Connect to the Cloud-IQ SDR at HAARP, Gakona, Alaska

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This article briefly describes how to connect to the RFSpace Cloud-IQ software defined radio (SDR) receiver that was installed on 6 August 2019 at the **High Frequency Active Auroral Research Program** (HAARP) near Gakona, Alaska. The receiver is installed primarily for space weather and propagation research. The receiver is operated in "Cloud" mode, which allows an external network connection through the appropriate software and worldwide web. At this time, connection time limit is 30 minutes and no password is required.

The Cloud-IQ receiver is connected to a TCI-540-N-02 omni-directional HF antenna, which is briefly described at https://www.tcibr.com/product/tci-model-540-omni-gain-antenna/ . The antenna design frequency range is 3 to 30 MHz but the receiver may be tuned from 9 kHz to 56 MHz with 1 Hz resolution.

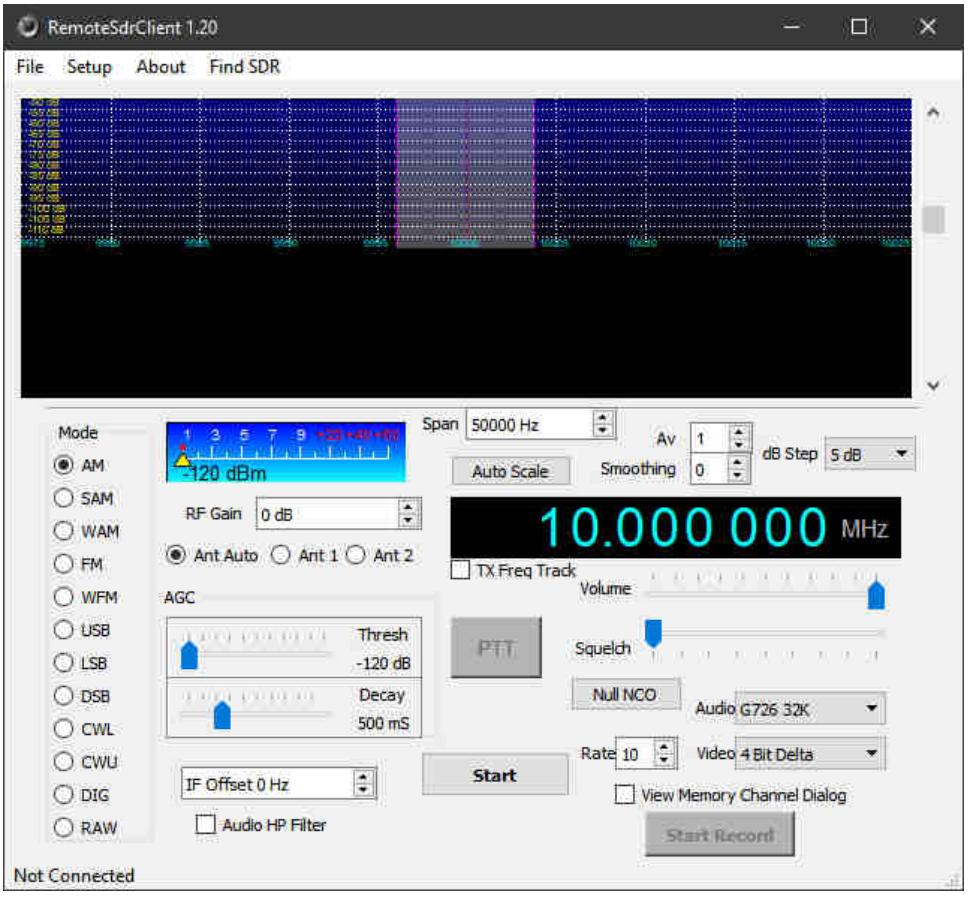
Begin by downloading and installing the RemoteSDRClient application available at http://www.rfspace.com/RFSPACE/CloudIQ.html . Scroll down to the bottom of the webpage and click on the link for the desired system – Windows, Mac or Android. The Android client is called SDRanywhere. A *RemoteSDRclient User's Guide* also may be downloaded. The remainder of this article is for Windows. Report problems or send feedback to haarp.reeve@gmail.com .

When RemoteSDRClient is installed, two shortcuts are placed on the desktop:

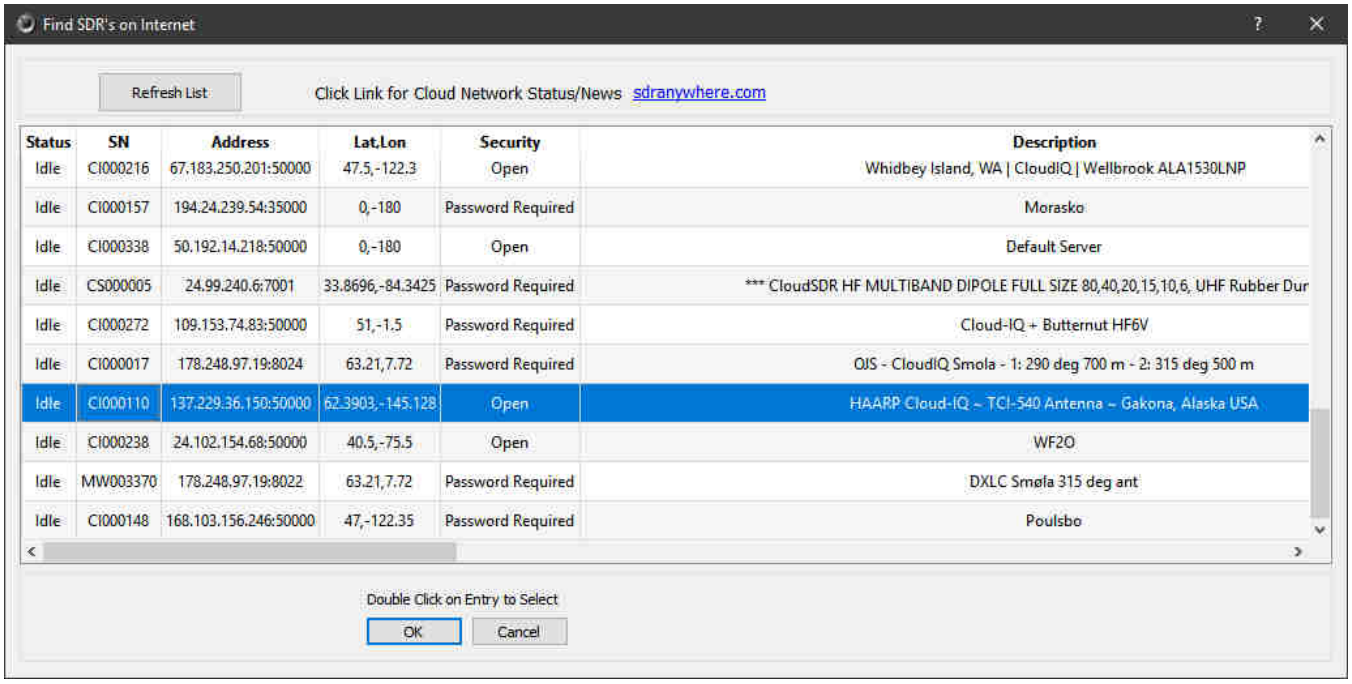
- RemoteSDRClient
- RemoteSDRServer

Open the shortcut labeled RemoteSDRClient. A spectrum-waterfall-control window will appear (right).

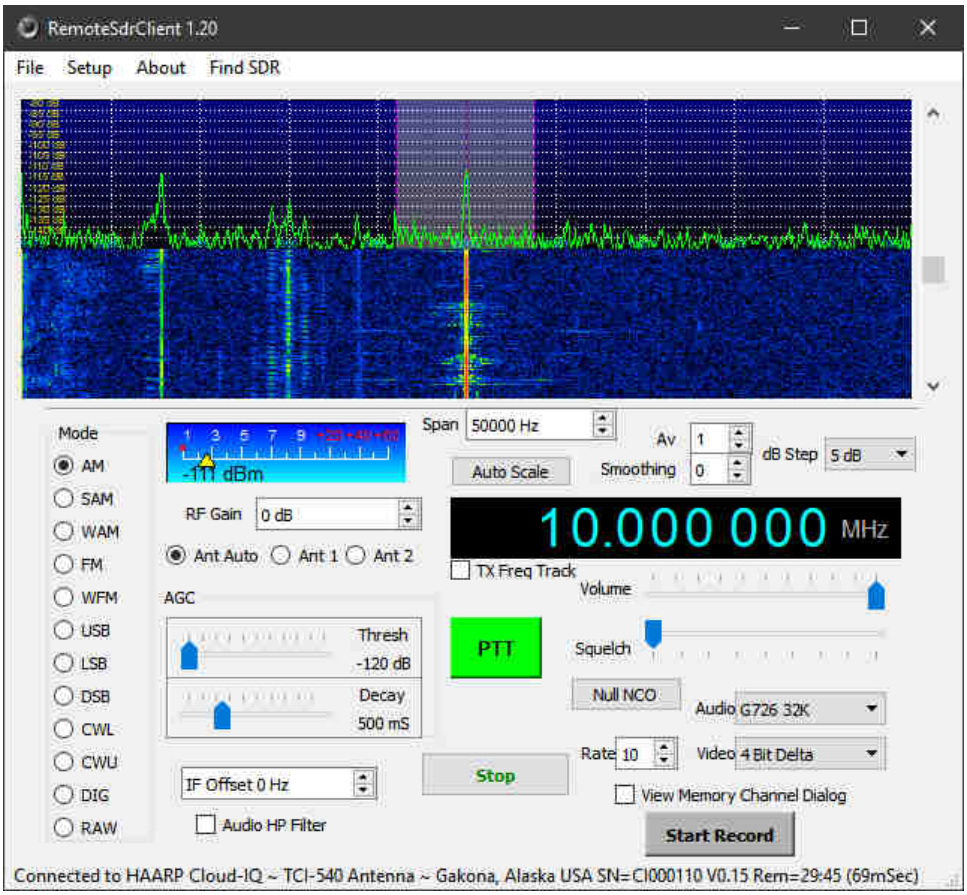
Click on Find SDR on the menu bar.



A table will open, which shows all SDRs connected to the Cloud Network (below). Scroll down and select **SN** CI000110. The description says *HAARP Cloud-IQ ~ TCI-540 Antenna ~ Gakona, Alaska USA*. If the **Status** shown in the first column is *Idle*, click OK and the window will close. If the **Status** is *In Use*, another user is connected (only one user is allowed at a time).



At the main window, click the Start button and a live spectrum and waterfall should appear (right). At this point, the modulation Mode, center Frequency, displayed Span and other aspects of receiver operation may be controlled. The frequency may be changed by placing the mouser cursor over the frequency digit to change and then pressing the keyboard Up or Down arrows. Use the mouse cursor or Left or Right arrows to move from digit to digit. Refer to the *RemoteSDRclient User's Guide* for additional operating details.



Document Information

Author: Whitham D. Reeve

Revisions: 0.0 (Original draft, 10 Aug 2019)
0.1 (Minor updates, 13 Aug 2019)
0.2 (General distribution, 04 Oct 2019)

Word count: 422
File size (bytes): 206336