

AOR[®]

TV-5000

TV CONVERTER

Owner's Manual

AOR, LTD.

Introduction:

Thank you for purchasing the TV-5000 TV converter. When using the TV-5000 with the AR5000 or AR5000+3 communications receiver, the TV-5000 will add the ability to receive broadcast television signals (NTSC) and allow monitoring video feeds from a variety of sources including public safety agencies, aircraft, Amateur Radio FSTV, news media video and more.

(Ability to monitor varies with location and antenna system in use.)

Features:

- Compact size (2-3/4 (W) x 4-7/7 (H) x 1-1/8 (D), projections included) and light weight (approximately 5.8 oz, batteries included)
- Battery operated (operates on 2 AA batteries, provisions for external 12 VDC power input)
- 10.7 MHz IF input from receiver, Line output and video output
- No adjustments required
- Simple operation
- 180 days limited warranty

Package Contents:

- One TV-5000 TV converter
- One BNC-BNC patch cable
- One owner's manual (this booklet)

System Requirements:

AOR AR5000 or AR5000+3 communications receiver or equivalent (with 10.7 MHz IF output, 10 MHz Bandwidth)

- Receiver antenna
- 2 – AA alkaline batteries (or external 12 VDC adapter, not included)
- 2 shielded cables with RCA-type plugs at each end
- NTSC monitor
- Audio amplifier and speaker (optional)

AR5000 setup

1. Push the **FUNC** key. The **FUNC** icon appears on the top left corner of the LCD.
2. Push the **KHz/CONFIG** key.
3. Push the UP key twice to get **EXT – IF OFF** on the LCD.
4. Rotate the small dial to change **OFF** to **1** on the LCD.
5. Push the **MHz/ENT** key.
6. Push the **FUNC** key again.
7. Push the **3/IF BW** key.
8. Rotate the small dial to get **220 KHz** on the LCD.
9. Push the **MHz/ENT** key.

Operations:

1. Using the supplied BNC-BNC patch cable, connect between the IF output of the receiver and the **IF IN** of the TV5000.
2. Using a shielded cable with RCA-type plugs at both ends (not supplied), connect between **VIDEO OUT** of the TV5000 and the **VIDEO INPUT** of the monitor.
3. Connect the antenna to your receiver. Apply power to the receiver, TV5000, and monitor.
4. Set the frequency of your receiver to the desired audio frequency of the TV channel.
5. To get a best picture quality, you may need to readjust the receiver frequency.
6. Optional: Connect **LINE OUT** to line-level input of monitor or audio amplifier using shielded cable with RCA-type connectors.

NOTE:

1. Not all video is NTSC format. The TV5000 cannot be used with PAL, SECAM, Slow-scan or digital video formats.
2. Results can vary based on distance to the transmitter and the antenna system in use.

Specifications:

Receive type:	NTSC
Input frequency:	10.7 MHz
Operating voltage:	Rated 3.0 V DC (using 2 – AA size alkaline battery)
External power input:	3.0 ~ 13.5 V DC
Operating temperature:	14 ~ 144 degrees (F)
Output:	Video 1 V p-p (75 ohm) Audio 0.3 V rms (47 Kohm)
Dimensions:	2.6 (w) x 4.2 (H) x 1.1 (D) inches (Projections excluded)
Weight:	Approximately 4 oz, (Battery not included)

Appendix:**US Broadcast TV frequency Allocations**

Channel	Video (MHz)	Audio (MHz)	Channel	Video (MHz)	Audio (MHz)
2	55.25	59.75	30	567.25	571.75
3	61.25	65.75	31	573.25	577.75
4	67.25	71.75	32	579.25	583.75
5	77.25	81.75	33	585.25	589.75
6	83.25	87.75	34	591.25	595.75
7	175.25	179.75	35	597.25	601.75
8	181.25	185.75	36	603.25	607.75
9	187.75	191.75	37	609.25	613.75
10	193.25	197.75	38	615.25	619.75
11	199.25	203.75	39	621.25	625.75
12	205.25	209.75	40	627.25	631.75
13	211.25	215.75	41	633.25	637.75
14	471.25	475.75	42	639.25	643.75
15	477.25	481.75	43	645.25	649.75
16	483.25	487.75	44	651.25	655.75
17	489.25	493.75	45	657.25	661.75
18	495.25	499.75	46	663.25	667.75
19	501.25	505.75	47	669.25	673.75
20	507.25	511.75	48	675.25	679.75
21	513.25	517.75	49	681.25	685.75
22	519.25	523.75	50	687.25	691.75
23	525.25	529.75	51	693.25	697.75
24	531.25	535.75	52	699.25	703.75
25	537.25	541.75	53	705.25	709.75
26	543.25	547.75	54	711.25	715.75
27	549.25	553.75	55	717.25	721.75
28	555.25	559.75	56	723.25	727.75
29	561.25	565.75	57	729.25	733.75

Channel	Video (MHz)	Audio (MHz)	Channel	Video (MHz)	Audio (MHz)
58	735.25	739.75	68	795.25	799.75
59	741.25	745.75	69	801.25	805.75
60	747.25	751.75	70	807.25	811.75
61	753.25	757.75	71	813.25	817.75
62	759.25	763.75	72	819.25	823.75
63	765.25	769.75	73	825.25	829.75
64	771.25	775.75	74	831.25	835.75
65	777.25	781.75	75	837.25	841.75
66	783.25	787.75	76	843.25	847.75
67	789.25	793.75			

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This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.