



-Preliminary-

Technical Manual

FAQ

ePanel-mgx

Version 1.00

Q: [What operating conditions can lead to problems accessing the floppy drive?](#)

A: It is possible for access errors to occur when CPU utilization is high, e.g. upon TVIn (Video In) or high data input from the USB channels.

Q: [Is there anything to observe when connecting a microphone?](#)

A: The microphone input requires a preamplifier for high quality microphones. Microphones with their own distribution voltage should be decoupled through a capacitor from the supply voltage on the signal line.

Q: [How does do the individual keyboards interact with the matrix keyboard?](#)

A: The matrix keyboard only works in combination with a USB keyboard, the PS/2 keyboard no longer plays any role. Assuming the matrix keyboard is the standard keyboard of a device and the USB keyboard is only used for installations or servicing, the following relationship arises:

Alternative 1:

The computer boots without a USB keyboard. All commands on port 60h and 64h are processed and/or saved by the matrix keyboard. When the USB keyboard is plugged in, it takes over the role as master. All commands now apply **only** for the USB keyboard, the matrix keyboard only relays keystrokes (parallel operation). The commands are decoupled, the matrix keyboard can work with a different delay/repeat rate, for example, from that of the USB keyboard.

Alternative 2:

The computer boots with a USB keyboard and this remains the master. The matrix keyboard only relays keystrokes. After unplugging the USB keyboard, the matrix keyboard assumes total control. Commands on port 60h and 64h are processed. Upon plugging in the USB keyboard again, this becomes master again and so on.

Q: [Can a user-defined key be set up on the matrix keyboard?](#)

A: To keep the number of bytes down, only scan codes of the AT keyboard can be made, not those of the common MF-II keyboard. This means some unnecessary keys, such as F11 and F12, are missing.

Q: [When does the matrix keyboard become effective?](#)

A: Currently, the matrix keyboard evaluates the keystrokes only shortly before the boot process. This has to do with the synchronization between USB and matrix keyboard. The USB configuration itself is multilevel and the USB controller is always initialized, with or without the keyboard. It is therefore not possible to enter the system BIOS setup with the matrix keyboard alone.

Two conditions must be met for the matrix keyboard to function free of trouble: it must be activated in the system BIOS setup and the scan codes programmed using the tool SC12XKBD.EXE.

Q: What do I have to consider when using the PC-Card adapter under Win98?

A: You should use the device manager to make sure the PC-Card resources hold the basic configuration 0000. If not, there is possibly a conflict resulting from later changes to IRQ resources. Possibly the hardware recognition should be run again.

Q: How does changing the screen resolution affect a video image (TVIn)?

A: Each mode change disturbs the video image display.

Revision History

Date	Author	Version	Description
08/24/2004	M. Hüttmann	1.00	First release