

specifications:

# frontrow<sup>™</sup> pro

infrared active learning system

## description

Wireless infrared active learning system designed to clarify the teacher's voice for all students.

## application & benefits

For use in general and special education classrooms.

- Fosters a successful learning environment
- Increases student attentiveness, participation, comprehension and test scores
- Significantly reduces behaviour referrals
- Helps non-native students and students with hearing impairments
- Reduces teacher absenteeism due to vocal fatigue

## key features

- Very easy to operate
- Lightweight wireless pendant microphone offers superior comfort and sound quality
- Teacher's mic mute button
- Team-teaching or student pass-around mic ready
- Integrates stereo sound seamlessly from other classroom audiovisual equipment
- Includes OPTIVOICE control for advanced speech clarity
- Fail-safe battery charging

## transmitter options

- Wireless pendant transmitter with two built-in mics
- Student handheld mic
- Bodyworn transmitter with separate microphone

## receiver

Base-station; 2-channels

## speakers

- Compact wall
- Distributed ceiling

## frequencies

2.3 and 2.8MHz

## installation

Mounting and wiring of base-station receiver and speakers, external ceiling and/or wall sensors (if needed)



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Phonic Ear<sup>®</sup>

**at-a-glance status indicators**

Green lights tell you the system is on and receiving the signal; red means no signal is being received

**auxiliary volume**

Controls the level of TV/DVD, CD, computer and any other secondary sound sources you add



**talk without dropout**

Three built-in sensors with advanced optics ensure consistent signal pick-up with 130° horizontal reception angle

**two channels for student participation and/or team-teaching**

Encourage student participation with a pass-around mic; also accommodates two teachers conducting a class at the same time

**OPTIVOICE for maximum speech clarity**

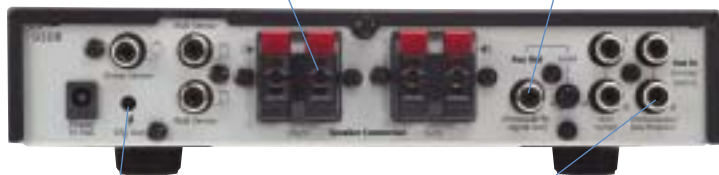
OPTIVOICE is specially designed to emphasize delicate speech sounds, so kids comprehend even more

**simple speaker hook-up**

Color-coded stereo push terminals make speaker connection quick and easy; bridgeable for 2-speaker operation for doubling speaker output power

**auxiliary output**

Connect a SOLARIS, EASYLISTENER, LEXIS, or other brand transmitter to broadcast speech directly to students wearing personal FM receivers



**easy recharging**

Up to two transmitters can be charged directly from the receiver without taking up additional outlet space

**audiovisual integration for enhanced active learning**

Integrate stereo sound from two other audiovisual classroom tools (music, TV, computer). Add more inputs with our handy AuxBoxes.

**highband EQ**

Assists installers who need to finely adjust the system to room characteristics

**specifications**

Receiving frequency:	2.3MHz & 2.8MHz
Modulation:	FM wide-band
IR frequency response:	50Hz to 10kHz (system)
Speakers:	8Ω
Acoustic output:	90dBA ± 3dB @ 1m into 8Ω
Auxiliary input level:	200 mVrms
Auxiliary input impedance:	15kΩ, Nominal
Signal-to-noise:	>65dB (system)
THD:	<1% @ 1kHz into 8Ω
Nominal deviation:	± 10 kHz
Maximum deviation:	± 25 kHz
Squelch:	RF carrier/tone control
Squelch level:	19 dBuV
Power supply:	15VAC at 2.5A (AT0783)
User controls:	Power on Channel A volume Channel B volume 2 auxiliary volumes OPTIVOICE™ Hi-band EQ (left side)
Displays:	Power on/off LED Ch A & Ch B signal LEDs
Color:	Black case, silver front face
Size (wxdxh):	21.5 x 23.5 x 2.25cm/ 8.5 x 8.3 x 1.75in
Weight:	1.3kg/3lbs
Case:	Steel, baked enamel finish, solid aluminum front face
Operating range:	18.5m/60ft line-of-sight (typical)
Reception area:	232m <sup>2</sup> /2500ft <sup>2</sup> (typical, with ceiling sensor)
Reception angles:	130° horizontally 60° vertically (1/2 power)
Inputs/outputs:	2 RCA stereo (L/R) aux in jacks RCA aux out jack 4 quick-connect speaker terminals 3 RCA jacks for external sensor connection 2.5mm input power jack 1.3mm output charge jack

## pendant transmitter: 930TM



## specifications

Transmitting frequency:	2.3MHz & 2.8MHz (switchable)
Modulation:	FM wide-band
Operating range:	18.5m/60ft line-of-sight (typical)
Audio distortion:	0.3% ( $\pm 10$ kHz deviation @ 1kHz)
Transmission angles:	160° horizontally 40° vertically (1/2 power)
Microphones:	dual uni-directional hypercardioid (directivity index 6.0 @500Hz)
User controls:	on/off/mute/channel
Inputs/outputs:	2.5mm mic input 3.5mm aux input 1.3mm DC charge jack
Battery type and life:	minimum 8 hours (single AA, 2500mAH rechargeable NiMH)
Size (wxhxd):	11 x 5.3 x 2.5 cm/ 4.5 x 2.1 x 0.9 in
Weight:	85g/3.0oz (with battery)
Case:	ABS plastic

## handheld transmitter: 930HT



## specifications

Transmitting frequency:	2.3MHz & 2.8MHz (switchable)
Modulation:	FM wide-band
Operating range:	12m/40ft line-of-sight (typical)
Transmission angle:	360° radial
Audio distortion:	<1.0% ( $\pm 15$ kHz deviation @1kHz)
Microphone type:	uni-directional dynamic
User controls:	on/off/channel
Battery type and life:	minimum 7 hours (dual AA, 2500mAH rechargeable NiMH)
Size (L x DIA):	255 x 58 mm/10.04 x 2.28 in
Weight:	258g/9.1oz with battery

## bodyworn transmitter: 930T



## specifications

Transmitting frequency:	2.3MHz & 2.8MHz (switchable)
Modulation:	FM wide-band
Operating range:	18.5m/60ft line-of-sight (typical)
Transmission angles:	140° horizontally 40° vertically (1/2 power)
User controls:	on/off/mute/channel
Inputs/outputs:	6 pin DIN mic input 1.3mm DC charge jack
Battery type and life:	minimum 8 hour (dual AA, 1600mAh rechargeable NiMH)
Size (wxhxd):	5.8 x 9.4 x 3.0 cm/ 2.3 x 3.7 x 1.2 in
Weight:	113g/4.0oz (with battery)
Case:	ABS plastic

## optional auxbox: AT0801 (for use with 930R receiver)

### add another 4 media sources to your system

Connect up to four extra sound sources for content-rich lessons and presentations



## specifications

Inputs:	4 RCA video 4 RCA audio right 4 RCA audio left 4 S-video
Outputs:	RCA audio right RCA audio left RCA video S-video
Power input:	9VDC, 200mA wall adaptor
Size (wxhxd):	20 x 5.1 x 13.5 cm/ 7.9 x 2.0 x 5.3 in
Weight:	346g/12.2oz

## compact wall speaker: 470-2856-119

### specifications

Speaker type:	bass reflex 8.9cm/3.5in woofer 2.5cm/1in soft-dome tweeter
Impedance:	8Ω nominal
Continuous power:	30W
Peak power:	80W
Frequency response:	65Hz to 20kHz -10dB
Dimensions (WxHxD):	2.7 x 22.2 x 14cm/5 x 8.75 x 5.5 in
Weight:	1.75kg/3.86lbs
Mounting:	wall mounting brackets provided
Speaker wire:	AT0581 18.3m/60ft
Sensitivity:	88dB, 1W @ 1m

**more power handling**  
80 watts of peak power

**versatile**  
Exceptional, natural  
sound quality for both  
speech and music



**full range**  
Wide, smooth  
frequency response  
(65Hz-20kHz @ -10dB)  
for faithful reproduction  
of the human voice  
and music

### drop & click bracket



**completely adjustable**  
A rotating ball joint allows for customized speaker  
positioning — no tools needed!

**easy mounting**  
1. Attach mounting plate to wall  
2. Screw ball joint on to speaker  
3. Drop and click ball joint into plate  
4. Position and tighten

## distributed ceiling speaker: AT0806

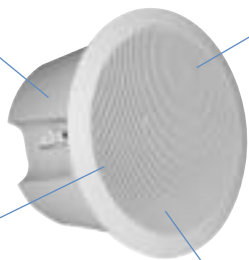
### specifications

Speaker type:	coaxial: 6in woofer, .5in tweeter
Impedance:	8Ω nominal
Sensitivity:	90dB, 1W @ 1m
Continuous power:	35W
Peak power:	70W
Frequency response:	65Hz to 20kHz
Dimensions (DIA x D):	203 x 5.7 cm/9 x 2.25 in
Weight:	1.1kg/2.4lbs
Mounting:	acoustic ceiling metal tile bridge (470-7347-106)
Speaker wire:	AT0581 18.3m/60ft
Min. ceiling height:	3m/10ft

**great sound dispersion**  
Offers exceptionally even  
sound coverage

**a seamless solution**  
Mounts flush with  
ceiling tiles for a neat,  
elegant installation

**full range**  
Wide, smooth  
frequency response  
(65Hz-20kHz @ -10dB)  
for faithful reproduction  
of the human voice  
and music



**sound stays in your room**  
Enclosed baffle prevents sound  
from traveling through plenum  
to other classrooms

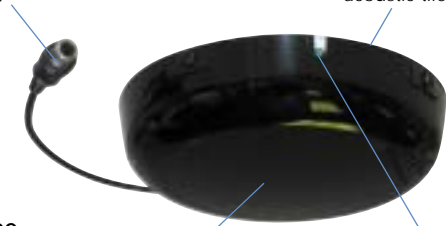
## ceiling sensor: 520-7347-103

### multiple mounting options

Multi-directional cord orientation for mounting on sheetrock or other flat surface; provides sleek streamlined solution for any installation

### easy-to-install bracket

Unique twist-on bracket design allows quick and easy installation; no need to make any holes in acoustic tile drop ceiling



### 360 degree

### 'full-sweep' signal coverage

Semi-spherical reception means you can install the ceiling sensor without worries about dropout

### power indicator

Green LED power indicator lets you know when unit is connected properly

### specifications

Operating frequency:	2.3MHz & 2.8MHz
Operating range:	18.5m/60ft line-of-sight (typical)
Signal/Power interface:	RCA-female jack, 20cm/8" lead
Number of IR LEDs:	9 (8 equal radial spacing; 1 center)
Power indicator LED:	green
Reception area:	232m <sup>2</sup> /2500ft <sup>2</sup> (typical with receiver sensors)
Reception angle:	360° full semi-spherical (half dome) coverage
Dimensions (DIA x H):	13.5 x 3.3 cm/5.1 x 1.3 in
Weight:	224g/7.9oz (with bracket)
Mounting:	drop ceiling acoustic tile or sheetrock ceiling
Sensor wire:	AT0847, 15m/50ft long (RCA male-to-male)

## wall sensor: AT0848

### easy-to-install bracket

Custom bracket allows quick and easy installation and proper angling for optimum room coverage



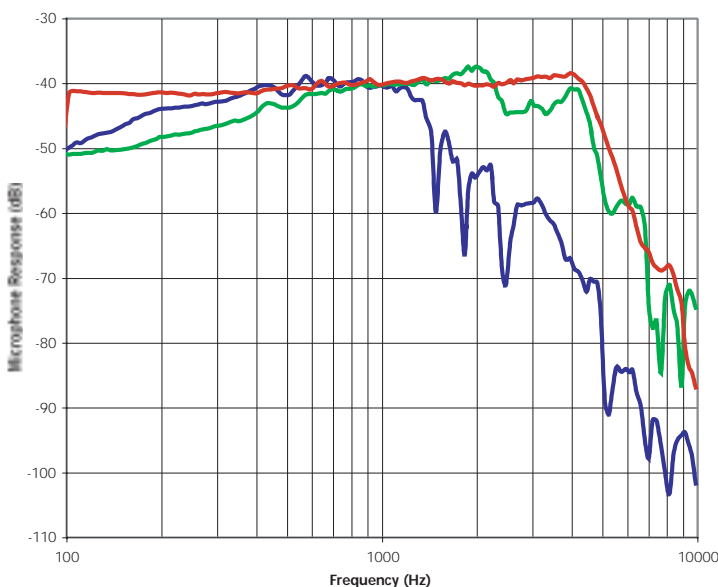
### power indicator

Green LED power indicator lets you know when unit is connected properly

### specifications

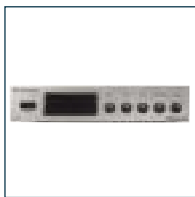
Operating frequency:	2.3MHz & 2.8MHz
Operating range:	18.5m/60ft line-of-sight (typical)
Signal/Power interface:	RCA-female jack
Number of IR LEDs:	2
Power indicator LED:	green
Reception angle:	70° horizontally 60° vertically (1/2 power)
Dimensions (WXHxD):	7.9 x 5.1 x 3.0 cm/ 3.1 x 2.0 x 1.2 in
Weight:	82g/2.9oz
Mounting:	wall mount bracket provided
Sensor wire:	AT0847, 15m/50ft long (RCA male-to-male)

## transmitter audio frequency response comparison



The FrontRow Pro 930™ provides a more faithful reproduction of the teacher's voice than competing products – particularly in high frequencies that are critical to speech intelligibility. The product also offers accurate response in low frequencies, resulting in warmer, more natural voice quality.

## receiver 930R



202-00-200-00  
930R receiver

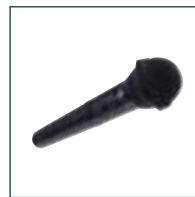
## transmitters



890-88-202-00  
930TM transmitter



202-01-200-00  
930T bodyworn  
transmitter



890-88-200-00  
930HT  
handheld transmitter

## microphones



AT0655  
boom mic



AT0795-L  
lapel mic

## speakers



470-2856-119  
compact wall speaker  
incl. bracket



AT0806  
distributed ceiling  
speaker



AT 0848  
IR wall sensor incl.  
bracket

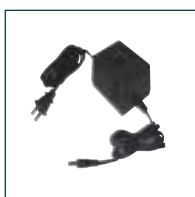


890-88-220-00  
IR ceiling sensor incl.  
bracket

## IR sensors

## system accessories

### power cords & transformers

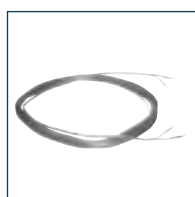


AT0783-AU  
wall transformer  
AT0811 EU wall transformer  
AT0787 EU power cord



AT0792-EU (Europe)  
AT0792-AU (Australia)  
930HTC charger  
transformer

### speaker cable



AT0581-60  
speaker cable  
18.3m/60ft  
AT0581-24  
7m/24ft

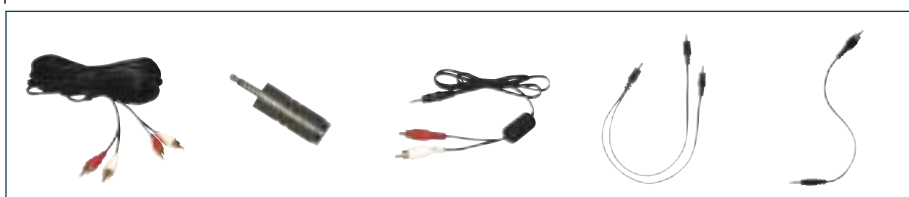
### sensor cable



AT0847  
IR sensor cable, 15m/50ft

### adaptor cords & plug

890-88-210-00



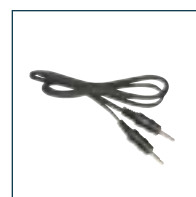
aux in adaptor cord  
(dual RCA - dual RCA)  
230R to external audio:  
TV, VCR, DVD, etc.

aux-out adaptor plug  
(3.5mm(F)-to-  
2.5mm(M))

aux in adaptor cord  
(3.5mm - dual RCA)  
for external audio, CD,  
computer

charging cord,  
receiver-to-transmitter  
1.3mm(M)-to-  
1.3mm (M)

aux-out adaptor cord,  
(RCA-to-3.5mm)



384-01-210-08  
aux in adaptor cord  
(3.5mm - 3.5mm)  
external audio: computer,  
CD and FM-systems

### transmitter accessories



890-88-201-00  
930HTC  
handheld transmitter  
charging stand



AT0712  
black belt



374-30-400-00  
Single AA, 2500 mAH  
Safety rechargeable  
NIMH battery

### stands



AT0579  
floor speaker stand  
only available for:  
470-2856-119  
compact wall speaker



AT0784  
receiver wall mount

### auxbox



AT0801  
auxbox (for use with  
930R receiver)