



FreeTW
the Tele-Web-Viewer

Analog and Digital TV

Television types

This document is about all the streaming types, transported by means of a carrier radiofrequency, that flow via cable or by aerial or by parabolic/satellite dishes.

Even if we imprecisely call them "TV" , here we talk about radios too (mainly the FM radios) and even the audio-video flows coming in from the auxiliary connectors "SVideo", "Composite" and "RGB" (usually generated by a videorecorder) . We also include the WebCams and the audio-video capture boards.

The main kinds are the following:

Name used by FreeTW	Name of the service	English name	Acronyms	Notes
TV-AnalogAnt	Television analog via aerial	AnalogTV Terrestrial	PAL NTSC SECAM	Very used in Europe in the previous century, it will quickly be overwhelmed by the Digital Terrestrial.
TV-DigitalTerr	Television digital via aerial	Digital Terrestrial TV	DVB-T	Televisions and Radios of kind "Digital Terrestrial" Terrestrial means "not from satellite" and the classic TV aerials are used
TV-AnalogCable	Television analog via cable	AnalogTV Cable		Very popular in the USA in the previous century, perhaps used in some countries yet.
TV-DigitalCable	Television digital via cable	Digital Terrestrial TV		The "TV by Cable" very used in the USA.
TV-DigitalSat	Television digital via satellite	Digital Satellite TV	DVB-S	Televisions and radios "from satellite"
TV-DigitalHand			DVB-C	Standard used for the television on mobile systems (mobile phones and similar)
TV-RadioFM	Radio FM	FM radio		Radios, via aerial, into the band range from 88 to 108 MHz
TV-Svideo	SVideo	S-Video		Audio-video signal with the colour carrier separated (a little better than the "Composite")
TV-Comp	Composite	Composite		Audio-video signal classical, usually on three RCA connectors yellow-black-red or through a SCART connector.
TV-RGB	RGB	Component		Audio-video signal divided into three colours, usually through a SCART connector.
TV-Capture	Capture audio video	Capture		Audio-video signals generated by USB cameras or from capture boards.

Even if FreeTW can recognize all of them and can manage them, not always the hardware of the PC can support them all. Usually only some of them are hardware available.

Because there is a large amount of different hardware devices, of different types, built with different standards, some of them could not be working with FreeTW or work well only with some of the kinds described into this table.

Note:

DVB means "Digital Video Broadcasting", i.e. "Digital TV". The Digital Television will become, by law, the only way to transmit television programs in Italy starting from December 2008 (and, with different timings, in all of Europe and in the USA).

Both the satellite television, the terrestrial digital television, the cable TV, the Internet TV, the mobile devices TV in fact use a digital protocol for the transmission of the signal.

The standard named HDTV (1020x760) is an odd standard sponsored by the TV constructors that will disappear in short times. The MPEG signal is not a fixed format one, can be from 60x40 to 2000x1600 and more, stepping on in one or four pixels. All depends on the bandwidth of the channel and on the computing power available.

Frequencies and channels

Name used by FreeTW	Channels	Frequencies	Notes
TV-AnalogAnt	1 - 20 21 - 69	47 - 230 MHz 474 - 858 MHz	the channels from 1 to 20 need very large antennas and then are no more used
TV-DigitalTerr	1 - 20 21 - 69	177 - 230 MHz 474 - 858 MHz	the channels from 1 to 20 need very large antennas and then are no more used
TV-AnalogCable	???	???	not implemented yet
TV-DigitalCable	???	???	not implemented yet
TV-DigitalHand	???	???	not implemented yet
TV-DigitalSat	-	10700 - 12800 MHz	Channel tuning is done with Frequency, SymbolRate and Polarization
TV-RadioFM	-	88-108 MHz	it is popular to indicate the frequency, channels are defined but are not used
TV-Svideo	-	-	does not use channels or frequencies
TV-Comp	-	-	does not use channels or frequencies
TV-RGB	-	-	does not use channels or frequencies
TV-Capture	-	-	does not use channels or frequencies

Special "URL" types for the TV channels

To tune single channels

"TV-AnalogAnt_ch55"	channel
"TV-DigitalTerr_ch68-sid17-onid29-tsid514"	channel / ... additional parameters
"TV-AnalogCable_ch95"	channel
"TV-DigitalCable_ch95"	channel
"TV-DigitalSat-satHotbird -fr11766-polV-sr27500-onid318 -tsid5200-sid3401-vpid512-apid650"	Satellite / Frequency / ... additional parameters
"TV-RadioFM_freq108500"	frequency (kilohertz)
"TV-Svideo"
"TV-Comp"
"TV-RGB"
"TV-Capture_Creative WebCam NX Ultra"	hardware device name

To search channels

"TV-AnalogAnt_Search-30-60"
searches all the Aerial AnalogTV channels from 30 to 60

"TV-DigitalTerr_Search-30-60"
searches all the digital terrestrial TV channels from 30 to 60

"TV-RadioFM_Search-88500-105000-step500"
searches all the FM-Radio stations from 88500 KHz to 105000 KHz in 500 KHz steps

"TV-Capture_Search"
searches all the capture devices installed in the system

"TV-DigitalSat_Search-fr10723-polH-sr29900"
searches all the channels on the frequency 10723 Mhz on satellite Hotbird, with horizontal polarization and 29900 Khz as SymbolRate

Found channels and device names will be added in the FreeTW index after the actually selected channel.

If you write only "_Search", without parameters, then FreeTW searches all the channels as in the following examples:

- "TV-AnalogAnt_Search" searches all the Aerial AnalogTV channels from 1 to 69
- "TV-DigitalTerr_Search" searches all the digital terrestrial TV channels from 1 to 69
- "TV-RadioFM_Search" searches all the FM-Radio stations from 88 to 108 MHz
- "TV-DigitalSat_Search-satHotbird" searches all the channels on the satellite HotBird

Hardware for television, radio and satellite

There is a large amount of radio and TV tuners, capture devices, USB cameras and audio-video inputs of different kind.

Generally, we don't suggest to use PCI boards, the USB versions are more comfortable, cheaper and connectable to notebooks too.

Another advantage using USB devices is that simply disconnecting them lead to disabling their software drivers so it's easier to test different models, compare each other and even to share the same device on different computers.

FreeTW has been designed to reliably work with any kind of hardware and this is an ambitious target non so easy to be reached, so we are testing a lot of devices from different providers.

At this stage we are heavily testing with the devices that present some problems so the informations into the following pages are to be intended as a work in progress and even not complete.

Hauppauge "WinTV-HVR-900"

Analog and Digital terrestrial Television



By now this is the model suggested by the FreeTW team

Digital terrestrial

- sensitivity optimal
- tuning time optimal (less than one second)
- search fast (50 channels in one minute and a bit more)
- indications good ("Strength" and "Quality" working and reliable)

TV analogue

- sensitivity optimal
- tuning time optimal (half of a second)
- search fast (50 channels in less than one minute)
- indications medium (present/missing signal)

Auxiliary inputs

- Composite OK
- SVideo OK

Working with FreeTW

- perfect 100%

Quality and price

- very well working
- medium priced (about 50 Euro on eBay)

Drivers

Suitable drivers, and also the drivers for all the other devices, can be downloaded from :
<http://www.freetw.net/downloads/DeviceDrivers.zip> (only 10 mega bytes)

Notes

It is advisable to install only the drivers, that are well engineered and don't ask to restart the computer. The application in bundle is instead very heavy and we suggest to DO NOT install it.

Technisat "Skystar USB 2"

TV da satellite



Questo e' il modello consigliato dal team di FreeTW per la TV da satellite.

TV satellitare

- sensibilità ottima
- tempo sintonia ottimo (mezzo secondo)
- tempo avviamento veloce (pochi secondi) (accade solo una volta, quando si avvia il PC)
- indicazioni medie (quality da 0 a 100% ma strength da 0 a 32000)

Funzionamento con FreeTW

- ottimo

Qualita' e prezzo

- funziona veramente bene
- costo medio (circa 70 euro su eBay)

Drivers

Suitable drivers, and also the drivers for all the other devices, can be downloaded from :
<http://www.freetw.net/downloads/DeviceDrivers.zip> (only 10 mega bytes)

Le applicazioni contenute nei CD non servono, bastano i drivers che sono molto ben fatti e non richiedono il riavvio del computer. Si devono sempre installare i drivers di tipo BDA

I drivers del CD allegato "Versione 4.4.1.0" funzionano bene con un solo satellite ma contengono un errore che impedisce di cambiare satellite.

Invece i drivers del 24_09_2008 "Versione 4.5.0.0" funzionano quasi perfettamente. (vedere note)

Per cercare drivers piu' recenti andare sul sito del costruttore <http://www.technisat.com> gli stessi drivers sono adatti per tutti i dispositivi da satellite (USB e PCI) questa e' una grande comodita' e anche un segno di buona progettazione del software. (nessun pericolo di dimenticare correzioni su alcuni modelli)

Note

Con questo dispositivo per evitare che si verifichi un crash dopo il ripristino dalla sospensione e' essenziale usare Gestione periferiche (DeviceManager) e disabilitare la proprieta' "Consenti al computer di spegnere la periferica..." su tutti gli HUB usb (vedere nelle ultime pagine di questo documento la spiegazione particolareggiata)

Hauppauge "Nova-S-USB2"

TV da satellite



Abbastanza valido

TV satellitare

- sensibilità ottima
- tempo sintonia ottimo (mezzo secondo)
- tempo avviamento lento (dodici secondi) (accade solo una volta, quando si avvia il PC)
- indicazioni medie (strength da 0 a 100% ma quality sempre al 100%)

Funzionamento con FreeTW

- ottimo

Qualita' e prezzo

- funzionano molto bene
- costo medio (circa 60 euro su eBay)

Drivers

Suitable drivers, and also the drivers for all the other devices, can be downloaded from : <http://www.freetw.net/downloads/DeviceDrivers.zip> (only 10 mega bytes)

E' bene installare solo i driver, che sono ben fatti ma che, purtroppo richiedono di riavviare il computer.

Sono stati provati drivers del CD allegato "WinTV6 CD 4.4.exe", e i drivers dal siti Hauppauge "WinTV6 CD 4.6b.exe" e "WinTV7 CD 1.0.EXE", appaiono funzionare tutti nello stesso modo.

Notes

Tutti i drivers provati su alcuni canali di Astra provocano un errore di sistema (nella NTDLL) che non e' recuperabile in alcun modo e che provoca la chiusura di FreeTW.

Il programma WinTV di Hauppauge in presenza di questi errori non si comporta meglio di FreeTW, anzi in due occasioni ha provocato lo schermo blu di sistema e addirittura il danneggiamento di alcuni settori dell' hard-disk e la perdita di una ventina di files in settori "orfani" (cosa che FreeTW non ha mai fatto)

Abbiamo scritto a "Hauppauge" e speriamo che si diano da fare.. Comunque questo difetto non e' molto grave, accade su pochissimi dei 2700 canali di Hotbird e Astra e non accade su nessun canale importante,

Per ora si consiglia di evitare le seguenti frequenze seguenti: "11817-polV-satAstra" / "11895-polV-satAstra" / "12012-polV-satAstra" e "12207-polV-satAstra"

Shenzen “DM04+”

TV da satellite



Questo e' il modello consigliato dal team di FreeTW se si usa un solo satellite.

TV satellitare

- sensibilità buona
- tempo sintonia ottimo (mezzo secondo)
- indicazioni medie (strength da 0 a 100% ma quality sempre a 0)

Funzionamento con FreeTW

- ottimo

Qualita' e prezzo

- costo basso (circa 30 euro su eBay)

Drivers

Suitable drivers, and also the drivers for all the other devices, can be downloaded from :
<http://www.freetw.net/downloads/DeviceDrivers.zip> (only 10 mega bytes)

E' bene installare solo i driver, che sono ben fatti.

I drivers da installare sono: “LG_DriverSetup_20081101_x86” e vanno scaricati da internet. Questi drivers funzionano bene ma non si riesce a cambiare satellite con i comandi “DiSEqC e la indicazione “Quality” segna sempre 0%.

Con i drivers del mini CD allegato “MiniCD - DM04+ 5.1A [LG]” la indicazione “Quality” funziona bene ma non si riesce a cambiare canale.

Analog and Digital terrestrial Television



SUGGESTED

Digital terrestrial

- sensitivity medium
- tuning time optimal (about half of a second)
- search fast (50 channels in about one minute)
- indications good ("Strength" and "Quality" working and reliable)

TV analogue

- sensitivity medium
- tuning time good (about half of a second)
- search fast (50 channels in less than one minute)
- indications medium (present/missing signal)

Auxiliary inputs

- Composite OK
- SVideo OK

Working with FreeTW

- all is OK

Quality and price

- working well
- medium price (45 Euro + shipping costs on eBay)

Drivers

Suitable drivers, and also the drivers for all the other devices, can be downloaded from : <http://www.freetw.net/downloads/DeviceDrivers.zip> (only 10 mega bytes)

Install only the drivers because the applications in bundle are very invasive and hardly working without presenting a lot of problems and misbehaviours :

- * errors while installing and a very slow installation lasting about half an hour
- * a lot of icons thrown on the desktop without asking anything to the user
- * complete failure of the Digital TV feature
- * errors while uninstalling too
- * after uninstalling, a lot of files and folders are still unerased and Registry entries too

Moreover the Pinnacle application setup, for some absurd internal reason, created a new Windows user named "ASP.net", locked, with password, without asking anything and without any notification to the user.

This unbelievable behaviour is very deplorable because the "User management" area is a very sensitive and personal one. If the Pinnacle programmers made this mess into a very visible area, could you imagine what they did into the deep and obscure recesses of your system ?

Avermedia "AVerTV Hybrid Super 007"

Analog and Digital terrestrial Television

DISCRETELY VALID



Digital terrestrial

- sensitivity optimal (finds a lot of channels and all of them are working very well)
- tuning time optimal (less than one second)
- search medium (50 channels in 90 seconds)
- indications good ("Strength" and "Quality" working 100%)

TV analogue

- sensitivity optimal
- tuning time optimal (half of a second)
- search fast (50 channels in less than one minute)
- indications medium (present/missing signal)

Radio FM

- sensitivity optimal
- tuning time optimal (0,2 seconds)
- search fast (200 channels spaced of 100KHz in fifty seconds)
- indications medium (present/missing signal)

Auxiliary inputs

- Composite OK
- SVideo OK

Working with FreeTW

- perfect 100%

Quality and price

- very well working
- medium-high price (about 50 - 100 Euro on eBay)

Drivers

Suitable drivers, and also the drivers for all the other devices, can be downloaded from : <http://www.freetw.net/downloads/DeviceDrivers.zip> (only 10 mega bytes)

we suggest to use USB devices instead of PCI boards because they are more comfortable, cheaper, could be disconnected and tested easily and you can use them with notebooks too.

Twinhan

DTV Hurricane USB

AD-TU500 and AD-TU501

Analog and Digital terrestrial Television



POOR SENSITIVITY BUT CHEAP

Digital terrestrial

- sensitivity medium (some problems with weak channels)
- tuning time medium (one second)
- search slow (50 channels in about three minutes)
- indications good ("Strength" and "Quality" working 100%)

TV analogue

- sensitivity poor (with strong signals all is working well, otherwise you see lines and dots)
- tuning time optimal (less than one second)
- search fast (80 channels in 30 seconds)
- indications medium (present/missing signal)

Auxiliary inputs

- Composite OK
- SVideo OK

Working with FreeTW

- all is OK, except for some very rare errors due to the software drivers
- sometimes the drivers (very rarely) lead to fatal errors that could sometimes restart Windows

Quality and price

- working decently but they are not so sensible
- very cheap (8 Euro + shipping costs on eBay)

Drivers

Suitable drivers, and also the drivers for all the other devices, can be downloaded from :
<http://www.freetw.net/downloads/DeviceDrivers.zip> (only 10 mega bytes)

- the driver's errors are not experienced while watching the same channel in TV

- the drivers present into the bundled CD were a little bit old (2005-2007) and working poorly. Using the drivers downloaded from Internet (version 3.4 of 2008) all is working in a smoother and better way.

Terratec "Cinergy RC-HD"

Analog
and Digital terrestrial
Television



NOT SUGGESTED

Digital terrestrial

- sensitivity medium
- tuning time medium (about one second)
- search slow (50 channels in two minutes and half)
- indications good ("Strength" and "Quality" working with values from 0 to 100)

TV analogue

- sensitivity medium
- tuning time medium (about one second)
- search fast (50 channels in less than one minute)
- indications medium (present/missing signal)

Auxiliary inputs

- Composite OK
- SVideo OK

Working with FreeTW

- mostly working well, but sometimes we experienced crashes

Quality and price

- working with some problems
- high price (50-80 Euro + shipping costs on eBay)

Drivers

Suitable drivers, and also the drivers for all the other devices, can be downloaded from :
<http://www.freetw.net/downloads/DeviceDrivers.zip> (only 10 mega bytes)

Install only the drivers.

With the drivers on the bundled CD some analogue TV channels present the audio with a strong background noise.

Downloading from the Web the drivers "Cinergy Hybrid XE (30-09-2008)" this defect disappeared but the following problems are still present:

- sometimes the video of the analogue TV becomes all black and you have to reset the computer to have it working again

- if you continue to test changing parameters when the video is black (maybe changing filters, etc..) finally the PC crashes and shuts down.

Terratec "Cinergy S USB"

TV da satellite



NOT SUGGESTED

TV satellitare

- sensibilità media
- tempo sintonia eterno (a volte fino a dieci secondi)
- indicazioni ottime (Strength e Quality da 0% a 100% ben funzionanti)

Funzionamento con FreeTW

- funziona con un solo satellite ed e' lentissima a cambiare canale

Qualita' e prezzo

- costo alto (circa 70 euro su eBay)

Aspetto estetico

- e' sicuramente uno dei dispositivi piu' belli tra quelli provati, bianco con i piedini in gomma arancione, il telecomando poi e' bellissimo.
- avremmo preferito un oggetto brutto ma ben funzionante.

note:

Installare i drivers BDA "Cinergy_S_USB_Drv_Vista_XP_1.4.2.4.exe" scaricandoli da internet altrimenti non sintonizza i canali.

Si consiglia di installare solo i driver, viste le esperienze con la "Cinergy RC-HD" non abbiamo avuto il coraggio di provare il programma allegato al CD.

L'hardware appare approssimativo, ci sono due fogli di rame aggiunti come rattoppo per evitare disturbi ma non bastano, se si avvicina una mano alla parte superiore il sintonizzatore si sgancia dal canale e poi ci mette dieci secondi con la "Quality" che rimbalza varie volte tra zero e 80% prima di riagganciare il canale. Dopo un po' di lavoro con il cacciavite si e' migliorato il contatto con le schermature, avvicinando la mano non perde piu' il canale ma su alcuni canali il tempo di sintonizzazione rimane sempre molto lungo e, a volte, si notano ancora oscillazioni sulla indicazione "Quality".

I drivers sono di progettazione "ruspante" sovente mandano il PC in crash e lo spengono. Per qualche strano motivo viene sempre usato l'oscillatore locale alto per cui i canali delle banda bassa vengono traslati in alto di 850 Mhz (ad esempio 11296-LIBERA diventa 12130-M2) in pratica il segnale a 22 kHz viene sempre emesso e cosi' lo LNB resta sempre sull'oscillatore alto. (prove fatte con drivers "1.4.1.1", "1.4.2.3" e "1.4.2.4")

Dopo aver installato i driver di questo dispositivo i driver dei dispositivi concorrenti non vanno piu' e si deve reinstallarli. La stessa cosa accade con i driver del dispositivo "Cinergy RC-HD" per la TV analogica e digitale terrestre per cui questa "interferenza" sembra proprio un comportamento voluto.

Asus "MyCinema p7131h"

Preliminary data for the models:

REALLY UNSUGGESTED

Digital terrestrial

- sensitivity good
- tuning time optimal (about half of a second)
- search fast (50 channels in 66 seconds)
- indications medium ("Strength" and "Quality" partially working, Strength sometimes reads 80)

TV analogue

- sensitivity medium
- tuning time medium (about one second)
- search medium (50 channels in 70 seconds)
- indications medium (signal 0 / 1 / 2 / 3 / 4 / 5)

Radio FM

- sensitivity low (few channels very disturbed)
- tuning time optimal (0,2 seconds)
- search slow (200 channels spaced of 100KHz in 110 seconds)
- indications good (S0 - S5)

Auxiliary inputs

- Composite OK
- SVideo OK

Working with FreeTW

- all is OK

Quality and price

- uncomfortable because of the two separated connectors
- medium price (50 Euro + shipping costs on eBay)

note:

install only the drivers because the applications in bundle (MyCinema, etc... are poorly engineered, create stability problems to Windows and deny the working of other TV softwares)

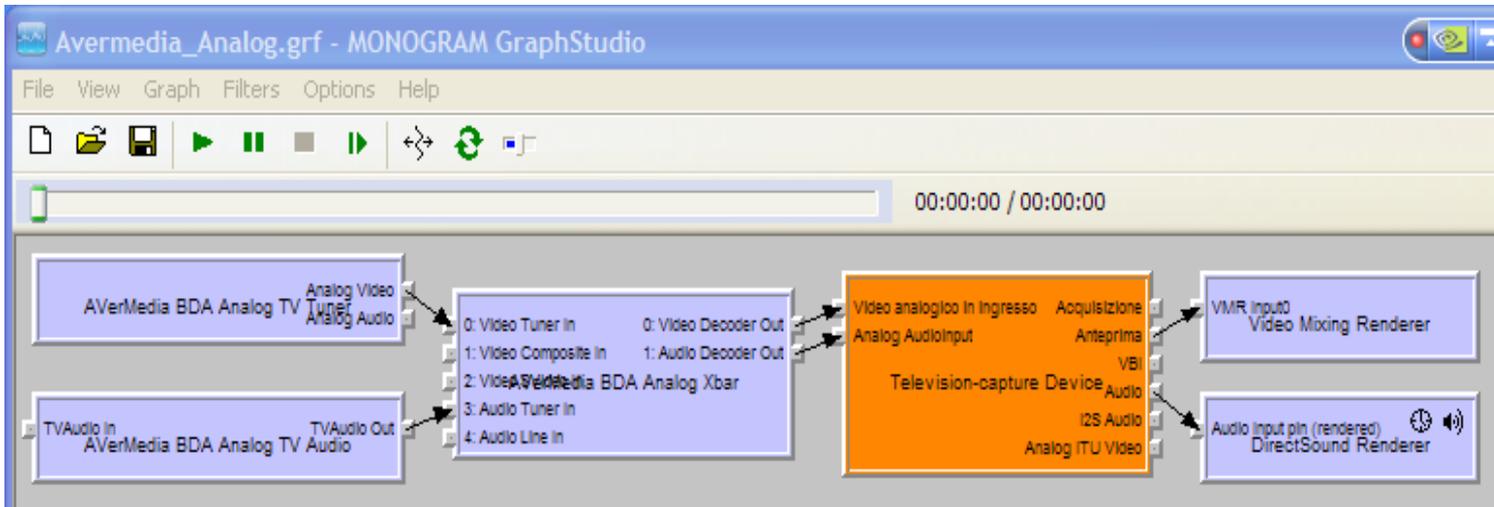
Our tests were accomplished with the drivers 13.3.1.7 of 31 march 2006 that seem very similar to those present on the bundled CD.

This board was designed for the USA market, to be used with the cable analogue TV. Then, if you are not resident in the USA, it is uncomfortable because of the two input connectors for three antennas (Radio FM / Analogue TV / Digital Terrestrial)

The virtual television set

The virtual television sets are made with "little blocks" (tuner / filters / display) in a fashion similar to the classical TV sets. The full scheme of a Virtual TV is named "graph" .

To explore the internal structure of a Virtual TV you can use the application GraphEdit included into the distribution of FreeTW. There are a lot of versions of this program in Internet, some of them are made by Microsoft, some other are by "Monogram". However it is enough to rename them to "GraphEdit.exe" and put them into the "FreeTW \ Extra \ GraphEdit" folder to allow FreeTW to recall them.



This one is a simple analogue TV receiver, all the little blocks are DirectShow components (standard Microsoft) and are named "filters" (DirectShow Filters)

The input filters

All the filters on the left side, light blue, before of the orange one, are part of the hardware tuner you bought to watch TV. Please note that they have a firm name (in this example "Avermedia") .

These are very specific filters, they only work with Avermedia tuners and probably only with the right drivers when the tuner is connected to the PC. If you change them with other blocks all will become not working.

The output filters

All the filters on the right side, light blue, after the orange one, are part of the computer output devices (video board, monitor, audio board and speakers)

These filters are specific, you cannot substitute them with others and there is no use to change them because they work and usually have no problems of any kind.

The central zone filters

In the central zone there are the decoding and signal management filters. In this simple example there is one only filter, orange coloured, but you could find four or even five of them in some cases.

The filters in this group could be changed with other similar to them if they realize the same function. There are different providers, different versions, different designs and probably there are hundredth of filters in this group.

Because using different filters you could see "really every kind of colours" , FreeTW allows the "Expert Users" to substitute these filters with the user preferred ones.

The TV Options

To access the "TV Options" panel you have to hit "Edit", "Options" and "TV"

FreeTW - Opzioni per televisione e satellite

Dispositivi per la televisione analogica Auto	Filtri per TV analogica Standard video filter User video filter FFDShow raw video filter Standard audio filter User audio filter FFDShow audio processor		
Dispositivi per la televisione digitale terrestre Auto			
Dispositivi per la TV da satellite Auto			
Opzioni per ricezione da satellite 			
Nazione Italy	Codice nazione 39	Ripristina le impostazioni	Applica
		Salva il report DVB	OK

In this panel only the Country Code should be selected, the three combobox "Devices" should normally be set as "Auto" and no filter should be selected. Only if you would use a particular filter, for example an additional audio equalizer, specific filters have to be chosen.

When no filter has been selected, the predefined DirectShow (Microsoft) filter is connected (or the best filter the system is able to find) .

If into the system there aren't any previous installations of "PowerDVD", "NeroDVD" or different hardware TV tuner drivers, after installing the drivers for your hardware TV Tuner, all should be working well and you should be able to watch and listen all the TV channels.

How to select the filters for the analogue and digital TV

>>> PAGINA IN COMPOSIZIONE <<<

Dato il numero elevatissimo di filtri e di versioni differenti degli stessi, spesso succede che venga usata una versione non del tutto adatta o una versione molto vecchia contenente difetti.

Per questo motivo FreeTW mette a disposizione, con questo pannello, la possibilita' di imporre i "Filtri standard" e anche di scegliere per nome gli "User filter"

Anche se FFDSHOW e' un po' particolare e, come vedremo nelle pagine seguenti, abbastanza portato a provocare errori, FreeTW lo ha scelto come default perche' e' molto potente e perche' contiene un gran numero di filtri utili e facilmente modificabili dall'utente.

Se FFDSHOW non e' gradito basta scrivere i nomi di altri filtri (compatibili con la funzione che devono eseguire) e questi verranno utilizzati nel grafo.



I filtri audio/video installati nel sistema si chiamano "xxxxxxx.AX" e possono essere esplorati molto comodamente con il programma "Installed Codec.exe" che troverete nella cartella "FreeTW / Extra / InstalledCodec"

Per consigli su quali filtri utilizzare consultare anche le schede dei dispositivi dai noi provati, nelle pagine precedenti di questo documento.

Analysis of a defect with the Digital Terrestrial TV



senza "DIGITAL - Standard video filter"



con "DIGITAL - Standard video filter"

Queste due immagini mostrano un canale digitale senza e con lo "Standard video filter"

Questo particolare caso, verificatosi con una scheda "AVerTV Hybrid Super 007", e' dovuto alla presenza di una vecchia installazione di "CyberLink \ PowerDVD" (del 2006)

Per risolvere questo difetto si sarebbe dovuto disinstallare il programma "CyberLink \ PowerDVD" , operazione che dovrebbe rimuovere dal sistema il filtro difettoso.

Spesso pero' i filtri di DirectShow non vengono rimossi automaticamente quando si disinstallano i programmi e quindi si sarebbe anche dovuto procedere manualmente a "de-registrare" il filtro. Inoltre gli utenti non sono mai contenti di dover disinstallare i loro programmi per far andare bene FreeTW

Per questi motivi FreeTW mette a disposizione gli "Standard filter", selezionando "DIGITAL - Standard video filter" si forza l'uso di un filtro predefinito al posto del vecchio filtro di CyberLink e tutto va a posto.

Si potrebbe pensare di tenere sempre abilitati tutti gli "Standard filter" ma ci sono casi in cui le loro funzioni sono gia' eseguite in hardware e in questi casi (Hauppauge per esempio) , si possono provocare difetti come:

- perdite di sincronismo e "scuotimenti a blocchi" nella parte inferiore della immagine
- maggiore uso di CPU e quindi piu' rumore dovuto alla ventola di raffreddamento del PC
- brevi mancanze sull'audio dovute a sovraccarichi del sistema

FFDShow icons not appearing

Quando si abilitano gli "User audio filter" e "User video filter" e si apre un canale di TV digitale o analogica dovrebbero apparire le icone di FFDShow audio e video come si vede in questa immagine.

Fare doppio click sulle icone colorate per aprire FFDShow e regolare i suoi parametri.



Pero' FFDShow usa un meccanismo molto complesso e contorto per decidere se rendersi disponibile o meno, per cui spesso, anche se invocato espressamente, non si apre.

Se una o tutte e due le icone di FFDShow si ostinassero a non apparire dovremo andare in "START / Programmi / FFDShow / Audio decoder configuration" e "Video decoder configuration" e abilitare la opzione "Show dialog when an unknown application tries to load ffdshow" poi fare "Apply" e "OK"

La prossima volta che si apre FreeTW dovrebbe apparire una finestra di FFDShow che chiede se si vuole usarlo con FreeTW, e dovremo selezionare "Usalo sempre" e "Non chiedermelo piu"

Dato che esistono moltissime versioni di FFDShow, tutte diverse, in alcuni casi si dovra' procedere in modo diverso per riuscire a convincerlo a "lasciarsi usare" e succede anche che provochi dei crash, quando si cerca di usarlo la prima volta, e che coinvolga anche FreeTW nei suoi errori.

Se, dopo alcune prove, non si riesce a usare FFDShow nel modo dovuto allora e' bene disinstallarlo e installarne una versione differente.

Missing audio in some channels of digital TV

Un difetto molto frequentemente provocato da FFDShow e' la mancanza dell'audio in alcuni canali di TV digitale

Questo difetto puo' capitare anche se non si e' indicato espressamente di usare FFDShow, in quanto non trovando filtri migliori il sistema lo sceglie automaticamente.

Se manca l'audio si deve controllare se e' presente la icona blu "FFa"



In caso positivo, abilitare il tasto "Standard audio filter" della TV digitale oppure disinstallare FFDShow.

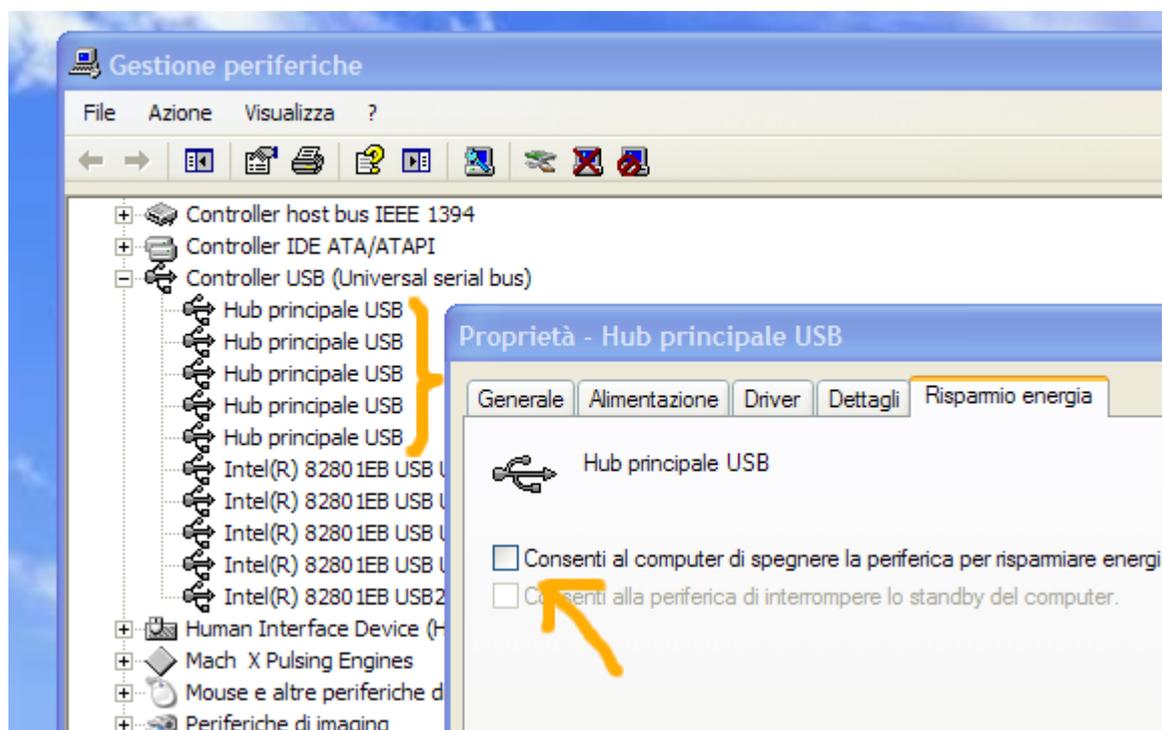
Defects observed using TV tuners

TV no more working after either the suspension or the restarting of the computer

After restarting the PC it could happen that some USB devices are no more working or are only partially working (for instance only the analogue TV works while the Digital Terrestrial is not functioning) .

In these cases you should leave the USB devices always powered applying the following procedure:

Control Panel
System
Hardware
Device Manager



*Please do a double click, for each of them, on every "USB Root Hub" .
select the "Power Management" tab
disable the checkbox "Allow the computer to turn off this device to save power."*

At last hit "Apply" and then "OK"