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AcadeRC Receiver Control
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(Description of 08-APR-2017)

Multifunctional TAP:

        * File browser (clear, fast, comprehensive)
        * Text viewer (text, HTML and PDF files, hex dumps, codecs)
        * Image viewer (displays BMP, GIF, PNG and JPG files)
        * Web browser (HTTP[S] downloads + display with hyperlinks)
        * Line editor (text files, URLs etc., input like SMS)
        * Music player (plays directories and playlists, shows lyrics)
        * Simple 20/24-lines EPG (no timers, no database)

        * Toppy usage statistics (switch, time and keys statistics)
        * System informations (hardware / software / resources)
        * Harddisk informations (SMART values etc.)
        * Topfield forum infos (users online etc.)
        * Calender with overview of 4 months at a time
        * Simple calculator for 4 basic operations

        * Cut ends of TV recordings (incl. .nav/.inf correction)
        * Screenshots of TV, MP4 etc., videotext and TAP windows
        * Shell scripts execution /w output viewing, autostart.sh
        * Copying of files and directory trees in the background
        * Disable or remap key codes (even sub-/state-dependent)
        * Remote Control Interception for Topfield RC units

         (This TAP enables you to continue to use your old or new
          Topfield remote control unit on other Topfield receivers,
          even several of them simultaneously, with all available keys.)

       NOTE: The TAP was actually intended for PVRs sold in Germany.
       But as many times tested, it also works on Australian models
       (see forum there). Remote control interception works at least with
       old RCUs (e.g. TP006 of 5000 series and other Mode 4 RCUs).

[Content](#)

Content

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Downloads & Links
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DOC:     http://acade.au7.de/acaderc/acaderc_en.htm
PDF:     http://acade.au7.de/acaderc/acaderc_en.pdf
TXT:     http://acade.au7.de/acaderc/acaderc_en.txt

ZIP:     http://acade.au7.de/acaderc/acaderc.zip
                    with:
                            000_acaderc_tms.tap    (last TMS version)
                            acaderc_en.txt         (English docu)
                            acaderc.txt            (German docu)
                            acaderc*.jpg           (screen shots)
                            acade_*.mips           (image backends)
                            acaderc-2.30.zip       (last tiny and 5K version)


TAPtoDate:               http://ttd.tms-taps.net/?lng=en


New Australia Forum:     http://oztoppy.forumchitchat.com/post/acaderc-receiver-
control-multifunctional-tap-8232178
Old Australia Forum:     http://topfield.forumchitchat.com/post/acaderc-remote-
control-interception-tap-8046890
German Forum:            http://www.topfield-europe.com/forum/showthread.php?t=51277
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Version History
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v4.86   24. 3.2017
                    Detailed key statistics (3 views)
                    Improved trimming behaviour (status messages)
                    Search EPG sub-/title in AcadeRC.files (undocumented)
                    Files with >= 4 consecutive 0xff are considered binary

v4.85    6. 2.2017
                    Recursive directory tree listing
                    / directory added to PVR top level
                    File extension filter excludes .bak and .db3
                    Display infos of HD .rec files modified by rectool

v4.84   26. 1.2017
                    Playback HD .rec files without .nav with pausing etc.
                    Copy files and directory trees in the background
                    Delete directories recursively (Caution!)
                    Harddisk partitions infos, even for USB devices
                    Topfield forum infos (users online etc.)

v4.83   20. 1.2017
                    Playback any TS stream, regardless of file extension
                    Play .mpeg and .vob files (like .mpg and .avi)
                    Show 5K .rec details (times, titles, EPG infos)

                    New: HDD infos also available for 2nd (eSATA) disk
                    Fix: Codecs error message, if backend program missing

                    Pause key pauses PVR within AcadeRC windows
                    Convert TAP key + "Slow" into "VF" key (TP006 lacks it)

                    File browser direct key default changed to "Ok"
                    Infos & Tools direct key default changed to "Subtitle"

v4.82   14. 1.2017
                    New: Playback 5K recording (file is modified)
                    New: Playback .rec and .ts files without .inf (not needed)

v4.81   10. 1.2017
                    New: HDD infos (SMART etc.) in Infos & Tools
                    Fix: JPGs > 2400 pixels had bad aspect ratio

v4.80   16.12.2016
                    EPG: Record key starts instant recording
                    Fix: Large JPGs freeze SRP 2410
                    Fix: Reboot at playing overlapping recordings

v4.62    8.12.2016
                    Added: Playmode conditions for keycode conversion
                    EPG: Teletext toggles new timers view
                    EPG: Mark set timers in brown color

v4.61   30.11.2016
                    EPG Programmes: Subt toggles channels / this new view
                    EPG Channels: Mark channels on same transponder blue
                    Fix: Reboots on 2100 in /DataFiles, if recording
                    New statistics in Infos & Tools (EPG, Trim, Capture)

v4.60   24.11.2016
                    Simple EPG, callable by TAP key + Guide or by browser
                    Change: Set HOME directory with TAP key + F1 now
                    F1 multi-selects files / directories for moving

v4.50   18.11.2016
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                        General line input (with permanent histories) to:
                        Rename files and directories (>|< and White key)
                        Search entry in file browser (Sat key [2x])
                        Search string in text viewer (Sat key [2x], >|<)
                        Edit mode for text documents (Ok in viewer)
                        Enter link (URL) for webpage (AR in viewer)
                        Lookup Wikipedia or Startpage (Aux/M/TvSat)

    v4.44    12.11.2016
                        Text viewer shows textual parts of PDF files

    v4.43     8.11.2016
                        Convert TAP key + "Play" into "Fav" (TP501 lacks it)
                        Max. files/dir. and lines/text configurable in menu
                        Sorting and MP3 mode configurable in menu
                        Menu improved (2 columns, help text and key icons)
                        Delete bookmark hyperlink lines (F4 in viewer)
                        Extract HTML  for bookmarks designation
                        Show MP3 info again with Info, lyrics with Teletext
                        Show symlink path in file info box, if available

    v4.42     4.11.2016
                        Create playlist from all subdirectories
                        Go to /PlayList, if a new playlist was created
                        Remove leading nn. from playlist titles
                        Shuffle and repeat modes
                        AcadeRC.map to disable or remap key codes

    v4.41    31.10.2016
                        Improvements for easier useability, more help
                        Browser direct key default changed to "Filelist"
                        Menu and Infos & Tools callable from browser
                        Key help in Infos & Tools and Calendar
                        Version number in most headlines
                        Screenshots of keycodes screen possible

    v4.40    27.10.2016
                        New: Music player (integrated in file browser)
                        Download & view MP3 lyrics (independent of player)
                        Play complete .mp3 directories (with navigation)
                        Play .m3u/.pls playlists (with relative .mp3 paths)
                        Generate symlinks for playlist files in /PlayList
                        New: Direct keys 4..9 for important directories
                        Backup files for AcadeRC.ini and AcadeRC.dat

    v4.32    11.10.2016
                        Show .rec and media files' streams/codecs info
                        Fix: Infobox nesting could yield PANIC message
                        Fix: Yellow replay color only for unique files

    v4.31     8.10.2016
                        New: Sorting by date in both directions selectable
                        New: Full size windows' headline color schemes
                        Fix: Fast replay stuttering after trim to begin

    v4.30     6.10.2016
                        Cut ends of TV recordings (incl. .nav/.inf correction)

                        New: Sorting mode stored in .ini file
                        New: Reversed sorting by date (newest are top now)

                        New: Go live on browser's "Play" key, if recording
                        New: Stay in browser window for radio replays

                        New: Show infobox after screen capture
                        New: Show infobox during script execution
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                             Some optical improvements (full size windows)

v4.20   26. 9.2016

                             New: Resume playback on "Play" key
                             New: Blue instant info area in file browser

                             New: File browser headline style (icons, clock)
                             New: Opt. list subdirectories details (#items / size)
                             New: File browser key help area (if free) /w icons
                             New: Key icons in all help windows

v4.15   17. 9.2016

                             New: Play MP4, MPG and AVI (DivX) files

                             New: Start / stop TAPs, show running TAPs colored
                             New: List of running TAPs in Infos & Tools sub-window
                             New: Show TAP info in file browser (Info key)
                             Inhibit start of AcadeRC, if already running

                             Ok on recording file replays timeshifted from start
                             New: Show size and #bookmarks in EPG infos

                             New: Sunrise / sunset times in Infos & Tools
                             New: Local time - UTC time difference (via ntp)
                             New: External IP address, geo location, timezone

v4.11   29. 8.2016

                             New: Execute .sh scripts and show output (AR key)
                             New: Execute optional autostart.sh script at startup
                             New: Show binary files as hex dump (AR key)
                             New: Added support for TMSCommander (Menu, Stop, Event)
                             New: Browser / viewer: Added V+/V- to move by page
                             Text viewer: Added Teletext key to go back in history
                             Text viewer: Native Teletext requires < 0.5" 2nd press
                             Prefixes for screen capture files (tap_, ttx_, video_)

v4.10   25. 8.2016

                             New: Show EPG infos in viewer / browser (Guide key)
                             New: Correct bad times (year 2000) of .rec/inf files
                             New Statistics: Components calls and key presses
                             New Sys. Infos: Model, Type, FW, OS, CPU, MEM, HD, MAC, IP
                             File browser: Sorting moved from Teletext to Subtitle
                             File browser: Teletext now calls text viewer / replay info
                             New: Show EPG infos and time of files being recorded
                             New: Stop recording of selected browser file (Stop)
                             New: File browser: 0 swaps with root directory
                             New: File browser: Move by [123]0 / 4..9 lines
                             Enter replay directory on Recall, if replay active
                             Select replay file automatically in this directory

v4.01   30. 7.2016

                             New: Support GIF files (requires Update)
                             Fix: Basic infos of image files were hidden
                             Image viewer: Changed Toggle Headline key to Subtitle
                             Text viewer: Subtitle key toggles begin/end URL display
                             New: Determine file type by content (and by extension)

v4.00   26. 7.2016

                             Display HTML documents and hyperlinks in text viewer
                             Download hyperlinked files via HTTP or HTTPS protocol
                             Download wget/lynx.mips via built-in Update function
                             Record text viewer history and move in it
                             Record text viewer bookmarks in special HTML file
                             Create some newspaper bookmark links at startup
                             Create symlinks for /mnt/sdb1 and /mnt/sdb2
                             Changed calendar call key binding in Infos & Tools
                             Create directories (green F2 key) in file browser
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                         Check for files in use corrected, red/yellow color
                         Stop playback .mp3/.rec/.ts files corrected / added
                         All warning type info boxes timeout automatically now

v3.40   30. 5.2016
                         New: Optional direct entry keys to Browser/Viewer/Infos
                         New: F3 (yellow key) to move files into folders
                         New: Fav key in browser recalls HOME and current directory
                         New: Screenshots of TV, Teletext and TAPs into /Captures
                         New: Show JPG comments, display correct image ratios
                         New: Show BMP, GIF, JPG and PNG graphics files and infos
                         New: Show MP3 infos and ID3 tag in browser info
                         Calculator moved from TAP menu into Infos & Tools
                         New: Buffered text read function (large files faster)
                         New: Logging in some error situations (acaderc.log)

v3.32    2. 5.2016
                         Update downloads to /ProgramFiles/0**_acaderc_tms.tap
                         Recording files coloring, no date, warning boxes
                         Left/Right in text viewer (docs within dir.)
                         New: Image viewer with navigation and capture

v3.31    1. 5.2016
                         Fix: Infoboxes had messed title line color
                         New: JPG files supported

v3.30   30. 4.2016
                         New: Base level help box (TAP key + Mute)
                         Help box omitted for Left/Right in text viewer
                         Delete files and directories in file browser
                         Free HDD size in file browser title line
                         Full path in text viewer title line
                         Home document for text viewer (F1 / Fav)
                         Text viewer entry (tapkey + Teletext)
                         Swap with DataFiles in file browser (Recall)
                         Info key in file browser about directory
                         Info about .inf/rec files in file browser

v3.20   20. 4.2016
                         New: File browser with text viewer (TMS only)
                         New: Calendar (1583 - 3000), 4 months per page
                         Fix: Onscreen texts improved and extended

v3.10    6. 4.2016
                         New: Optionally disable original RCU
                         New: Font selection, normal / bold
                         New: Update online descriptions

v3.00   31. 3.2016
                         New: Language selection, German / English
                         New: Online description (this documentation)
                         New: Statistics infos about toppy usage

v2.30   20. 3.2016
                         First release in English
                         Fix: Cleanup TAP menu
                         Last tiny version (without text viewer etc.)

v2.20   18. 6.2015
                         New: Alternative TAP key "TvSat"
                         New: Optional start mode "Listen"
                         New: Optional update download
                         Last 5K version tested by Acade
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What is AcadeRC able to do?
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        General
                Many payload lines (24/20)
                Good contrast and readability
                Color scheme for better visualization
                Normal and (optional) large letter font
                English and German (selectable)
                Help windows and texts, with icons
                No database required for file system
                Support for TMSCommander

        TAP Menu
                Settings
                Show key codes
                Check online update
                Integrated description

        File Browser
                [Optional direct call with just 1 key]
                Navigate within directory tree
                List subdirectories and files
                Sort listing by selectable criteria
                Walk through subdirectories recursively
                Show details about all file types

                Open/start/stop files depending on type
                        Show text files in text viewer
                        Show image files in image viewer
                        Start and stop TAPs
                        Start and stop TV recordings
                        Media files (MP3, MP4, MPG, AVI)
                        Playback 5K recordings

                Direct keys for important directories
                        DataFiles
                        Root directory /
                        HOME directory (selectable)
                        Change back, if key pressed again

                Delete files and directories
                Create new directories
                Move files and directories
                Rename files and directories
                Search files and directories

                Correct bad .rec/inf file times
                Links for /mnt/sdb1 and /mnt/sdb2 in /

        Text Viewer
                [Optional direct call with just 1 key]
                Show plain text and PDF files
                Show HTML files (with hyperlinks)
                Download web pages (HTTP and HTTPS)
                Show EPG infos of recorded files
                Show current EPG info details
                Show codecs of .rec and media files
                Show hexdump of binary files
                Save displayed text to file
                Show details about displayed text
                Change to next / previous file
                Change within history of documents
                Show / set HOME document
                Set / call / delete bookmarks for documents
                Search text strings
```

Edit mode

Image Viewer
          [Call by file browser or text viewer]
          Show BMP, GIF, PNG and JPG files
          Show next / previous image
          Show JPEG comments
          Show meta-informations

Web Browser
          [Integrated in text viewer]
          Predefined newspaper bookmarks
          Enter link (URL) for webpage
          Lookup Wikipedia or Startpage

Musicplayer
          [Integrated in file browser]
          Play complete .mp3 directories
          Recursive directory playlist
          Play .m3u/.pls playlists
          Shuffle and repeat modes
          Download & view MP3 lyrics

Simple EPG
          List available channels
          List current programmes
          List set timers
          Start channel replay
          Start instant recording
          Stop channel's recording

Infos & Tools
          [Optional direct call with just 1 key]
          Usage statistics (starts and runtime)
          Last switch ON/OFF
          Keys statistics / AcadeRC
          Geo location and timezone
          Sunrise / sunset, day's length
          Moon phases (next new/full moon)

          HDDs infos (partitions, SMART etc.)
          List of running TAPs

System Informations
          PVR facts
          Software versions
          CPU and memory infos
          Harddisk infos
          MAC and IP addresses
          Signal strength and quality
          Number of channels (TV and radio)
          [Call by Infos & Tools]

Calendar
          Overview of 4 months per page
          Simple navigation
          Years 1583 - 3000
          Show easter and pentecost dates
          [Call by Infos & Tools]

Calculator
          4 base operations
          Operation by cursor keys
          [Call by Infos & Tools]

Trim Function
          Cut off ends of TV recordings

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        Correct associated .nav/.inf files
        Simple and exact operation

Screencapture Function
        Screenshots of TV and TV recordings
        S. of media files (MP4, MPG, AVI)
        S. of video / tele text
        S. of TAP windows
        S. of all AcadeRC windows

Shell Scripts
        [Call by file browser]
        Execute .sh files via Linux bash
        Execute MIPS binaries ending on .sh
        Show output in text viewer
        Execute autostart.sh at TAP start

Keycode Remapping
        Replace missing Fav key (TP501)
        Replace missing VF key (TP006)
        Turns a keycode into another code
        Disables a key completely, too
        Optional sub-/state/playmode conditions

Remote Control Interception
        Continue to use old 5K remote control units
        Use any other Topfield TMS remote control

        Remap cursor keys as volume / channel keys
        Remap color keys to encode original RCU keys
        Use replacement and original RCU simultaneously

        Control multiple Topfield PVRs with only 1 RCU
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Installation

The TAP shall be copied to the AutoStart folder as alphabetically first TAP,
so it is the first TAP to be started (name e.g. 000_acaderc_tms.tap).
This is essential for passing remapped keycodes to the system and other TAPs.

For testing or only rare use however, the TAP may as well be started from an
arbitrary folder, e.g. ProgramFiles.

All the other accompanying files belong to ProgramFiles/Settings/AcadeRC.

It is strongly recommended to call the menu's "Update" function (see below)
after the TAP's installation (by TapToDate especially) to ensure the latest
version and its required components.

For owners of old 5K toppies and for those, who only need the Remote Control
Interception functions, the last tiny and 5K version (acaderc-2.30.zip) is included.

Operation

As usual, the TAP is started manually or from the AutoStart folder.
The "TAP key" is by default the "Sat" key (optionally the "TvSat" key).

After starting, the TAP key (FOLLOWED by a second key) is used to control the
TAP, the original meaning of the TAP key can be retained by pressing it twice.

Combining the TAP key with a second key, the respective TAP functions are
being called (mostly in own TAP sub-windows), e.g. the TAP menu.

Keys to enter AcadeRC functions

The TAP key is 'Sat' (default) or 'TvSat=M=Aux' (optional).
Followed by a second key, it starts these actions:

TAP key + TAP key: Original TAP key's function
TAP key + 'Menu': Enter TAP menu & settings (options)
TAP key + 'Info': Infos & Tools (statistics, calendar, calc., etc.)
TAP key + 'Filelist': Enter File Browser
TAP key + 'Teletext': Enter Text Viewer
TAP key + 'Guide': Enter simple AcadeRC EPG
TAP key + 'Sleep': Screen capture to /Captures
TAP key + '|<' / '>|': Trim paused TV recording to begin / end
TAP key + '0'..'9': Select device (see description!)
TAP key + cursor / color key: Pass key's native key code
TAP key + 'Play': Simulate 'Fav' key (TP501 hasn't got one)
TAP key + 'Mute' / other keys: Show this help text

NOTE: File Browser, Text Viewer and Infos & Tools may be called
by a single direct key, select this in the menu.

EXIT : Leave any window

Any TAP sub-window will be closed by pressing the "Exit" key.
In most TAP sub-windows, there are the following common special keys:

        TvRadio: Toggle font size
        Audio: Toggle language
        Sleep: Screen capture of active window
        Mute / other unused keys: Show key binding help text

Some keys may be missing on some RCUs. In this case, they may just have
different names (maintaining the same key code)

        AR (Aspect Ratio)   = Uhf (5K)
        TvSat (SCART-Input)   = Aux (Eco)   = M (SRP 2100 / 2410)

or they are really missing and may be replaced by AcadeRC:

        Fav (Favourites)   = TAP key + Play (for SRP 2100 / 2410, TP501)
        VF (Video Format)   = TAP key + Slow (for 5K, TP006; will come later)

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TAP Windows
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This is an overview of "key => window" transitions:

Top Level (outside any TAP or system window)

        TAP Key + Mute
                => Main Help

        TAP Key + Menu
                => AcadeRC Menu
                        Ok on "Show Description"
                                => Text Viewer

                        Ok on "Show Key Codes"
                                => Key Codes

                        Ok on "Show System Infos"
                                => System Infos

        TAP Key + Filelist or
        Direct File Key
                => File Browser
                        Ok on text file
                        Teletext
                                => Text Viewer

                        Ok on image file
                                => Image Viewer

                        Menu
                                => AcadeRC Menu

                        VFormat
                                => Infos & Tools

                        Guide
                                => EPG List

        TAP Key + Teletext or
        Direct Text Key
                => Text Viewer
                        Ok on image link
                                => Image Viewer

        TAP Key + Info or
        Direct Info Key
                => Infos & Tools
                        <       => System Infos
                        ^       => Harddisk Infos
                        v       => About Infos
                        >       => Calendar
                        Ok      => Calculator
                        Ttx     => TAPs List

        TAP Key + Guide
                => EPG List
```

TAP Menu
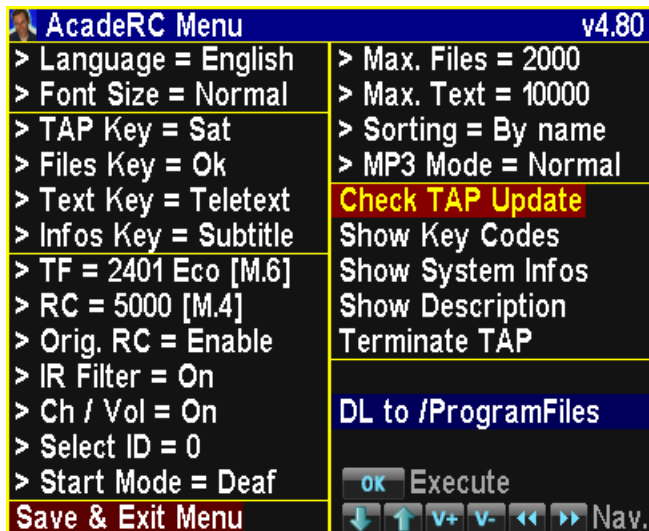
Enter the TAP menu by "TAP key" + "Menu" (default "Sat" FOLLOWED by "Menu"),
navigate there by "Up / Down", change values by "Left / Right", press "Ok"
to open a sub-window and "Exit" to leave again.

The menu items:

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        > Language =            [English/German]
        > Font Size =           [Normal/Bold]
        ----------------
        > TAP Key =             [Sat/TvSat]
        > Files Key =           [indirect/Filelist/Ok]
        > Text Key =            [indirect/Teletext]
        > Infos Key =           [indirect/Info/Subtitle]
        ----------------
        > TF =                  [PVR type]
        > RC =                  [RCU type]
        > Orig. RC =            [Enable/Disable]
        > IR Filter =           [Off/On]
        > Ch / Vol =            [On/Off]
        > Select ID =           [0-9]
        > Start Mode =          [Deaf/Listen]
        ----------------
        Save & Exit Menu
        ================
        > Max. Files            [1000..20000]
        > Max. Text             [5000..100000]
        > Sorting               [By Date etc.]
        > MP3 Mode              [Shuffle etc.]
        ----------------
        Check Update
        Show Key Codes
        Show System Infos
        Show Description
        Terminate TAP
        ================
```

Display settings:

"Language =" selects the language used throughout the TAP.

"Font Size =" selects the font size used throughout the TAP.

Key settings:

"TAP Key =" selects the TAP key ("Sat" or "TvSat").
It is active immediately after "Save & Exit Menu". The default is "Sat".

"File Key =" enables a direct entry key to the file browser (instead of
the indirect "TAP key" + "Filelist"). "Filelist" or "Ok" may be selected.

"Text Key =" enables a direct entry key to the text viewer (instead of
the indirect "TAP key" + "Teletext"). Only "Teletext" may be selected.

"Info Key =" enables a direct entry key to "Infos & Tools" (instead of
the indirect "TAP key" + "Info"). "Subtitle" or "Info" may be selected.

Remote control settings:

"TF =" (not needed on 5K) selects the target PVR type,
"RC =" selects a (replacement) remote control type (may be same as PVR).
At both menu items, the effective IR Filter mode is indicated [M.*].

"Orig. RC =" disables / enables the original RCU's IR signals.

"IR Filter" must be turned ON only, if PVR and RCU are different, i.e.
if you want to use a replacement RCU.

"Ch / Vol =" controls the cursor mapping (only needed for TMS types,
the 5K has no extra keys for Ch/Vol and uses the cursor keys).

"Select ID =" is the unique identification number (1-9) of the device,
if multiple receivers are controlled by only 1 remote control (see below).
If not equal 0, the device can only be accessed again (after "Save & Exit"
and after every restart of the PVR or the TAP) by "TAP key" + "ID/0".

"Start Mode =" defines the start behaviour of the TAP, if a "Select ID" (1-9)
was set: "Deaf" is the default as described below (not selected after restarts),
"Listen" is a special user request (always selected after restarts).

Save & Exit:

All settings are stored in a file ProgramFiles/Settings/AcadeRC/acaderc.ini
as soon as you select the menu item "Save & Exit", otherwise the values at
the time of entering the menu are retained.

Limit Settings

Due to the limited available system memory (ca. 30 MB) and the relatively low
processor speed (ca. 400 MHz) is it necessary to limit some TAP parameters
to keep it well operable and prevent it from getting too slow:

"Max. Files" sets the max. number of files in the file browser's list of files.
The value may range from 1000 to 20000, its default is 2000 files per directory,
which should be quite sufficient.

"Max. Text" sets the max. number of lines in the text viewer. The value may
range from 5000 to 100000, its default is 10000 lines per document.

After changing one or both of these values (with Save & Exit), the TAP must
be restarted to make the new setting effective.

Special functions:

"Check Update" checks via network connection, whether a newer version of
AcadeRC, its description or other components are available.

If so, they are downloaded to Settings/AcadeRC and 0**_acaderc_tms.tap is stored in the ProgramFiles folder, *** being an incremental number. Some auxiliary programs (*.mips) are needed e.g. for special functions like codecs listing, HTTP download or HTML and PDF display.

"Show Key Codes" displays the hexadecimal RCU codes as they arrive without any changes in the receiver for the TAPs.

"Show Description" displays this documentation in the text viewer.

"Terminate TAP" ends execution of the TAP.

```
                            Update
 000_acaderc_tms.tap: Geladen nach ProgramFiles/000_acaderc_tms.tap.
  264005 Bytes, Fri Dec 16 16:19:58 2016


 acaderc.txt: Geladen nach Settings/AcadeRC.
  47912 Bytes, Tue Dec 20 14:58:58 2016


 acaderc_en.txt: Geladen nach Settings/AcadeRC.
  41779 Bytes, Tue Dec 20 14:58:59 2016


 acade_gif.mips: Keine neuere Version.

 acade_png.mips: Keine neuere Version.

 lynx.mips: Keine neuere Version.

 wget.mips: Keine neuere Version.

 ffprobe.mips: Keine neuere Version.

 pdftotext.mips: Keine neuere Version.
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Line Editor
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```
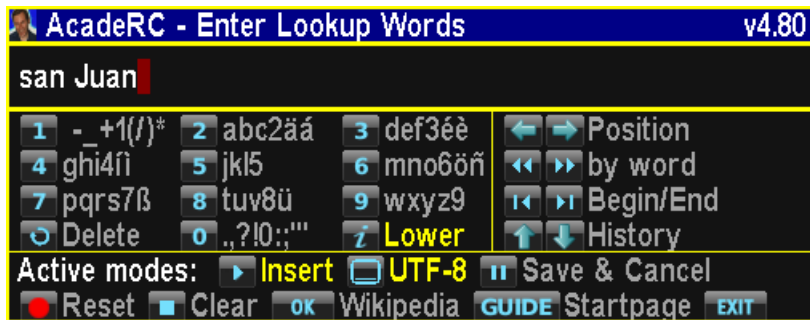

A general input window (with permanent history) for these tasks:

> * Rename files and directories
> * Search files and directories
> * Search strings in text viewer
> * Edit lines in text documents
> * Enter links (URL) for web pages
> * Search in Wikipedia or Startpage

Character input is done in SMS style, operation is intuitive.
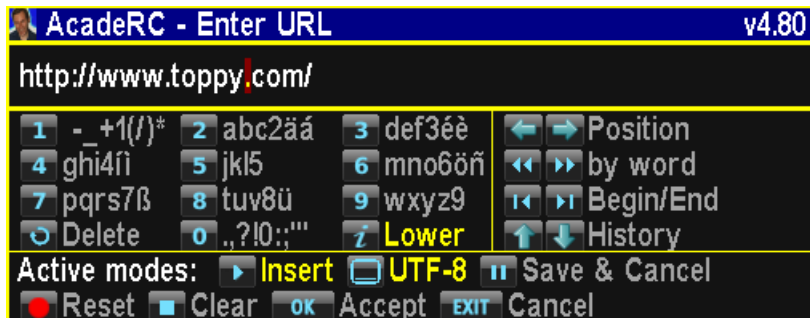
File Browser

Use the file browser to inspect filesystem directories and to display or
start their files.

By "TAP key" + "Filelist" or an optional direct key (default "Ok")
you are entering the file browser. Help text there is available by any
unused key and the "Mute" key, which is reserved for this purpose.

These are the sub-window's special keys:

          v ^ << >> |< >| V+ V-: Navigate in list
          <: Enter parent directory
          >: Enter selected/next directory
          Ok: View / start file / enter directory
          Play: Resume replay / MP3 playlist
          Stop: Stop selected file
          AR: Execute .sh / View codecs or hex dump

          4: Change to/from MediaFiles directory
          5: Change to/from MP3Files directory
          6: Change to/from AcadeRC directory
          7: Change to/from DataFiles directory
          8: Change to/from PlayList directory
          9: Change to/from ProgramFiles directory
          0: Change to/from root directory

          Recall: Change to/from replay directory
          Fav: Change to/from HOME directory
          TAP key + F1: Set current directory as new HOME

          F1 2x < 0.5": Clear all multiple selection marks
          F1 (Red): Toggle file's / dir.'s multiple selection mark
          F2 (Green): Create a new directory (nnnn)
          F3 (Yellow): Move marked selection to this directory

```
       F4 (Blue): Delete file or directory
       Record: Copy marked selection to this directory
       TAP key + Record: Show copy status / cancel / clear
       >|< (White): Rename file or directory
       Sat [2x]: Search file or directory

       Info: Show details about file or directory
       TAP key + Info: Recursive directory listing
       Aux (TvSat, M): Toggle mode (subdir. details, shuffle etc.)
       Subtitle: Sort by name / date / size / incl. ALL files
       Teletext: Call text viewer (last document)
       Guide: Show EPG infos (nav. with cursor keys)
       Menu: Open menu (settings etc.)
       VFormat: Change into Infos & Tools
       Filelist: Call original filer
```

By default, the file browser's listing of files and directories is sorted
alphabetically and is displayed without files of some extensions (.inf, .nav,
.bak and .db3). The "Subtitle" key changes the sorting mode (by size, time)
and may also disable the extensions filter.
This temporary sorting mode can be made permanent within the menu.

The "Info" key within the file browser deserves some special comments:

On directories, it starts a complete tree search of all files and
sub-directories contained herein and displays the result: Number of
levels, sub-directories and files, as well as occupied harddisk space.
TAP key + Info generates a recursive directory listing as text file.

On .rec/.ts files, it uses the text viewer to show their EPG event text,
which is seen here as a normal text file, that can be stored.

On image files, it shows their size and, if given, the JPEG comment.

On .mp3 files, it shows their parameters and ID3v1 tag, if present.
If a lyrics server is available via internet, its response is preferred.

To have quick access to important directories (e.g. DataFiles), there
are several mechanisms:

A HOME directory may be set by TAP key + "F1 (Red)" and be entered by the
"Fav" key. The "Fav" key toggles back to the previous directory, if you are
already in HOME.

For the current replay directory (usually DataFiles or any other),
the "Recall" key is reserved permanently.
The above mentioned toggling mechanism applies to it as well.

For other directories, the digit keys in the above list are reserved.

```
/sdb1/rec+inf                                    n. Größe  88█    137G   0:08
    6.8 G  20.12.2015   2:48  Wacken 2013: Deep Purple - Live-Musik vom Wacken Fest
    7.2 G  31.12.2015  19:13  Jeff Lynne's ELO: Hyde Park 2014 - Hyde Park, London,
    7.4 G   1.01.2016   5:13  The Who: Live at Hyde Park 2015 - Hyde Park, London,
    7.6 G  31.12.2015  20:13  Tina Turner: One Last Time - Wembley Stadium, London,
    7.8 G   5.06.2016  23:18  Sport extra: EM 1996 - Halbfinale England - Deutschland.
    7.8 G  31.12.2015  10:58  Dire Straits: Alchemy Live - Hammersmith Odeon London
    9.5 G   1.01.2016  22:10  Monika Gruber - Irgend    Sender: SWR BW HD
    9.6 G  21.12.2015  20:13  Die Ferien des Monsieur  Dauer: 64', EPG 65'
    9.8 G  21.12.2015  22:38  Trafic - Spielfilm Frankreich _ Italien 1971 - 2015-12-21 22
    9.9 G  14.05.2016   2:18  Bean - Der ultimative Katastrophenfilm - 2016-05-14 02-2
    9.9 G  30.12.2015  20:13  Onkel Filser - Allerneueste Lausbubengeschichten - Spiel
   10.0 G   8.03.2016  23:13  Fukushima - Nichts ist, wie es war - 2016-03-08 23-15.rec
   10.0 G  12.11.2015  14:02  Arsen und Spitzenhäubchen - Spielfilm Großbritannien _
   10.2 G  12.02.2016   0:20  München 1970 - Als der Terror zu uns kam.rec
   10.3 G  13.11.2015  12:32  Tante Frieda - Neue Lausbubengeschichten - Spielfilm De
   10.5 G  15.01.2016  13:57  Mein Onkel - Spielfilm Frankreich 1958 (Mon Oncle) - Film
   10.6 G  10.02.2016   3:18  Kein Sex ist auch keine Lösung - Fernsehfilm; Deutschla
   10.8 G  25.10.2015   1:03  Scorpions - Live in Wacken 2012 _ The Gates - Verpackt
   11.2 G  20.11.2015  12:29  Cat Ballou - Hängen sollst du in Wyoming - Spielfilm US
   11.2 G   3.01.2016  21:58  Gerhard Polt - Ekzem Homo - 2016-01-03 22-00.rec
   11.3 G  21.05.2016  20:55  Sportschau live - DFB-Pokalfinale: FC Bayern München -
   11.3 G   9.01.2016   0:33  Lemmy - Dokumentarfilm USA 2010.rec
   11.5 G  14.11.2015   5:04  Lausbubengeschichten - Spielfilm Deutschland 1964.rec
   12.9 G   2.11.2015  13:52  Unheimliche Begegnung der dritten Art - Spielfilm USA 19
```

The AR key displays the codecs and streams of a video file:

```
/DataFiles/ALF/DONE/Michael Altinger - Das Beste.rec (Codecs)        100% 22
 Duration: 00:49:01.60, start: 26641.603067, bitrate: 14276 kb/s
 Program 10301
    service_name    : Das Erste HD
    service_provider: ARD
 Program 10302
    service_name    : arte HD
    service_provider: ARD
 Program 10303
    service_name    : SWR BW HD
    service_provider: ARD
  Stream #0:0[0x55a]: Unknown: none (0x0005)
  Stream #0:1[0x87b]: Unknown: none ( 0x000B)
  Stream #0:2[0x9ac]: Unknown: none ( 0x000C)
  Stream #0:3[0x1401]: Video: h264 ( 0x001B), none, 50 fps
  Stream #0:4[0x1402](deu): Audio: mp2 (0x0003), 48000 Hz, 2 channels, 192 kb/s
  Stream #0:5[0x1403](mis): Audio: mp2 (0x0003), 48000 Hz, 2 channels, 192 kb/s
  Stream #0:6[0x1404](deu): Subtitle: dvb_teletext (0x0006)
  Stream #0:7[0x1405](deu): Subtitle: dvb_subtitle (0x0006) (hearing impaired)
  Stream #0:8[0x1406](deu): Audio: ac3 (0x0006), 48000 Hz, stereo, 448 kb/s
 Program 10304
    service_name    : SWR RP HD
    service_provider: ARD
```

NOTES on replaying old 5K recordings:

The header of these files is modified to get a pure TS stream, that can be
replayed normally.
@@

NOTES on copying of files and directory trees:
@@

```
Text Viewer
-----------
```

AcadeRC Receiver Control

(Description of 18.12.2016)

Multifunctional TAP:

* File browser (clear, fast, comprehensive)
* Text viewer (text, HTML and PDF files, hex dumps, codecs)
* Image viewer (displays BMP, GIF, PNG and JPG files)
* Web browser (HTTP[S] downloads + display with hyperlinks)
* Line editor (text files, URLs etc., input like SMS)
* Music player (plays directories and playlists, shows lyrics)
* Simple 20/24-lines EPG (no timers, no database)

* Toppy usage statistics (switch, time and keys statistics)
* System informations (hardware / software / resources)
* Calender with overview of 4 months at a time
* Simple calculator for 4 basic operations

* Cut ends of TV recordings (incl. .nav/.inf correction)
* Screenshots of TV, MP4 etc., videotext and TAP windows
* Shell scripts execution /w output viewing, autostart.sh

Enter the text viewer either from the file browser by pressing "Ok" on a
text or HTML file (any non-binary file) or by "TAP key" + "Teletext" (or
an optional direct key). In the latter case, the last shown document is
presented again. If no file has been shown yet, the HOME document is
displayed, defaulting to the bookmarks file.

These are the sub-window's special keys:

        v ^ : Move by lines
        << >> : Move by pages (also with V+ V-)
        |< >| : Move to begin / end of file

        < > : Select link or change document
        P- P+ or |> > : Back / forward in history
        Ok: Load selected link / Enter edit mode
        AR: Enter link (URL) for webpage download
        Aux (TvSat, M): Lookup Wikipedia / Startpage

        Fav: Change to HOME document
        F1 (Red): Set current document as new HOME
        F2 (Green): Bookmark current document
        F3 (Yellow): Show bookmarks as new document
        F4 (Blue): Delete selected link from bookmarks

        Sat [2x]: Search text string
        >|< (White): Search text string again
        Recall: Reload current document
        Record: Store document formatted as .text

        Info: Show details about the text
        Subtitle: Toggle begin/end of URL display
        Teletext: Call native teletext (within 0.5s)
        Guide: Show EPG infos (nav. with cursor keys)

The original Teletext will be called after opening the text viewer, if
the "Teletext" key is pressed within 0.5 seconds.

Otherwise, the "Teletext" key leads back in the documents' history
to the previous document (same as the "P-" key).

If a replay is running while the text viewer is being opened directly,
the replay file's EPG infos are shown as new document.

To have quick access to important documents (e.g. Bookmarks.html), there
are two mechanisms:

A HOME document may be set by "F1 (Red)" and be opened by the "Fav"
key. However, there is no toggling mechanism as in the file browser.
Instead, there is a text viewer history, available by "P-" and "P+".

For the Bookmarks.html document, the "F3 (Yellow)" key is reserved
permanently. "F2 (Green)" appends a new bookmark to it," F4 (Blue)"
deletes a selected link from the bookmarks list.

Edit mode: @@

```
/ProgramFiles/Settings/SmartEPG_TMS/Services.db (Hex Dump)        0% 3343
00000: 45 50 47 5f  53 44 42 00  05 00 00 00  03 11 85 e0   EPG_SDB      à
00010: 9d 02 00 00  00 00 00 00  3d 28 fb 03  01 00 c0 00        =(û  À
00020: 01 03 01 01  c0 00 e5 2c  3d 28 01 00  fb 03 00 00      À å,=( û
00030: 00 00 00 00  00 00 00 00  00 00 00 00  1c 00 00 00
00040: 31 2e 20 41  52 44 00 74  65 20 48 44  00 00 00 00   1. ARD te HD
00050: 00 00 00 00  00 00 00 00  09 00 00 00  00 00 00 00
00060: 66 2b f3 03  01 00 c0 00  01 03 01 01  c0 00 61 2c   f+ó  À    À a,
00070: 66 2b 01 00  f3 03 00 00  00 00 00 00  01 00 00 00   f+ ó
00080: 00 00 00 00  68 00 00 00  32 2e 20 5a  44 46 00 00       h   2. ZDF
00090: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00
000a0: 09 00 00 00  00 00 00 00  55 28 01 04  01 00 c0 00         U(   À
000b0: 01 03 01 01  c0 00 3e 2d  55 28 01 00  01 04 00 00      À >-U(
000c0: 00 00 00 00  02 00 00 00  00 00 00 00  20 00 00 00
000d0: 33 2e 20 42  52 00 64 20  48 44 00 00  00 00 00 00   3. BR d HD
000e0: 00 00 00 00  00 00 00 00  09 00 00 00  00 00 00 00
000f0: 47 6f 45 04  01 00 c0 00  01 03 01 01  c0 00 e9 2f   GoE  À    À é/
00100: 47 6f 01 00  45 04 00 00  00 00 00 00  03 00 00 00   Go  E
00110: 00 00 00 00  42 00 00 00  34 2e 61 6c  70 68 61 00       B   4.alpha
00120: 61 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00   a
00130: 09 00 00 00  00 00 00 00  5b 28 01 04  01 00 c0 00          [(   À
00140: 01 03 01 01  c0 00 3e 2d  5b 28 01 00  01 04 00 00      À >-[(
00150: 00 00 00 00  04 00 00 00  00 00 00 00  20 00 00 00
00160: 35 2e 20 70  68 6e 78 00  48 44 00 00  00 00 00 00   5. phnx HD
00170: 00 00 00 00  00 00 00 00  09 00 00 00  00 00 00 00
```

Image Viewer
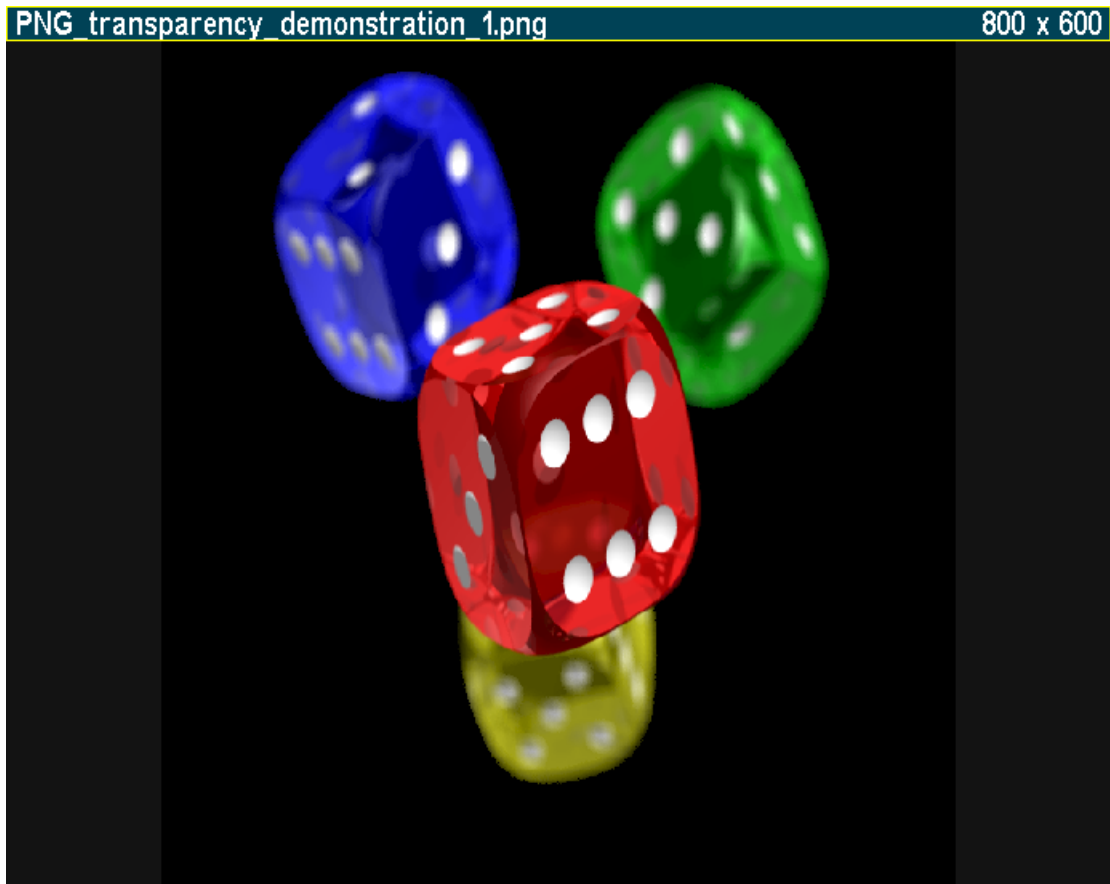
The image viewer is entered either from the file browser by pressing "Ok"
on an image file or by an "Ok" on a HTML image link within the text viewer.
Currently supported image formats: BMP, GIF, JPG and PNG.

These are the sub-window's special keys:

        < > : Move to previous / next image
        v ^ : Move to previous / next image (same)
        << >> : Move by 10 images
        |< >| : Move to first / last image

        Info: Show details about the image
        Subtitle: Toggle headline content

Web Browser

Actually, the web browser is just a special mode within the text viewer that
has been enabled to show HTML documents with hyperlinks and to download files
from the internet over the HTTP[S] protocol.

All downloads are stored in /WebCache and may be redisplayed even without an
internet connection.

Entry documernt is a bookmark file /WebCache/Bookmarks.html, that is created
and predefined, if not yet existing. Alternative bookmark files, e.g. from
your PC's Firefox may be copied there and be used in parallel.

Bookmarks.html may be opened (F3 = Yellow key) in the text viewer at any time
and be appended (F2 = Green key) with a link to the current document, including
its line position. At the moment, Bookmarks.html can be edited at your PC only.

Currently it's (not yet) possible to enter an URL manually.

Another way to download and open files from the internet is via the file browser.
An "Ok" on a sub-folder within /WebCache gets the main document of e.g.
www.topfield-europe.com and displays it in the text viewer.

For how to operate the web browser, see the text viewer's key legend.

External auxiliary programs are required for HTML display and HTTP[S] download
(lynx, wget), these can be obtained via the TAP's "Update" function (see Menu).

Music Player

Within the file browser, you can press "Play" on a .mp3 file to play this and
all subsequent (or with navigation also the preceeding) files in the same directory.

An "Ok" in this directory also continues playback there, but pressed in another
directory, only its selected file will be played and then playing of the previous
directory will be resumed.

If a playlist (.pls or .m3u) is selected, "Ok" displays its content in the text
viewer (as this happens to all text files). "Play", however, starts the replay
of the contained MP3 files. These files (possibly distributed through all
directories of the file system) are symbolically linked to a new directory
/PlayList (not copied physically!), so that you can navigate in the playlist
and skip or repeat songs etc. The /PlayList directory is managed by AcadeRC
and is not allowed to be changed or even deleted by other TAPs etc. (data loss
is guaranteed, if other TAPs are following the symlinks during deletion).

The paths of the MP3s in the playlist must be relative to the location of the
playlist itself, so you must not have a '/' or '\' at the beginning of a line.
Comment lines are indicated by a '#' at the beginning of a line.

Pressing "Play" on a directory links all its MP3 files (even recursively) into
/PlayList (symbolically) and starts to replay them.

After starting a replay (no matter whether .mp3, .rec or .mpg etc.), pressing
the "Recall" key within the file browser leads always to the current playback
directory, i.e. to /PlayList in the case of replaying a playlist.

With the file browser in /PlayList, the Aux (TvSat, M) key selects an MP3 replay
mode (will be stored as default, if you Save & Exit the Menu):
Shuffle mode (endless or single) and Repeat mode (one file or all of the list)
may be selected. Pressing "Play" within /PlayList jumps to the next file.

Even outside of the file browser (when the CD logo and the ID3 infos of the MP3

file being played is visible) navigation in the playlist / playback directory
is possible: Pressing >| resp. |< jumps to the next resp. previous MP3 file.
"Stop" finishes the playback.

Regardless of whether a selected MP3 file is currently being replayed, pressing
the "Info" key within the filebrowser will download, permanently store (in
/WebCache) and finally display the lyrics of a song from a lyrics server via
internet. Once saved, there is no internet access needed anymore for re-viewing.

Song title and artist name are retrieved from an MP3's ID3 tag (only v1 currently)
and modified appropriately to pass them on to the lyrics server. Sometimes a title
or artist is unknown (if it is e.g. incorrect), but possibly another link to the
wanted text may be available in the then displayed HTML file for manual lookup.

```
/WebCache/lyrics.wikia.com/_/Deep_Purple/Highway_Star.html        56% 374+16
 Nobody gonna take my car, I'm gonna race it to the ground
 Nobody gonna beat my car, it's gonna break the speed of sound
 Ooh, it's a killing machine
 It's got everything
 Like a driving power, big fat tires and everything
 I love it, and I need it, I feed it
 Yeah, it's a wild hurricane
 All right, hold tight, I'm a highway star
 Nobody gonna take my girl, I'm gonna keep her to the end
 Nobody gonna have my girl, she stays close on every bend
 Ooh, she's a killing machine
 She's got everything
 Like a moving mouth, body control and everything
 I love her, I need her, I seed her
 Yeah, she turns me on
 All right, hold tight, I'm a highway star
 Nobody gonna take my head, I got speed inside my brain
 Nobody gonna steal my head now that I'm on the road again
 Ooh, I'm in heaven again
 I've got everything
 Like a moving ground, an open road and everything
 I love it, I need it, I feed it
 Eight cylinders, all mine
 All right, hold tight, I'm a highway star
```

Simple EPG

```
AcadeRC EPG v4.80    ZDF HD [11361 MHz]           Fr 16.12.2016 20:50
 1. Das Erste     20:15-21:45 Krauses Glück -- Fernsehfilm Deutschland 2016
 2. ZDF           20:15-21:15 Die Chefin -- Kopf gegen Herz
 3. BR Fernsehen  20:15-21:00 Landfrauenküche - Das Weihnachtsmenü
 4. ARD-alpha     22:30-23:00 Per Bahn zu Shiva und Buddha - Eine Reise von Indi
 5. PHOENIX       20:15-21:00 Königliche Dynastien (1/3) -- Die Welfen
 6. WDR           20:15-21:45 "Der beste Chor im Westen" - das Finale -- Moderati
 7. NDR FS HH     20:15-21:45 Hand in Hand für Norddeutschland -- Der große ND
 8. 3sat          20:15-21:00 Die Holzlüge -- Film von Anika Giese und Torben Sch
 9. arte          20:15-21:50 Der durch die Wand geht -- Fernsehfilm Frankreich 2
10. KiKA          19:30-20:50 Mitten in der Winternacht
11. MDR Sachsen   20:15-21:45 Wiedersehen macht Freude zur Weihnachtszeit -- Ax
12. rbb Berlin    20:15-22:15 Helene Fischer - Weihnachten -- Das große Konzert
13. SWR BW        20:25-21:10 Expedition in die Heimat -- Winterbeginn im Bregenze
14. hr-fernsehen  20:15-21:45 Inseltouren auf Sylt und Rügen - Urlaubsglück vor d
15. tagesschau24
16. ONE
17. EinsPlus
18. zdf_neo       20:15-21:45 Lewis -- Die Schlüssel zum Mord
19. ZDFinfo       20:15-21:00 ZDF-History -- Mao - der rote Kaiser
20. zdf.kultur
21. münchen.tv
22. rfo Regional
23. intv
24. Niederbayern
```

The EPG is entered either from the file browser or text viewer by pressing
"Guide" or by "TAP key" + "Guide" from outside of any TAP.

There are 4 sub-windows:

        List of channels with their current programme
        List of programmes of a selected channel
        List of set timers for future recordings
        EPG details of a selected programme

These are the sub-windows' special keys:

        << >> |< >| V+ V-: Navigate in window
        v ^ < >: Change channel / programme
        Guide, Info: Show detailed EPG infos
        Subtitle: Toggle view (Channels / Programmes)
        Teletext: Toggle view (Timers)
        TvRadio: Toggle service type (TV/Radio)
        Recall: Select live channel
        Ok: Start playing channel
        Record: Start instant recording
        Stop: Stop recording channel

18. zdf_neo HD
Fr 16.12.2016 17:00 - 18:35

Columbo
Traumschiff des Todes

USA 1974
Während einer Kreuzfahrt nach Mexiko wird die Sängerin Rosanna Welles von
ihrem Liebhaber, dem verheirateten Mitreisenden Danziger, den sie um eine hohe
Summe erpresst hat, ermordet.
Danziger lenkt zunächst erfolgreich den Verdacht auf den Pianisten Lloyd
Harrington. Doch hat er nicht mit Columbo gerechnet, der sich zufällig auch auf
dem Kreuzfahrtschiff aufhält.
Darsteller:
Columbo - Peter Falk
Hayden Danziger - Robert Vaughn
Sylvia Danziger - Jane Greer
Lloyd Harrington - Dean Stockwell
Capt. Gibbon - Patrick Macnee
Purser Watkins - Bernard Fox
Dr. Frank Pierce - Robert Douglas
und andere
Regie: Ben Gazzara
Buch/Autor: Richard Levinson, William Link, William Driskill

AcadeRC EPG Timer				Fr 16.12.2016 20:50
Das Erste		21:45	20'	Tagesthemen - mit Wetter.rec
ZDF		22:00	30'	heute-journal - Wetter.rec
Das Erste	Sa 17.12.	17:29	3'	SmartEPG.rec
ZDF	Sa 17.12.	22:40	145'	das aktuelle sportstudio - 2016-12-17 23-00.rec
Das Erste	Sa 17.12.	23:35	25'	Tagesthemen - mit Wetter.rec
ZDF	So 18.12.	21:45	15'	heute-journal - Wetter.rec
Das Erste	So 18.12.	23:15	25'	Tagesthemen - mit Sport und Wetter.rec
WDR	So 18.12.	23:43	37'	Zeiglers wunderbare Welt des Fußballs - 2016-12-18
ZDF	Mo 19.12.	21:45	30'	heute-journal - Wetter.rec
Das Erste	Mo 19.12.	22:55	35'	Tagesthemen - mit Wetter.rec
BR Fernsehe	Di 20.12.	4:50	65'	Blickpunkt Sport - Moderation: Tom Meiler.rec
ZDF	Di 20.12.	21:40	30'	heute-journal - Wetter.rec
Das Erste	Di 20.12.	23:30	25'	Tagesthemen - mit Wetter.rec

Usage Statistics

This is the main function of "Infos & Tools".

By "TAP key" + "Info" you can display statistics infos about toppy usage
(starts and runtime, last On/Off time). Thereby, a PVR is considered as On
only after a user has pressed a RCU key or chassis button, so that automatic
starts e.g. by SmartEPG or other timers can't influence the data prematurely.

When turning the PVR off while still recording, you should stop the TAP (via
TAP menu) manually to prevent falsified statistics by userless ;-) activity.

Additional information within the "Infos & Tools" sub-window:

        Number of key presses
        Geo location / timezone
        Sunset / sunrise
        Moon phases

By pressing some special keys, the following sub-windows are available:

        < : Show System Infos
        ^ : Show Harddisk Infos
        v : Show About Infos
        > : Show Calendar
        Ok: Small Calculator
        Fav: Key Statistics
        Teletext: TAPs List
        Recall: Forum Infos

System Informations

```
AcadeRC System Infos          v4.80
Sys.ID: 22570 (SRP 2401 CI+ Eco)
Type: BCM97xxx Settop Platform

FW: TF-BCPCE 1.03.00 (Mar 24 2015)
OS: Linux (2.6.18-7.1)

CPU: BMIPS4380 V4.4 (402.43 MHz)
MEM: 320 [MB]

Heap: T=48 F=29 A=29 [MiB]
HDD: Total=463 Free=125 [GiB]

HDD: WDC WD5000LUCT-63C26Y0
Ser.: WD-WX71EA3ALRR6

MAC: 00:0e:9e:09:11:de
IP: 192.168.1.33 / 84.57.22.175

Signal: Level=78% Quality=99%
Channels: TV=465 Radio=204
```

Display various HW, SW and system informations:

> System ID / PVR Model
> STB Platform
>
> Firmware Version / Date
> Operating System
>
> CPU / [MHz]
> Memory [MB]
>
> Heap Capacities
> Harddisk Capacities
>
> Harddisk Model
> Harddisk Serno.
>
> MAC (Network Adapter)
> IP (Internet Address)
>
> Signal (Level / Quality)
> Channel Numbers (TV / Radio)

Harddisk Informations

```
AcadeRC Harddisk Infos      /dev/sda
sda1 /mnt/games      2.1 G,     1.7 G frei
sda2 /mnt/hd      497.9 G,  282.3 G frei
Model: WDC WD5000LUCT-63C26Y0
Serial: WD-WX71EA3ALRR6
FW Rev.: 01.01A01
Capacity: 500.1 G
Spin Up Time                   1208
Start/Stop Count               1975
Power-On Hours                 5630
Power Cycle Count              1975
Power-Off Retract Count        1974
Load Cycle Count                  4
Device Temperature [C]           37
```

Display partitions, general HDD infos and non-zero SMART values.

If additional harddisks are connected (USB, eSATA), any other key press
shows the infos of these disks (for USB devices only the partitions).

Key Statistics

```
AcadeRC Key Infos                                    v4.86
Tasten s. 13.11.2016: 81873, max. 13115 / 4 > 3278: 8 61341

    113 AR         69 Aux         75 Sleep       49 Mute
    130 1         189 2          138 3
     84 4         122 5          166 6            0 VFormat
    116 7         141 8          205 9            0 Star
   1015 Recall    134 0         1537 Info

   1512 Guide    7172 ^          837 TvRadio      2 P+
     78 Menu                    1151 AudioTrk     3 P-
   2127 <        7231 Ok        3094 >
    262 Fav                     1500 Subtitle     1 V+
  13115 Exit    10314 v          825 Teletext     1 V-

   4754 <<       6019 Play      9259 >>
     33 Slow      358 Stop       406 Record    3477 Pause
    179 |<         62 Filelist   346 >|
    316 F1        252 F2         502 F3         724 F4
                 1457 Sat        215 >|<          4 White
```

From within "Infos & Tools" (see above), press the Fav key to get into
the detailed keys statistics.

The table is sorted by keycodes. Values greater than 1/4
of the most frequently used key are highlighted, their sum is displayed
in the upper right corner.

Update: The sorting order may be changed by pressing the Fav key again:
By the layout of the keys of a TP006 RCU (default), by the frequency of
key presses per key and by the keycodes.

To obtain correct statistical values, AcadeRC has to be started before
any other TAPs processing key presses, of course.

Automatic key repetition (key kept pressed) is counted only once.

Note: This statistics is also working with TMSRemote and WebControl, if
AcadeRC was started before these TAPs (should be anyway).

```
Forum Infos
-----------
```

oztoppy.forumchitchat.com

There are currently 6 users online: 3 members, 3 guests

Topics: 98, Posts: 1,001 , Members: 99

Acade, pippo, Tango

@@

Calender
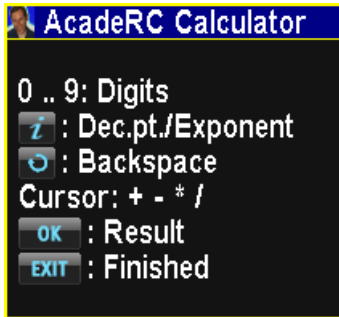--------

Calendar (1583 - 3000), 4 months per page.

These are the sub-window's special keys:

              < > : 1 Month back / forward
              ^ v : 4 Months back / forward

              << >> : 1 Year back / forward
              |< >| : 10 Years back / forward

              Ok: Current Month

Calculator

Simple calculator for basic arithmetic operations (was an Easter egg once).

In the calculator, you can enter digits (keys "0" - "9"), a decimal point
("Info" key), exponent entry (2nd "Info"), basic arithmetic operators
(+ - * / by the cursor keys "Right" "Left" "Up" "Down") and "OK" to complete
the computation. To backspace an item, press the "Recall" key.

Operations can be chained, but without "*" "/" priority.
If an operand is omitted, the last result is put in its place.

```
Trim Recordings
---------------


To trim off the endings of TV recordings, AcadeRC provides a simple cut function:

First, pause the replay of your recording at the position limiting your cut at
one side. Then press "TAP key" + "|<" to cut from beginning or "TAP key" + ">|"
to cut to the end of the file.

The .rec's associated .inf and .nav files are corrected in order to reflect
the changed duration time, start time (in the case of a cut from the file's
beginning) and bookmarks.
```

Screenshot Function

By "TAP key" + "Sleep" you can capture screenshots of the current TV, MP4 etc.,
of videotext and of the sub-windows of other TAPs, at any time. The screenshots
are stored in /Captures/PREFIX**.bmp. In AcadeRC sub-windows press "Sleep".
PREFIXes are tap_, ttx_, video_ and acaderc_, depending on the capture source.

Note: Video capture is only possible while the replay is running (not paused).

AcadeRC must have been started before the other TAP, whose window to capture.
This is the normal operation mode of AcadeRC anyway.

```
Shell Scripts
-------------

Chapter missing @@, but is for experts only anyway.
```



```
/ProgramFiles/Settings/Acade.sh/example.sh (Output)          100% 18+5
cd `dirname $0`        # change to script's directory
cat `basename $0`       # output this script's content
ps | tail -13          # show last processes' status
#======================================================

  29    S   0K     0K  0.0 mtdblockd
  30    S   0K     0K  0.0 pegasus
  32    S   0K     0K  0.0 /bin/sh /etc/init.d/rcS
  44    S   0K     0K  0.0 syslogd
  53    S   0K     0K  0.0 /bin/sh /root/rc.user
  54    S   0K     0K 20.2 pvr
 156    S   0K     0K  0.0 /mnt/hd/ProgramFiles/busybox telnetd -p 13151
 164    S   0K     0K  0.0 portmap
 176    S   0K     0K  0.0 /mnt/hd/ProgramFiles/Settings/TMSServer/unfsd -s -e
/mnt/hd/ProgramFiles/Settings/TMSServer/exports
 199    S   0K     0K  0.0 sh -c
/mnt/hd/ProgramFiles/Settings/Acade.sh/example.sh >
'/mnt/hd/ProgramFiles/Settings/Acade.sh/example.sh (Output)' 2>&1
 200    S   0K     0K  0.0 sh -c
/mnt/hd/ProgramFiles/Settings/Acade.sh/example.sh >
'/mnt/hd/ProgramFiles/Settings/Acade.sh/example.sh (Output)' 2>&1
 206    R   0K     0K  0.0 ps
 207    S   0K     0K  0.0 tail -13
```

```
Keycode Remapping
-----------------

Preliminary remarks (independent of the rest of this chapter):

1. Remapping of the cursor keys into Vol/Ch +/- is already done by default
   (see chapter "Remote Control Interception"), this may be disabled.

2. The TP501's (SRP 2100/2410 RCU) missing Fav key is being simulated by
   a key sequence TAP key + 'Play' at any time.

3. The TP006's (5K RCU) missing VF key is being simulated by
   a key sequence TAP key + 'Slow' at any time.


The optional remapping of keys is performed according to the definitions in
"AcadeRC.map" (to be found in ProgramFiles/Settings/AcadeRC). This file is
generated (empty, but with comments), if not yet existing.

The content of "AcadeRC.map" follows this syntax rules (examples):

   {key_code}    [target_code]   [conditions]     # comment
   ------------  --------------- ---------------  ---------------
   0x1001a                       PM0              # suppress Pause key during live TV
   0x10050       0x10022                          # restore the portal "M" key to
TvSat in AUS

The amount of whitespace characters (spaces and tabs) has no effect.
Optional fields may appear in any order after the first key code field.
Lines contradicting the syntax are simply ignored.

Key codes are specified in hexadecimal (no symbols) and are all listed
with their names as comments in the initial "AcadeRC.map".

A missing target code suppresses the specified key.

Key remapping may be made dependent on some conditions. If there is more
than one condition for a rule, they must be true simultaneously. Any rule
may contain only one condition of the same type a) - c) (see below):

a)     ST*     state condition, the most important:

       ST0     normal state (outside of TAPs and system)
       ST1     system menu
       ST2     system EPG
       ST4     system teletext
       ST6     system filer
       ST7     TAP OSD

b)     SS*     more than 100 substates, e.g.:

       SS34    favorites list
       SS36    audio selector

c)     PM*     playmode condition (replay of recordings):

       PM0     no replay
       PM2     normal replay
       PM3     timeshift replay
       PM5     MP3 replay

Conditions may be prefixed by a ! character for inversion.
The 1st matching rule is being applied.

After changes to "AcadeRC.map", the TAP must be restarted to make
the new rules effective.
```

```
Remote Control Interception
---------------------------

This was originally the TAPs prime function.

Swapping my old TF 5000 PVR ("5K") for a new SRP 2401 CI+ ("TMS"), I wanted
to keep the 5K remote control unit for the TMS and I also wanted to be able
to control both receivers with this one RCU simultaneously, so I wrote this TAP.

The TAP's goal is to remap a different Topfield RCU's keycodes to a device's
native keycodes, so you can use the original and a "replacement" RCU at the
same time (or only one of them) with all available keys and same functionality.

Currently, RCUs of these PVRs can be replaced by each other:
TF 5000, TMS 2100, SRP 2410, SRP 2401 (incl. Eco); CRP 2401 not tested.
Every receiver should be completely controllable with other TF RCUs.

IMPORTANT: Prerequisite for the use of a replacement remote control is
the activation of the respective filters in the IR receiver of the PVR
("TF=", "RC=" and "IR Filter" must be set explicitly in the TAP menu).
FireBird's "RemoteSwitch" TAP is not required anymore :D

These are the sub-features:


1. Recoding the cursor keys

By default, the 4 cursor keys are remapped to "Channel / Volume" "Up / Down"
keys, this behaviour can be switched off in the TAP menu.
While in menus or other TAPs, the cursor keys keep working as usual.


2. Recoding the color keys

Depending on the selection in the TAP menu (TF/RC), the 4 color keys
("Red" "Green" "Yellow" "Blue"), the "White" and the "Fav" key (if available)
of a replacement remote control are recoded correctly for the target device.
(But unfortunately, the color keys of TMS RCUs don't work on 5K PVRs.)


3. Simultaneous use of replacement and original remote control

Since the above remappings could (unintendedly) also affect the original RCU
(that should still be usable in parallel), the affected original key codes
remain available by prefixing the TAP key before these keys.
The original remote control can be deactivated in the TAP menu.


4. Controlling multiple Topfield receivers with only 1 remote control

The icing: If you have several receivers, you can assign a unique "Select ID"
(1-9) to each one in its TAP menu. Afterwards, the respective PVR is
accessible again after selection by "TAP key" + "1-9", all other receivers (with
different "Select ID") will then ignore any key presses, until they are selected.
"TAP key" + "0" is a general key to make all waiting receivers responsive again
(e.g. if you have forgotten a receiver's ID).

By default, this feature is turned off ("Select ID = 0" in the TAP menu).

Unfortunately, the remote control's power key can not be caught by the TAP,
you should therefore switch on and off your PVRs by their chassis power buttons
in order not to put all other receivers into their opposite ON/OFF state, too.
```

Troubleshooting

In the case of any failure, an error message may be appended to a logfile
within the folder ProgramFiles/Settings/AcadeRC, acaderc.log.

With enabled "Select ID", it can happen (inaccurate or disturbed RCU signal),
that during unlocking "TAP key" + "ID", one of the two key presses doesn't
reach the PVR and the receiver remains unselected. In this case, simply
press an arbitrary additional key before retrying the selection sequence.

If something goes really wrong with this TAP: Start your Toppy without TAPs
from the AutoStart folder (keep the "0" key pressed while powering on).

Since the IR filter setting is retained in standby, the receiver must, in the
case of incorrect settings (neither TF= nor RC= correspond to an available
remote control), be started not only without AcadeRC, but must first be made
powerless (plug off, switch off) for a few seconds to let it forget the offending
IR filter setting. Then you can use the original RCU to start your Toppy without
AcadeRC and remove the acaderc.ini file from ProgramFiles/Settings/AcadeRC
(or delete even the whole AcadeRC folder) to get rid of the erroneous settings.

Final Remarks

As separate parts, the above features may already be contained in other TAPs,
but AcadeRC is distinctive by consistently simple operation and
configuration, appropriate combination of functions and additional features.

The TAP was programmed very carefully and tested thoroughly. However, I can
not guarantee its correct functioning, use it at your own risk.

Have fun with AcadeRC!

Ciao,
Acade