



Grundig Globe Traveler G3 Portable

By Jay Allen

I've got to tell you right up front that I put my name on a waiting list to get a G3 the moment they were available. Why? Well for one thing, I own its predecessor, the Grundig G5, which in my opinion offered the very best performance of any radio near this size and price range. The G5 (and identical Eton E5) were based on the popular (and still available) Degen DE-1103 / Kaito KA-1103, and were essentially the same radio with a redesigned user interface to include up/down volume buttons – a feature notably absent on the original 1103.

But the performance was the thing. On all bands (AM/SW/FM), these radios pull in signals like a magnet. They feature amazing sensitivity, a low noise floor, and great selectivity – there is just no other radio in its class that will “hear” as many listenable signals. In the world of smaller portable radios, that’s a primary concern. They also sound very pleasant for their size and make great travel companions.

So, how could these little wonders be improved upon?

❖ Synchronous Detection

Ah, good question! Eton has come up with several ways to make a good radio even better. One of the improvements is the addition of synchronous detection, usually referred to simply as “sync.”

Synchronous detection allows the radio to lock onto or sync with an AM or SW station’s carrier signal, then discard that carrier and replace it with a perfectly clean and stable signal generated within the radio. This offers several advantages over traditional envelope detection. It can sometimes greatly reduce the annoying fading and distortion caused by so-called “selective fading,” which often plagues AM and SW signals.

During selective fading, portions of the station’s carrier signal are varying in level, leaving the audio information (contained in the sidebands) with a poor quality carrier signal to reference to. The result is mild to gross distortion varying over time. Sometimes switching to sync mode can drastically clean up such a fading signal.

Sync can also let you choose to listen to either the upper or lower sideband of a signal ignoring the opposite sideband. This can be a big help if only one of the station’s sidebands is being interfered with, such as when it is adjacent on the dial to a stronger signal which is crowding it. Let’s say you are trying to hear a signal on 6000 kHz, but there is interference from another signal on 6005 kHz. In that case

you would engage lower sideband sync mode and completely ignore that interfering signal on the upper sideband of your desired signal. Again, sometimes the effect is dramatic.

A well designed sync circuit can sometimes make a hopelessly bad signal literally “jump out of the mud” and sound great. Of course, radios vary in terms of how well their sync circuits work. We’ll see in due course how the G3 stacks up in this regard.

❖ Plethora of Features

Improved SSB: The G3 now offers switch-selectable upper and lower single sideband modes which makes tuning SSB signals much easier than in the previous models.

Civilian Air Band: The G3 adds the 118-137 MHz civilian air band. If you live near enough to an airport you can listen in on airplane and tower communications.

RDS (Radio Data Systems): A real boon to FM enthusiasts, RDS allows you to see text information broadcast by many FM stations. Typically you’ll see the station’s call letters or name, song title and artist.

Line output and line input lets you use your G3 as an amplified speaker for an IPOD or other audio device, in addition to feeding stereo signals out of the G3 for connection to an external audio system or recorder.

❖ Initial Problems

As is often the case with newly-introduced wideband portable radios, some of the initial G3’s had problems. The G3 I had pre-ordered and waited so many months for was a disappointment – so much so that I ended up sending it back. Its synchronous detector would only lock onto very strong signals, rendering it pretty much useless. Worse, the AM band was full of birdies and spurious noises which ruined reception of virtually every signal I tuned in. SW was not bad, but not quite as good as my older G5/E5 radios.

On top of this, I was reading online that other people were experiencing similar issues. This clearly was not a case of a single bad unit, but rather a design or production problem I hoped Eton would iron out.

Luckily, it seems they have. I began reading of better-performing G3’s that did not have any of these issues, so I decided to try another. In fact, I decided to try *two* others, because my second unit was serial number 29 and I wanted to try one with a higher serial number as well. The later one is serial number 1308. My guess is that serial number 29 was updated by Eton.

I’m happy to report that these G3’s deliver the kind of performance I was hoping for and that the G3 offers some worthwhile advantages over the earlier models. They were worth the wait!

❖ Tests and Comparisons

My first goal was to compare the new G3 with my earlier G5 as a standard of comparison. I spent several weeks band scanning on both radios to compare their absolute overall performance, along with lots of listening to each radio to see how the overall experience compared. In terms of reception, the G3 runs neck and neck with the earlier models, with each having certain pros and cons.

On shortwave they seemed identical. As hard as I tried, I could discern no meaningful differences between the old and new models in terms of sensitivity, selectivity, and overall reception, which is good news. Swapping the positions of the two radios under test (always an important thing to do when comparing portable radios side by side) often produced bigger differences than any which may have been present in the radios themselves.

The dual bandwidths are well chosen, with the wide mode offering good sound and reasonable selectivity for most listening, and the narrow position offering increased selectivity at the expense of some audio crispness or clarity when signals are closely spaced. I checked all the active frequency bands day and night and listened to all manner of strong and weak signals: The two models always seemed identical.

However, the G3 has a slightly mellower tone quality than the older models, so any noise there seemed a bit less noticeable on the G3. Further, the G3’s sync detection provided dramatic improvements on some signals. It not only reduced those annoying fades which AM and SW are known for, but it also helped separate interfering signals squashed together on the dial.



At other times things were better without sync. This is often the case because sync is not a magic elixir that can fix everything. To understand why various sync circuits may behave differently, a slightly technical discussion may be useful.

Two major specifications of a radio's sync circuit are known as sync-lock *width* and sync-lock *depth*.

Width specifies how far above or below the center-tuned frequency the circuit is capable of locking onto the signal. With other sync-equipped radios I've used, this is generally in the range of +/- 3 or 4 kHz. In other words, a signal on 5000 kHz should lock into sync mode when you are tuned anywhere between approximately 4997 to 5003 kHz. The G3, however, only locks on when *precisely* tuned to 5000 kHz. That means that, with typical manufacturing tolerances, some units will likely be off by a digit or so. I hope Eton can slightly widen the sync lock width in future production. This is not an issue so much with actual reception as much as it is an annoyance.

As for sync lock depth, that has been improved, as I mentioned earlier. The latest G3's will lock onto reasonably weak signals, but again, this could be even better. If you are listening to a signal that falls below about 1/4 on the signal strength meter, the sync loses lock. As it comes back into lock, there is usually a momentary mute that can be annoying. Still, since the sync on the G3 often helps dramatically, it's great to have the option.

AM Mode

In AM mode, the G3 was similar to but just slightly less sensitive than the older models, and it seemed to exhibit slightly less aggressive AGC (automatic gain control) action as well, so some very weak signals were received at a slightly lower volume than stronger ones. For perspective, this was not noticeable on the majority of signals I compared, but only with some very weak daytime signals, especially near the upper end of the AM band. At night, when most signals are stronger, I found it difficult to detect this difference at all. Again, the sync circuit sometimes cleaned up fading or interference-ridden signals very nicely and was a tremendous advantage.

Some AM stations now are broadcasting in HD (High Definition) using Ibiquity's IBOC (In Band On Channel) digital system. Such stations do not sound good on most sync-equipped radios, but this is not a fault of the radio. AM IBOC causes a rumbling or rushing noise when sync is engaged except on the very few radios that offer a third sync mode, Dual Sideband Sync. The only radio I own which offers this feature is the (\$500) Eton E1.

Again, if sync makes the signal less listenable, simply turn it off. Consider it a tool you can use whenever it helps.

FM Mode

On FM, the G3 was slightly less sensitive than the G5, but it was also more selective and better at rejecting false images. In my suburban location, with a mix of stronger and weaker signals, each radio could receive some difficult signals clearly that were troublesome on the

TABLE: FEATURES/SPECIFICATIONS

Serial numbers: 000029 and 001308
 Manufactured in China
 Frequency coverage
 AM/SW/LW (150-30000 kHz continuous)
 Air Band 118-137 MHz
 FM settable 76 or 87.5 - 108 MHz
 Selectable 9/10 kHz AM tuning steps
 Dual conversion PLL digital
 RDS (Radio Data System)
 Synchronous detector with selectable side band
 SSB (Single sideband reception) with switch selectable modes
 Dual IF bandwidths
 Line In/Out
 700 Randomly programmable memories
 Clock, sleep timer, four alarms
 Lighted LCD Display
 3.5 mm stereo headphone output
 Whip antenna for AM/Air/SW
 Internal ferrite rod for AM/LW
 3.5 mm external antenna jack for SW/FM/Air
 Tuning: Direct frequency entry, scan, seek, ATS (auto tuning storage) modes, meter band selection
 Power Source: 4 x 1.5 (AA, LR6, AM3); 4 Ni-MH batteries (can be internally recharged), AC Adapter 8V 200 ma center pin positive (supplied)
 Size: 6.614" x 4.13" x 1.1" (168 x 105 x 28mm)
 Net Weight: 345 grams
 MSRP \$169.95 (Generally available for about \$150)
 Accessories: Owner's Manual, Warranty Card, Protective Pouch, AC Adapter/Charger

other radio. For the handful of very weak signals that had no strong adjacent stations, the older model pulled those in more easily, but for stations that were crowded together on the dial the G3 was easily the winner. Each radio thus received some signals that the other one couldn't.

Overall I would give a slight edge to the G3, but depending on your location either one might have a slight advantage over the other. Another improvement – the G3's signal strength meter now functions normally in FM mode, although the owner's manual incorrectly states that it does not.

SSB Mode

The G3 offers greatly improved Single Side Band performance. You can now select upper or lower sideband modes at the press of a button, which makes tuning SSB much easier. You then perform coarse tuning with the tuning knob, and finally zero in for best audio using the fine tuning thumbwheel.

Both wide and narrow filters are available in SSB mode, which is a bit unusual as well, and I suspect the less aggressive AGC I noted earlier helps SSB sound a bit cleaner on the G3.

❖ Other Comparisons

I discovered that the G3's external antenna jack does not function for AM as it did on the older models. Also, the IF wide/narrow switch that doubled as a tone control for FM on the old model does not on the G3. Finally, the G3's buttons are not lit (although the manual incorrectly says they are).

On the positive side, the scan function is much more effective on the G3. It scans more

slowly than the old model, but it finds more listenable signals, making scan far more useful and a joy to use. At night, though, with many stronger signals available, I often set the DX/Local switch to local while using auto scan, and in crowded bands it may otherwise stop at virtually every frequency.

❖ Other Features

The G3 is a very full-featured radio. In addition to those we've already discussed, you also get four alarms, sleep timer, internal battery recharging, 700 randomly assignable memories in pages with eight digit alpha tagging (it was only four characters on the G5/E5), and a new copy/paste function that lets you copy memories from one location to another.

The use of any of these features is optional, but you will need the owner's manual to learn how to use them. Unfortunately, the manual makes this slightly tougher by not offering the usual diagram of the radio showing the location of all the controls, but any of the features that are important to you can be mastered with a little practice.

There are a few errors in the manual, although Eton has been known to update their manuals with new models so yours may vary. For one, there is no diagram showing the dual functions of the seven multi-function 'F' keys under the flip stand as stated (and as provided on the older models). I have provided it for you, since the functions are the same as the previous model.

F1	F2	F3	F4	F5	F6	F7
49m	41m	31m	25m	22m	19m	16m
Alarm 1	Alarm 2	Alarm 3	Alarm 4	9/10 Khz	Scan Set	Charge (Power Off)

One button that needs explanation is the scan set button, which lets you choose from three auto scanning modes: scan and stop (the default mode); scan, delay, continue; or ATS (automatic storage of the frequencies found).

❖ Conclusion

I have always been a portable radio junkie, and in my book Eton has hit another home run with the Globe Traveler G3. It offers many new features and represents the new state-of-the-art in performance for smaller portable shortwave radios.

It is also intriguing that all these extra functions have been carefully fit into the identical cabinet as the older model. Even the buttons and switches appear identical although many have different functions on the new model. Wherever your travels may take you, be it overseas or just from room to room, the Grundig G3 will bring in signals as well as or better than any comparable radio, all in a neat attractive package that's fun to use. As such, it is a worthy new addition to Eton's line-up. I highly recommend it!

The Grundig G3 Globe Traveler (RCV65) is available from Grove Enterprises for \$149.95 plus shipping and handling. Call toll free 1-800-438-8155 or visit www.grove-ent.com to order.

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