

FUJITSU- SIEMENS LIFEBOOK E-6560



The silvery grey plastic case of the Fujitsu-Siemens E-6560 makes a good impression, even compared with the magnesium cases of some of the other notebooks tested here. Unfortunately with just two rubber feet it doesn't have a good grip on smooth surfaces and in normal use we found it constantly slides back and forth. The keyboard is relatively soft but offers a comparatively deep key depression. Despite the standard 'Windows' keys and a cursor block which is not offset, the Lifebook has an amazingly wide space bar although this is at the

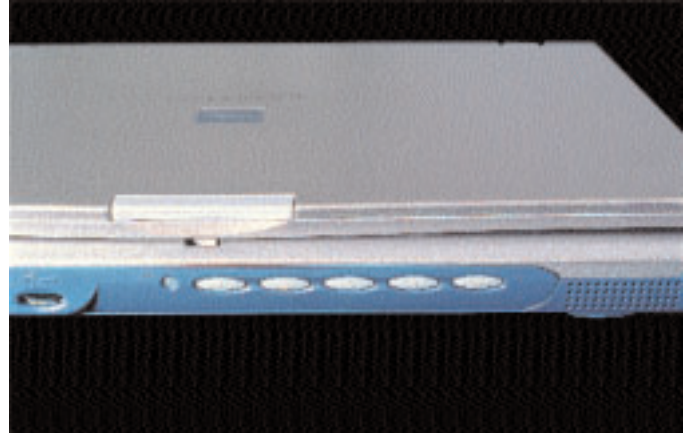
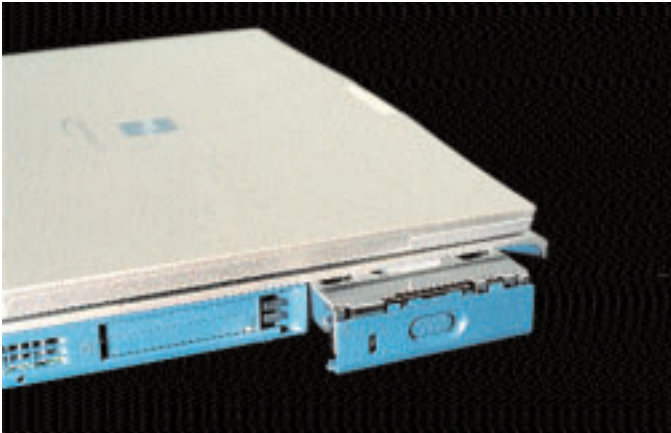
expense of correspondingly narrower [Ctrl], [Alt] and cursor keys. Apart from the Wortmann Terra Aura the E-6560 is the only device with just two mouse keys. In the way of mouse control Fujitsu-Siemens provide a touchpad.

Hard disk swap

Together with sound connectors and a loudspeaker control on the front of the unit, there are five special keys which unfortunately do not function under Linux. The developers have dreamt up a particularly crafty solution for the hard disk on our test model, however, which is that the disk sits in a 'swap frame' which can be taken out without a screwdriver. Another highlight is that the eyelet for the notebook lock is also part of the swap frame and thereby prevents theft of the hard disk. Sadly the swap frame is not a standard accessory but an extra. Not only that but it's described even by Fujitsu-Siemens themselves as 'very expensive'.

We received the test device with a 24x CD-ROM drive but without the disk drive in the external drive slot, something which will be standard on the model you buy. The ejection mechanism of the CD-ROM is not ideal as a lever has to be folded out and then pressed in. But it is a very smooth mechanism although the protruding lever will keep on catching on things – clearly some room for improvement.

The positioning of the infrared port has been taken well care of by placing it on the left front side. So the mobile used in the test was easy to get up and running transferring data. We were unable to investigate the IR port for a mouse on the lower right edge of the display because we had no suitable device.



Linux Installation

After starting YaST2 it was indeed possible to see a graphical user interface but the image was very badly distorted and, in fact, unrecognisable. Obviously there are problems here with the activation. The way out was to connect an external monitor, switch once to external display and then remove the monitor after returning to internal. The image is then, as usual for TFT screens, pin sharp.

The rest of the installation including XFree86 was uneventful. But care is recommended after this step – although the integrated sound card is correctly recognised as ESS-1978 Maestro 2E (unlike the Compaq Armada which has the same chip), YaST2 will then crash along with the kernel if you use automatic installation. So you shouldn't even try this but load the *maestro* module manually later on.

Modem and Infrared

With this notebook we found another Lucent WinModem although, as with the Acer TravelMate, this was activated without any problems. The same applies to the infrared port – after a few minutes we were able to surf the Internet using the test mobile phone connection.

The Lifebook E-6560 was the only device in the test with an LCD status display. It provides the most important informations on the laptop such as battery level, hard disk and CardBus activity. However, this is hidden when the display is closed so there's is no way of telling whether the device has gone into sleep mode or is switched off. The CardBus hardware is a Ricoh RL 5c476 controller which is the same as in the Sony Vaio and Wortmann Terra Aura devices. As it takes a good 20 seconds for initialisation of the Type-III PCMCIA hard disk, this is also one of the more leisurely types of Cardbus chipset on test here.

Hot problem

The cooling deserves limited praise. As in the Toshiba notebooks there is a side air vent so the

device can theoretically be propped on the lap without causing heatstroke. But this is not really a ideal solution because the underside, at up to 45 degrees, is almost as hot as the airflow. Even higher temperatures reign in the CardBus slots protected by the spring shutters, and at almost 50 degrees they are heated up a great deal by the ventilation slot located in their immediate vicinity. Here too we can well envisage PCMCIA cards ceasing to work on particularly hot Summer days.

As with the Compaq Armada the Lifebook E-6560 has problems with the sleep mode under X which always ends in a total crash. For this reason, you should first deselect in BIOS the option *Lid Closure Suspend*, which can be found in the *Power* menu under *Advanced Features*. But from the text console itself the Lifebook woke up again with no problem with keyboard, mouse and X remaining intact and working.

Conclusion

The Lifebook E-6560 offers much when used under Linux. It can be bought in two versions – either with the Lucent WinModem tested here or with an Ethernet port which, according to a statement from Fujitsu-Siemens, runs under Linux without any problems. Sadly, this notebook, too, does not come with Linux pre-installed. The hardware is completely supported and apart from the sleep problem we didn't encounter any crashes. It was not possible for reasons of time to take up the opportunity of testing the even smaller and lighter Lifebook B200 but we will be making up for that as soon as possible. ■

Fujitsu-Siemens Lifebook E-6560

(+)	Hardware is completely supported
(+)	Hard disk in swap frame
(+)	Clear LCD status display
(-)	Sleep mode under X led to a crash
(-)	CardBus slots too hot

[left] The hard drive sits in a swap frame, which – also fitted with a notebook lock – secures the whole housing.

[right] Nothing for Linux – the keys on the front can only be used under Windows.