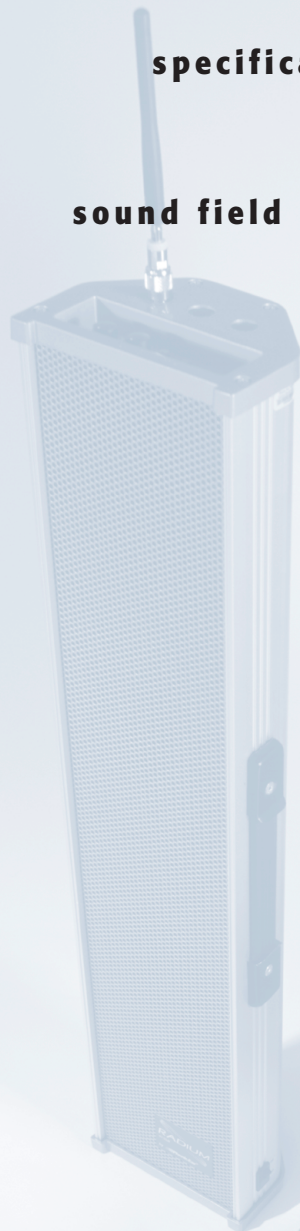


RADIUM sound field system

specifications: RADIUM sound field system



description

Wireless FM speaker/receiver, body-worn transmitter, handheld microphone

application

For use in general education classrooms, for ESL, ADHD, and CAPD students and for students with minimal hearing loss; shown to reduce teacher absenteeism from vocal fatigue and to improve student comprehension and test scores.

key features

Portable; very easy to operate; two-channels; excellent sound quality

transmitter

Body-worn or handheld

receiver

Two-channel base station inside speaker enclosure

frequencies

20 wide-band frequencies
174MHz–214MHz

typical fm range

34m/110ft

portability

Built-in handle on speaker; carry bag



))))))PhonicEar®

U.S.A.: 800.227.0735 Canada: 800.263.8700 Web: www.phonicear.com

two channel column speaker: PE 915SR

available frequencies

Option	Channel A	Channel B
1	174.5 MHz	182.2MHz
2	175MHz	179.3MHz
3	176.3MHz	180.4MHz
4	177.8MHz	183.6MHz
5	184.51MHz	189MHz
6	186.2MHz	192.2MHz
7	186.6MHz	200.3MHz
8	190.6MHz	195MHz
9	196.6MHz	203MHz
10	202.5MHz	214.75MHz

excellent wideband
sound quality
Available in 20 frequencies

column speaker technology
Dual phase-angled speakers in a
single enclosure allow complete
coverage of a small to medium
size classroom

carry handle
For easy transportation

plugs into wall or runs on battery
Battery offers 5 to 8 hours of continu-
ous cordless operation; recharge the
battery or power the system from a
wall transformer

convenient charging indicator
Red tells you the battery is charging; green
lets you know the system is fully charged

power and charging port
Runs on wall transformer or battery

receivers
Incorporates tone key squelch
to eliminate white noise due
to interference

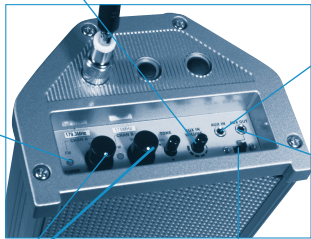
power and
FM reception
indicator light

aux input/volume control
Mix in music or other
audio programs from CDs,
VCRs, computers, etc.

aux output
Plug in a SOLARIS, EASY LISTENER, or
SPRITE transmitter, or a tape recorder

two channels
For team teaching or
use with pass mic

hi/low aux output switch
Ensures adequate signal level



accessories

AT0820
wall mounting bracket
(set of 2)



AT0823
speaker table stand



AT0824
speaker floor stand



AT0822
carry bag



AT0818
speaker power cord
(included)



AT0529A-26
antenna for use
when connecting
FM transmitter to
Aux Out

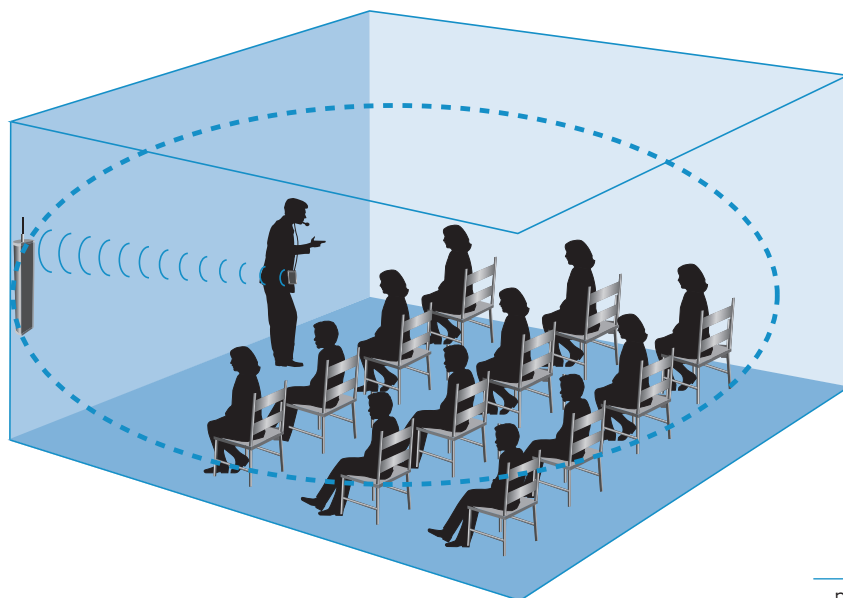


AT0532-05 (5 feet)
AT0532-15 (15 feet)
Aux connection
cord for connecting
secondary sound sources
or transmitters

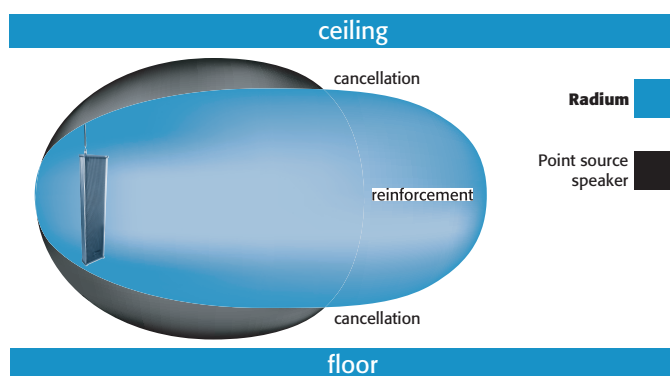


AT0794-B
adhesive wall bracket
to hold connected
FM transmitter





The Radium dispersion pattern is elliptical, reducing reverberation from the ceiling and floor



dispersion pattern (side view)

Our column speaker technology takes advantage of the effects of cancellation and reinforcement that occur when spacing two speaker cones a precise distance apart (phase angling). Because RADIUM's speakers are phase angled, sound cancellation occurs at the top and bottom of the speaker enclosure. This reduces the amount of sound reflecting off the floor and ceiling, and therefore reduces reverberation.

In addition, reinforcement occurs at the center of the RADIUM speaker. The sound energy that would ordinarily bounce off the ceiling and floor is directed in front of the speaker. This means that the RADIUM speakers' sound will drop only 4dB for every doubling of distance up to about 7m/23ft versus the 6dB drop of an ordinary point source speaker.

output power	Max. 36W @ 4Ω x 2
power requirements	110V/240V AC adaptor 15V DC/2A Battery 12V/2.7A (rechargeable, sealed lead-acid, 1-1.5 year life [with continuous usage])
frequency response	100 Hz – 12kHz
total harmonic distortion	Less than 1% (at rated output)
signal-to-noise ratio	>70 dB (at rated output)
inputs	AUX x 1, power & charge
output	AUX x 1 (Hi: 700 mV/Low: 100mV)
controls	Tone, Channel A & Channel B Power/Volume, Aux Volume, High/Low output, Master Power
dimensions	100(w) x 660(h) x 145(d)mm
weight	5kg/13.4lbs
recharging time	4 – 8 hours
battery operating time	5 – 8 hours (continuous operation)
speaker stand	Optional table stand (AT0823), floor stand (AT0824) or wall brackets (AT0820)
frequencies	See chart at left
de-emphasis	50μs

bid specifications

The sound field system must have a built-in battery, two built-in receivers and two built-in speakers that can provide amplification within a room for people with normal hearing as well as for people with minimal to mild hearing loss of 10 to 25 dB. The receiver must be able to amplify the speaker's voice 10 to 12 dB above room noise. It must have an auxiliary input jack to broadcast sound from an auxiliary source such as a CD player or VCR. The column speaker must have an auxiliary volume control to control the sound level of input received from external sources. The unit must have two FM volume controls, one for channel A and one for channel B, to allow for adjustment of the sound level of the FM signal received from the wireless transmitter. The column speaker must have a tone control to adjust the frequency response for a variety of users and acoustic environments. The unit must have an auxiliary output and high/low switch for connecting SOLARIS, EASY LISTENER, and SPRITE transmitters. The unit must be freestanding. It must have a battery operating time of 5-8 hours. It must have a recharging time of 4-8 hours. It must have an auxiliary out jack. The speaker's dimensions must be 100 (w) x 660(h) x 145(d) and it must weigh 5 kg/13.4lbs.

handheld transmitter: PE 917T

available frequencies

the perfect student pass mic
Handheld microphone is sturdy and easy to use—ideal for passing around to students for reading aloud or reports; also used for team teaching

convenient charging contact
Place in the AT0827 charging stand to replenish NiMH batteries

excellent battery life
Enjoy 23 to 45 hours of continuous operation

on/standby/off switch

anti-rolling guard band

Channel B

- 182.2MHz
- 179.3MHz
- 180.4MHz
- 183.6MHz
- 189MHz
- 192.2MHz
- 200.3MHz
- 195MHz
- 203MHz
- 214.75MHz

mic	Dynamic microphone
antenna	Built-in
RF output	15mW
spurious emissions	45 dBc
battery	NiMH rechargeable battery Alkaline disposable 1.5V x 2 AA
battery life	NiMH rechargeable: 23 hours typical Alkaline disposable: 27 hours typical
recharging time	4 hours (NiMH batteries)
dimensions	54mm (diameter) x 237mm (length)
weight	230g/8.1oz
controls	on/standby/off

accessories

AT0807 NiMH
Nickel Metal
Hydride batteries



bid specifications

The handheld transmitter must have an on/standby/off switch. It must run for 23 hours (typical use) while using NiMH rechargeable batteries and 27 hours (typical use) on disposable alkaline batteries. It must weigh 230g/8.1oz. It must have a built-in antenna, and operate on one of 10 frequencies in the 182 to 214 MHz band.

body-worn transmitter: PE 916T

available frequencies

on/standby/off switch
Standby mode eliminates white noise when mic is not in use

microphone jack
3.5mm jack accepts boom microphone

two way indicator light
Red flash shows adequate power; steady red indicates low battery

volume control
Adjust to optimize sound quality

belt clip
Durable, lightweight, and sturdy; can be clipped securely to a belt or worn around the neck



Channel A	Channel B
174.5 MHz	182.2MHz
175MHz	179.3MHz
176.3MHz	180.4MHz
177.8MHz	183.6MHz
184.51MHz	189MHz
186.2MHz	192.2MHz
186.6MHz	200.3MHz
190.6MHz	195MHz
196.6MHz	203MHz
202.5MHz	214.75MHz



AT655RM boom mic comes standard with Radium package

convenient charging contacts
Place in AT0827 charging stand to replenish NiMH batteries



AT655RM boom mic provides close proximity to the mouth and high quality sound

carrier frequency range	174MHz to 202MHz (Channel A) 182MHz to 214MHz (Channel B)
emission modulation	FM (F3E)
T.H.D	<0.5%
frequency stability	± 0.005% (at 25° C)
operating temperature	-10° C to +50° C
maximum modulation	± 25KHz, with level limiting
image rejection	Over 70dB
pre-emphasis	50µs
frequency response	50Hz to 15KHz
dynamic range	100 dB
tone squelch	Tone key and noise lock dual squelch
operating range	>34m/110ft
controls	On/standby/off
battery	NiMH rechargeable (1600mA) Alkaline disposable (2AA)
battery life	NiMH rechargeable: 20 hours typical Alkaline disposable: 23 hours typical
recharge time	4 hours

bid specifications

The transmitter must be capable of being clipped to a pocket or belt, or worn around the neck. It must be capable of transmitting on one of 20 wide-band frequencies in the 174 -214MHz range. The transmitter must have the ability to transmit beyond 34m/110ft. It must be powered by two easily-changed AA rechargeable NiMH batteries or two AA alkaline disposable batteries. The transmitter design must allow rechargeable batteries to be recharged without removal from the transmitter. The transmitter must have a low battery indicator light. The transmitter must be capable of operating for up to 23 hours with two AA alkaline batteries, and up to 20 hours with two AA NiMH batteries. The transmitter must also have a 3.5mm mic input jack and volume control.

accessories

AT0807 NiMH
Nickel Metal
Hydride batteries



AT0655RM
boom microphone



AT0712
belt



AT0512
lavalier cord



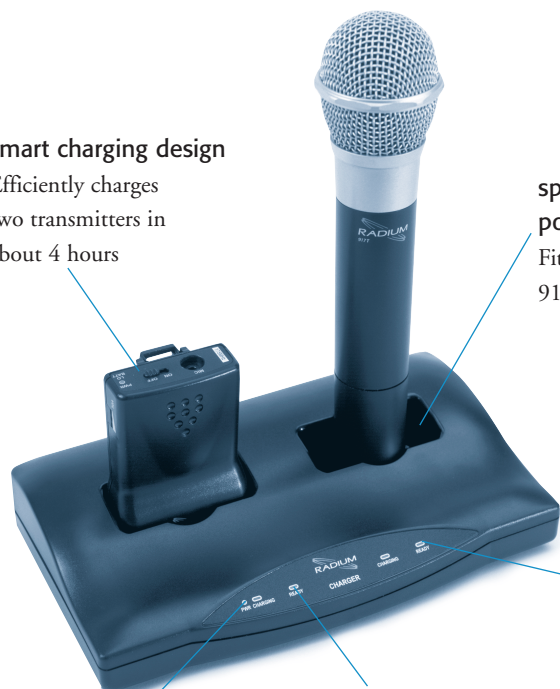
AT0827 charging stand

smart charging design

Efficiently charges
two transmitters in
about 4 hours

space saving pocket design

Fits both 916T and
917T transmitters



ready light

Indicator lights when unit
is completely charged

charging

Indicator lights to confirm
transmitter is connected
properly and receiving a charge

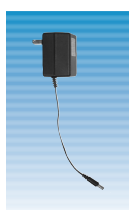
power

Indicator lights when
unit is plugged into
wall socket

power supply	AC adapter (DC 12V/0.5A)
indicator lights	LED green = battery ready LED orange = recharging LED red = power on
recharging time	NiMH (1300mA): 4 hr
dimensions	135(w) x 47(h) x 230(d)mm
weight	360g/12.7oz
controls	On/off switch

accessories

AT0819
charging stand
transformer
(included)



bid specifications

The charger stand must have two charge receptacles. Both receptacles must accept either the PE 917T wireless microphone or the PE 916T body-worn transmitter. The charger stand must have two orange "charging" status lights and two green "ready" status lights. It must have a power-on light. It must have an on/off switch on the back of the charger. It must have an AC adaptor to supply power. It must recharge NiMH batteries in 3-4 hours. It must weigh 360g/12.7oz.