

TIME SIGNALS

Having the correct time is important in all navigation, but is paramount for celestial. Determining longitude has always been the strictest test of timekeeping which is today improved by quartz clocks and worldwide broadcast time signals. These time signals are broadcast on shortwave frequencies of 2.5, 5, 10, 15, and 20 MHz in the USA, and a few others in the rest of the world.

In the past, there have been inexpensive radios whose crystal settings have been dedicated to receiving just these frequencies. These radios are no longer available, but digital tuning technology (like your car radio that can seek and scan) has made ordinary shortwave radios capable of receiving these signals reliably. The world band radios in this catalog are all suitable for this purpose.

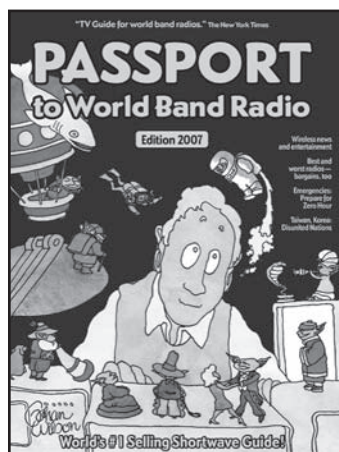
As an alternative, one may phone the U.S. Naval Observatory at the following number, and hear a transcription of the time signals or visit our web site to view the time as a link from them.

**For the time call:
1-202-762-1401**

CHOOSING A WORLD BAND RADIO

The job for a world band radio is tough. Crowded signals traveling long distances require proper equipment for good reception. Yet, there is a global free-for-all in the manufacturing and merchandising of these radios. Some do an excellent job, and some are sold on the basis of good looks while having terrible performance. The following points should be considered in making your selection.

1. **PRICE-** Do not buy a cheap radio! Expect to pay a decent price for good equipment. Choose from those which are rated highly by impartial reviews.
2. **SIZE-** This depends on how you will use it. Small is great for travel, but poor for the home. Large radios usually sound better and have more features than small ones, but are poor for travel.
3. **TUNING-** Digital tuning, and selective analog tuning are sensible choices, and is all that we offer. The older analog tuners that whistle and wow, take time, and make stations hard to find, should be avoided.
4. **SINGLE SIDEBAND (SSB)-** This is unimportant for ordinary program listening, but is necessary for receiving shortwave utility, "ham" signals, and air-to-ground, and ship-to-shore stations.
5. **ANTENNA-** Usually, the built-in telescoping antenna that comes with your portable is all you will need; unless you live in a harder to receive-in area such as the North American midwest, or west. Here you may consider an external clip-on antenna which are widely available.



A PASSPORT TO WORLD BAND RADIO- 2007

Some call it the "TV Guide" of world band radio. It is...but much more. The backbone of this annual publication is the "blue pages", a complete listing of world broadcast stations; by frequency, language, time of day, and target areas. If you hear something on the radio, you can see who it is at a glance. If you want to hear something, you know where to look. Another section lists hour-by-hour (with editorial comment) the best stations for listening in your area.

Other sections deal with getting started in world band, best news programs, ratings and test reports of radios, and even a world map showing broadcast station locations. We highly recommend this book, even if you are just thinking about getting a radio. SC, 592 pages. SW 2 lbs.

Passport to World Band Radio- 2007

#3007

\$22.95

WHY A WORLD BAND RADIO?

A navigator needs to know more than just where the ship is going. Weather forecasts, accurate time, and even global political situations can affect a voyage. Modern digital tuning technology makes even small shortwave radios easy and effective to operate. Listen to hourly newscasts from the BBC, enjoy the latest music from West Africa, listen in on weather reports from Australia. It's the perfect tool for keeping in touch with the world.



GRUNDIG-ETON E5 (YACHT BOY 400PE)

The E5 is Eton's premier model among the digital compact portable WB radios. It has received the very best ratings in sound and performance for any compact. Among its most important features are: FM, AM, and shortwave (SW) frequency bands, SW bands are from 1.7 to 30 MHz, clock display, alarm function, sleep timer, 700 memory presets, and automatic station scanning. It comes with carrying case and portable external antenna. Single sideband (SSB) is standard. This radio is perfect for supplying weatherfax input to a computer. Size is: 6-5/8" (W) x 4-1/8" (H) x 1-1/8" (T). Wgt: 12.2 oz. Power is by 4 AA batteries (not included) or included AC adapter. SW 3 lbs.

Grundig YB 400 PE

#3545

\$149



New

GRUNDIG-ETON E-100

This new model from Grundig gives full-sized features in a compact package. It has comprehensive coverage of AM, FM, and Shortwave bands (covers 1.7-28 MHz). A full range speaker delivers fine high fidelity sound. Digital synchronous detector circuitry lets you detune slightly from standard frequencies so you can fine tune away from interference, without loss of signal clarity. Built-in telescoping antenna for FM/SW, with external antenna inputs to expand your global reach. Separate bass and treble tailors the sound. Large LCD screen displays frequency, clock, and alarm. Size is 5"x3"x1-1/4". Weight 7 oz., powered by 2 AA batteries (not included). Comes with shoulder strap. An AC adapter is optional. SW 3lbs.

Grundig S-350

#3587

\$99



New

GRUNDIG-ETON CELL PHONE CHARGING SW RADIO

Always be prepared for an emergency, whether from natural disaster or power outage. The Emergency radio will keep you in touch with 3 sources of power. Flip out the hand crank, give it 60 turns, and enjoy up to one hour of play time; plug in an AC adapter (not included); or put in 3 AA batteries (also not included). It **charges most cell phones too!** Built for both indoor and outdoor use, it comes with a nylon carrying case with strap. Although NOT crystal controlled tuning, it has AM/FM/SW1/SW2 bands with fine tuning. Comes with shortwave listening guide. Size: 6.5"W x 5.5"H x 2"D. SW 2.0 lbs

Grundig FR-250 Emergency Radio

#3537

\$ 39