Installing MTS

Installation of the MTS interface software via the Python easy install process.

Installing Dependencies

Requires: 'valon_synth', 'serial', 'iniparse', 'inspect', 'signal', 'optparse', 'numpy'

The MTS interface uses the Python Valon library provided by the NRAO:
https://github.com/nrao/ValonSynth
Install the package using the information in https://github.com/nrao/ValonSynth/wiki.

An old fork for the VALON 5007 can be found on:
https://github.com/rubyvanrooyen/ValonSynth

```
> git clone git@github.com:rubyvanrooyen/ValonSynth.git
> cd ValonSynth/
> python setup.py build
> python setup.py install --prefix=/home/ruby/.virtualenvs/venv
> ls ~/.virtualenvs/venv1/lib/python2.7/site-packages/valon_synth/
```

or

```
> pip install .
```

PySerial for python serial connections
https://wiki.python.org/moin/PySerial

```
> svn co http://svn.code.sf.net/p/pyserial/code/trunk/pyserial/
> cd pyserial/
> pip install .
```

Ini file parser for python
https://pypi.python.org/pypi/iniparse

```
> tar -xvzf iniparse-0.4.tar.gz
> cd iniparse-0.4/
> pip install .
```

or to install on the system

```
> sudo aptitude install python-iniparse
```

Since `numpy` is a fairly extensive package it is suggested that it be installed on a system level

```
> sudo aptitude install python-numpy
```

The last imports should be part of python standard library
The `inspect` module provides several useful functions to help get information about live objects
The `signal` module set handlers for asynchronous events
The `optsparse` module provides a parser for command line options

Installing MTS

To prevent continuous reinstallation during development of the MTS package, it is suggested that a development installation be done using pip
(`-e, --editable <path/url>  Install a project in editable mode (i.e. setuptools "develop mode") from a local project path or a VCS url.`).
This will make links in the relevant directories to the source scripts in the package directory where the user is editing and developing.

Download the software package from https://github.com/ska-sa/mts

```
> git clone git@github.com:ska-sa/mts.git
```

```
> cd mts
> pip install -e .
```

```
> ipython
> import mts
> mts.MTS.get_cw?
```