

# Intelligent TV for the **German-speaking TV Market**

tured by TC Unterhaltung- output. selektronik AG is an Android-based DVB-S2 satellite nated by the satellite IF inreceiver that is highlighted put and its looped-through by two special functions: on output. But here you'll also the one hand there's an Ad find an HDMI port, an RJ45 Blocker that can recognize network interface, a coaxial commercial breaks while on digital audio output as well the other hand there's a Per- as a jack for the external sonal TV function. Both of power supply. these functions are currently only optimized for German- the included remote control language TV programs.

The box measures just 13 were also quite impressed x 13 x 3 cm (5.1 x 5.1 x 1.2 when we had a look at the inches) and comes in a sleek technical data sheets: The black housing. There are no Fernsehfee is powered by ceiver's serenity, but, unfor- 4GB Nand Flash. For the op- with your local router. tunately, the user also has to do without a front-panel status display.

The only button on the

The Fernsehfee manufac- well as a CVBS/stereo audio

The rear panel is domi-

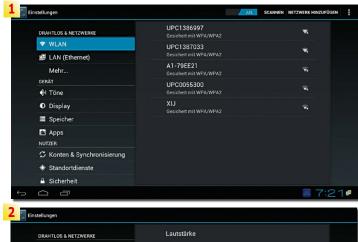
Just like the receiver itself, is also just as elegant. We



erating system the manufacturer chose Android 4.0.4. We were also pleased to see lands directly in the Main that an appropriate WiFi chip menu and if you've ever held buttons on the front panel a 1GHz Cortex CPU, 1 GB was not left out either; it lets an Android Smartphone in that would disturb the re- DDR2 memory as well as the Fernsehfee communicate your hands, you'll feel right

After taking care of the initial installation, the user at home. The user is thus able to enjoy the Android features but is also able to set up the Fernsehfee App so that it loads right after turn-













Logitech K400 wireless keyboard with an integrated trackpad. This makes utilizing the box's functions much easier and quicker compared to the remote control.

After setting up the Fernsehfee to our personal needs, the Fernsehfee App can be started so that we can now enjoy watching TV.

Since the Fernsehfee can provide a very complete TV viewing experience (more on that later in this test report), the manufacturer recommends opening up a free account through their own website (www.fernsehfee. de). This would allow you to store and edit your personal box settings on the provider's server plus you'd be able to utilize a wide variety of features as well as have the ability to remotely access the box. After registering, you merely have to enter your login data in the box and just like that, you're to edit the LOF settings for ready to go.

Even though the Fernsehfee has its own integrated DVB-S2 tuner that at first glance resembles a standard satellite receiver, you should ignore that train of thought; this box is nothing like a standard satellite receiver.

But let's not get ahead of ourselves. Before you can do anything, you have to tell the box what satellites you can receive with your antenna system.

The manufacturer had the presence of mind to preprogram the unit with the six most important European satellites: ASTRA 19.2°, ASTRA 23.5° east, ASTRA 28.2° east, ASTRA 4A 4.9° east, HOTBIRD 13° east, EU-TELSAT 9° east, TURKSAT 42° east.

Unfortunately, though, during our tests we did not find a way to add additional satellites. This limits the installation of the Fernsehfee functions to central Europe

which actually is logical considering that the actual Fernsehfee functions are currently only available for German-language TV chan-

For reception of multiple satellites the manufacturer claims that the DiSEqC protocols 1.0, 1.1, 1.2 and 1.3 are all supported, however, during our tests we were only able to activate DiSEqC

And don't waste your time looking through the menus for a channel scan function; instead the box loads a complete channel list for the six satellites directly from the TC Unterhaltungselektronik AG's servers. The advantage here is that there's always a totally up-to-date channel list available for the user but at the same time it prevents reception of any other satel-

We also didn't find a way individual satellite entries in the Fernsehfee App nor did we find a way to use SCR single cable solutions. If you need these features or if you

- 1. WiFi network settings
- 2. Audio settings
- 3. HDMI video signal resolution
- 4. During the initial installation the size of the picture can be matched to vour TV
- 5. Apps settings for the Fernsehfee App
- 6. Numerous Fernsehfee settings can be synchronized with the manufacturers server
- 7. Synchronization of the settings and data
- 8. Numerous basic Android system settings correspond exactly to Smartphones and Tablets
- 9. Overview of the factoryinstalled Apps
- 10. The File Browser can be used to access local multimedia content
- 11. Music player
- 12. Video player
- 13. Internet browser
- 14. Photo viewer logo
- 15. The Fernsehfee App is the central component of the













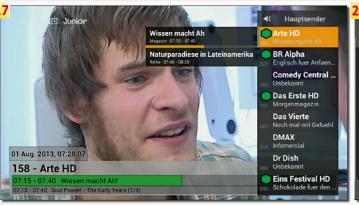








- 16. Fernsehfee App main menu
- 17. Fernsehfee App channel list sorted alphabetically
- 18. Commercials are currently running on Sat 1; thus this channel is marked with a red dot in the channel list
- 19. Three different Fernsehfee EPG modes are available to the user
- 20. Fernsehfee EPG
- 21. Satellite EPG
- 22. TV Pilot EPG
- 23. For legal reasons the Fernsehfee does not come shipped from the factory PVR compatible. This function only activates after downloading a plug-in.
- 24. What to do with commercials? The Fernsehfee App can either mute the audio or switch to another channel.









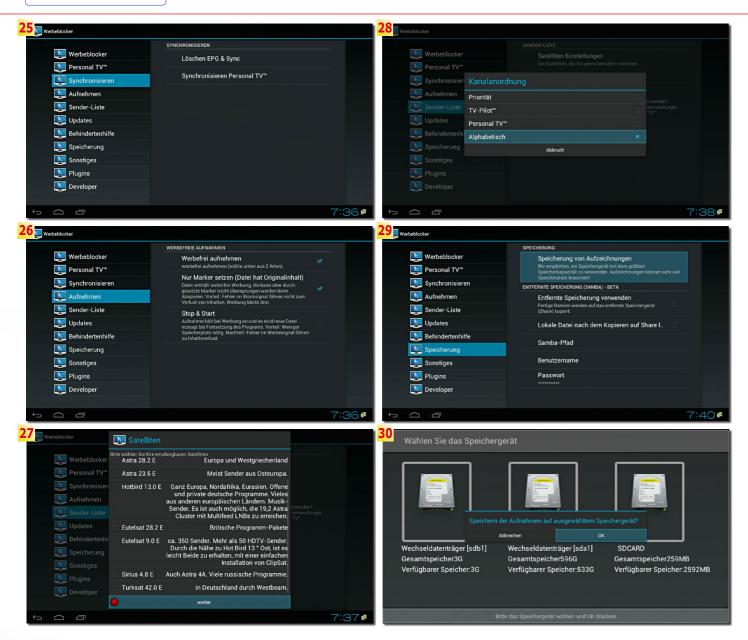




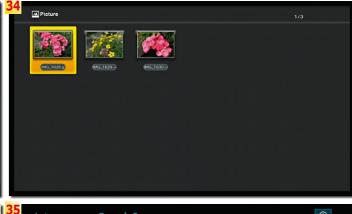




Fernsehfee Fernsehfee















25. If necessary the synchronized data can be deleted and reloaded

26. The Ad Blocker even has influence in the PVR. The user can select how the box handles commercial breaks



- 30. External storage devices can be connected via the USB ports so that they can be used for recordings
- 31. If desired, the Fernsehfee App can be set to automatically start when the box is turned on
- 32. Information on the currently received channel
- 33. Audio, video and pictures can be presented from local storage
- 34. Photo viewer
- 35. A Google account is needed so that all the Android operating system functions can be used
- 36. The Fernsehfee provides easy access for the user to the



want to receive additional satellites, you have to rely on the DVB App that is also preinstalled, but you will lose all of the additional features that make the Fernsehfee interesting in the first place.

that is automatically downloaded from the Internet can be sorted by priority, TV Pilot, Personal TV or alphabetically.

somewhat complicated but in reality there are a number of simple and ideal Fernsehfee features available. Most importantly you should rid yourself of the idea of a rigid channel list since the basic concept of the Fernsehfee whereby the Fernsehfee is to always have the user's would then sort the channels most interesting channels at once again by their ratings. the forefront.

If the channel list is sorted by priority, then those channels that were watched the most on average over the past year will wind up at the top of the list. Sorting by TV Pilot on the other hand The Fernsehfee channel list takes into account the expected ratings of a channel. Using the ratings of previous programs and a number of other parameters, the box calculates the audience rat-At first this may sound ing that a program achieves and sorts the channel list in such a way that those with the highest ratings end up at the top of the list.

> Sorting by Personal TV requires that you've already placed TV channels in groups

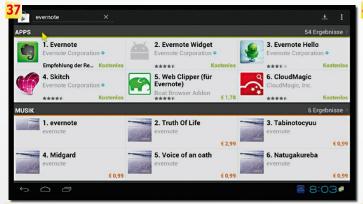
In this way you could, for

- 37. Downloading Apps directly to the Fernsehfee
- 38. Thanks to the support of external input devices, surfing with the Fernsehfee is a lot of fun!
- 39. The Fernsehfee channel list sorted according to our personal interests
- 40. The Fernsehfee channel list sorted according to our personal interests displaying the different categories
- 41. Naturally, subtitles are

#### also supported

- 42. Unfortunately, we saw this message a number of times during our tests overall the Fernsehfee App reacts very slowly at times
- 43. OSD teletext decoder
- 44. Recorder programming can be handled directly from the EPG
- 45. If a channel is available in both SD and HD, the Fernsehfee asks which version should be recorded with every timer entry







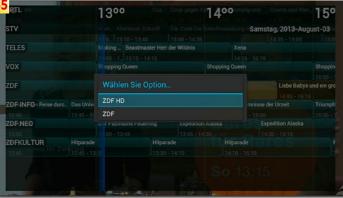












example, display movie or then directly transferred to operational concept; the lon- nels at the same time for sports programming without the Fernsehfee where it is any undesired results from processed with the TV chanother categories.

interests in the smallest channel list is created with detail to the manufactur- all of your desired channels. ers website (such as, ball You can even identify your so that we could finally start satellite and always shows breaks and automatically refavorite actors or directors our tests. to the website.

nels EPG (that is available gave to us. Personal TV can do even for up to three weeks in ad-

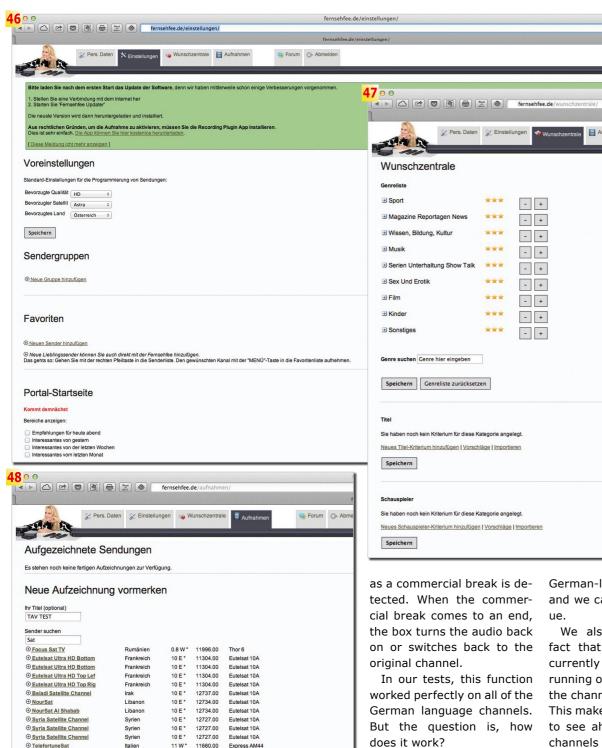
With so many design op-

able in the modes Fernsehfee the day. EPG, TV Pilot and Sat EPG. All of this information is get used to the Fernsehfee's gramming from nine chan- to another channel as soon

ger we played around with it, several weeks in advance in the more fun and pleasure it a grid format. The TV Pilot EPG shows only those favor-We especially liked the in- ite channels and provides an more: you can provide your vance) so that a customized tegrated EPG that was avail- overview of the highlights of

The Fernsehfee's best While the Sat EPG merely fo- feature is the integrated Ad games, comedy series, polit- tions, we couldn't wait to see cuses on the data provided Blocker that allows the box ical dramas, cartoons, etc.). the first picture on the TV by the broadcasters on the to recognize commercial just one channel, the Fern- act to it. The box can be set It took us no time at all to sehfee EPG displays the pro- to mute the audio or switch





does it work?

It's actually surprisingly simple: the employees at TC Unterhaltungselektronik AG monitor all the channels manually and then submit the commercial breaks to the Fernsehfee customers.

Even though this method doesn't sound all that technologically advanced, the reliability of the system that we demonstrated during our tests ultimately proves the manufacturer right.

According to official data, the Fernsehfee Ad Blocker covers up to 99% of all the German-language channels, and we can confirm this val-

We also really liked the fact that any channel that currently has commercials running on it are identified in the channel list by a red dot. This makes it extremely easy to see ahead of time which channels to surf through and which ones to avoid.

The Fernsehfee is not PVR compatible as shipped from the factory, but have no fear, you can simply download a plug-in from the manufacturers website to turn the Fernsehfee into a recorder.

Thanks to the available USB ports and the SD card reader there is nothing to stop you from connecting an external storage device.

We were able to record one channel at a time in our tests without any problems; multiple simultaneous recordings

however were unfortunately not possible.

There's a Timeshift function that lets you comfortably pause a program and then continue watching it when you're ready without missing a thing.

Naturally, the integrated Ad Blocker also plays a role in the PVR such that any commercial breaks that occur during a recording a marked so that later on they can be removed on a PC before the recording is burned to a DVD.

You can also just let the Fernsehfee store the individual segments of a program in its own file; in this way the commercials aren't even recorded. And, of course, there's also the ability to set up recordings and if desired even a playback function directly from the EPG.

We found it ideal that the box even asks ahead of time if the program should be recorded in SD or HD. This would only work, though, if the satellite in question carries both the SD and HD version of a channel.

Anyone who burns DVDs on a regular basis is almost certainly aware that HD recordings can only be burned onto Blu-Ray discs.

And it's exactly these users that will appreciate that the Fernsehfee manufacturer included this selection capability.

All in all, the everyday use of the Fernsehfee was quite enjoyable; the manufacturer was very diligent in including all the basic features of a satellite receiver as well as ideal features like the Ad Blocker and Personal TV.

The Fernsehfee App worked perfectly during our tests. TC Unterhaltungselektronik AG deserves our congratulations for developing such an excellent product.

And last but not least we don't want to forget to mention that besides the Fernsehfee App, all the other functions of the Android operating system can be used without any problems, whether it's the video player that worked correctly with all of the various video formats we used during our tests, the audio player that can play back a wide variety of different formats, the photo viewer or the web browser that is all the more fun to use thanks to the keyboard and mouse support.

In addition, the user has access to the Google Play Store with its vast assortment of Apps, nearly all of which can be used with the Fernsehfee and its Android 4.0.4 operating system giving the box almost unlimited possibilities.

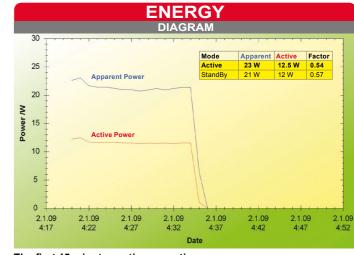




TC Unterhaltungselektronik AG, with the Fernsehfee, has introduced a satellite receiver whose functions have been matched to the primary requirements of the user. The box that is currently compatible only with the German-speaking market is extraordinarily easy to use and at the same time comes with especially innovative features such as the integrated Ad Blocker and the Personal TV function. In our tests these features proved themselves to be very reliable and functioned without any problems. Thanks to the Android operating system running in the background, the Fernsehfee also offers an outstanding user experience in multimedia, Internet and Apps. The entire Google Play Store with all of its many different Apps can also be accessed.

Because of its exceptionally simplified operation, there are relatively few settings capabilities for more experienced users. The model that we tested unfortunately did not support the reception of encrypted channels although the manufacturer is working on a version with a CI slot.





The first 15 minutes active operation;

## 48. Recorder programming via Internet

46. Individual online portal at www.fernsehfee.de

Ende 3 + August + 2013 + 19 + 15 +

Vorgemerkte Aufzeichnungen

⊕ RTS Sat ⊕ Coptic Sat

⊕ EURSAT

⊕ Eutelsat 3D **⊕ LOMBARDIA SAT** 

METRO SAT

**⊕ METRO SAT** 

⊕ NOELLO SA ⊕ NOELLO SA

⊕ LUNA SAT SKY 88

12.5 W \* 11428.00 Eutelsat 12 West

11470.00 Hot Bird 13B

11604.00 Hot Bird 13B

11470.00 Hot Bird 13B 11623 00 Hot Bird 134

12322.00 Hot Bird 13B

11470.00 Hot Bird 13B

13 E \* 12558.00 Hot Bird 13A

13 E °

13 E \*

13 E °

47. The settings of the Fernsehfee features can also be changed