



Kaito's Multifaceted KA1121

A portable shortwave radio that keeps up with the times

By Ken Reitz KS4ZR

There's nothing new about a portable shortwave radio, but the Kaito KA1121 has a built-in MP3 player with 256 MB of Flash memory that you can use to download your favorite on-line podcasts and record your favorite shortwave, AM or FM programs for later listening.

❖ Kaito Pulls Out the Stops

The list of features for the KA1121 is impressive: It has long wave and medium wave coverage from 140 kHz to 1710 kHz; shortwave coverage from 3-29.999 MHz; FM from 70-108 MHz and all seven channels of the NOAA Weather band.

But wait, there's more! It comes with rechargeable batteries for both the main radio and the MP3 player and separate charge circuits for both. It also tunes Single Side Band (SSB) ham transmissions, has six equalizer audio modes, three clock alarms, a sleep timer, an external antenna connector and can store up to 400 frequency presets and 100 customized station names. All this in a package just 6.5" wide, 3.75" high, and 1.25" deep.

Of course, the big attraction of this radio is the removable MP3 player which, when outside the radio, measures just 1.5" wide, 2.25" high and .5" thick. The player has a built-in USB port, earbud jack and four micro switches on the left and right sides of the unit which disappear when it's installed in the radio. These switches control the MP3 player functions when out of the radio.



Kaito's KA1121 pops its secret MP3 player. Plug in the ear buds or plug it into your car stereo; record off-air, on-line or rip CDs from your own library. (Courtesy: Kaito U.S.A.)

The display panel, which can be turned off when in radio mode to conserve battery power, serves as both the MP3 display and the radio display. A second tiny LCD display at the top

of the touch pad shows the time, frequency and level of both radio and MP3 batteries. There's a 35" telescoping whip antenna, fold-out desk stand and little rubber feet on the bottom. Finally, there's a line input jack which allows you to play any other electronic output such as the audio from your computer.

❖ The KA1121 Highlights

The KA1121 is an amazingly ambitious radio. It wants to be your AM/FM radio, your MP3 player, your shortwave radio, your weather radio, and your personal recording device. Can it really do all this? As with any product this ambitious, the reviews are going to be mixed. The built-in MP3 player is clearly the big calling card here, so I'll look at it first.

Anyone born after the year 2000 already knows how to use an MP3 player, but to some of us older folks it's new technology. With a little help from the instruction manual and the included MP3 driver mini-CD, I was ripping CDs to my audio library and putting them on the MP3 player in no time. Setting up to record from the radio to the MP3 player is not easy the first time, but like anything else, the more you do it the easier it is. Of course, the audio quality will only be as good as your reception quality. On FM the quality was very good. Playback of CDs from the CD library is excellent, especially when heard on the stereo earbuds which come with the radio.

On its own, the MP3 player has its pluses and minuses. On the plus side, it's versatile. You can pop it out and slip it into your shirt pocket or hook it into your car stereo through the use of an optional FM modulator or cassette adaptor. The built-in battery charger is a real plus. The downside is that the recording space is relatively small compared to the iconic iPod®. At 256 MB, depending on the audio quality you select, you can only get a fraction of the songs you'd expect to get on a 2 GB iPod. (It also doesn't have video display, which is one of the reasons iPods need to have so much memory.) Still, you should be able to get at least 100 songs on this little MP3 player. The MP3 player has other features including display of song lyrics for music playing on

the player, record from other audio sources (via the line input), and even record live with the built-in microphone.

The KA1121 comes with three AA rechargeable NiMH batteries which, according to the Kaito tech folks, should be able to go through several hundred recharging cycles. This is a huge savings in battery costs. If all portables had this feature, it would also have a great impact on landfill pollution. The charger circuit automatically shuts down after 12 hours.

I was disappointed in long wave reception with this radio, but most portables are not capable of doing justice to that band. I was able to tune in a few low band beacons within two hundred miles of my location, but little else.

AM reception on the KA1121 was a pleasant surprise. It tunes this band in 1 kHz increments, a plus for AM DXers. Sitting on the desk with the computer shut off, running on its built-in batteries and my trusty Radio Shack tunable AM loop antenna by its side, I logged quite a few stations from all directions with strong signals. From my location in central Virginia I heard CHML 900, Ontario; Radio Progresso 890, Cuba; WWL 870, New Orleans; WWJ 950, Detroit, and all the regular metro powerhouse stations. Nothing was heard west of the Mississippi – not unexpected for those of us at the edge of the east coast.

The WX band on this radio was very good. It had no difficulty tuning our local NOAA WX station over 30 miles away. It doesn't have a WX Alert mode and no provision for SAME encoding. But, it does what it's supposed to



Kaito's ambitious KA1121: AM/FM/LW/SW/SSB/WX band receiver with built-in MP3 player. (Courtesy: Kaito U.S.A.)

MANUFACTURER SPECIFICATIONS

Tuning Range:

FM: 70-108 MHz tuned in .5 MHz steps
LW-MW: 140-1710 kHz tuned in 1 kHz steps
SW: 3-29.999 MHz
WX: 162.400-162.550 MHz
Freq. Presets: 400

Power Supply:

Internal Battery 3 AA Rechargeable NiMH (included)
External Power Supply 6V 300 mA (included)

Dimensions:

Radio Size: 6.5" wide 3.75" high 1.25" deep.
MP3 Player (out of radio): 1.5" wide 2.25" high and .5" deep
Weight: 14 oz. (including batteries and MP3 player)

MP3 Player/Recorder:

Flash Memory: 256 MB
Max Record Time: 16-32 Hours depending on kbps rate
Music Play Format: MP3 and WAV, WMA (Windows Media Audio) files
Music Record Format: MP3 and WAV
Built-in Microphone: Electron Capacitance
MP3/Wave Access Rate via USB port 32-320 kbps
Internal Battery DF6 (included)

Ports:

External antenna jack (3.5 mm)
Headphone jack (3.5 mm)
Line-in jack (3.5 mm)

Knobs and switches:

Narrow/Wide/SSB audio button
DX/Local slide switch
Main tuning side mount knob
SSB fine tuning thumb wheel

do: it lets you listen to weather forecasts and current conditions choosing from the seven available NOAA frequencies.

The audio from the little 2" speaker was well balanced, but could be made to distort at the highest volume setting, though there's no reason you should have the audio that high. Audio from the MP3 player was good through the speaker and very good through the ear buds. But, heard through a set of Bose headphones, the audio was even better with plenty of bass, highs and channel separation.

❖ KA1121 Shortfalls

Despite the positive features of the KA1121, it's not perfect. The first review unit I received had a problem with the small MP3 battery charging circuit. But, Kaito customer service proved knowledgeable, and a replacement, which worked perfectly, was quickly sent. The small size of the radio and MP3 player requires some finger dexterity. For example, the fine tuning wheel is so close to the headphone jack that, if you're listening with headphones, it's tough to tune the SSB feature. The display will challenge those who don't think they need reading glasses. The tuning gap between 1,710 and 3,000 kHz is significant for shortwave enthusiasts. The digital entry tuning method is awkward.

The radio is sensitive to ambient electronic noise. In fact, the manual says to listen to AM or SW stations using the batteries, because the AC adaptor may cause noise and interfere with reception. Reception on those bands did improve when the radio was running on battery

power. But, I found that even on battery power the radio was sensitive to noise generated by nearby computers – a four year old desk model and a two year old laptop.

This was only a problem when I was trying to copy digital modes such as RTTY and SSTV. The strongest of those signals could override the interference from the computers but weak signals could not. Away from the computer the digital signals were strong and would have been easily copyable. This was not a problem on the KA1103 at my location.

❖ Last Word

This is a hybrid period across the entire radio industry. We're on the bridge between the analog past and the digital future. Accordingly, we may be seeing the first of a new wave of hybrid shortwave radios in the KA1121. While Sony and Sangean haven't shown us anything new in the way of design for years, Kaito is at least moving in the right direction, taking advantage of current digital technology and applying it to the ordinary portable shortwave radio. The two most important features of this radio are the built-in MP3 player and the battery charging circuit. They should be standards in all portables.

The KA1121 is a complicated radio. If you have trouble programming your scanner, VCR, or digital clock, this radio is not for you. If you're a tech savvy radio enthusiast who doesn't mind spending some time with a poorly written manual, take a chance on this radio. The KA1121 retails at \$250, but I found it available at Universal Radio for \$149.95 plus shipping.

BRAC Closures / New Airports

By Iden Rogers

The Base Realignment and Closure Commission (BRAC) was enacted some years ago to periodically select U.S. military bases that could be closed or realigned for different uses. The intended purpose has been to cut billions of dollars from the defense budget. For BRAC info: www.govexec.com/specialreports/brac.htm and www.defenselink.mil/brac/.

The BRAC Commission met in 1995 and again in 2005. The BRAC 2005 Commission turned over the list of bases recommended for closure or realignment on May 13, 2005.

Twenty-five major installations are to be closed down and 24 others radically realigned over the six years following the report. Your local newspaper should alert you to any affected bases in your area.

A few bases have and will become civilian airports. This changes the communications that we hear. Ones that don't become airports can have all kinds of different businesses and government entities, many of which may provide new and interesting, non-aircraft listening. BRAC closures do not happen overnight. Over the next few years, keep an eye and an ear out for the changes as they progress.

Here are three of the previously closed bases that now have civilian air activities:

GEORGE AFB in the California desert near Victorville, closed in 1992, has become a cargo airport named Southern California Logistics Airport.

VICTORVILLE TOWER 118.35, **VICTORVILLE GROUND** 124.45, **JOSHUA APPROACH** and **DEPARTURE** 124.55, **WX AWOS** 109.40. For more airport info, see: www.airnav.com/airport/KVCV.

MATHER AFB in Sacramento California, closed in 1993, has become Sacramento Mather Airport and also serves as an air cargo airport with plans to become a major hub.

MATHER TOWER 120.65, **MATHER GROUND** and **CLEARANCE DELIVERY**: 121.85, **NORCAL APPROACH** 119.1, **NORCAL DEPARTURE** 127.4, **CLEARANCE DELIVERY** 121.85, **UNICOM** 123.075, **ATIS** 118.325. For more, see: www.airnav.com/airport/KMHR

BERGSTROM AFB next to Austin, Texas, has become the Austin-Bergstrom International Airport with reports that it "is the biggest new airport project in the United States since Denver International."

AUSTIN TOWER 118.225, 121.0, **AUSTIN GROUND** 121.9 121.7, **CLEARANCE DELIVERY** 125.5, **AUSTIN APPROACH** and **DEPARTURE** 118.8 119.0, **UNICOM** 122.95, **ATIS** 124.4, **WX ASOS** 127.875. See: www.airnav.com/airport/KAUS

It will be interesting to see what additional new airports BRAC 2005 will bring.

