Record Nr. UNINA9911008398703321 Autore Donat Wolfram Titolo Explore software defined radio: use SDR to receive satellite images and space signals / / Wolfram Donat Pubbl/distr/stampa [Raleigh, North Carolina]:,: The Pragmatic Programmers, LLC,, [2021] ©2021 **ISBN** 9781680508345 1680508342 9781680508369 1680508369 Edizione [First edition.] Descrizione fisica 1 online resource (77 pages) Collana Pragmatic exPress Disciplina 621.384 Soggetti Software radio Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Cover -- Table of Contents -- Acknowledgments -- Introduction --Materials Needed -- 1. Installing the Required Bits and Pieces --Hardware -- Software -- 2. Your First SDR Reception -- Attaching the Antenna -- Windows -- Linux -- Troubleshooting -- Try This -- 3. Antenna Theory and Design -- How Antennas Transmit -- How Antennas Receive -- Antenna Design for SDR Hobbyists -- 4. Digital Speech Decoding -- Hardware -- Software -- Things to Try -- 5. Listening to Satellites -- Hardware -- Software -- Troubleshooting --Try This -- Conclusion -- A1. Running SDR on the Raspberry Pi -- Try This. Combine your desktop or laptop computer with easy-to-find Software Sommario/riassunto Defined Radio (SDR) equipment, and tune in a wide range of signals in no time at all. Then, go one step further by converting a Raspberry Pi into your own dedicated SDR device. SDR USB dongles are usually designed to receive and decode high-definition digital television broadcasts, but the rising popularity of SDR has led to several of these devices being specifically made for-and marketed to-the software radio crowd. With step-by-step instructions, you'll have no problem getting

everything up and running on both Windows and Linux. The antenna

is the final piece in the SDR puzzle: Which antenna do you use? What shape do you need? How big does it have to be? And where do you point it? Get all the answers you need and learn what's possible when it comes to picking out or building an antenna. And if you're not particularly handy, don't worry. You can use an old-school set of rabbit ear antennas without too much modification. Discover the fun of this growing hobby and then open your ears to the hidden signals that surround you.