

# Operation Manual

## 1. Installation

### 1.1 System Requirements

This keyboard requires a PC with USB connection and one of the following operating systems:

Windows 98SE / ME / 2000 / XP / Vista

For the installation of the keyboard under the mentioned above operating systems you need NO special driver!

### 1.2 Installation of the USB receiver

In order to install your keyboard, please perform the following steps:

Connect the included USB receiver (dongle receiver) to a free USB port on your computer.

*Advise:*

*Please ensure, that the USB receiver has a minimal distance of 20 cm to metallic dividing walls, other computer cases, monitors, ZIP drives, loudspeakers and switching power supplies.*

All mentioned above state-of-the-art operating systems with *Plug & Play* support will recognize your keyboard automatically and load the required drivers. During the phase of installation your operating system informs you via changing Pop-up information windows on the task-bar about the current status of installation. Please be patient, until the system informs you finally about the successful installation. The USB receiver is now ready for operation.

### 1.3 Installation of the keyboard

Recommended requirement for that is the successful installation of the USB receiver under point 1.2.

If you haven't done yet, remove the covering of the battery case on the bottom of your keyboard. Install the included batteries of type AAA 1.5 V considering the right polarity in the battery case.

Switch the I/O sliding switch to ON position!

*Advice:*

*The USB receiver and the keyboard are factory-made already synchronised on the same channel. Normally you have not to make a new-synchronisation (as described under point 2.4). The keyboard is **immediately** functioning.*

Now you can check the functionality by pressing any key of your keyboard. If you press the Windows key, there has to open for instance the Windows *Pop-up* menu down left on your screen. If so, your wireless keyboard is working correctly now. If not, please synchronise the USB receiver and the keyboard again like described under point 1.4.

*Advise:*

*Should the functionality be influenced by other users applying their wireless keyboard close-by, make a new-synchronisation as described under point 1.4.*

### 1.4 New-synchronisation of the radio channel

The *keyboard* is equipped with the newest radio technology allowing in the easiest manner to make a new-synchronisation.

In contrast to conventional or older wireless keyboards on the market here is to press the PAIRING key on the back side only 1 time, whereby the new synchronisation signal is transmitted to the USB *receiver*. Thereby a complete, extremely comfortable handling from the user's location is possible without the need to stand up for pressing the synchronisation key of the receiver, which is usually located in the USB port of the PC.

The process of synchronisation can take up to 10 seconds and is signalled by flashing up of the PAIRING-LED (left LED on front side of the keyboard), which goes out after successful procedure. The keyboard is now re-synchronised.

Check now the functionality of the keyboard like described under point 1.3.

In implausible case the keyboard does not work even after new-synchronisation, you have the following options to solve this problem:

Repeat the procedure including the *hardware reset* of the USB receiver (conventional synchronisation) by pressing at first the LED key on the USB *receiver* (blue LED of the USB *receiver* flashes 3 times in a row) and only now the PAIRING key on the back side like mentioned above. In very rare cases it is necessary to repeat this routine several times until the right “radio channel” was found.

## **2. How to use the keyboard**

After successful launch enjoy now during the operation a free and independent choice of location up to approx. 10 m distance to the PC. More or less range can be caused, like mentioned above, by metallic dividing walls, other computer cases, monitors, ZIP drives, loudspeakers, switching power supplies etc., but also by different loading capacity of the batteries. For this, the status LEDs on front side of the keyboard give you information about the current operating condition.

### **2.1 Meaning of status LEDs**

#### *Pairing-LED*

indicates that the keyboard and the USB receiver are in Pairing-Mode, that means during manual initiation of the new-synchronization routine to one shared “radio channel” (ID). It goes out after successful synchronisation.

#### *Transmitting-LED*

indicates during key actuation that all input information have been sent out successfully per radio transmission from the keyboard.

### *Battery Low-LED*

indicates that the load condition of the batteries is below 2.4 Volt. It flashes until a new battery was inserted or the battery was used up completely.

Besides it flashes only when the keyboard is not in *Sleep-Modus* (idle state).

## **2.2 Special operation modes of the keyboard**

### *Sleep-Mode*

When 30 minutes happens no input in your keyboard respectively touchpad, the keyboard turns automatically into *Sleep-Mode* (idle state) to save battery capacity.

### *Wake up-Mode*

For activating the keyboards from *Sleep-Mode* press any key on your keypad (not the left or right mouse function key of the touchpad or the touchpad itself!).

### *Reconnect-Mode*

After reactivation the keyboard connects automatically again with the *USB receiver*. Depending on environmental conditions for the radio transmission it needs for that between less than 1 second up to few minutes.

## **3. Power Source**

It uses NI-MH rechargeable battery as the main power source. If the voltage level of battery is below 2.00 V which can be seen as the battery low led flashing, please use USB power to charge the battery via a cable equipped mini-B male connector. The mini-B female connector on board is used for battery recharging purpose only.

### **CAUTION:**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.