

ColibriDDC

DIRECT SAMPLING HF/6M RECEIVER



- LAN Interface
- 62.5 MHz wide bandscope
- 2x312 kHz software receivers
- 4 slice receivers
- Linux or Windows your choice!
- User-friendly software
- Remote control
- Raspberry Pi2/3 supported



The small size ColibriDDC SDR receiver has the power and functionality to serve in many different amateur radio applications. DDC, Direct Down Conversion technology, provides quality audio reception and a powerful spectral display of received bandwidth. Powerful and easy to use software will appeal to new users as well as experienced operators who want to use DDC technology for DXing, contesting or general HF/VHF listening. The accessory connector allows for integration of the ColibriDDC in complex setups to control optional bandpass filters, antenna switches etc.

Modes.....LSB/USB/DSB/CW/AM/SAM/NFM/WFM
 Receiving freq. bandwidth, MHz.....0.01...55(0.01...62.5)
 Receiving bandwidth in all Nyquist zones,MHz....0.01...800
 Spectrum scope bandwidth (up to), MHz62.5
 Amount of independent receiving channels2
 Sensitivity, uV0.3
 Blocking Dynamic Range (BDR),dB110
 Dynamic Range over IMD3 , dB.....90
 Image channel suppression, dB.....>110

DC Supply voltage range, V4.5...5.5
 Maximum consumption current, A.....0.7
 RF ADC clock frequency, MHz.....125
 RF ADC resolution, bit.....14
 Local oscillator stability, ppm.....±0.5
 Built-in attenuator, dB.....0...-20
 Built-in audio DAC resolution, bit.....24
 Dimensions, LxWxH, mm.....112x64x24
 Weight,kg.....0.2



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Expert Electronics LLC
 +7(8634)34-00-26
 +7(938)119-77-37
 info@sunsdr.com
 www.eesdr.com

ColibriDDC Remote Control System



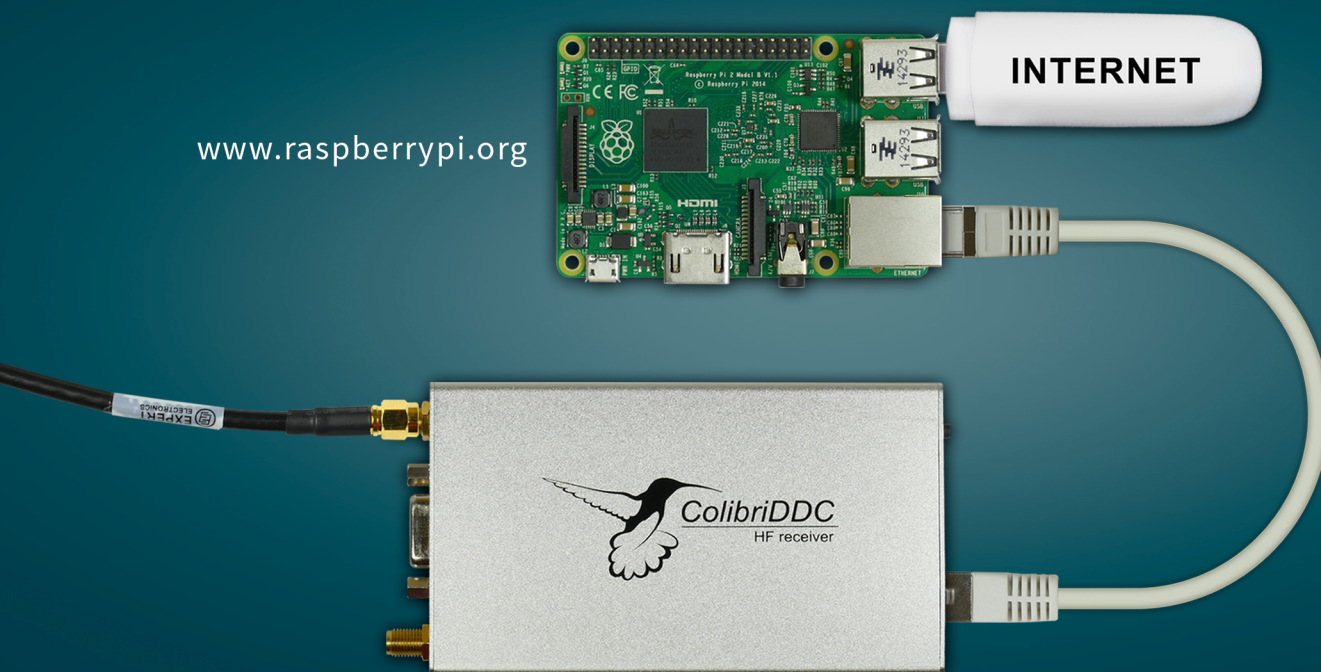
Remote control system - Expert Remote, utilizes a client-server connection. PC with the installed ExpertRemoteServer (**ExpertRS**) and connected to it ColibriDDC (one or several) used as a server. Server's PC connected to a router with an access to the Internet. PC with the installed ExpertRemoteClient (**ExpertRC**) used as a client.

ExpertRS server-software receives a high-speed stream of quadrature channels from the receiver(s), processes the signals, calculates spectrum for panorama and waterfall, demodulates received signal in the RX bandwidth and sends it via local network and/or Internet to the **ExpertRC** client-software. Before sending the received signal, it is compressed by the server-software. Data traffic of the received signal equals 30-50 Kbit/s. Panorama data is also being compressed and sent to the client-software along with the received signal. Panorama data traffic equals to 30-950 Kbit/s. Data transfer protocol of the remote control system also includes receiver's control commands for all parameters (change frequency, modulation types, control of DSP functions, compression quality, etc.).

Total Internet traffic equals 60...1000 Kbit/s and depends on the level of the signal compression and panorama quality in the client-software window.

Raspberry Pi2/3 Remote Server is available for ColibriDDC

www.raspberrypi.org



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