

Tuner drivers

Simple tuner Programming

There are some flavors of Tuner programming APIs. These differ mainly by the bandswitch byte.

- L= LG_API (VHF_LO=0x01, VHF_HI=0x02, UHF=0x08, radio=0x04)
- P= PHILIPS_API (VHF_LO=0xA0, VHF_HI=0x90, UHF=0x30, radio=0x04)
- T= TEMIC_API (VHF_LO=0x02, VHF_HI=0x04, UHF=0x01)
- A= ALPS_API (VHF_LO=0x14, VHF_HI=0x12, UHF=0x11)
- M= PHILIPS_MK3 (VHF_LO=0x01, VHF_HI=0x02, UHF=0x04, radio=0x19)

Tuner Manufacturers

- Samsung Tuner identification: (e.g. TCPM9091PD27)

System Message: WARNING/2 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\driver-api\media\drivers\[linux-master] [Documentation] [driver-api] [media] [drivers] tuners.rst, line 23)

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.. code-block:: none

TCP [ABCJLMNQ] 90[89][125] [DP] [ACD] 27 [ABCD]
[ABCJLMNQ]:
  A= BG+DK
  B= BG
  C= I+DK
  J= NTSC-Japan
  L= Secam LL
  M= BG+I+DK
  N= NTSC
  Q= BG+I+DK+LL
[89]: ?
[125]:
  2: No FM
  5: With FM
[DP]:
  D= NTSC
  P= PAL
[ACD]:
  A= F-connector
  C= Phono connector
  D= Din Jack
[ABCD]:
  3-wire/I2C tuning, 2-band/3-band
```

These Tuners are PHILIPS_API compatible.

Philips Tuner identification: (e.g. FM1216MF)

System Message: WARNING/2 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\driver-api\media\drivers\[linux-master] [Documentation] [driver-api] [media] [drivers] tuners.rst, line 53)

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F[IRMQ]12[1345]6{MF|ME|MP}
F[IRMQ]:
  FI12x6: Tuner Series
  FR12x6: Tuner + Radio IF
  FM12x6: Tuner + FM
  FQ12x6: special
  FMR12x6: special
  TD15xx: Digital Tuner ATSC
12[1345]6:
  1216: PAL BG
  1236: NTSC
  1246: PAL I
```

```
1256: Pal DK
{MF|ME|MP}
MF: BG LL w/ Secam (Multi France)
ME: BG DK I LL (Multi Europe)
MP: BG DK I (Multi PAL)
MR: BG DK M (?)
MG: BG DKI M (?)
MK2 series PHILIPS_API, most tuners are compatible to this one !
MK3 series introduced in 2002 w/ PHILIPS_MK3_API
```

Temic Tuner identification: (e.g 4006FH5)

System Message: WARNING/2 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\driver-api\media\drivers\[linux-master] [Documentation] [driver-api] [media] [drivers] tuners.rst, line 79)

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4[01][0136][269]F[HYNR]5
40x2: Tuner (5V/33V), TEMIC_API.
40x6: Tuner 5V
41xx: Tuner compact
40x9: Tuner+FM compact
[0136]
xx0x: PAL BG
xx1x: Pal DK, Secam LL
xx3x: NTSC
xx6x: PAL I
F[HYNR]5
FH5: Pal BG
FY5: others
FN5: multistandard
FR5: w/ FM radio
3X xxxx: order number with specific connector
Note: Only 40x2 series has TEMIC_API, all newer tuners have PHILIPS_API.
```

LG Innotek Tuner:

- TPI8NSR11 : NTSC J/M (TPI8NSR01 w/FM) (P,210/497)
- TPI8PSB11 : PAL B/G (TPI8PSB01 w/FM) (P,170/450)
- TAPC-I701 : PAL I (TAPC-I001 w/FM) (P,170/450)
- TPI8PSB12 : PAL D/K+B/G (TPI8PSB02 w/FM) (P,170/450)
- TAPC-H701P: NTSC_JP (TAPC-H001P w/FM) (L,170/450)
- TAPC-G701P: PAL B/G (TAPC-G001P w/FM) (L,170/450)
- TAPC-W701P: PAL I (TAPC-W001P w/FM) (L,170/450)
- TAPC-Q703P: PAL D/K (TAPC-Q001P w/FM) (L,170/450)
- TAPC-Q704P: PAL D/K+I (L,170/450)
- TAPC-G702P: PAL D/K+B/G (L,170/450)
- TADC-H002F: NTSC (L,175/410?; 2-B, C-W+11, W+12-69)
- TADC-M201D: PAL D/K+B/G+I (L,143/425) (sound control at I2C address 0xc8)
- TADC-T003F: NTSC Taiwan (L,175/410?; 2-B, C-W+11, W+12-69)

Suffix:

- P= Standard phono female socket
- D= IEC female socket
- F= F-connector

Other Tuners:

- TCL2002MB-1 : PAL BG + DK =TUNER_LG_PAL_NEW_TAPC
- TCL2002MB-1F: PAL BG + DK w/FM =PHILIPS_PAL
- TCL2002MI-2 : PAL I = ??

ALPS Tuners:

- Most are LG_API compatible
- TSCH6 has ALPS_API (TSCH5 ?)
- TSBE1 has extra API 05,02,08 Control_byte=0xCB Source:[1]

[1] [conexant100029b-PCI-Decoder-ApplicationNote.pdf](#)