

NAME

pyrotor – antenna rotor GUI frontend for rotctl/hamlib

SYNOPSIS

pyrotor [-h|--help] [-v|--version] [-d|--debug] [-c|--config= *ConfigFile*]

DESCRIPTION

pyrotor GUI program frontend for *rotctl/hamlib*. Allows activation and control of attached antenna rotors using *otctl* (from hamlib).

Provides compass display of azimuth, updates via polling, activation and control of rotctld daemon, gui configuration menu, configuration files (reading and writing), and button rotor control.

Pyrotor is a GUI front end for the *hamlib* [<https://sourceforge.net/projects/hamlib/>] programs *rotctld* and *rotctl* to read and control the antenna rotor. See hamlib for set and configuration.

OPTIONS

-h,--help

Displays help and exits.

-v,--version

Displays the program version and exits.

-d,--debug

turns on debug logging. default is off, only INFO level messages are logged

-c *ConfigFile* ,--config=*ConfigFile*

use the config file for program operation. default is *\$HOME/.local/pyrotor/pyrotor.ini* If the *.local/pyrotor* directory does not exist, one will be created on program startup. The .ini files will be read/written to this directory, unless a different directory is specified by providing a path in the config file window.

CONFIG FILE

The following configuration settings are available through the GUI and the *pyrotor.ini* file. These options can be read/written to a configuration file by using the **Save** and **Open** buttons in the *Config* dialog window. The .ini file uses the ini configuration syntax with a *[DEFAULT]* global section.

modelid , [Model ID]

The rotctl model id number used by *rotctld* daemon. Default is 603 (Yaesu G232B protocol)

devserial, [Device (Serial)]

The string serial device path (e.g. */dev/ttyACM0*) for rotctld to connect to the rotor.

speed, [Serial Speed]

The integer index value for setting the serial device baud rate. 3=9600, 4=19200, etc. Default is 3 (9600 baud)

path, [Path to Rotctld]

The full file path to the *rotctld* executable file. The *rotctl* executable path is derived from this path automatically.

starttrc, [Startup Rotctld]

Flag for autostarting *rotctld* on program start. Default is 0 (do not autostart)

poll, [Poll Rate]

The polling delay rate (ms) between successive polling to *rotctld* for getting position updates. Default is 1000 (1 second)

port, [Rotctld Port]

The hostname:port string to use for *rotctld* and *rotctl*.

[Config File]

The file name (and optional file path) to the *pyrotor.ini* configuration file. Default is *pyrotor.ini* in *\$(HOME)/.local/pyrotor/*. This configuration setting is only available in the GUI.

title, [Main Title]

The string to use for the main display title on the GUI.

GUI CONTROLS

File->Config

Opens the Config window. Shortcut is Ctrl-S.

File->Lock

Toggles the Lock/Unlock rotor control. No commands can be sent to the rotor (except **Stop** while locked). The compass window displays "rotor locked" while in Locked mode. Shortcut is Ctrl-L.

File->Exit

Exits the application.

File->Poll

Toggles polling rotctld for position updates. Warning - commands can be sent to the rotor while polling is deactivated. Shortcut is Ctrl-P.

Help->About

Displays the About dialog window.

Main->Button CCW

Sends the command to rotate CCW. Use the **Stop** button to deactivate.

Main->Button Stop

Sends the stop command to the rotor.

Main->Button CW

Sends the command to rotate CW. Use the **Stop** button to deactivate.

Main->Button 000 to 360

Sends the command to rotate to the target position. The rotor will autostop once the target position is reached.

Config->Button Test Config

Checks if the *rotctld* daemon is running, and also checks if the *devserial* path exists. Results are logged in the Config log message window.

Config->Start Rotctld

Starts the *rotctld* daemon based on the current config settings. The **PID** of the spawned process is saved and used for future control.

Config->Stop Rotctld

Kills the *rotctld* daemon. Note that the daemon is automatically killed when the program exits.

Config->Save

Writes the current configuration to the *pyrotor.ini* file.

Config->Open

Reads and updates the current configuration from the *pyrotor.ini* file.

FILES

\$HOME/.local/pyrotor/

default config initialization directory. Config files without a path will be written and read from this directory. Directory will be created automatically if it doesn't exist.

\$HOME/.local/pyrotor/pyrotor.ini

default config initialization file.

/usr/bin/rotctld

default rotctld daemon file path. Use the config window to change.

/usr/bin/rotctl

default rotctl daemon file path. Generated automatically from the rotctld setting.

BUGS

Only controls the azimuth settings. Elevation control is not provided.

SEE ALSO

hamlib(3), rotctld(8), rotctl(1)

AUTHOR

David Fannin (dfannin@sushisoft.com) KK6DF