SDR Cube Transceiver Kit

Portable Software Defined Radio without a PC!

The SDR Cube Transceiver Kit is a self-contained Software Defined Radio that couples with any quadrature-sampling RF front end (like a Softrock) to perform to form a full-featured SSB and CW transceiver for the HF bands … without the need for a PC!

The SDR Cube Kit offers many customer-selectable ordering options to allow homebrewers of all kinds to easily take part in the leading-edge SDR revolution of radio design. The Cube is available as a bare pc board set or as a full kit of parts and pc boards.

Various options turn the SDR Cube's 3-board minimal design into a fully-featured SSB or CW transceiver. The Cube is designed to work with any "RF front end", such as any of the Softrocks. There is even a space inside to house the most popular Softrock ever: the RXTX 6.3, which is also available as a purchasable option! All this fits inside an optional black powder-coated, custom-designed Ten-Tec enclosure.

The SDR Cube has a full user interface, a bandscope display to show spectrum activity, DSP processing and I/O connectors on the rear panel. It ideally interfaces to the NUE-PSK modem for digital mode support, and future growth will directly encompass digital modem functions and more.

What a great way to eliminate the complexities and vagaries of using the PC as a radio! As many SDR Cube Transceiver owners now proudly say: "We don't need no stinkin' PC!"

Thank you for your purchase!

Whether you bought the bare PC board set, or the full kit of parts for the three boards, or "the whole enchilada" including the board kit, enclosure and Softrock RXTX 6.3, we hope you will enjoy building and using your Cube.

Please see the attached Packing List created specifically to list the SDR Cube items you purchased. Based on that listing, you may have any or all of the following packaged items …

- **PCB-Bare** – A set of the three PC Boards, without any parts.
- **PCB-Kit** – Three separate bags containing the pc board and parts for the DSP, I/O and Controls boards comprising the Cube
- **Cable-Kit (Int)** – The connectors and wire to be used to create cables needed to connect the Cube electronics to an internal RF front end (e.g., Softrock)
- **Cable-Kit (Ext)** -- A bag containing the connectors and wire to be used to create cables needed to connect the Cube electronics to a connector on the rear panel, thus enabling you to control an external RF front end (e.g., Softrock)
- **Cable-Modem** – The special cable that interconnects the SDR Cube with the NUE-PSK Digital Modem. Enables optimized support of digital modes.
- **SR-Base-Kit** – The base board for the Softrock RXTX 6.3 rf front end
- **X-LPF-Kit** – The small pc board and components kit that serves as an external low pass filter board. (Included with every SR-Base-Kit order.)
- **TXPA-Kit** – The Transmit/PA module kit that plugs into the SR-Base. May be built for either 30/20/17 or 80/40 band groups.
- **RXAMP-Kit** – The Receive Amp/Filter/Attenuator board kit that plugs into the SR-Base. May be built for any of the four frequency groups covering the HF spectrum.
- **Clock-Si570** – The Si570 chip for optional use on the Controls board of the Cube, providing the programmable LO clock to RF decks that might not have an onboard clock generator.
- **Clock-DDS** – The handful of components (and DDS chip) for optional use on the Controls board of the Cube, providing the programmable LO clock to RF decks that might not have an onboard clock generator.
- **ENC-Cube** – The black powder-coated aluminum clamshell enclosure, pre-milled and labeled for use with the Cube.

A detailed set of step-by-step Assembly Instructions are available online at **http://www.sdr-cube.com/construction**. This website has many colored photos and references that are excellent for all levels of Cube kit builders … far exceeding what could be available in a printed manual. A single, large PDF "Assembly Manual" may also be downloaded from there.

Please let us know if you have any questions in building or using your SDR Cube Transceiver! The SDR-Cube email list at Yahoo Groups is very active and also is a helpful resource.

73, George N2APB and Juha OH2NLT

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