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# General User Manual for IPC

Version 2

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## Foreword

Dear customer,

due to the rapid advancement of technology there is no claim to completeness of this manual. The manual is continually revised and updated. With the purchase of your computer you have purchased a device that offers an excellent combination of quality, reliability and performance and represents a high quality technical product.

This manual will help you get started and how to deal with your computer. You will find here an overview of the connection options, safety for working with the computer and instructions for installation and commissioning. It provides instructions for maintenance and upgrades and possible causes of errors and correct them.

All pictures and illustrations in the manual are for convenience only explanation and may not match exactly with your computer.

Read this manual thoroughly, because there is response for many potential issues. If you can not find a required information, contact our expert service confidently.

## Manufacturer's Certificate

We certify that our computers complies with the applicable CE directives. All our units are equipped with the CE mark.

## 1. General notes

### 1.1 Safety instructions for working with the computer

Please read all the instructions.

**a)** Please keep these instructions for possible future use. Please observe all warnings and notes in the text of this document and on the devices.

**b)** Do not let children play unattended on electrical equipment. Children can not properly assess possible hazards often.

**c)** Please leave the maintenance and repair only to a qualified professional.

**d)** Please also refer to the instructions in the manual to the built-in Motherboard / CPU-Card. You will find this either in book form in the product documentation or on the enclosed driver CD. The driver CD is either printed by the manufacturer of the motherboard or the CPU card or simply white/blank if it has been attached by us.

**e)** you should remove the power plug from the outlet and contact an expert in the following situations:

- Plug or power cord are damaged.

- The unit has been exposed to rain or water.

- Although all instructions have been followed, the computer is not working correctly.

- The unit is dropped or the housing is damaged.

- The device displays serious abnormal behavior during operation that require investigation by a specialist.

**f)** For optical drives (CD-ROM, CD-RW, DVD, DVD-RW) is devices of Laser Class 1. Never remove the casing of the drive, since invisible laser radiation can pass out.

**g)** The device may only be operated with the mains voltage specified on the nameplate. If you are not sure, ask your dealer or our service center.

The device is equipped with a two-pole grounding plug. This plug only fits into corresponding sockets. If you do not have such an outlet, your electrician (expert) can certainly help. Never make changes to this connector by yourself. Make sure no objects are located on the power and signal cables and lay them safely so that nobody can walk on or stumble over.

**h)** If you want to use an extension cord, make sure beforehand that the total ampere-load of the equipment to be connected to the cord does not exceed the maximum load of the extension cord. You should also check your wall socket. A wall outlet must not be loaded with more than 15 amperes, in no case.

**i)** Pull to clean the appliance always remove the power plug from the socket.

**j)** Use for cleaning only a dry cloth and liquid cleaners or spray products.

**k)** Please keep the device away from water and high humidity premises.

**l)** Place the computer on stable and solid squares. In the case of a fall, the device can be damaged significantly.

**m)** Of course, the device must not be placed on a bed, sofa or similar surfaces.

**n)** Never cast or spray any liquids (eg. as detergent) on or in the device.

**o)** Only set in enclosed superstructures or housing if proper ventilation of the unit is ensured.

**p)** Do not insert objects into the housing openings. They may touch dangerous voltage points and so lead to short circuits. This might cause fire or electric shock.

**q)** The slots and openings in the housing are provided for ventilation. These openings must not be blocked, otherwise the equipment may result in overheating and malfunction.

**r)** Change only the settings that are provided in the instruction manual.

## **1.2 Important note about copyright**

If your PC is equipped with a CD or DVD / CD burner you must only copy the material for which you have received the copyright by the owner or whose copyright holder you yourself are. If you are not the owner of the copyright or have obtained from the copyright holder permission to copy, then you may violate the copyright and be subject to claims for damages.

## **1.3 Important Notice for data backup**

Secure your data at regular intervals. For example after every Windows update on removable media (memory cards, CD-R, CD-RW).

We assume no guarantee for the safety or the preservation of your data. The assertion of claims for damages for loss of data and thereby possibly resulting consequential damages is excluded.

## **1.4 Important note about security risks and threats from the Internet / network**

Please carefully read primarily the safety requirements of your company.

To avoid security risks or minimize, please use your computer only accompanied by appropriate security tools, such as e.g. :

- Antivirus programs (some of our customers have made good experiences with Kaspersky)
- Firewall programs
- Antispyware programs

Update these programs regularly!

Please note that threats can come from an internal network to which the computer is connected, even if your computer is not even connected to the internet over this network.

Another possible danger pose infected USB sticks.

When updating the operating system must be balanced:

- Basically, your operating system should be updated regularly in order to close security holes and fix malfunctions.
- It may happen that updates for the operating system cause errors in your applications. Especially if your system is already well shielded from the outside against security risks and threats, it is perhaps advisable to leave it on the functioning state. Also conceivable is to install updates only step by step in order to recognize where errors caused.

## **1.5 Unpacking and plug-in the computer**

This chapter describes how to set up your computer system and adapt it to your needs. It is advisable to study this chapter carefully, as it accurately describes the startup of your computer system and ensures a smooth flow. Although the details may be a little time consuming, but the work with the computer will run properly then.

### **1.5.1 choice of location**

The computer should be set up just like any other electronic device to an appropriate location. The location should be dry, room temperature and well ventilated. Set the computer on a flat, stable surface. With the exception of the underside of the basic unit is to ensure in all directions a 5 to 8-cm distance from other objects. He serves the proper heat radiation. Direct sunlight or other heat sources should be avoided as they can lead to overheating of the components. The computer system should not be placed in the immediate nearness of stereo equipment, TV sets and loudspeakers. High-frequency interference and strong magnetic fields may be the cause of malfunctions occurring your computer system. In addition to or in loudspeakers stored magnetic storage media are altered by the magnetic fields and can lead to data loss.

### **1.5.2 Unpacking the computer**

Record all system components from the cartons. Proceed carefully before and do not destroy the packaging material. It can be used for later relocation or maintenance and guarantees and will be an optimal and safe transportation. Since the components depending on the equipment have a considerable weight, call possibly a second person for support. Look at the checklist set out in Chapter 1, if all system components are present. If anything is missing, please call us immediately.

Keep the invoice and the original packaging in order to make possible warranty claims easy.

The shipping of this equipment should only be in the original packaging with the optionally sent along outer carton.

### **1.5.3 Making Connections**

Before connecting other components, the basic unit of your system should be turned off. The Main connections are located on the back of your computer and can be plugged into each other only once. If the connectors do not fit properly, please do not force it.

Check each connection types and make sure that no pin within the Connectors is bent.

### 1.5.4 Connecting the keyboard

Connect the USB port on the back of the PC.

Optionally there is also the possibility of a keyboard with the 4-pin PS / 2 keyboard connector to connect to your computer.

The keyboard connector and the interface are highlighted in purple.

(Caution: keyboard port can be confused with PS / 2 mouse port; color coding note!)

### 1.5.5 Connecting the mouse

Connect the USB port on the back of the PC.

Optionally there is also the possibility of the mouse with the 4-pin PS / 2 mouse port on your computer to join.

The mouse connector and the interface are marked green.

(Caution: keyboard port can be confused with PS / 2 keyboard port; color coding note!)

If you connect a USB wireless set, please see the notes in the operating instructions of the set.

### 1.5.6 of the monitor (screen) connection

Make the connection between the screen and the connector of the video port.

Does the graphics card and the monitor can multiple interfaces use only one of the available options.

You should always use the connection with the highest severity. (For example, DVI or HDMI)

Caution: If your computer has a graphics card plugged, is automatically disabled under certain circumstances the onboard graphics port. Take in this case to connect the graphics card as this is much stronger performance.

This manual does not describe specifically the purchased system. It describes in general all systems offered by us, which may optionally be configured with other microprocessors.

Our offered hardware is so far as it is not produced by us, based on well-known manufacturers, thus guaranteeing compatibility with other computers.

## 2. Startup

### 2.1 First start

In this chapter you will learn some important information about the processes and procedures that run automatically after turning on the computer. This process is also known as initialization („REBOOT" or „POWER UP") referred to the computer and runs substantially in the following steps:

#### 2.1.1 Turning on your computer

After plugging in and inspection of all connections (signal and power cable connections) first turn on all peripheral devices (monitor, printer, etc.) via the corresponding power switch. Finally, turn on the power switch on your computer.

The power switch, with which the device is unplugged from AC power is available at the rear panel. The second switch is located on the front panel, to turn the computer finally on (please switch on the rear panel to position "I" at first).

#### 2.1.2 Hardware initialization

The hardware initialization begins immediately after turning on the computer.

It starts a self-test and a check of the electronic components of your computer.

In computer science, this is known as a "POST" [POWER ON SELF TEST]. If this process runs without any complaints, it automatically starts the second step of the initialization.

**Our devices are possibly adapted usually in the BIOS and in the preinstalled operating system. So a startup operation without further adjustment is easily possible. Therefore, please refrain from changing the default settings. If you require special settings or to activate additional interfaces, we can set up this during manufacture already. Please let us know your wishes in the inquiry / order.**

#### 2.1.3 Initialization of the operating system

With different complex loading and initialization processes of the computer starts to load the operating system into memory. If the operating system has been ordered by you this and all further provided for your specific computer system software is already preinstalled on the hard disk. No install from the disk and CD-ROM drive or the Internet is necessary after switching it on. Your device is ready for use.

If you ordered the computer without OS, the hard disk is usually empty and you need to install a desired system. The drivers are usually available on an enclosed CD (can be white/blank). As we need an operating system for our usual tests before delivery, we maybe install such a regular basis, but without a license. It may therefore be that a operating system is further stored on your hard drive. You can see in this case that the computer is working, but you should delete it for installing your chosen operating system.

### 2.1.4 Shutting down your computer

Under the WINDOWS operating system the computer after the graceful shutdown of the operating system is automatically switched off. The power supply then operates in standby mode.

During longer breaks please turn off your computer using the switch on the back completely or use a power strip with a switch to take all other connected devices from the power.

### 3. Maintenance

To ensure that our devices can work long and reliably, they must be regularly maintained.

If they are not connected in a completely dust-free environment, dust layered very often from well inside the case. This must be removed periodically so that the cooling of the components is functioning correctly.

Depending on the environment and mounting varied cleaning requirements, eg. In a closed cabinet with own air filters cleaning significantly less needed than detached in a dusty factory hall.

Midi-Tower: These usually don't have an incoming air filter, so cleaning is required often.

Industrial computers 1U to 4U: These are fitted with filter mats reduce the coarse dust, fine dust can still get on the components after longer time.

#### Please note when cleaning:

- **In case of damage by opening, modifications and other work inside the computer your warranty may get deprived!**
- **Cleaning the inside of the computer should be performed only by qualified personnel**
- **The components are sensitive to electrostatic discharge. Please take appropriate precautions to prevent this.**
- **The power supply must not be opened!**

Note: If a failure of the computer has been caused by non-observance of this manual, we reserve the right to carry out returning repairs after previous estimate costs and provide necessary cleaning work into account, even if the return is still within the warranty period.

Although precaution you should

- Regularly backup your data and settings, especially before returning a unit to us.

With a return we'll attempt preserving your data if possible, so you can continue working direct. Please note, that we can not give a warranty for that, because we are not specialized in data recovery.

- Hold a replacement system for fail-critical systems.

Even if we try, we can not have a supply for each component or even offer as whole systems, especially if they are not our current products.

It may also happen that a necessary repair will take longer time to complete. Our work often is not reduced only to the one complained mistake because we are trying to return a device after repair, its correct function, we can assure. It may possibly be advisable for your company to take a second device as a replacement device (if you have a project in which our devices in larger numbers e.g. about >50 are to be used, ask us again).

### 4. Retrofitting of components

#### For absolute respect:

**In case of damage by opening, modifications and other work inside the computer your warranty will be deleted! We recommend that you perform hardware changes by a specialist.**

**Before opening the housing cover always switch off your computer and remove all power cables. Otherwise there is danger to life!**

**Please check carefully before the retrofitting of components the use of a more powerful power supply, especially in high-quality graphic cards or processors. The capacity of the power supplies used by the manufacturer is designed for each unit shipped!**

Read the following instructions if you add additional plug-in cards (eg graphics card, modem or ISDN card, TV card, network card, etc.), an optical drive (eg CD-RW drive) or want to upgrade the RAM:

- a) Take enough time for any work!
- b) Inform yourself in detail about the new component before buying.
- c) Reassure your right for return, if the component is not functioning.
- d) Please refer to the installation instructions in the manuals of the respective manufacturers.
- e) Let each component in the packaging until it is assembly into the device (protection against dust and static

electricity)

- f) Before starting the assembly, you must discharge your body by touching the heater or other grounded metal object (static charges can destroy components such as memory chips or processors!)
- g) Do not touch the contacts with your bare hands (damage caused by sweat and grease)
- h) Apply and work with great caution not to force. A slipping the screwdriver can eg. a motherboard completely destroy!
- i) Make sure there are no loose screws inside the enclosure remain.

**Let us finally allow a remark:** If after following the instructions and guidelines that we have in our chapters, no proper operation of the computer system to be guaranteed, you do please DO NOT unauthorized maintenance. You can contribute to further damage to the unit.

## 5. Procedure in case of problems

In case of failure of your computer, please read the following points carefully and follow the Statement described.

- a) Please contact us in case of problems with your computer under [service@alptech.de](mailto:service@alptech.de). Many problems can be solved in short.
- b) Try to determine the error of the device precisely.
- c) Claims under warranty arise exclusively from established hardware faults / hardware defects. Should it turn out that this is a software or user problem, we reserve the right to charge a fixed work rate.

### Save yourself unnecessary costs:

We recommend you to check all connection cables and a reinstallation of the operating system the functionality of your device before submitting your PC.

**a) Please give us before every return a detailed report of the failure and what you have already tried.**

**b)** To serve you faster and more reliably is an RMA number for each returning product or device required.

Please apply the RMA number by phone on +49-6173-325950 or by e-mail to [service@alptech.de](mailto:service@alptech.de).

We will then phone, issue an RMA number via email or fax.

This RMA number shall be mentioned on the package and on the einzusendenden fair description of the fault.

**c)** To edit only the computer, driver CDs and cable motherboard and possibly used external power adapter is needed. Additional accessories (keyboard, mouse, monitor), you can keep.

A form for recording the error description and the data to the computer, you see at the last page of this document, which you can print / copy separately.

Please note:

Remove older address labels to avoid incorrect deliveries.

The following documents must be enclosed with the package:

- Address, telephone number. and possibly email address for any questions
- An exact description of the problem with the RMA number.

Never send us the package without postage.

### 5.1 Ordering

**a)** Alptech Elektronik GmbH (hereinafter referred to as manufacturer) pledges the statutory warranty for the delivered products and spare parts.

**b)** The customer has to sign and demonstrate a possible claim from the legal warranty with return the order. All it takes is generally a copy of the purchase contract/our invoice.

**c)** The sent in for repair device needs to attached by a sufficient description of the error and contact details (phone number, email address) for further inquiries by the customer.

If there is no description of the fault added, all the necessary work for error detection and correction are done generally by the manufacturer. But this can lead to significant delays in the repair.

If no errors are found, we first check with you in order to understand the errors. In individual cases returns without a description the repair could be denied by the manufacturer.

**d)** For paid repair, the customer first obtains from the manufacturer a cost estimate. This estimate must be confirmed in writing by the customer prior to the execution of the repair work. It cost estimates are not binding. Should more errors express during repair, you may receive a new estimate.

## 5.2 Conducting repair work

Repair dates are not binding. The manufacturer tries to provide repair in terms of the legal warranty within 7-14 business days after receipt. For paid repair repairing execution generally takes place within 10 working days after written confirmation of the estimate by the customer. In individual cases it may take longer because not all goods are in stock. We inform you about the estimated time. To carry out the necessary repairs, the manufacturer uses spare parts and components that are new or new according to the respective customary industrial standard.

## 5.3 Costs for repairs and payment

- a) repairs that were provided by the manufacturer during the legal warranty, will be charged.
- b) All chargeable repairs are based on labor and material costs.
- c) You pay only the shipping route from you to us. For the dispatch of us back to you, we pay the costs.

## 5.4 Privacy

All customer information collected to fulfill the contract will be used exclusively for the aforementioned purpose and not shared with third parties. The manufacturer, the provisions of the Data Protection Act (in german BDSG) are respected.

## 5.5 Customer claims for repairs within the warranty period

- a) In the case of a defect of the product or in the case of any failure of pledged features the manufacturer is entitled at its option to repair the defective item or replace the goods within a reasonable period. For this purpose the manufacturer is entitled to examine the products in his house.
- b) In the case of repair or replacement of the manufacturer acquires the exchange or expanding ownership of the exchanged or developed component or the replaced device.
- c) We give 12 month warranty solely on the replaced component again.
- d) The manufacturer should not hold responsibility for damage caused by:
  - Abuse
  - Accident and disaster
  - Negligence and improper or non-contractual use
  - Damage caused by the effects of weather (eg. thunderstorm damage)
  - Software and user errors and incorrect installation and modification of the software or operator error
  - Error by installing drivers, updates, and other hardware components
  - Viruses, Trojans and other malicious software
  - Repair, adjustment, costum settings by an unauthorized service organization or individual
  - Damages due to incorrect or improper packing (transport damage, the sender ist always responsible for the safty of the shipment)
  - Damage caused by external mechanical influences (eg. pressure, torsion, impact, etc.)
  - Damage caused by vandalism, violence, moisture, liquid or other inapropriate use of the equipment with negative influences
  - Defects due to heavy contamination and / or maintenance has been neglected.

**The manufacturer should not hold responsibility for systems or components for which the manufacturer's own labels (eg. serial number label) have been modified or removed, as well as improper labeling of the goods.**

In the above cases, the customer will receive a detailed estimate to confirm through the service department of the company.



## Alptech Elektronik Gmbh - RMA - form

Dear customer,

our products are tested before sending without exception and perform their duties normally for many years without any complaints. Unfortunately, it may still be occasions when a product doesn't meet your and our expectations. Please note in appropriate cases the following processes, which allows us to provide you with as soon as possible a solution.

1. Contact us to obtain an RMA number.

You can reach us by calling +49-6171-9799110

or by fax at +49-6171-9799115

or by email at [service@alptech.de](mailto:service@alptech.de)

2. Fill in the lines below.

3. If you are sending in a computer: Please back up your data and store it.

4. Return the Alptech product with the completed RMA form to us. Please make sure to use the proper packaging of the device.

5. If we can repair the product free, we will send it immediately functional and checked back to you. Please note that depending on the cause of the problem and because of the necessary tests a proper repairs for a longer time can avail. We therefore ask you to inform us in urgent cases in advance so that the work processes can be adjusted accordingly.

6. In the event that we have to face costs invoiced for our work and / or parts, we will contact you before the start of a paid measure and ask for your consent.

RMA number. \* \_\_\_\_\_ Serial no. \* \_\_\_\_\_ \* Date \_\_\_\_\_

Invoice / delivery note no. \_\_\_\_\_ Name \* \_\_\_\_\_ Tel.\* \_\_\_\_\_

Please exact fault description:

Which behaviour has the fault\*

When he stepped on first \*

How can we reproduce the failure of the product \*

Is the device used for you or your customers \*

What special software, drivers, devices are used \*

\* Required Fields

In urgent cases, can also be dispensed with previous request an RMA number, a detailed error description is, however, indispensable.