

**description**

A dual-receiver, frequency-synthesized, two speaker FM sound field system housed in a single, portable column.

**educational & commercial applications**

For use in general or special education classrooms, conference rooms, senior centers, or training facilities. Helps reduce teacher/speaker vocal fatigue while improving test scores and listener comprehension.

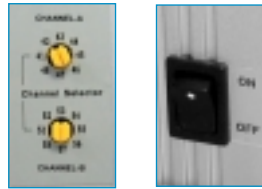
**key features**

Portable; easy to install and operate; affordably priced; team-teaching ready; excellent sound quality; 16 total channels in 216MHz band for increased flexibility and compatibility with other products.

# Radium™

## sound field system

**All new  
multi-channel  
216MHz band  
flexibility**

**two-channel column speaker: 920SR****receiver top controls****receiver column controls****body-worn transmitter: 921T****transmitter top controls**

carrier frequency range/frequencies	216.025 – 216.875MHz 16 total
modulation	FM (F3E)
output power	maximum 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	100Hz – 10kHz
total harmonic distortion	1% (at rated output)
system signal-to-noise ratio	>65 dB (at rated output)
inputs	AUX x 1, power & charge
output	AUX x 1 (High: 700 mV/Low: 100mV)
controls	tone, channel A & channel B power/volume, aux volume, high/low output, master power, channel selector
dimensions (WXHXD)	100 x 660 x 145 mm/ 3.9 x 26 x 5.7 in
weight	5kg/11lbs
recharging time	8 hours for initial charging 4 – 7 hours for recharging
battery operating time	5 – 8 hours (continuous operation)
speaker stand	optional table stand (AT0823), floor stand (AT0824), or wall brackets (AT0820)
de-emphasis	75µs
squelch	RSSI

carrier frequency range/frequencies	216.025 – 216.875MHz 16 total
modulation	FM (F3E)
total harmonic distortion	<0.5%
frequency response	50Hz to 12KHz
frequency stability	.0005%
maximum modulation	± 25KHz, with level limiting
image rejection	over 70dB
pre-emphasis	75µs
dynamic range	100dB
operating range	>34m/110ft
dimensions (WXHXD)	65 x 90 x 25 mm/ 2.5 x 3.5 x 1 in
weight	51g/1.8oz
controls	on/standby/off/channel selector/volume
inputs/outputs	2.5mm microphone input jack
battery	NiMH rechargeable (1600mA); alkaline disposable (2AA)
battery life	NiMH rechargeable: 20 hours typical alkaline disposable: 23 hours typical
recharging time	6 hours

## handheld transmitter: 922T



carrier frequency range/ frequencies	216.025–216.875MHz 16 total (see chart below)
mic	dynamic microphone
antenna	built-in
RF output	15mW
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	6 hours (NiMH batteries)
dimensions (dia x length)	54 x 237 mm/2.1 x 9.3 in
weight	230g/8.1oz
controls	on/standby/off/channel selector

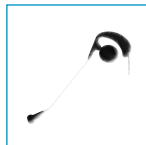
## channels/frequencies

Channel #	Channel A	Channel #	Channel B
41	216.025 MHz	51	216.525MHz
42	216.075MHz	52	216.575MHz
43	216.125MHz	53	216.625MHz
44	216.175MHz	54	216.675MHz
45	216.225MHz	55	216.725MHz
46	216.275MHz	56	216.775MHz
47	216.325MHz	57	216.825MHz
48	216.375MHz	58	216.875MHz

## microphone options



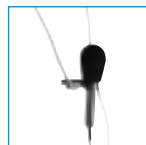
AT0655  
behind-the-neck  
microphone  
★★★★



AT0814  
earhook microphone  
★★★★



AT0816  
FM collar microphone  
with mute switch  
★★★



AT0291-L  
directional microphone  
with lavalier cord  
★★

★★★★= most compatible    ★= least compatible

## mounting options

choose from one of the following:



AT0820  
wall mounting bracket  
(set of 2)



AT0823  
speaker table stand



040-7402-106  
power supply cord



AT0532-05  
auxiliary output/  
input cable  
(5ft/1.5m)



AT0712  
921T elastic  
waist belt



300-6332-107  
aux-in cable for  
external audio  
(3.5mm-dual RCA)



AT0831  
920SR speaker  
antenna



330-3000-101  
channel changer  
screwdriver

## optional accessories



AT0822  
carrying bag with  
shoulder strap



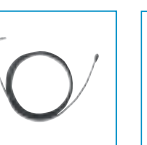
AT0801  
aux-box (adds four  
additional audio  
inputs)



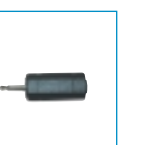
AT0824  
speaker floor stand



AT0532-15  
auxiliary input/  
output cable  
(15ft/4.6m)



AT0529A  
transmitter antenna



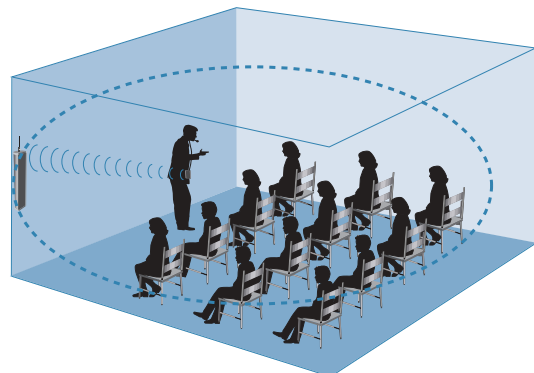
310-2544-1341  
aux-out adaptor plug  
(3.5mm-2.5mm)

## charging stand: 923C



power supply	AC adaptor (DC 12V/0.5A)
indicator lights	LED green = battery ready LED orange = recharging LED red = power on
recharging time	NiMH (1300mA): 4 hr
dimensions (WXHD)	135 x 47 x 230 mm/5.3 x 1.9 x 9 in
weight	360g/12.7oz
controls	on/off switch

## speaker placement



Based on your classroom acoustics and seating arrangement, speaker placement will vary. Download our **sound field wizard** software from [www.phonicear.com](http://www.phonicear.com) to determine the best arrangement possible.