



Cover Story 2012 Annual Radio **Buyer's Guide**

. This month *MT's* third annual Radio Buyer's Guide looks at some of the things that make our shacks click: scanners, accessories, antennas and a new crop of shortwave radios.

In addition, some of our regular columnists have chipped in and examined other products of interest to readers. For example, Kirk Kleinschmidt NTOZ looks at the subject of amateur radio antenna rotators, what works, what doesn't; Dan Farber ACOLW reviews the stealthy Chameleon VI 80-10 meter vertical antenna that proves to be inexpensive and effective; Bob Grove W8JHD looks at the Sangean ATS-909X shortwave portable as well as the Jetstream power supply, and Ken Reitz KS4ZR looks at two inexpensive, amplified TV antennas that actually work.

And, as usual, there's plenty more to pique the interest of every radio enthusiast from radio restorations to plumbing the depths of longwave; chasing new HF digital signals to working the oldest AMSAT still circling the globe.

On Our Cover

This month MT looks at radio accessories for amp (Courtesy: Tokyo Hy-Power); Heil Pro Set Plus (Courtesy: Heil Sound); Ten-Tec 715 speech processor (Courtesy: Ten-Tec); ALS-600 linear amp (Courtesy: Ameritron); GHD single-lever paddle key (Courtesy: Tohihiko Ujiie JA7JHD); Alinco DX-R8T (Courtesy: Alinco); AOR 2300 screen (Courtesy: AOR); AOR loop antenna (Courtesy: AOL); ATS-909X (Courtesy: Sangean)

Ν ТЕ Ν

By Larry Van Horn N5FPW

Product models for scanner enthusiasts in the market for a new scanner have never been better. The latest crop of scanners can put you in the middle of the action with little or no effort. But, such convenience comes with a price. And, while this new generation of public service band radios is more capable than ever, there are tradeoffs to consider. It all comes down to frequencies and what's happening where you live. Larry looks at conventional analog, trunktracking, APCO25, civilian and military capable receivers, and guides you toward a decision that will be useful now and in the future.

By Ken Reitz KS4ZR

Rising sunspots lift all SWLers' spirits, but to really enjoy HF to its fullest you may need to take your listening to another level. Ken looks at three recently introduced radios spanning the price point range. Sangean's new ATS-909X proves to be a capable and portable shortwave, AM and FM receiver; Alinco's DX-R8T delivers a solid table-top performance with pluses that include DRM reception at a reasonable price; and, for the SWL who needs an all-in-one HF to UHF top shelf performer, AOR's AR2300 is just a credit card swipe away.

The Quest for Power, the "Keys" to Success, By Kirk Kleinschmidt NT0Z

There's nothing like being able to put a little steam into a frequency when band conditions get rough, that's the attraction of linear amplifiers. While Kirk is an old school QRP man, he understands your quest for more power and brings his veteran operator insights to the question of which amp is right for you. Here he examines the pros and cons of low-end to high-end linear amplifiers.

Kirk also examines other accessories that have long attracted hams, including outboard speech processors, after-market microphones, antenna rotators, and special CW keys. There are dozens of brands of each product on the market vying for your hard earned dollar and Kirk makes it a little easier to find just the right product to help you decide.

Finding the Perfect Antenna (it's not that easy!) 16 By Bob Grove W8JHD

Without an antenna your radio is just a curiosity on a shelf. MT publisher and antenna guru Bob Grove W8JHD looks at some of the most important aspects of radio antennas: size, frequency, design and feed. In this in-depth analysis, Bob examines vertical and horizontal antennas, mono-elements and beams, ground-planes and log periodic dipole arrays with examples and prices for some of the best available. If you're a ham, scanner enthusiast or shortwave listener, Bob will help you find the perfect antenna for your radio shack.



Sanaean ATS-909X Portable SW

and Two Jetstream Power Supplies

By Bob Grove W8JHD

Sangean has a new portable shortwave radio and MT founder Bob Grove W8JHD puts it to work in his listening post. Find out why Bob calls it " a good example of superior performance from a modern compact portable at a lower cost." Bob also looks at two versatile power supplies from Jetstream.





MONITORING TIMES (ISSN: 0889-5341; Publishers Mail Agreement #1253492) is published monthly by Grove Enterprises, Inc., Brasstown, North Carolina, USA.

Copyright © 2011 Grove Enterprises, Inc. Periodicals postage paid at Brasstown, NC, and additional mailing offices. Short excerpts may be reprinted with appropriate credit. Complete articles may not be reproduced without permission.

Address:	7540 Highway 64 West,
	Brasstown, NC 28902-0098
Telephone:	(828) 837-9200
Fax:	(828) 837-2216 (24 hours)
Internet Address:	www.grove-ent.com or www.monitoringtimes.com
Editorial e-mail: Subscriptions:	editor@monitoringtimes.com order@grove-ent.com

Subscription Rates: \$32.95 in US; \$42.95 Canada; and \$58.95 foreign elsewhere, US funds. Label indicates number of issues left. Renewal notice is cover sheet 3 months before expiration. See page 76 for subscription information.

WRITE FOR MONITORING TIMES: Learn how at

www.monitoringtimes.com/ html/write_for_mt.html or write to editor@monitoringtimes.com

Postmaster:

Send address changes to Monitoring Times, 7540 Highway 64 West, Brasstown, NC 28902-0098.

Disclaimer:

While Monitoring Times makes an effort to ensure the information it publishes is accurate, it cannot be held liable for the contents. The reader assumes any risk for performing madification or construction projects published in Monitoring Times. Opinion or conclusions expressed are not necessarily the view of Monitoring Times or Grove Enterprises. Unsolicited manuscripts are accepted. SASE if material is to be returned.

Subscription Questions? belinda@grove-ent.com

Owners Bob and Judy Grove judy@grove-ent.com

Publisher Bob Grove, W8JHD bobgrove@monitoringtimes.com

Managing Editor Rachel Baughn, KE4OPD editor@monitoringtimes.com

Assistant and Reviews Editor Larry Van Horn, N5FPW larryvanhorn@monitoringtimes.com

Features Editor Ken Reitz kenreitz@monitoringtimes.com

> Art Director Bill Grove

Advertising Services Judy Grove (828) 837-9200 judy@grove-ent.com

TABLE OF CONTENTS

Departments:

Communications	6
Letters	
Stock Exchange	
Advertisers Index	

First Departments Getting Started

Scanning Report	
By Dan Veeneman	
The Truth about Encrunt	ion

Ask Bob23 By Bob Grove W8JHD

Linear amp bypass; NOAA frequencies; Inboard vs outboard DSP; Ham and public service HT combos; Nulling FM signals; Solar cycle maximum flop; Defining RDS, SDR and DSP, and a shortwave interference puzzle.

Utility World	
By Hugh Stegman NV6H	
WLO Regins Public RTTY Bro	nadcasting

Digital Digest......27 By Mike Chace New Digital Signals

On the Ham Bands......28 By Kirk Kleinschmidt NT0Z The Right Rotator for the Job

Beginner's Corner30

By Ken Reitz KS4ZR Low Profile TV Antennas and PC to TV

Programming Spotlight......32 By Fred Waterer New Programs and News Programs

Second Departments

English Language SW Guide35

MTXtraShortwave Broadcast Guide..47 Portuguese/French

Fed Files54
By Chris Parris
2011 Fed Files Wrap-up

Globalnet58 By Loyd Van Horn W4LVH Clearing Out the GN Mailbag

Technical Departments

Radio Restorations	62
By Marc Ellis N9EWJ	
Addressing the Meissner Mystery	

On the Bench......68 Handy Video Tuning Tool: Your Wireless Camera; VHF Audio/Video Transmitter

You may contact any MT staff writer by email by combining their **first and last name @ monitoringtimes.com.** By postal mail, you may write them in care of MT Headquarters in Brasstown. Please enclose a self-adressed, stamped envelope if you wish the columnist to reply.