



Mission-Critical Audio™

DS Series Digital Wireless Microphones

- Concert Digital Audio
- Fault Tolerance for Mission-Critical Reliability
- US Government Certified Encryption
- Rechargeable AA Batteries & Docking Station
- For Small to Very Large Systems
- SACOM Remote Software Included

Made in USA

www.SacomUSA.com

SACOM™ DS8000 Digital Wireless Microphone Systems

Mission-Critical Audio

Whether it is a meeting of the Board of Directors, an inauguration speech, or a live TV broadcast, it is mission-critical audio. Every sound must be clear and natural. SACOM's wireless system is the first to combine uncompromising audio quality specifications with a totally redundant hardware platform to deliver mission-critical audio.

Mission-Critical Audio Specifications SACOM Wireless Systems deliver unsurpassed 24-bit audio quality that meets the most demanding specifications for the concert stage, recording studio and broadcast.

Mission-Critical Backup Redundancy SACOM hardware platforms can be configured for total redundancy for belt and suspenders reliability. The system automatically detects a system fault and seamlessly switches to the backup system. In addition, an alarm is immediately sent to the technical staff, informing them of the fault, and what must be done to rectify the situation. In one example, the SACOM system senses that a battery is about to die in the middle of a presentation. The system automatically switches to the backup transmitter and receiver and sends text messages to tech support. Anybody who can change a toner cartridge can easily change out a SACOM receiver module, a transmitter antenna, and yes, anybody can change the batteries.

Mission-Critical Encryption Military, government, banking and corporate meetings are assured confidentiality with SACOM's 256-bit encryption algorithm, which conforms to the US Government AES (FIPS PUB 197) specifications.

Mission-Critical Battery System A wireless transmitter is no more reliable than its batteries, so SACOM transmitters are engineered around standard AA rechargeable batteries. The system's docking station keeps them charged and ready to go. Standard alkaline AA batteries work also. When powered by an external power supply unit, the transmitters operate normally, with or without batteries.

Plug and Play SACOM systems are engineered for quick and easy setup. In most regions, they work right out of the box. That being said, they should not be confused with consumer products. SACOM systems are complete, professional audio systems with all of the features and functions required for the most demanding audio requirements.



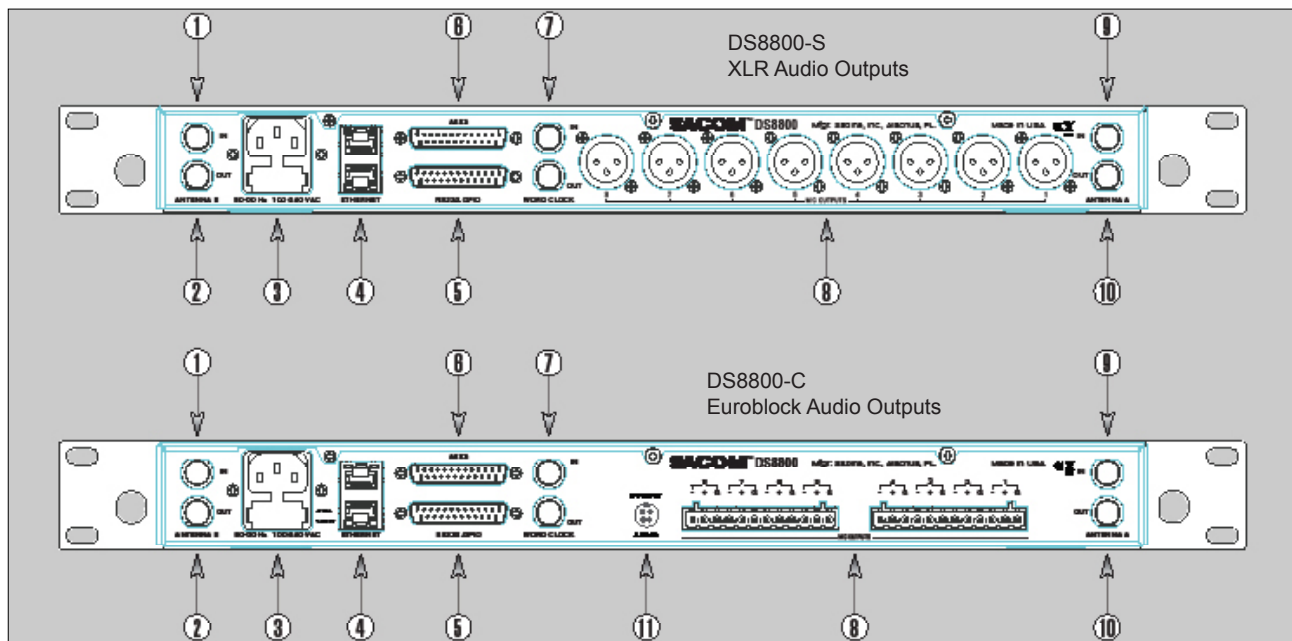
SACOM™ DS8000 Receivers



DS8800 Series Receiver

Features:

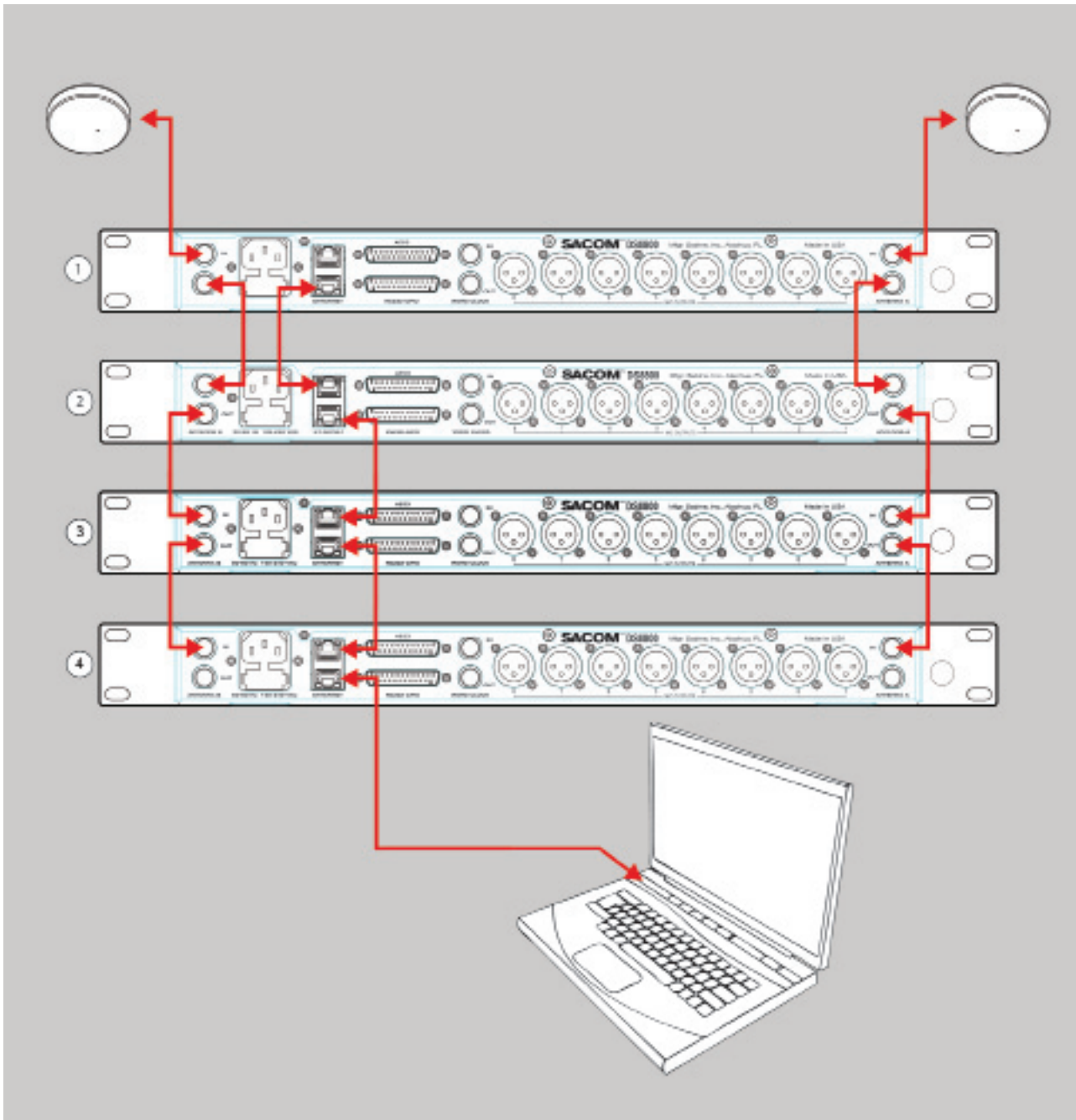
- Four or eight modules per rack
- 24-bit digital audio, No companding
- 256-bit, FIPS 197, encryption
- Mixed audio output and level control
- USB
- AutoScan & Sync



1. Antenna A Input , TNC
2. Antenna A Output, TNC
3. Power Cord Input
4. Ethernet I/O
5. GPIO & RS232
6. AES/EBU-3 Digital-Audio Output (Optional)
7. Word clock In and Out, BNC
8. Audio Output Jacks: Specify XLR or Euro-blocks
9. Antenna B Input, TNC
10. Antenna B Output, TNC
11. DC Input: Optional, external power source (available on DS8800-C and DS8400-C models)

SACOM™ DS8000 Receiver Back

- **Daisy-chain up to 32 channels to two antennas**
- **Pre-tuned extension antenna kits available up to 150 feet**
- **Longer antenna cable lengths available as special orders**
- **Network up to 32 channels w/ Ethernet in and out**
- **Receivers IP addressable. Network hub not required**



SACOM™ DS8000 Receiver Module



DS8800 Series Receiver Module

Features:

- Independent true diversity receiver
- 24-bit digital audio, no companding
- 256-bit, FIPS 197, encryption
- Hot-swappable, field replaceable module
- Bright OLED display



DS8800 Series Receiver Module

Functions:

- Battery bars plus run-time hours
- RF level and diversity status
- Audio level of the microphone
- Assign channel the name of the presenter
- Mixed audio output: On/Mute
- Mixed audio output level
- Squelch
- Transmitter low-cut
- Transmitter pad
- Transmitter switch programming
- Transmitter output power (1, 10, 25, 50 mW)
- ABOUT screen with system status



Field Replaceable Receiver Modules

SACOM™ DS8000 Transmitters



Standard Features:

- 24-bit digital audio, no companding
- 256-bit FIPS 197, encryption
- Aluminum Alloy case
- Transmitters recharge in Docking station
- AA rechargeable or alkaline batteries: up to 8 hrs usage
- Programmable switch: on/off, on/mute, on/logic mute, on/on
- Programmable power output: 1, 10, 25 & 50 mW
- USB for charging and free firmware upgrades
- OLED Display
- IR link

Hand Held Features:

- Suspended core eliminates handling noise
- Soft-touch, no slip finish
- ClearOne and Audix heads optional

Lavalier and headset microphones:

Lavalier and Single or double ear headset mics are available with TA4 connectors to complement Sacom wireless Systems.

(www.SacomUSA.com for details)



SWT40L-oB-TA4
Lavalier



SWT74W-oST-TA4
Single Ear Headset Mic

DS80-H Series
Hand-held Transmitter

Belt-pack Features:

- Standard TA4 jack w/ electret bias voltage
- Reversible belt-clip
- One of the smallest transmitters in the industry 2 1/2" x 2 3/4" (62mm x 70mm)
- Field-replaceable antenna



DS80-T Series
Belt-pack Transmitter

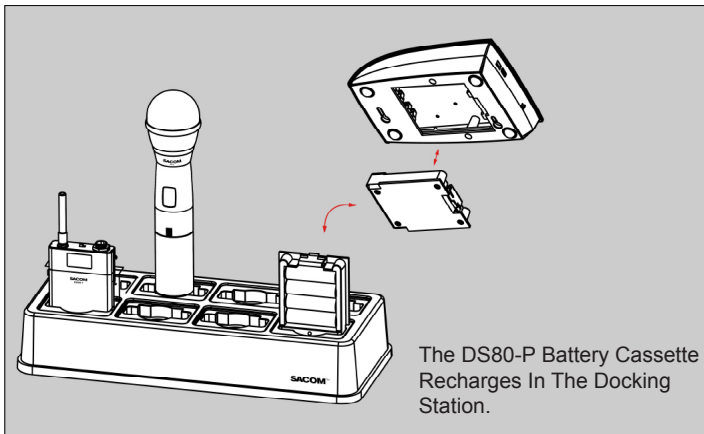
SACOM™ DS8000 Conference Microphones

Podium Gooseneck Mic Features:

- Contemporary design w/ internal antenna
- 24-bit digital audio, no companding
- 256-bit, FIPS 197, encryption
- Programmable switch: push to talk, push to mute, push for logic mute, toggle on / off.
- Interchangeable plug-in goosenecks: 12", 18" lengths.
- Interchangeable capsules: cardioid, super-cardioid
- Charge via USB or Docking Station.
AA rechargeable batteries or alkaline:
charge the battery up to 16 hrs operation per charge w/ USB



DS80-P Series
Podium Gooseneck Mic



The DS80-P Battery Cassette
Recharges In The Docking
Station.

Conference Table Mic Features:

- 24-bit digital audio, no companding
- Omni or cardioid patterns
- 256-bit, FIPS 197, encryption
- Programmable switch: push to talk, push to mute, push for logic mute, toggle on / off.
- Small size 2 3/4" x 3 3/4" (69mm x 94mm)
- AA rechargeable batteries or alkaline
(up to 8 hrs continuous usage)
- Charge via USB or Docking station



DS80-C Series
Conference Table Mic

SACOM™ DS8000 Docking Station



DS80-8 Docking Station

Docking Station Features:

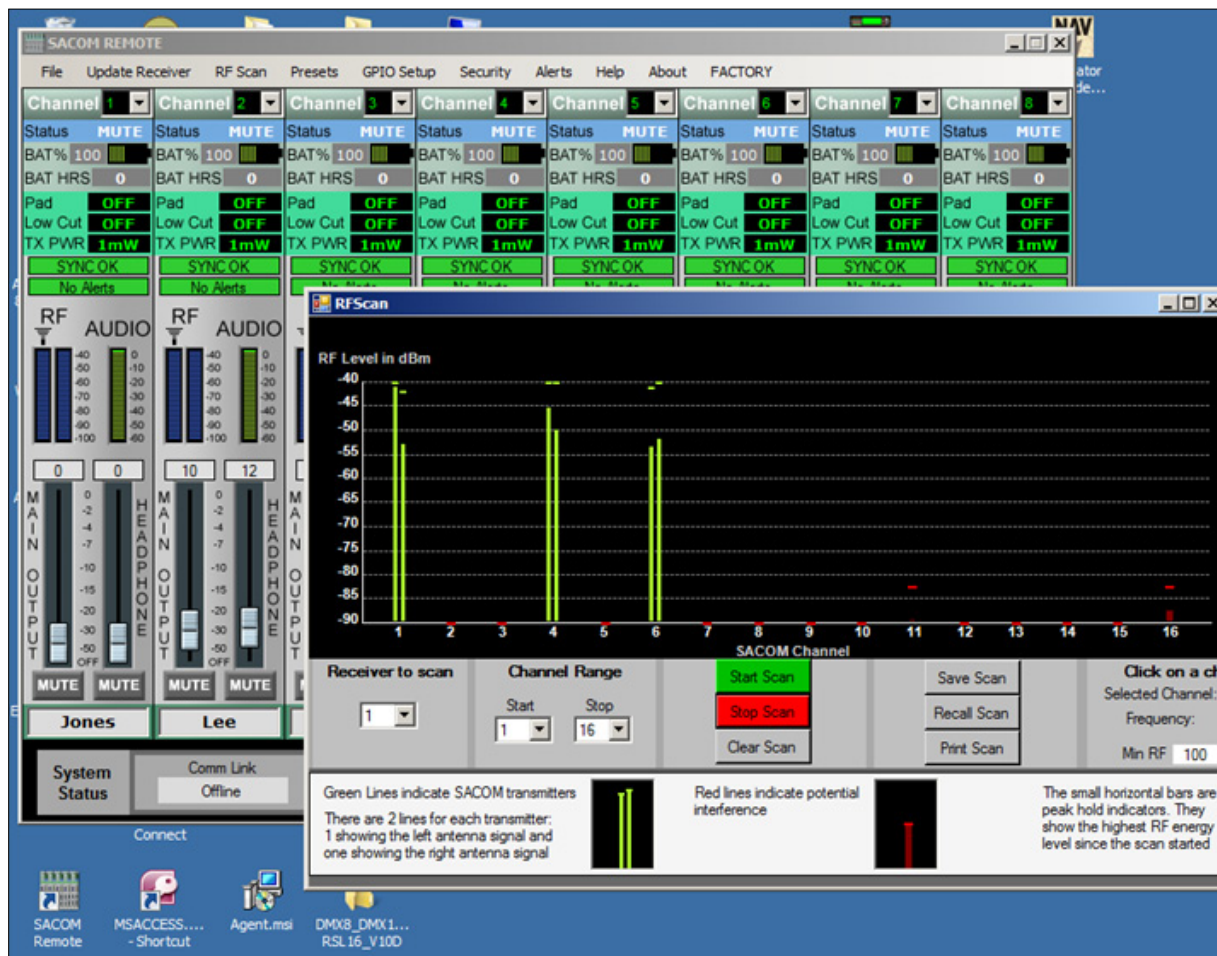
- 8-Bay docking station standard with every receiver
- Charges standard NiMH AA batteries (It will not attempt to recharge alkaline batteries).
- For hand-helds, belt-packs, conference-table transmitters, and battery cassettes.
- Recharge NiMH batteries between 500 -1000 cycles. By then, NiMH batteries, will have repaid the entire cost of the system.
- NiMH battery life, up to 8 hours, depending on power setting
- Lithium ion non-rechargeable battery life, up to 9 hours, depending on power setting.
- SACOM transmitters can be powered without batteries by an optional USB PSU for permanent installs

SACOM™ Remote Computer Software



Features:

- Full system monitor and control of the complete system
- Intuitive. Your window to all things SACOM
- Password protected
- Auto Scans and sets clear RF channels
- Setup and control system redundancy and reliability
- Automatically emails low-battery and scheduled maintenance alerts and other system faults.
- Download and evaluate free from www.SacomUSA.com



Sacom Remote Computer Software with RF Auto Scan in progress

Advantages of 24-bit digital wireless technology

- **Sounds like a wire - Flat frequency, no companding**
- **Digital is more immune to interference than analog**
- **Encryption - As secure as a wire**
- **Compact Size - 8 receivers in a 1-U space**
- **Digital output - AES/EBU-3**
- **Large channel counts. 200-plus channels configurable in a courthouse or campus**

SACOM Advantages

Corporate / Government / Military

- **Sounds like a wired mic - 24-bit audio**
- **Encryption, US Government specs**
- **Mission-Critical Audio**
- **Plug 'n Play**
- **Wireless Podium and conference-table mics**
- **GPIO contact closures and logic mute**
- **Docking station**
- **Made in USA**



Church

- **Sounds like a wired mic - 24-bit audio**
- **Mission-Critical Audio**
- **Plug 'n Play**
- **Large channel counts**
- **Private meetings stay confidential**
- **Digital output for digital boards**
- **Docking station**



Education

- **Sounds like a wired mic - 24-bit audio**
- **Mission-Critical Audio**
- **Large channel counts**
- **Mini belt-packs and wireless podium mics**
- **Docking station**



Live Sound

- **Sounds like a wired mic - 24-bit audio**
- **Mission-Critical Audio**
- **Mini belt-pack**
- **Noise-free hand-held**
- **ClearOne and Audix heads**
- **Large channel counts**
- **8 receivers per rack space**
- **Pre-tuned extension antennas**



Can you hear me now?

Specifications: SACOM™ DS8000 Series

DS System Overview

- RF Technology: 24-Bit digital audio: No Companding
- Encryption: 256 bit key. Meets US Gov. AES (FIPS PUB 197)* standard.
- Digital Carrier Frequency Range: Available in several bands: see: www.SACOMUSA/FrequencyBands for details
- S/N Ratio: 108 dB (Typical 'A' weighted)
- THD: <0.03%
- Frequency Response: 20 Hz - 20 KHz +/- 1.5 dB (stage mode)
- Stability: < 5 ppm
- Channel Spacing: 1.625 MHz or 812.5KHz (programmable)
- Range: >100 meters line-of-sight
- Latency: < 3 mSec (Stage Mode Digital Output)

DS Series Receivers

- Receiving Mode: True diversity
- External Antennas: Optional
- Power Supply: 100-240 VAC 50-60 Hz, 15 Watts, 320mA slow-blow fuse (spare included)
- 1-U Rack-Mount Case: 4 or 8 independent receivers modules
- Analog Audio Outputs: Balanced XLR or terminal blocks; +2 dBV, +4 dBu, 100 Ohm source impedance; pin1=chassis ground, pin2 = hot, pin3 = cold. The output connectors are protected against inadvertent application of phantom power from the mixer
- Digital Audio Output (optional) AES/EBU-3 with word-clock
- Headphone out (mixed): Balanced, 1/4-in, stereo phono-jack for headphones, recording devices or powered speakers
- Serial Interface: USB, RS232 & Ethernet
- GPIO Interface: Programmable
- Computer Software: System control, monitor, scan
- Programming Display: OLED
- Maximum Undistorted Sine Wave Output: +4dBu
- Antenna Distribution: Built-in. Attach up to 32 channels to one pair of antennas
- Gain Adjustment Range: -20dB to +31dB
- Power input rating: 100 – 240 VAC 50/60 Hz 15 W
- Fuse: 250V SLOW BLOW 320mA
- Operating Temperature: 0 - 50 degrees Celsius ambient temperature (32 - 129 degrees F)
- Dimensions: 1-U rack-mount, 19 x 1.75 x 6.5 inches (48 x 4.4 x 16.5cm)
- Weight:
 - 8 Channel Receiver 4.7 lbs. (2.14 kg)
 - 4 Channel Receiver 4.5 lbs. (2.04 kg)

DS Series Hand-Held Transmitters

- Housing: Machined aluminum alloy, quiet-coat finish
- Capsule: Various dynamic and condenser. ClearOne H13 or Audix OM5** optional
- RF Output: 1, 10, 25 or 50 mW, user selectable (check for local restrictions)
- Antenna: Internal
- Telemetry: Battery status, mute status, channel, etc
- Display: OLED
- External Switch: Programmable On/off, on/on, on/mute, on/logic mute
- Battery: Two Rechargeable AA NiMH included (or alkaline)
- Rechargeable Battery Life: ~8 hours per charge, typical @ 1mW
- RF Frequency Stability: < 5 ppm
- Dimensions: 2 13/16 L x 2 3/8 W x 2 1/32 H
- Weight with batteries: 0.35 lbs. (.16kg)

DS Series BeltPack Transmitter

- Housing: Cast aluminum alloy
- RF Output: 1, 10, 25 or 50 mW, user selectable
- Antenna: External, field replaceable
- Telemetry: Battery status, mute Status, channel, etc
- Display: OLED
- External Switch: Programmable On/off, on/on, on/mute, on/logic mute
- Battery: Two Rechargeable AA NiMH included (or alkaline)
- Rechargeable Battery Life: ~8 hours per charge, typical
- RF Frequency Stability: < 5 ppm
- Mic input impedance: 47 K Ohms
- Mic bias: 3V
- Mic connector: TA4
- Dimensions: 10 3/16 L x 1 3/8 W x 1 3/8 H
- Weight with batteries: 0.75 lbs. (.34kg)

DS Series Podium Gooseneck Transmitter

- Housing: Zinc and ABS
- Capsules: Condenser - Omni, cardioid or super-cardioid
- Gooseneck lengths: Various
- RF Output: 1, 10, 25 or 50 mW, user selectable
- Antenna: Internal
- Button: Press to talk, press to mute (or logic mute), toggle on/off
- Telemetry: Battery status, mute Status, channel, etc
- Display: None
- External Switch: Programmable On/off, on/on
- Battery: Four rechargeable AA NiMH included (or Alkaline)
- Rechargeable Battery Life: ~16 hours per charge, typical @ 1mW
- RF Frequency Stability: < 5 ppm
- Dimensions: 6 1/8 L x 4 9/16 W x 1 7/16 H
- Weight with Batteries: base 1.60 lbs. (.72kg)

DS Series Table-top Transmitter

- Housing: ABS
- Mic - Internal
- RF Output: 1, 10, 25 or 50 mW, user selectable
- Antenna: Internal
- Telemetry: Battery status, mute Status, channel, etc
- Display: None
- External Switch: Programmable On/off, on/on
- Battery: Two rechargeable AA NiMH included (or Alkaline)
- Rechargeable Battery Life: ~8 hours per charge, typical @ 1mW
- RF Frequency Stability: < 5 ppm
- Dimensions: 3 15/16 L x 2 3/4 W x 1 11/16 H
- Weight with Batteries: base .25 lbs. (.12kg)

(SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE)

* see www.SacomUSA.com for details

**Company names, product names, and trademarks listed here are the property of their respective owners and are used only to identify evaluated microphones used to develop digital processing; they in no way imply association, endorsement, or approval by any named manufacturer.

NOTE: SACOM™ and Mission-Critical Audio™ are trademarks of Sabine, Inc., Alachua, Florida USA.

Made in USA



13301 NW US Highway 441
Alachua, FL. 32615 - 8544 USA
Phone: (386) 418 - 2000
Fax: (386) 418 - 2001
WWW.SACOMUSA.COM