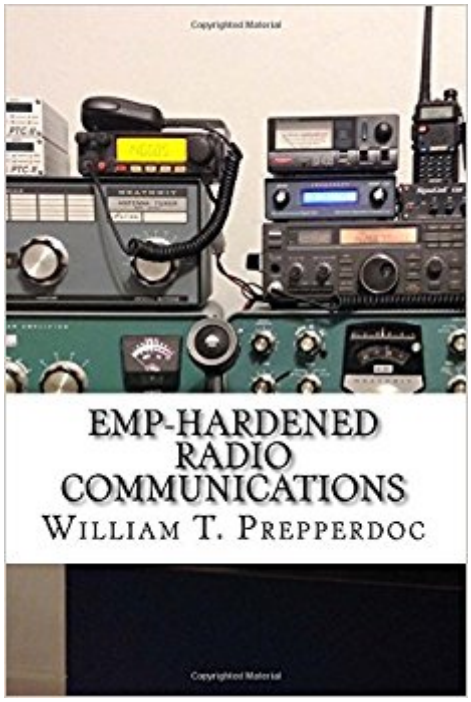
EMP-Hardened Radio Communications



Synopsis

An extremely practical how-to manual to protect almost any radio from both EMP and CME damage. James Wesley, Rawles thought this book so important that he wrote the Foreword, pointing out this book could save the life of your loved ones, and keep your business from being destroyed by EMP/CME events. If you want your radio to work no matter what the Sun or a nuclear EMP throws at you, this book is for you. Written by an experienced Electrical Engineer / Physician with > 40 years of amateur radio experience.

Book Information

Paperback: 74 pages

Publisher: CreateSpace Independent Publishing Platform; 1 edition (December 4, 2016)

Language: English

ISBN-10: 154077760X

ISBN-13: 978-1540777607

Product Dimensions: 6 x 0.2 x 9 inches

Shipping Weight: 5.8 ounces (View shipping rates and policies)

Average Customer Review: 4.7 out of 5 stars 16 customer reviews

Best Sellers Rank: #499,190 in Books (See Top 100 in Books) #173 inÃ Â Books > Crafts, Hobbies & Home > Crafts & Hobbies > Radio Operation #192 inÃ Â Books > Engineering & Transportation > Engineering > Telecommunications & Sensors > Radio

Customer Reviews

> 40 years of amateur radio experience Bachelor’s and Master’s degrees in Electrical Engineering > 30 years experience as a physician Built and designed many amateur radio units; extremely involved in digital amateur radio.

The solutions described in the book are simple, practical and readily available to a competent ham operator. My basic knowledge of electronics (from the General License study and test) made the content understandable but I will likely have to do some additional research and remedial education to be confident that I’ve correctly understand/make/install the suggested DIY solutions. The references in the appendix will save you lots of time and research for the components and parts to harden you shack.I do believe that you can build a very effective Faraday cage from large ammo cans (have several cans that are 17x6x20 to hold backup laptop, iPad, SignaLink for PSK, tuner, coaxial cable, QRP OCF antenna, hand helds, small fold up solar panels and charge controller, and

a few generator parts) making a gasket using 26 gauge sheet metal and soldering a tinned braided flat ground cable (or RF shielding tape) to the perimeter that matches the rubber seal, and creating a very tight gasket seal that is conductive and water/moisture resistant too, and bonded to the lid to create an effective cage. Have done a few with 3M RF shielding tape that have been shown to be effective too.The information on solar panels is widely known - the book is my motivation and will now wrap up the six 100 watt panels in heavy aluminum foil and tape for back up. Will swap out these back up PVP's when there are good alternatives - saving the best for last. Likewise, didn't realize the damage that could be done to my coax cable - so I got a 25-50-75-100 foot sections stored away with some connectors too.Thoughtful references to ComSec issues and risks, but didn't mention that a HEMP will likely come in 2 waves to take out the recovery systems - likely best to wait 5-10 days before pulling out the protected electronics as a precaution.Can't overlook the background information on the risk of a CME/EMP - factual reference to a variety of experts, commission and committee reports that have assessed the risk - perhaps a very low probability of such events but the severity of the event will be like nothing that has been seen or experienced in the US - no one that has read the background information on EMP/HEMP/CME will be able to ignore the risk - whether by nature, mankind's evil or the will of the good Lord.Well worth the $5.00 investment with the kindle version. Would like to see the next edition that has an appendix of projects with material lists and better photographs of the DIY solutions, including 1-3 of the best digital HF communication solutions and tactics after a EMP/CME events, and recommendation for the post event communication protocols that will be widely used by the few Hams that are prepared.Let's pray to God that we are spared of any events that should make the contents of this book something other than a curious read...

With a growing risk of a high altitude electromagnetic pulse (EMP) and a continuing risk of coronal mass ejections (CME) impacting our important electronic equipment, this book defines that risk at a level the average citizen can understand. More importantly, the last half of the book focuses on hardening techniques for survival of our critical communications devices and systems. It's a fast read, packed with information, recommendations and even explanations of how to minimize these risks at reasonable costs. For example, the appendix on constructing a Faraday cage offers a cost effective solution, which is easily accomplished. There is a lot of great advice throughout this book.

I will NOT throw my radios and expensive electronic devices into a garbage can... not when I can employ common sense EMP hardening to devices I need for everday life. After watching some of

the crazy-headed ideas on Yo-tube, one has to ask themselves, "well, how the heck do they harden helicopters, airplanes, vehicles, for the military? Giant garbage cans with lids?"One of the FEW books for the do-it-yer-selfer, like me. It’s not just an EMP, there’s lightning too! Granted nothing is 100%, unless it’s two campbell soup cans and a string - and neither is a garbage can with foil tape around the cover (radios hear microvolts, very, very, very weak signals - EMP or solar flare is thousands of times stronger and/or longer!). Not garbage can theory, from people who know nothing of attenuation or grounding.5 stars for - Enough theory, and plenty of do it yourself at a fair price.P.S. For less than the cost of a 33 gallon garbage can, you can be educated - and still enjoy your radio... with a few mods.

Information in this book is very useful and up to date. I got this for my son since he does not completely understand and/or the need to harden your electronics against electromagnet forces. I think I’ll buy a couple extra copies for other people I know before they are sold out. Jim

Grama14 pretty much summed up my thoughts on this excellent book. I learned more about EMP/CME events and how they work than from any other source. The extent of my Ham experience is with handheld radios and simple antennas, so my protective needs are easier than those with extensive HF/VHF/UHF base and mobile systems. But it is evident that protective methods for even large rigs are a relatively easy and inexpensive proposition.Why the government and power utility companies have not taken the steps to harden the grid is beyond me as the protective techniques are essentially the same for large transformers and generators as for consumer electronics, just in larger scale.

It is an esoteric subject but also provides a lot of insights into real world EMP preparedness and old but valid real world test results.

Just finished reading Prepperdoc’s book on EMP & CME. It was very informative. I have been following every article I could find on the subject for the past few years, I found information that I was not aware of in this book. As an amateur radio enthusiast it provided several solutions to EMP that I was unaware of. I do feel it is a good resource on the subject. It will cause you to think about " what if One Second After actually happens"

Very concisely written, well established book on emp/and protection. Highly recommend for people

as an informative book by a qualified subject matter expert.

EMP-Hardened Radio Communications EMP Protecting Housing and Solar: A National EMP protection plan as well as EMP protection of family, homes and communities. Protection is achieved ... and cable surge suppression and filtering. EMP: Electromagnetic Pulse. Protect Your Family and Survive Long After the EMP (Prepping, Survival, Homesteading, Preparedness, EMP, Electromagnetic pulse) How To Survive An EMP Attack: The Ultimate 10 Step Survival Guide On How To Prepare For Life Before, During, and After an EMP Attack That Brings Down The National Power Grid Breakdown: An EMP Survival Thriller (The EMP Terror Series Book 1) Unwanted World: A Post Apocalyptic/Dystopian Survival Fiction Series (The EMP Survivor Series Book 4) (The EMP Survivor Series (5 Book Series)) Simulation and Software Radio for Mobile Communications (Artech House Universal Personal Communications) The Art of the Start 2.0: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything The Art of the Start: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything Data and Computer Communications (10th Edition) (William Stallings Books on Computer and Data Communications) The Shadow Radio Treasures (Old Time Radio) (Classic Radio Suspense) Say Again, Please (Kindle edition): Guide to Radio Communications The ARRL Handbook for Radio Communications 2004 The ARRL Handbook for Radio Communications 2010 The ARRL Handbook for Radio Communications: The Comprehensive RF Engineering Reference [With CDROM] IFR Communications Manual: Radio Procedures for Instrumental Flight EMP: Electromagnetic Pulse: Prepping for Tomorrow Series Turning Point: A Post Apocalyptic EMP Survival Fiction Series (The Blackout Series Book 3) Devil's Homecoming: A Post Apocalyptic EMP Survival Fiction Series (The Blackout Series Book 6) Hornet's Nest: A Post Apocalyptic EMP Survival Fiction Series (The Blackout Series Book 5)