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7. Operation

Operation through SSH

connect via SSH - adjust the port number and possibly also the user scanner

```
ssh -p 9001 scanner@hayguen.hopto.org
```

in case you are already connected to the host - as different user

```
sudo su -l scanner
```

start the scanner (as scan user)

```
startBgScanLoop.sh
```

stop the scanner (as scan user)

```
stopBgScanLoop.sh
```

check results while scanning - before having uploaded (as scan user)

```
scanEvalFMcmpPS.sh
scanEvalFMcmpPI.sh
scanEvalDABens.sh
scanEvalDABensTii.sh
scanEvalDABprogs.sh
```

upload all results (as scan user)

```
stopBgScanLoop.sh wait
prepareScanResultsForUpload.sh all
uploadScanResults.sh
```

probably, you want to edit the upload comment FMLIST_UP_COMMENT - before uploading (as scan user)

cd ~/.config/fmlist_scan
nano fmscan.inc

and after the upload, you might want to restart the scanner (as scan user)

startBgScanLoop.sh

and probably also restart monitoring

monitorBgScanLoop.sh

Operation through Webserver

all operations can be done through the webserver

see 'Setup control webserver' in setup scanner software

Buzzer status tones

The scanner reports its status primarily via the piezo-buzzer. The detection of Broadcast-FM and DAB stations is reported with tone sequences on each scan. See configuration entry FMLIST_SCAN_PWM_FEEDBACK

Event	Tone sequence
Welcome at startup	short short long short
FM success (at least 1 transmitter)	short short, short
FM failure	short short, long
DAB success (at least 1 station)	short long, short
DAB failure	short long, long
Write error for result	3 x (long long long)

In addition to these operating results, there are other tone sequences to sign

- Start the scanner
- Error status, e.g. no RTL dongle found
- · Scan results saved

Test / listen with scanToneFeedback.sh or the webserver

The individual LED colors have no dedicated meaning. They are switched over for each recognized station. There is no changeover if the next station is detected within/below one second - in order to limit the changes.

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