

# ColibriDDC and SkimmerServer



Connection ColibriDDC receiver  
to SkimmerServer

## **Information**

Working everyday at CW on search and during the work at competitions it is very comfortable to use spots received from the cluster via Internet. It allows to save time on search of interesting stations and not to find them repeatedly. Disadvantage of this way is the receipt of station spots, which are impossible to receive at your location. Desirable are only those spots, which can be heard at your location. In such case the own receipt point can help, which receives the stations in the specified frequency band, automatically decode them and transmit spots to the logger. It allows to see only those spots the stations of which you can make the QSO with.

Classically to make your own receipt point it is necessary to have several separate receivers and several Skimmer programs. Such way causes a large number of disadvantages, as the signal from each receiver should be transmitted to the separate sound card, which is very uncomfortable and costly. The best solution is using DDC receivers. ColibriDDC receiver is a good solution for implementation your own multi-channel receipt point. ColibriDDC receiver supports the work of two independent receivers on different bands, which allows to receive simultaneously the stations from two bands. Physically ColibriDDC receiver is connected to PC via local network and can be placed at any distance from the PC (even on antenna). The work on air can be significantly improved by simultaneous usage of ColibriDDC receiver and SkimmerServer software.

## Getting Started with CW SkimmerServer software

1. Download archive ColibriDDC\_SkimSrv.zip from the manufacturers web-site [www.eesdr.com](http://www.eesdr.com). The contents of the archive is shown at figure 1.

Name	Size
..	
ColibriDDC.dll	112 128
QtCore4.dll	2 599 936
QtNetwork4.dll	1 053 184

Figure 1 — The contents of the archive ColibriDDC\_SkimSrv.zip.

2. Un-zip the contents of the archive into the folder with the installed program **CW SkimmerServer** (figure 2).

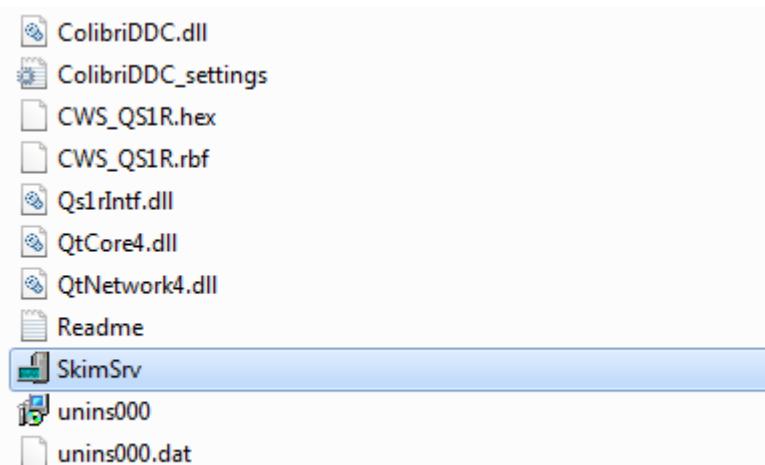


Figure 2 — Folder with the set program **CW SkimmerServer**.

3. Start the program **CW SkimmerServer** by the double click on SkimSrv.exe. The program icon will appear in the task tray after starting the program (figure 3).



Figure 3 — **CW SkimmerServer** program icon in the task tray.

4. Click once on the **CW SkimmerServer** program icon (figure 3) and the settings window appear (figure 4)

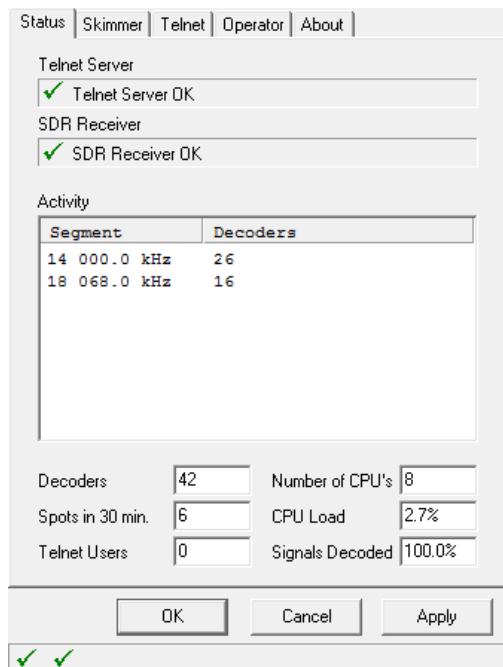


Figure 4 — **CW SkimmerServer** software settings window.

5. At the tab **Skimmer** in the drop-down list **Receiver** (1) choose ColibriDDC (figure 5). In the drop-down list **Segment Bandwidth** (2) choose the necessary sampling frequency of the stream, e.g. 192 kHz. Choose one or two necessary bands in the window **Segments** (3), e.g. 14 000.0 kHz and 18 068.0 kHz.

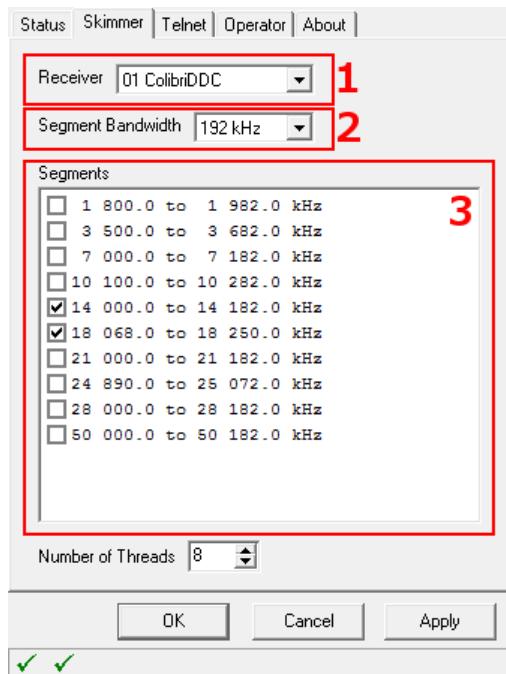


Figure 3 — ColibriDDC receiver settings window.

6. When the program launches, the ColibriDDC receiver starts working at once.

**CW SkimmerServer** sends information about the received stations to Telnet. For further work with this software visit web-site [www.dxatlas.com](http://www.dxatlas.com) and download the manual for using this software.

*Note! This library allows to use the ColibriDDC receiver with other software from [www.dxatlas.com](http://www.dxatlas.com) web-site, e.g. RTTY Skimmer Server.*

## Additional settings

This library allows to control the embedded into the ColibriDDC receiver -20dB attenuator, point out the serial number and the IP address of the necessary ColibriDDC receiver, when there are found several ColibriDDC receivers in one network. Wideband LPF is always switched on in the **CW SkimmerServer** software. All the settings are stored in **ColibriDDC\_settings.ini** file, which is placed at the folder with the installed program **CW SkimmerServer**.

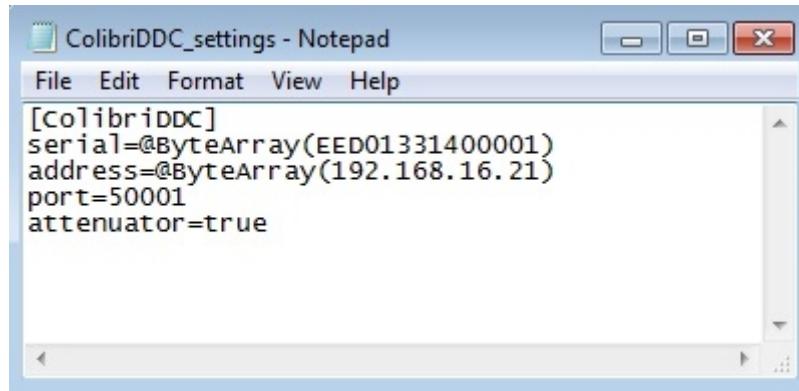


Figure 4 — ColibriDDC\_settings.ini file contents

After starting the **CW SkimmertServer** software finds the first ColibriDDC receiver in the network and starts working with it at once. After the program is shut down and restarted **CW SkimmertServer** would try to use the ColibriDDC receiver with the same serial number, as the previous time. If the ColibriDDC receiver is not found, the software will search for any receiver.

It is possible to point the necessary serial number in the settings file **ColibriDDC\_settings.ini**, if there are several ColibriDDC receivers in the network and the software has chosen the one which is not necessary. For that in the field shown at the figure 5 insert the serial number of the ColibriDDC receiver, which should be used with **CW SkimmertServer**. Shut down the **CW SkimmertServer** software before changing the settings file.

***Note!*** The ColibriDDC receiver's serial number is pointed at the label, which is stuck to the receiver.

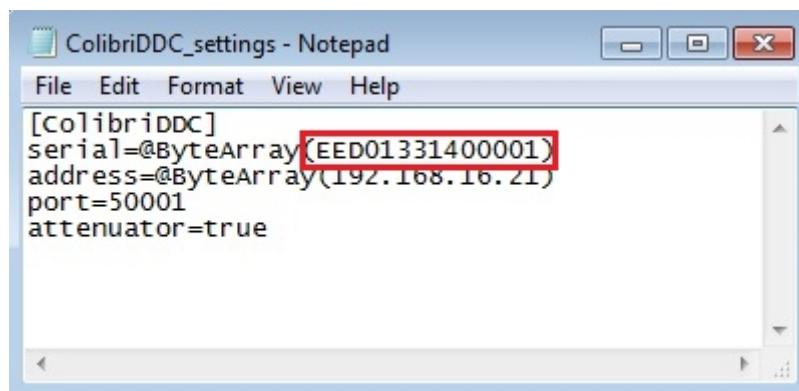


Figure 5 — The field serial number in the settings file

Controlling the ColibriDDC receiver's attenuator is done by editing the field **attenuator** in the settings file **ColibriDDC\_settings.ini** (figure 6):

- **attenuator=true** - attenuator switched on, additional attenuation -20 dB;
- **attenuator=false** - attenuator switched off, additional attenuation 0 dB.

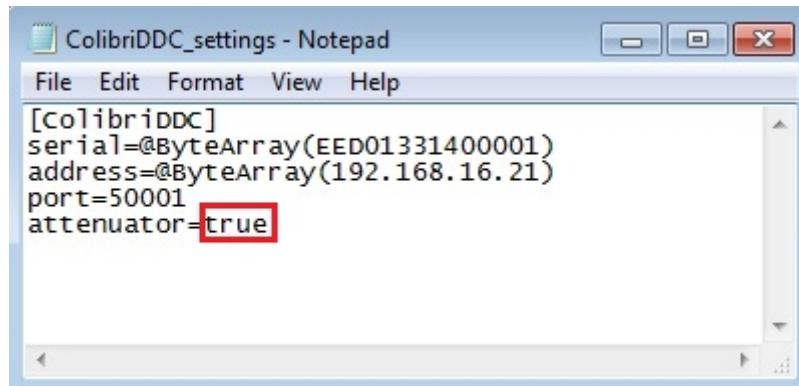


Figure 6 — Field **attenuator** in the settings file.

## Conclusion

An opportunity to use the ColibriDDC receiver with **CW SkimmerServer** (developed by Alexander Shevkoplias **VE3NEA**) and other software from the website [www.dxatlas.com](http://www.dxatlas.com) is given in the document. By using the ColibriDDC receiver you can receive spots from two independent bands.

## Links:

- Expert Electronics web site [www.eesdr.com](http://www.eesdr.com)
- CW SkimmerServer developer web site [www.dxatlas.com](http://www.dxatlas.com)