



# User Reference

## AnaPico APCON4

### Downconverter Software

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## 1. Introduction

This document will give a quick reference for the APCON4 control software consisting of

- APLO4.exe: GUI for controlling the Sampling Downconverter
- SDC.dll: DLL-library to control APLO4 system.

## 2. APLO4.exe

A screen shot of the APLO4-program is shown in Fig. 1.

At present, the program runs on PC under Windows and requires the Microsoft .NET framework installed.

The SW has been tested under Windows XP, it is currently not supported under Windows Vista.

Both the APLO4.exe and the SDC.dll must be installed in the same directory.

The GUI allows controlling the following functions:

- Establish TCP/IP connection to the AnaPico hardware controller. Currently, the controller uses fixed IPs. The static IP address can be changed under File\Network Configuration.
- To connect, select the IP address from the window in the top right corner and click on "Connect". If connection is established, the red light on top right will turn green.
- In the future the IP will be obtained from the DHCP-server, this is not yet implemented.
- Select sampling frequency. Changing every digit will automatically update the sampling rate. Currently, a frequency update takes about one second.
- Each channel can be enabled individually. Positive and negative sampling gate bias can be set. The LO amplitude can be left at the default setting.
- Reference clock: the reference clock frequency can be set. Current software implementation allows only the following references between 10 and 100 MHz in MHz steps.

- Power on/off: allows to power down a large portion of the system.
- Reset: Software reset

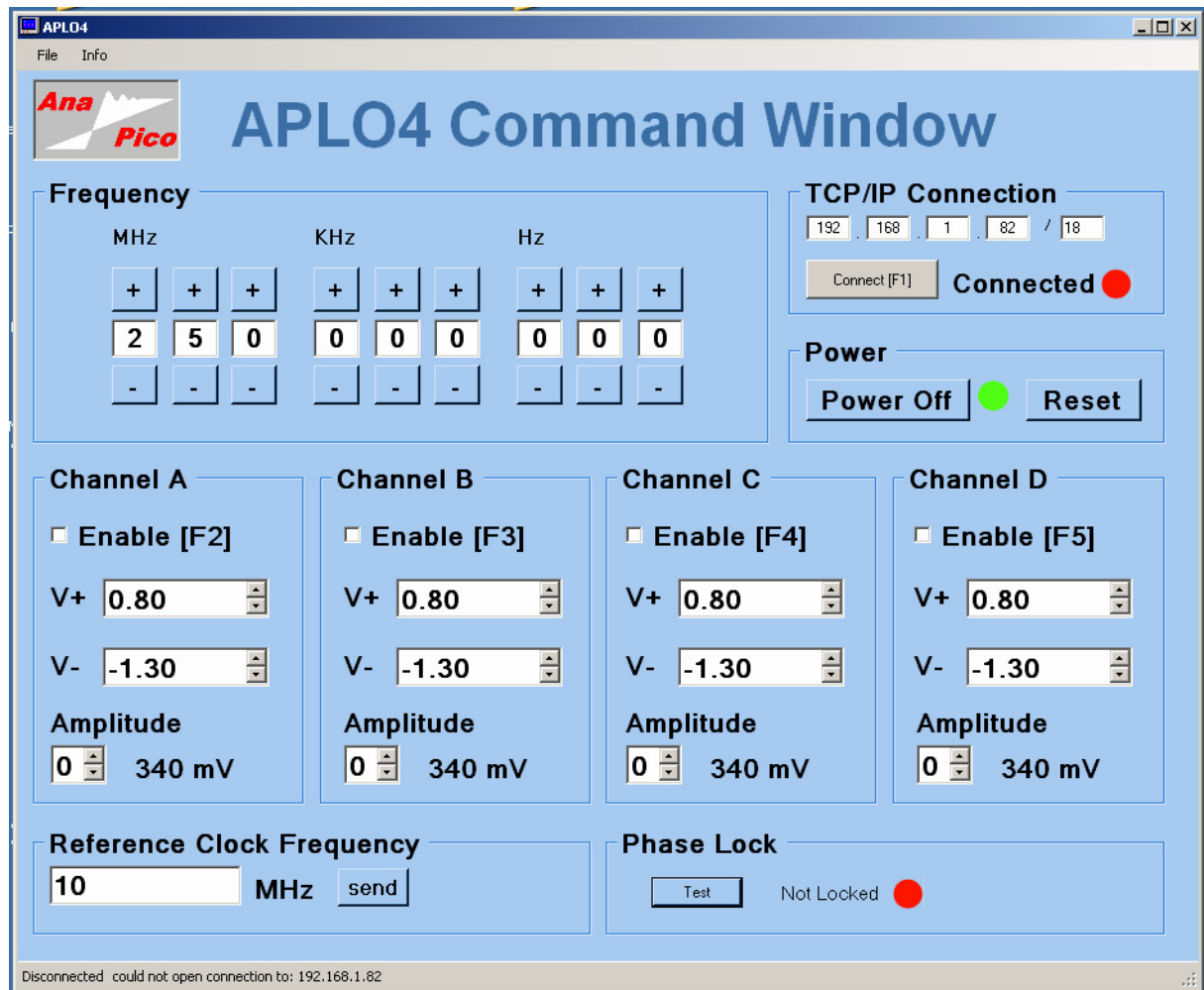


Fig. 1: Screen plot of the APLO4.exe GUI

### 3. Known issues

none

### 4. Document History

| <b>Version/Status</b> | <b>Date</b> | <b>Author</b> |  | <b>Notes</b>       |
|-----------------------|-------------|---------------|--|--------------------|
| V11                   |             | jk            |  |                    |
| V12                   |             | ul            |  | Updates for APCON4 |
|                       |             |               |  |                    |