDHC memory cards  
**Recording modes:** Stereo, mono (built-in or external microphone)  
**Microphone types:** 3-wire electret microphone (Knowles FG recommended)  
**Ext. mic. phantom power:** 1.2 V, max 0.3 mA  
**Input impedance:** 100 k $\Omega$   
**Nominal input level:** 2.3 Vp-p (approx. 0.8 Vrms effective value for a sine wave)  
**Input amplification:**  
**Analog:** 0 dB, 20 dB, (40 dB external microphone only)  
**Digital:** 6 dB, 12 dB, 18 dB, ALC  
**A/D conversion bit depth:** 13-16 bit (according to the setting)  
**Sampling frequency:** 8192 Hz, 10923 Hz, 16384 Hz, 21845 Hz, 32768 Hz, 43690 Hz  
**Frequency range:** 18 Hz – 17 kHz (3 dB, gain 20 dB, sampling frequency 44 kHz, LPCM mode)  
**Dynamic range:**  
78 dB (gain 20 dB, sample rate 8 kHz, ADPCM mode, mono)  
82 dB (gain 20 dB, sample rate 8 kHz, ADPCM mode, mono 300Hz-4KHz band only)  
**Power supply:** Compact Li-pol battery 3.7 V, 320 mAh



Transmission module

### Power consumption:

**Recording:** 7.5 – 80 mA (depends on Micro SD card size and recorder settings)

**VOX mode:** usually 3 mA in stand-by mode

**External controller:** < 0.1 mA

**Sleep mode:** approx. 13  $\mu$ A

**Battery charger:** 5V DC, .4A

**Charging time:** 2 hours (to 80% of capacity), 3 hours (to full capacity)

**File system:** MS-DOS/Windows FAT-16/32 compatible, memory card up to 32GB

**Recording formats:** Linear PCM,  $\mu$ -law or IMA ADPCM, WAV compatible

**Additional functions:** Real time clock, saving the date and time information of the recordings, upgradable firmware.

**Recording modes:** Manual, timer, external voltage signal, VOX and combinations.

**Connectors:** 1x4 - pole jack 2.5mm gold plated (charging, external microphone input, communication with PC, vibrating external controller)

**Control elements:** Micro switch, two LEDs, optional remote controller, mobile phone with Bluetooth capability.

**CRYPTO** is a software option with added security functions. Recorded data can be protected against unauthorized misuse by encryption. Optionally, the same data can be subject to a cryptographic checksum, should users require a guarantee of authenticity. The CRYPTO option is available anytime for all SCALE II recorders as an upgrade.



Car key housing

### Contents of the Basic set:

SCALE RF ALU unit • Receiver/remote unit • 5 dBi omnidirectional dipole antenna • Panic button • Earphones • Printed documentation • Memory Card  $\geq$  2GB • Micro SD USB reader • Data cable • Charging cable • AC Adaptor • Configuration utility CD • Transport case

### Optional accessories (or full set):

All items included in Basic set, plus: SCALE RF Car Key unit • 9dBi whip antenna with stand • Mobile phone with control software • External microphone (Knowles FG) • Car 12V adaptor



Scale RF Full Set

**Mechanical design:** High quality aluminum compound (CERTAL) housing with matte finish (ALU), compact PCB with black rubber cover (MODULE) or Car Key housing (CARKEY).

**Dimensions:** max. 1.122 x 1.496 x 0.354 inches (incl. battery, casing and Micro SD) (28.5 x 38 x 9 mm ) max.

**Weight:** 16 g (in CERTAL casing with battery and Micro SD card)