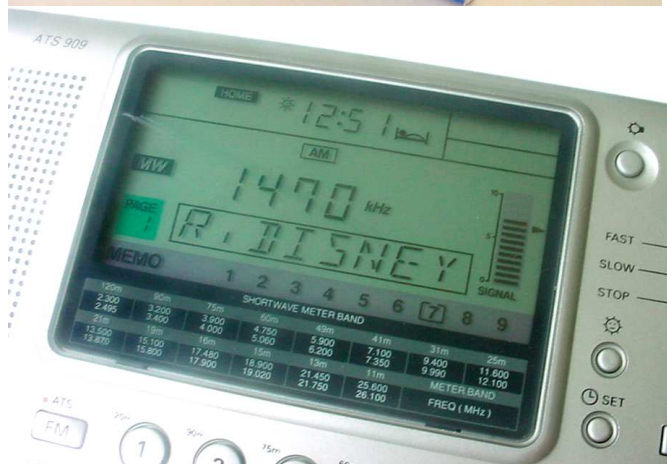
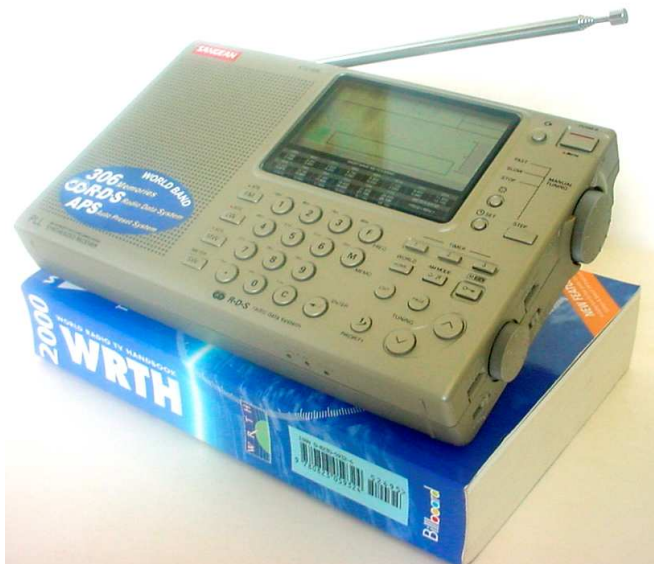


Sangean ATS-909 Review

Article and Photos by Rich Toebe

Since 1986, I've been using the hallowed Sony ICF-2010 as my receiver when traveling. It's been with me to several countries in North America and Europe. The 2010 been a great performer for DX and general listening. It is fairly large and heavy by today's standards for a portable, especially when lugging it through airports. Age has put its mark on the 2010 as well—although it still receives well, the power receptacle is failing, and often when I turn the unit



on, I get an "Error 3" message instead of the desired station. So, I decided, it's time to look for a replacement. Should it be another 2010, or something new?

I was able to obtain a Sangean ATS-909 for evaluation from IRCA member **Dan Albertson**, president of **Radio Accessory Headquarters** in Sacramento, California. He is a dealer in ICOM and Sangean receivers, and he made his floor sample available to me over the Memorial Day weekend. This article describes my findings. I also put the radio into competition against the 2010 and the GE Superadio III.

Size and Weight

Per the photo, the unit is slightly smaller than a copy of the *World Radio TV Handbook*; weighed on a postal scale, with batteries it weighs 29.0 ounces (822 grams) compared to the Sony's 65.6 ounces or 1.86 kilograms. The ATS-909 uses 4 AA batteries total compared to the 2010's 3 C cells plus the 2 AAs for the memory. The size and weight of the titanium-colored unit are convenient for stuffing into a carry-on. A black leatherette case is included with the ATS-909; it should be well protected when taking it out and packing it back in the bag when going through airport security.

Tuning Methods

The ATS-909 has continuous AM tuning from 153 to 29999 kHz, divided into LW 153-519 kHz, MW 520-1710 kHz (covering both the low end European MW and the US X-band frequencies), and SW 1711-29999 kHz. FM runs from 87.5 to 108.0 MHz (no Japanese FM frequencies ala the 2010). Frequencies can be tuned in 4 ways. The bigger knob to the right of the unit is the manual tuning knob. It has detents, and can be adjusted to different channel spacing depending on the band you select. For MW, it can be set to a "fast" setting of 9 or 10 kHz per detent, and a "slow" setting of 1 kHz. SW is either 5 kHz or 1 kHz, LW is 9 kHz or 1 kHz, and FM either .05 MHz or .1 MHz.

The two largest buttons, at the lower right of the face of the radio, are the slewing buttons, and can speed tune across frequencies when keeping the button depressed, or can go up or down by one channel by a quick press. The frequency spacing again is dependent on the band you select. MW is 9 or 10 kHz, LW 9 kHz, SW 5 kHz, and FM .1 MHz. The 9 or 10 kHz adjustment is made on the right side of the unit, a recessed slider near the volume control, the smaller knob.

The other two methods use the keyboard; either by entering the frequency directly, hitting the "F" button, keying in the frequency (use a decimal point on FM!) and hitting the "enter" key, or by calling up a preset or "memo" channel by using the keys 1 to 9. This constitutes a "page" of 9 presets.

LW gets one page of 9, MW gets 2 pages for 18 presets, FM has 2 pages, and SW has 29 pages, for a total of 306 presets. Most but not all of the SW pages are assigned to international broadcasters; BBC gets 2 pages, for example. Some pages have some or all of the presets "permanently" programmed, but there are quite a few empty "memo" spots.

There's also the AUTO function. The radio will scan the dial and find the most powerful signals to fill all the spots in the memory for the band (except those already selected at the factory).

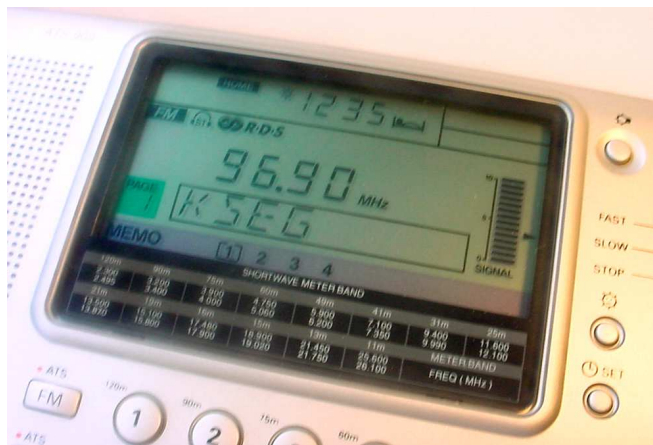
Memo Function

When a frequency is set to memory, you can also enter the name of the station on that channel. Letters, numbers, and some symbols can be entered; for 1470 KIID, I entered "R.Disney". There are 8 spaces or characters total per memo. Tune to 1469 or 1471, and the memo disappears. The SW pre-programmed pages have the country names of the international broadcasters set, so "England" is shown for the BBC and "Ecuador" for HCJB. Unlike the user set memos, if you go to a page for England on SW, the name stays even when you tune away from an "England" frequency.

In the picture you'll note that 1470 is set on page 1, memo 7. All 9 have been filled. If you set less than 9, you'll only see that many numbers in that row. Note also that above the frequency it says "AM". There are also lower and upper sideband settings. To the right is the signal strength meter; when the set is turned off it becomes the battery meter for a few seconds. The screen can be lit up by pressing the button next to the lamp icon; it stays on when using AC, and turns off after a few seconds when on batteries.

Time

At the top of the screen is the time setting; note "Home" in the black box to the left, the sunburst to the upper left of "12:51" denotes Daylight Savings Time, and the bed symbol, which means the sleep function is activated. This can be set for up to 90 minutes. You can set your home time, and enter your city, but 42 world cities are also



there, with their times popping up as you call up that city, accessible by the manual tuning knob to the right or the slewing buttons after you hit the "home" button. Cities' times seem to be offset by the correct number of hours from Home time, but not all cities come up with Daylight Savings or Summer Time. Berlin was a notable exception. There are three timers built in, and a snooze function.

The FM band is notable for the inclusion of stereo and RDS, the Radio Data System used heavily in Europe but beginning to be used here in the USA. When playing audio through the unit's built-in speaker, no stereo will be received, but when headphones or an external pair of speakers are attached, the stereo symbol of a set of headphones and "ST" appears. Audio response through headphones is excellent, and I had nice results playing the signal through a pair of powered Yamaha speakers I use with my PC.

Radio Data System

The RDS symbol appears when a station carrying the RDS signal is present. Local Sacramento classic rocker KSEG 96.9 is one of a handful of stations locally that has the RDS signal, as seen here. It does not instantly appear, and when I tried to detect the RDS signal from outlying stations with a weaker signal, it would take the radio several seconds or more to detect the message even though the RDS icon quickly appeared. KOIT 96.5 San Francisco, about 67 miles (108 km) away, carries the RDS signal, but the icon appeared and disappeared even though the stereo signal seemed solid. I also noted that when, after getting KOIT's RDS message ("KOIT"), tuning to KSEG 96.9, getting the "KSEG" message, and then retuning to KOIT, the unit sometimes just brought up the "KSEG" message again, as if it wanted to put something there instead of waiting for a solid lock to KOIT's RDS.

So, how did the ATS-909 stack up?

In a nutshell, the 909 held its' own against the 2010 for sensitivity, but the 2010's sync detection allowed it to eliminate co-channel interference from strong AM signals more effectively. Conversely, the 909's FM section was better, not only because it could decode stereo and RDS, but was able to pull out distant stations co-channel to locals that the 2010 could not separate. On SW, results were comparable to MW. For further comparison, I also brought the GE Superadio III into the fray. No external antennae were used, although all 3 will accept input. The 909 and 2010 were set to the "wide" settings, the SR-III to narrow, as wide is really W-I-D-E. All used fresh batteries. Night time signals are noted as heard, not by the signal meters:

Station	ATS-909	Sony 2010	GE SR III
640 KFI	strong	strong	strong
(KSTE-650 local)	slight splash	slight splash	slight splash
660 KTNN	medium	medium	medium
	med. splash	med. splash	med. splash
1520 (KFBK 1530 local)	overload/KFBK	overload/KFBK	overload/KFBK
1540	overload/KFBK	overload/KFBK	overload/KFBK

Using the sync mode allowed the Sony to bring in some signal for 1520/1540, but there was still some splash. KFBK is 25 mi. or 40 km away, 50 kW, and difficult to null, or minimize signal strength, with the built in ferrite. The 909's wide setting seems geared more to audio response rather than bandwidth. Like the Sony, the Sangean has a gain control for AM. While the Sony has a slider, the 909 has a rotary knob (on the left side, not seen in the pictures) with a detent to lock it in the maximum position.

Although reception of selected stations below was roughly equivalent between the two receivers, signal readings from the meters didn't correlate to each other. Gain was set to maximum on both. All are noontime receptions:

Station	ATS-909	Sony 2010
540 KVIP	0	6
580 KMJ	4	6
740 KCBS		6
1100 KFOX	6	6
1190 KDYA	6	5
1360 KFIV	0	3

1410 KMYC	4	5
1570 KCVR	4	6

FM receptions next to strong local signals:

Station	ATS-909	Sony
2010 GE SR-III		
93.3 The Wave San Francisco (93.1 Patterson-Modesto)	yes, \$	no
101.7 KKIQ Livermore (Kool 101.9 Shingle Springs-Sacramento)	yes, \$	no
102.1 KDFC S.F. (classical)	yes, \$	no
103.1 KATM Modesto (103.5 The Bomb Sacramento)	yes, \$, RDS	yes
103.7 KKSF San Francisco	yes, \$, no RDS	no
104.1 KHKK Modesto (104.3 R. Romantica, Davis)	yes, \$, RDS	yes

KKSF carries the RDS signal, noted in SF on a car stereo with RDS; \$=stereo

Overloading was noted from locals 90.3 KDVS Davis and 102.5 KSFM Woodland (their transmitter is seen from my back yard, less than a mile away), on all receivers. 104.3 Davis did not overload; their transmitter is ironically on the outskirts of Woodland! Interestingly, I was able to receive many of the above noted FM's on the 909 even with the telescoping antenna retracted.

Conclusion

I like the ATS-909 a lot. It's smaller and lighter than the 2010, has more memories, although the "memo" function is a bit eccentric. I prefer the detent rotary tuning on the Sangean; I can "feel" each channel go by. It has stereo + RDS reception on FM, with better reception and audio quality all around compared to the Sony and GE. AM (MW and SW) reception is about equal to the 2010 and SR-III, but the 2010's sync mode takes care of co-channel interference in DXing situations better. For regular listening, though, it's a wash. The lack of sync detection is a minus, but the ATS-909 is much kinder to the checkbook.

If you can find a 2010, they're running over \$350, and **Radio Accessory Headquarters** is selling the 909 right now for \$239.95—check out www.rahq.com and their online catalog for more information, or call them toll free at **888-438-7247**. Radio Shack's DX-398 version lacks the accessories the 909 offers, including the AC adapter and reel antenna for SW. I was going to hunt down a "new" 2010 to replace my 16-year-old model, but after trying the 909 out, why bother? This radio more than holds its own against the 2010.