

description

A digital FM transmitter and with narrow- or wide-band body-worn receivers.

application

For enhanced listening and ADA compliance in churches, live theatres, stadiums, conference centers, etc.

key features

Digital audio processing and Direct Digital Synthesis for superior FM transmission, sound clarity, and channel flexibility; wide-band and narrow-band compatible; bass cut adjustment; line, mic, and speaker level inputs; lightweight and comfortable receivers; easy to install and operate; three-year warranty.

specifications:



direct digital synthesis FM



transmitter: 560T



transmitting frequency	72MHz to 76MHz (U.S./Canada)
channels	10 WB, 40 NB selectable
frequency stability	±2 kHz 0° to 50° C
transmission range	100m/300ft (standard antenna) 300m/1,000ft (large area antenna)
RF field strength	80mV/m at 3m
modulation	FM wide-band and FM narrow-band user-selectable
signal-to-noise ratio	> 70dB (WB), > 65dB (NB)
THD	≤ .1% at nominal deviation
nominal deviation	± 20kHz (WB) ± 3.6kHz (NB)
1/4in pre-amp input level	100 mV <sub>rms</sub> Active ALC
XLR line input level	250 mV <sub>rms</sub> Active ALC
XLR mic input level	2 mV <sub>rms</sub> Active ALC
terminal block input levels	2 V <sub>rms</sub> , 10 V <sub>rms</sub> and 70 V <sub>rms</sub>
line input impedance	600 Ω (balanced)
mic input impedance	600 Ω (balanced)
power input	12V, 2A
input connections	power jack: 2.1mm; pre-amp input: 1/4in jack line input: universal XLR jack; mic input: universal XLR jack speaker input: terminal block
input protection	1-amp slow blow fuse
current drain	500mA maximum
antenna output	LH-TNC jack (FCC Regulation)
ground plane	LH-TNC jack (FCC Regulation)
max cable length	30m/100ft with RG58/U cable
size	4.45 x 21.59 x 20.32 cm/1.75 x 8.50 x 8.00 in
weight	790g/28oz
case	anodized black

receivers: 500R / 506R

wide-band receiver: 500R

channels	10 wide-band tunable
receiving frequency	72MHz to 76MHz (U.S./Canada)
modulation	FM wide-band
user controls	off/on/volume; tuning screw
inputs / outputs	accessory output jack; charge jack
battery life	60Hr (AA alkaline)
nominal volume setting	30Hr (AA NiCad)
size (W x H x D)	5.6 x 9.4 x 2.5 cm/2.2 x 3.7 x 1 in
weight	80g/2.8oz
case	ABS plastic, black
signal to noise ratio	60dB
frequency response	60Hz to 8kHz ± 3dB
THD	< 1%
SSPL 90 earbuds	131dB max
SSPL 90 transducer	135dB max
SSPL headset	120dB max

narrow-band receiver: 506R

receiving frequency	72MHz to 76MHz (U.S./Canada)
modulation	FM narrow-band
user controls	off/on/volume
inputs / outputs	accessory output jack
battery life	60Hr (AA alkaline)
nominal volume setting	30Hr (AA NiCad)
size	2.5 x 9.4 x 5.6 cm/1 x 3.7 x 2.2 in
weight	80g/2.8oz
case	ABS plastic, black
signal to noise ratio	>55dB
frequency response	80Hz to 8kHz ± 3dB
THD	< 2%
SSPL 90 earbuds	122dB
SSPL 90 transducer	137dB
SSPL headset	120dB



12 unit charger: 500C (500R)/ 300C (506R) (2-unit charger also available)

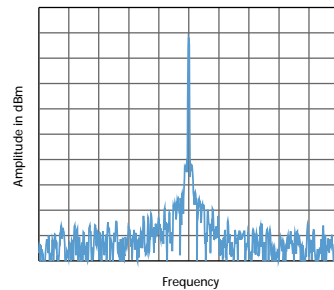
capacity	12 units (transmitters and/or receivers)
500C power supply	9VDC, 1A (AT0758 wall transformer)
300C power supply	8.5VAC 11.5VA (AT0461 wall transformer)
user control	none
display	green LED power indicator
color	black with aluminum trim
size (w x h x d)	39.4 x 15.2 x 29.2 cm / 15.5 x 6 x 11.5 in
weight (empty)	1859g / 4.1lbs



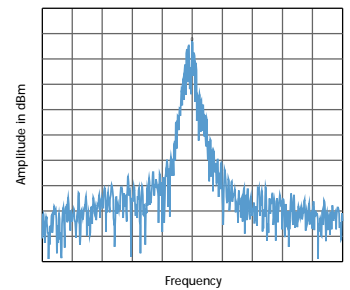
band channels and frequencies

	channel	transmitter frequency code	frequency
high band	13	22	75.475
	14	24	75.575
	15	26	75.675
	16	28	75.775
	17	30	75.875
	18	32	75.975
mid band	7	33	74.625
	8	34	74.675
	9	35	74.725
	10	36	74.775
	11	37	75.225
	12	38	75.275
low band	1	1	72.025
	2	5	72.225
	3	11	72.525
	4	14	72.675
	5	17	72.825
	6	19	72.925

carrier signal purity comparison (10kHz span)



ONWAVE 560T with DDS  
FM signal generated digitally using  
Direct Digital Synthesis



typical system with phase lock loop  
FM signal generated in the  
analog domain

optional accessories

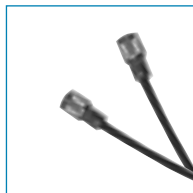
transmitter accessories



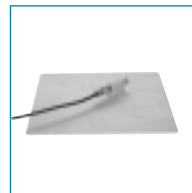
AT0571  
dynamic microphone  
(requires AT0572  
XLR-XLR cable)



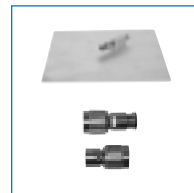
large area antenna  
with connector kit  
ch. A to E/1 to 20: AT0773  
ch. F to J/21 to 40: AT0774



AT0779  
15m/50ft antenna cable for  
remote-mounting antenna

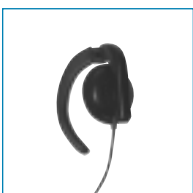


AT0776  
antenna ground plane  
with 15m/50ft cable

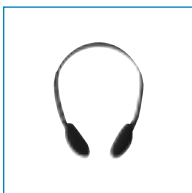


AT0775  
antenna ground plane  
with connector kit

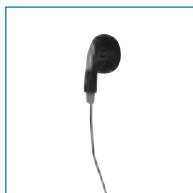
receiver accessories



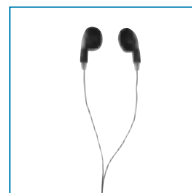
AT0825  
swivel earphone



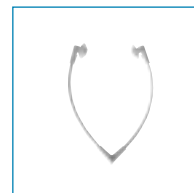
AT0541  
standard headset



AT0538M  
monaural earbud



AT0538S  
binaural earbuds



AT0359  
stetoclip  
(use with AT0016  
transducer button and  
AT0545 connector cord)



AT0163-B  
teleloop  
(use with AT0543  
connector cord)