

# AR-ONE

## Communications Receiver

The AR-ONE gives you total command of frequencies, modes, tuning steps and more. It is possible to tune in increments of **one** Hz.



## Monitor Any Frequency from 10 KHz to 3.3 GHz

### Ultra-stable reference frequency oscillator (0.1ppm)

**The AR-ONE is a  
new beginning for  
wide-range monitors.**

*The AR-ONE is designed to support computer controlled operation. Link up to 99 receivers for control by a single PC. The AR-ONE can be used for mobile or fixed monitoring operations.*

Surveillance operations are enhanced. Monitoring multiple frequencies is easier and faster. Computer control gives you maximum flexibility and unleashes the many features found in this advanced technology receiver.

The AR-ONE is the right choice for the new world we now monitor.

- Super wide coverage: 10 KHz ~ 3.3 GHz
- 1000 memory channels
- 10 VFOs
- Monitor AM, NFM, WFM, USB, LSB, CW, Data
- Ultra-stable reference frequency oscillator
- Two RS-232C ports plus control head port
- Control up to 99 AR-ONE Units with one PC
- Triple conversion superheterodyne front end
- Antenna input level readout
- Adjustable BFO
- High intercept
- Multi IF signal output (10.7 MHz or 455 KHz)
- Excellent sensitivity

*The AR-ONE is designed for use by the monitoring professional. The AR-ONE is so advanced, you'll be thinking of new applications for its powerful capabilities.*



Authority on Radio  
Communications

**The Serious Choice in Advanced  
Technology Receivers™**

# AR-ONE Advanced Technology Communications Receiver



AR-ONE Rear Panel

## SPECIFICATIONS

Model:	AR-ONE	
Configuration:	Triple conversion super heterodyne	
Frequency coverage:	10KHz ~ 3.3 GHz (no gap)	
Receive mode:	AM, NFM, WFM, USB, LSB, CW, DATA	
Sensitivity:	(AM mode – 10 dB S/N, NFM mode – 12 dB SINAD, CW/SSB mode – 10 dB S/N)	
10 ~ 40 KHz:	CW 22.3 uV,	
40 ~ 100 KHz:	AM – 4.5 uV, CW – 1.5 uV,	
100 KHz ~ 40 MHz :	AM 2.5 uV, 2 ~ 40 MHz: AM – 1.5 uV, SSB/CW – 0.7 uV, NFM – 0.89 uV	
40 MHz ~ 1 GHz :	AM – 0.89uV, SSB/CW – 0.4 uV, NFM – 0.5 uV, WFM – 1.5 uV,	
1 GHz ~ 2.5 GHz :	AM – 0.7 uV, SSB/CW – 0.32 uV, NFM – 0.4 uV, WFM – 1.5 uV,	
2.5 GHz ~ 3.3 GHz :	AM – 0.9 uV, SSB/CW – 0.35 uV, NFM – 0.5 uV, WFM – 1.5 uV	
IF frequencies:	1st IF : 754 MHz /265 MHz, 2nd IF : 10.7 MHz, 3rd IF : 455 KHz	
Frequency steps :	Standard steps: 1, 10, 50, 100, 500 Hz, 1, 5, 6.25, 9, 10, 12.5, 20, 25, 30, 50, 100, 500 KHz	
Non standard steps:	Less than 1 MHz ( 1 Hz incremental)	
Selectivity:	B/W	- 6 dB      - 60 dB
	0.5 KHz	0.5 KHz >      < 2 KHz
	3 KHz	3 KHz >      < 6 KHz
	6 KHz	6 KHz >      < 20 KHz
	9 KHz	9 KHz >      < 30 KHz
	15 KHz	15 KHz >      < 40 KHz
	30 KHz	30 KHz >      < 70 KHz
	110 KHz	110 KHz >      < 450 KHz
	220 KHz	220 KHz >      < 600 KHz
	300 KHz	300 KHz >      < 900 KHz
Spurious Sensitivity:	60 dB >	
Adjacent Selectivity:	55 dB >	
Dynamic Range:	90 dB >	
Unwanted Spurious emission:	< -57 dBm	
3rd IP:	+2 dBm > (-1 dBm > above 2.5 GHz)	
Frequency stability:	+/- 0.1 ppm (-10 ~ 50 C)	
THD:	20 dB > (< 10 %)	
Audio Output:	1.5 w (at 8 ohms, THD < 10 %)	
Power requirement :	13.5 V DC, < 2 amp. ( @ 1 w audio output)	
Antenna impedance:	50 ohm	
Antenna Connector :	N type	
IF output level :	-20 dBm ( 10.7 MHz or 455 KHz)	
External frequency standard input :	10 MHz (0 dBm +/- 3 dB)	
Control interface :	RS-232C	
Operating temperature:	-10 ~ 50 degrees ( C ) , -18 ~ 144 degrees ( F )	
Dimensions:	157 (w) x 58 (h) x 270 (d) (mm), 6.2 (w) x 2.3 (h) x 10.8 (d) (inch)	
Weight:	Approximately 2.2 Kg (4.9 lbs)	

## Amazing Stability

Accuracy of 0.1 ppm from -10° ~ 50° C (14° ~ 122°)

## Unparalleled Range

Continuous tuning from 10 KHz to 3.3 GHz.

## Connectivity

Control up to 99 AR-ONE units from just one PC. Provisions for external speaker, IF outputs (10.7 MHz or 455 KHz), local oscillator input/output (for coherent).

## High Intercept

Greater than +2 dBm (-1 dBm above 2.5 GHz).

## Applications

Surveillance, military, intelligence gathering, media monitoring, transmitter location, technical troubleshooting and more.

## Accessories

120 VAC adapter and instruction manual included (US model)  
230 VAC adapter and instruction manual included (European model)



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AR ONE is only available to authorized users in the USA, documentation required.

Specifications subject to change without notice or obligation.  
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