# UPC19

## User Manual

version 1.0.1

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# *CONTENTS*

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# *INTRODUCTION*

Thank you for choosing the UPC. Before you begin using the device, read these instructions to become familiar with the device's features and functions. Be sure to save this manual for future use. It will help you solve problems that may arise. The latest version of the manual is freely available on the web site in the Support section.
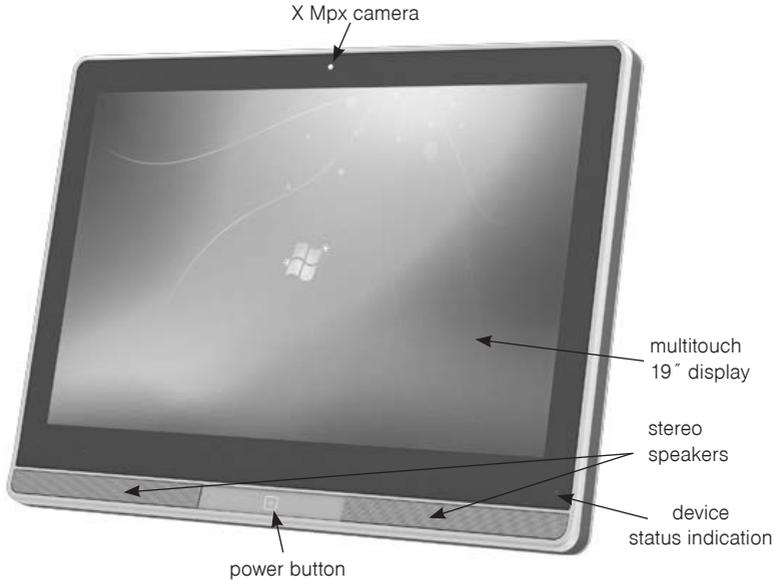
## IMPORTANT NOTICES

Please pay attention to the following notices. They will help you avoid possible damage to the device and potential injury which could result from improper use of the device. With damage to the device caused by non-observance of the procedures mentioned in these notices, the legal warranty expires due to improper handling with the product.

- Do not leave the switched-on product unattended!

- Install the product in a place where it will not be exposed to direct sunlight, unusual changes in temperature (below 0°C and over 45°C) or high humidity. Installation in an unsuitable place could cause damage to the casing and electrical components.

- Upon carrying the product from a cool environment to a warm one, or vice versa, do not switch it on for at least 30 minutes.

- The product should not be operated by a person with wet hands. Water could penetrate to the interior and cause damage to the parts.

- Clean the external surface with a soft, dry cloth. Never use caustic cleaning agents. The use of such chemicals could lead to damage to the product. Do not clean the product with sprayed water and do not submerge the product in water.

- If the product is not working properly, take it to an authorized service center technician. Do not attempt to repair the product yourself. Do not open the product!

- Use only the AC/DC adapter provided or an adapter recommended by an authorized dealer. The use of other types of adapters may result in damage to the adapter or the product. First connect the power cable to the UPC, and only afterwards to the power source! Never disconnect or connect a power cable, not even a VGA cable, if the UPC or a connected display is switched on!

- Notice: The adapter is designated for interior use only!

- The use of sharp objects for operating the touch panel can cause serious damage or destroy the touch panel.

- Electronic equipment producing interference, connected in the same power circuit, can cause the improper functioning of the device. In such a case, use special anti-jamming aids recommended by the producer.

- To completely disconnect the device from the electrical network, unplug the AC/DC adapter from its electrical outlet.

- If the device is used in ways different than those described in these instructions, the dealer cannot be responsible for any possible damage that may result.

-  A symbol (a crossed-out waste basket) on the product or on its packaging indicates that this product, upon completion of its use, should not be treated as common household waste. Instead it should be handed over to a special take-back scheme for the recycling of electrical equipment and electronic components. By ensuring the proper disposal of this product, you will help preserve natural resources and will help prevent potential negative consequences on the environment and on human health.

-  The product contributes to environmental protection through the use of lead-free technology during its production.

# *DEVICE CHARACTERISTICS*

UPC19 is an elegant device merging in itself a powerful computer conveniently combined with multi-touch display and other devices. All this is hidden in a sleek body with modern appearance, which you can customize to fit any interior or exterior. With its top-quality protection against ingress of liquids and other substances it is also suitable for extreme operating conditions in the industry, while on the other hand also meeting the demands of the medical sector. Its robust construction in several mounting versions and optional configurations make it a computer system, which has vast potential for applications in various environments..........................................................................................................................................................................

**Figure 1.1.  Features of UPC19**

X Mpx camera



multitouch 19˝ display

stereo speakers

device status indication

power button

## Package contents

1. UPC
2. power adapter
3. installation guide
4. Support CD with drivers
5. Mounting kit according to the configuration (hinge/Vesa)

**Table 1.1. Technical parameters and available configurations of the UPC19**

| | |
|---|---|
| Operating system | Windows 7 Pro |
| Display | 19",16:10, 1440x900pixels, 300cd/m$^2$, 1000:1, LED backlight |
| Pixel size | 0,264 × 0,264 mm |
| Contrast/Lumiousity | 1000:1  250cd m2 |
| Number of colors | 16,7 mil. |
| Touch panel | Capacitive PCT multitouch |
| Processor | Intel Atom N270 |
| RAM | 2 GB DDR2 |
| Hard drive | HDD 320 GB / 500 GB*<br>SSD 32 GB |
| Interfaces | 3 - 8 × USB 2.0<br>1  3 × RS-232<br>1 × Gigabit LAN (RJ-45) |
| Wireless | WiFi (optional)<br>Bluetooth (optional) |
| Webcam | TBD 2 Mpx |
| Audio | waterproof stereo speakers 2×3 W and microphone |
| Mounting options | VESA 100<br>pole stand mount with hinge (Tube holder) |
| Dimensions (W × H × D) | |
| Ingress Protection | IP65 |
| Vibration resistance | TBD |
| Power consumption | 17 W (OS idle) |
| Power | Adapter AC/DC 230 V - 12 V (±5%), 4000 mA |
| | |
| Display type | TFT LCD with LED backlight |
| Weight | 1,5 kg (without mouniting kit) |
| Operating conditions | temperature 0–40 °C, humidity 80% at 35 °C or lower |

## Indicator LED meaning
**Table 1.2. Status indication LED**

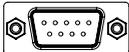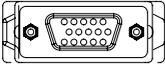| not lit | device is switched off |
|---|---|
| blinking green | device is switched on in sleep mode |
| green | device is switched on in normal mode |

## Connecting peripheral devices

It is possible to connect accessories and different peripheral devices to the UPC. These can be connected directly to UPC ports, which are brought out with cables, or through a port replicator, which enables you to connect more devices at the same time. The choice of a replicator depends only on your needs and requirements. You can find more information about replicator ports on offer at our web site. The way in which cables are led from the UPC is illustrated in figure below. Individual ports are described in table on the next page.

**Figure 1.2. UPC cables and their routing in the tubeholder – VESA and joint version**



In addition to cable interfaces UPC can, according to configuration, contain optional wireless interfaces. Possibilities of network conection similar to RJ–45 connection are offered by optional wireless WiFi interface, which does not need connecting any cables and provides some mobility. Optional Bluetooth interface allows for wireless communication and the transfer of data between external devices supporting this communication standard.

**Tabuľka 1.3. UPC connectors (not all generally available, depends on configuration)**

| Connector | Description |
|---|---|
| | Power connector. Power adapter connects here. It is secured against accidental unplugging. |
| | Audio conector. UPC has two of them – first (ODLÍŠENIE) for connecting external speakers and second (ODLÍŠENIE) for connecting external microphone. |
| | USB connector. UPC has at least 3 of them, optionally up to 8 USB version 2.0 connectors. Through them it is possible to connect all standard USB devices which are supported by the operating system. This includes, for example, different keyboards, bar-code scanners, payment terminals, scales, storage devices (USB memory sticks, external discs), sound cards, modems, etc. The number of USB ports available can be increased using a replicator or a so-called USB hub device. |
| | RJ–45 LAN network connection. Connection to a computer network of the Ethernet type (LAN, Internet connection), supports 10/100/1000 Mbps speeds. |
| | DB9–M connector of the RS-232 serial interface. Allows to connect to cash registers and other devices equipped with this interface (barcode scanners, scales, printers). |
| | HDMI connector. Allows digital output of multimedia content from UPC to an external devices equipped with HDMI. |
| | DVI connector. Allows digital or analog output of picture from UPC to an external display device equipped with DVI. |
| | VGA connector. Allows analog output of picture from UPC to an external display device equipped with VGA. |

## Optional components

Keyboard EK–5000
Display ED–5000
Magnetic card reader
Barcode scanner
RFID reader
Dallas key reader
Fingerprint reader
VoIP headphone
Digitizer for electronic writing and signature recognition

Placement of these components on the UPC is configured when ordering.

# *USING THE DEVICE*

# BEFORE USING THE DEVICE

Prior to using the device it is necessary to connect the power adapter. Connect the power cable to the power adapter. Connect the power cable plug from the power adapter to the power connector. Plug the power cable into the electrical power outlet (220V, 50 Hz).

*Note : UPC with a built–in backup battery can be switched on and short–term used even if it is not connected to an electrical outlet.*

*Note : Before using the UPC it is a good idea to look over the sections devoted to methods of controlling the device.*

# SWITCHING ON

After connecting to the power source press the POWER button on the front of the device for approximately 3 seconds. The device switches on, which is indicated by the green LED on the front of the panel. After performing a quick system test, the operating system is launched.

If you have a version of the device without a pre-installed operating system, it is first necessary to install it – see the documentation for the relevant operating system. Drivers for the UPC components can be found on the supplied CD.

# LOGGING ON TO THE OPERATING SYSTEM

The welcome screen of the operating system differs according to its type and version. Depending on the type of the operating system it is possible that your operating system will request the entry of a user name and password for the user account.

Enter the required information for logging on to the user account and press Enter or click the button for logging on. If you are creating your own user account with a password, please remember the password, as without it you will not be able to log on to your account.

*Note : If during logon procedure the computer does not respond to the touch panel controls, connect an external keyboard and mouse, which will allow you to log on and subsequently calibrate the touch panel according to the process described in the section "Calibrating the touch panel".*

# SWITCHING OFF

The device can be switched off according to the standard procedure of the operating system or by touching the POWER button for at least 3 seconds.

# RESTARTING

Restarting the device is possible using the standard procedure in the operating system being used.

If an emergency restart of the device is needed, touch the POWER button until UPC turns off. Then turn it on. With this method of restarting you risk losing any unsaved data of the applications which were open at the time of restarting. This solution should be therefore used only if the operating system stops responding and it is not possible to restart it using the standard method.

# CONTROLLING

To control the UPC primarily the built–in touch panel is used, additionally it is possible to attach a standard computer mouse, keyboard or other input device to the UPC through a USB port (or other interface).

The mouse can be used to control the mouse cursor within the operating system. You can use the keyboard when entering text and controlling some elements of the operating system and applications using keyboard shortcuts. The settings for the mouse and keyboard can be changed in the system settings of the operating system.

Controlling using the touch panel can be used to perform many operations without using keyboard and mouse. The information you need to use the touch panel correctly is presented in the following section.

*Note : The way of controlling with the keyboard, mouse and touch panel may be different according to the type of operating system used and its settings.*

## Controlling with the touch panel

The UPC is equipped with a touch panel which allows you to control the mouse cursor and applications or enter text using the virtual keyboard on the display. The touch panel can be controlled by the touch of the fingers or using a special touch pen (stylus). If you use a keyboard or mouse and at the same time the touch panel to control the computer, the individual methods of controlling will interfere with each other. Before using the touch panel for controlling it is necessary to calibrate the touch panel; the procedure is described in the section "Calibrating the touch panel".

*Note : Control the touch panel by gentle pressure of the finger or stylus. Do not use excess pressure or objects with hard and sharp edges for controlling; otherwise you may cause damage to the touch panel or the display.*

### Controlling the mouse cursor with the touch panel

Using the touch panel you can control the mouse functions as follows:

Tapping on the screen is the equivalent of left-clicking the mouse – the cursor is shifted to the place of the touch and the object beneath the cursor is selected.

Double-tapping – is the equivalent of double-clicking the left mouse button.

Placing and holding a finger on one spot of the display – is the equivalent of clicking the right mouse button, calling up the context menu. After the menu is displayed, tap on the desired item in the menu while the relevant item is activated.

*Parameters for controlling the mouse cursor can be changed in the dialogue box for setting the touch panel display on the "Setting" card.*
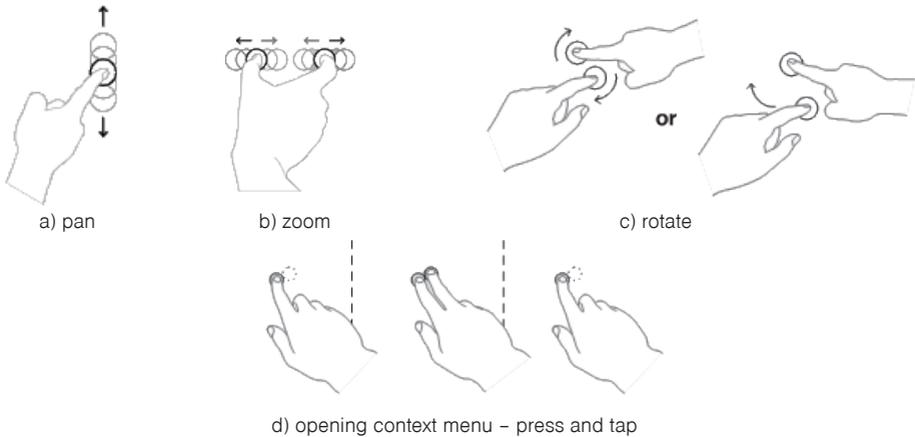
### Using gestures

On operating systems that support multi touch control – among supplied operating systems it's Windows 7 – you can use the advanced touch control options using specific movements of fingers or stylus, so called gestures. Using gestures is possible in Windows 7 in compatible applications to control the scrolling, zooming, rotation and a context menu. Basic gestures are summarized below. Not all gestures must be available in all applications and for all objects.

*Note : To take full advantage of the multi touch support, your operating system and also applications need to support multi touch features. This also means that available gesture controls depend on the software used.*

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**Table 2.1. Touch gestures available in Windows 7**

| Gesture | How to perform | Description |
|---|---|---|
| Pan | Touch and drag the page with either one or two fingers. | Use panning to see another part of a page that has scroll bars. For example when viewing a long document or spreadsheet that doesn't fit in the window. When you pan with one finger, dragging your finger vertically moves the page, while dragging your finger horizontally selects text on the page. |
| Zoom | To zoom out, touch two points on the item, and then move your fingers toward each other, as if you're pinching them together. To zoom in, touch two points on the item, and then move your fingers away from each other. | Use zooming to make an item on the screen larger or smaller. With a picture, zooming in shows a smaller area in more detail; zooming out shows a larger area. |
| Rotate | Touch two points on the item, and then move the item in the direction that you want to rotate it. | Use rotating to move a picture or other item on the screen in a circular direction (clockwise or counter-clockwise). |
| Press and tap | Press the item with one finger, then quickly tap with another finger close to the first pressing point, while continuing to press the item with the first finger. | Use press and tap to access the shortcut menu. Press and tap does the same thing as press and hold or right-clicking an item. |

**Obrázok 2.1. Illustrations of gestures available in Windows 7**



a) pan          b) zoom                          c) rotate



d) opening context menu – press and tap

**Entering text using the touch panel**

By using an application that shows a virtual keyboard on the display it is possible to enter text by tapping on the virtual buttons depicted. The choice of individual keys is most comfortably handled with the help of the touch panel, but this can also be done using a mouse. Most modern operating systems include a virtual keyboard as a standard component.

The virtual keyboard which is a standard component of the operating system is launched as follows:

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**Windows 7:** In addition to above mentioned of launching a virtual keyboard also so called Tablet PC Input Panel can be used, which can be accessed quickly when needed and is easier to use. To display it, proceed as follows:
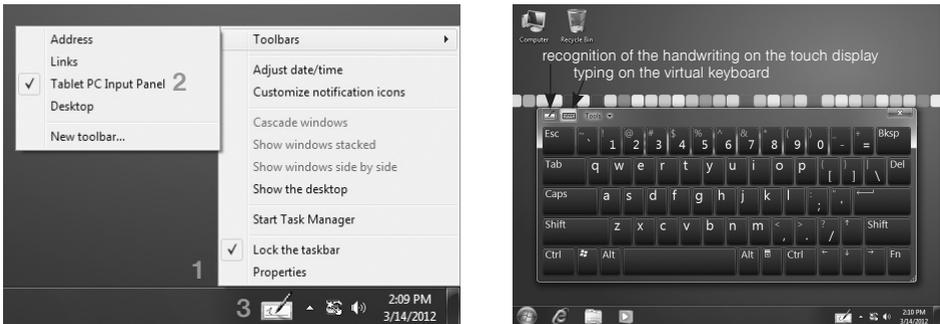
1. Right-click the taskbar of Windows 7 (hold down the touch screen in the area). Local menu is displayed.
2. In the local menu, expand "Toolbars" and check the option "Tablet PC Input Panel".
3. The taskbar button appears, which allows launching on-screen keyboard or the possibility of handwriting recognition.

Use: When you want to enter text using the touch panel, after the placing of the text cursor to the desired location, tap the Tablet PC Input Panel button and then you can enter text. In basic setup also the edge of the virtual keyboard window is shown at the left edge of the screen and the keyboard can be "pulled" by sliding your finger from the left edge of the screen towards its center. Depending on touch input settings, virtual keyboard icon is also displayed near input fields after you place the text cursor in them.

When you are done entering text, you can close virtual keyboard's window. Settings for the text input using the touch panel can be found in the "Tools" at the top of the window.

**TIP:** For greater typing comfort you can adjust the size of the virtual keyboard by dragging its edge.

**Figure 2.2. Displaying the Tablet PC Input Panel**



You can also search for and install other applications providing a virtual keyboard for the operation system used which will better suit your needs.
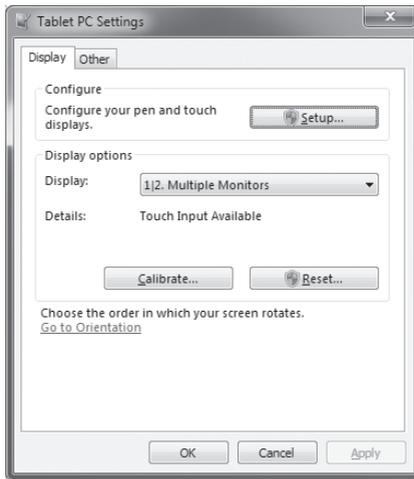
## TOUCH PANEL SETTINGS

In Windows 7 you can find these settings in the Control Panel, which can be launched from the Start menu of Windows 7

### Touch panel settings in Windows 7

In Windows 7, the touch panel calibration and options are found in Control Panel.

In the dialog that opens when you select **Control Panel → Hardware and Sound → Tablet PC Settings** you can choose screens which you want to use as a touch input and calibrate or reset calibration parameters for every connected touch panel.
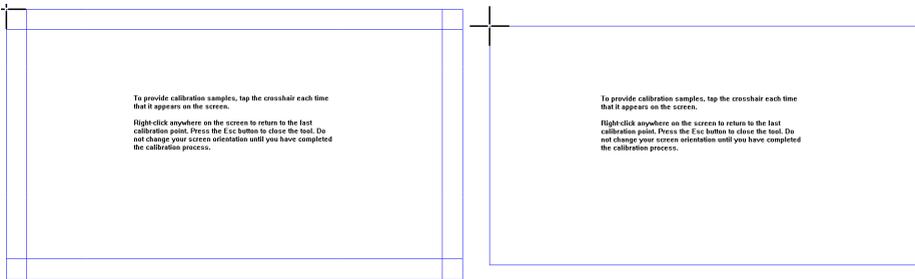
**Figure 2.3.  Touch panel settings dialog**



#### Calibration of the touch panel

Perform the calibration of the touch panel in Windows 7 if the response to touch control is inaccurate or have other problems with touch controls. Start the calibration by clicking "Calibrate..." button in the "Tablet PC Settings." window. During calibration follow the instructions displayed, tap each crosshair symbol, which appears in the corners of the screen. If the calibration has already been done, one crosshair symbol appears for each corner of the screen. If calibration data haven't yet been stored, or were restored to their original values, four crosshair symbols are gradually displayed in every corner. After you have completed the calibration, the operating system will prompt you to save your settings. Confirm by pressing down the "Yes" button.

**Figure 2.4. Calibration of the touch panel in Windows 7**

**a) first calibration**  |  **b) subsequent calibrations**

## The touch control settings in Windows 7

The way or controlling the computer using the touch panel can be customized in a dialogue that launches through the **Control Panel → Hardware and Sound → Pen and Touch.** In this dialogue, among other settings, you can edit:
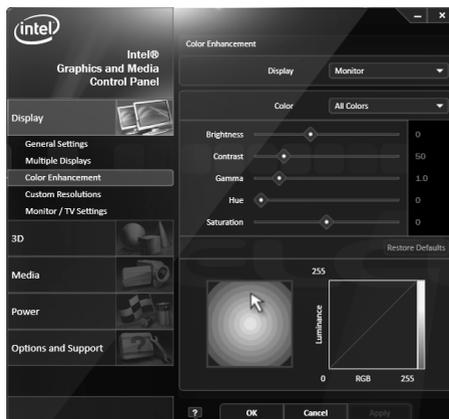
• actions performed for different ways of touch and movement on the touch panel
• touch control sensitivity
• the speed and accuracy required for double–taps
• time delay of the context menu when you tap and hold

## DISPLAY AND IMAGE SETTINGS

### Color correction

To adjust the contrast and brightness, press and hold the panel on the desktop until local menu appears (mouse right–click). Then select "Graphics Properties". A window opens with the settings, choose the category "Color enhancement". Then select display for which you want to change settings (the internal display or external display connected to the UPC) and set the gamma correction, brightness, contrast, hue and saturation. Confirm with the OK or Apply button.

**Figure 2.5. Setting the contrast and the brightness**

## Rotating the image by 180°

If the device is mounted with the display rotated by 90° or 180° it is also essential to set the desktop rotation properly.

To set the rotation of the displayed image press and hold the panel on the desktop until local menu appears (mouse right–click). Then select "Graphics Properties". A window opens with the settings, choose the category "General settings" and set the "Rotation" to a proper value. Confirm by pressing OK or Apply.

**Figure 2.6. Rotating the image by 180°**

*Note : In Windows 7 portion of the settings included in the driver (such as display rotation) is also available from standard system dialogs. It doesn't matter where you change the settings, parameters are system–wide.*

## WIRELESS CONNECTIONS

If your UPC contains optional WiFi and/or Bluetooth components, you can use them to communicate with other devices supporting these wireless standards. You need to use either built–in operating system functions or special utilities (supplied by communication device vendor together with the driver or by a third party) to create and use connections. Please refer to your operating system or respective device documentation.

## CONNECTING AND DISCONNECTING A USB DEVICE

When connecting any equipment to the UPC observe the manufacturer's instructions for the given device. After connection of a USB device to a UPC port, the operating system detects it and if it has a driver available for the device, it will load the driver and the device can then be used. If a driver is not automatically available, it is necessary to search for one and install it. Drivers are usually located on the CD supplied with the devices or can be downloaded from the Web site of the manufacturer.

If after connecting and using a USB device you want to disconnect, it is a good idea to remove it safely – first in the operation system (in order that all device operations be completed) and then after notification of the operating system to physically pull out the device's connector. The procedure for safe removal of a device depends on the operating system used. Connecting and disconnecting USB devices when the UPC is switched off is always safe.

*Note : Not all equipment allows for safe removal of hardware. Safe removal makes sense mainly with equipment which stores data (hard disks, USB memory sticks) and which also use the write buffer. Equipment which is not shown on the list of equipment that can be safely removed can be disconnected without the procedure for safe removal.*

# *MOUNTING AND CARE*

# MOUNTING VARIANTS OF THE UPC

UPC is manufactured and supplied in different variants that are adapted to different variations of the location and mounting. With numerous possibilities for attachment, UPC can be placed and used in virtually any environment while maintaining ergonomy of the work.

Mounting variant consists of UPC fitted with mount (which may include joint) suitable for connection to the type of stand and the stand itself, which may consist of several segments and include joints and sliding segments for position adjustment of the mounted UPC.

## Mounts

According to the configuration, UPC is equipped with one of the two mounts. Mouniting fixture allows to attach UPC to a stand that fits your needs.

### Muont with joint

Mount with joint is an attachment option, which, thanks to built–in joint with waterproof collar, allows flexible adjustment of the display tilt in four directions (up–down and left–right). Adjustment is possible in steps of 15 ° (the position is stable in these points) This fixture is designed primarily for mounting on a pole stand and allows to lead the cables for connecting peripherals through the centre of the mount into the tube of the stand. This variant can also be attached to a VESA stand using special adapter.

### VESA mount

VESA is a standardized method of attachment suitable for various devices. Thanks to its high prevalence and standardization there is a wide range of different stands available, that can be used in various environments in order to ensure easy access to connected devices. VESA mount itself does not allow to change the position of UPC, all position adjustment options are dependent on a stand.

## Stands

### Pole stands

Tube stands are sturdy and solid solution with intelligent design and protected cables. They can be ordered in various lengths (500 mm, 1300 mm) and angular designs (straight, with a tilt of 15 °, 30 °, 45 °)

Cables are led inside the metal tube rack and this design provides a high degree of ingress protection IP 54 The stand is fixed with four screws to the table or other object. For the mounting of the tube to the ceiling it is necessary to reposition the monitor on the tube rotating its holder by 180 °, if UPC is not equipped with handle joint.
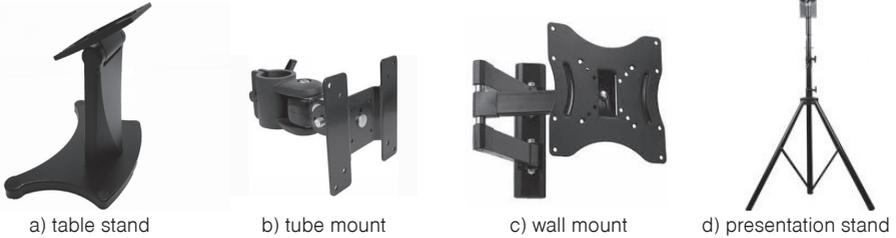
**Figure 3.1.  Placement of joint variant on a tube**
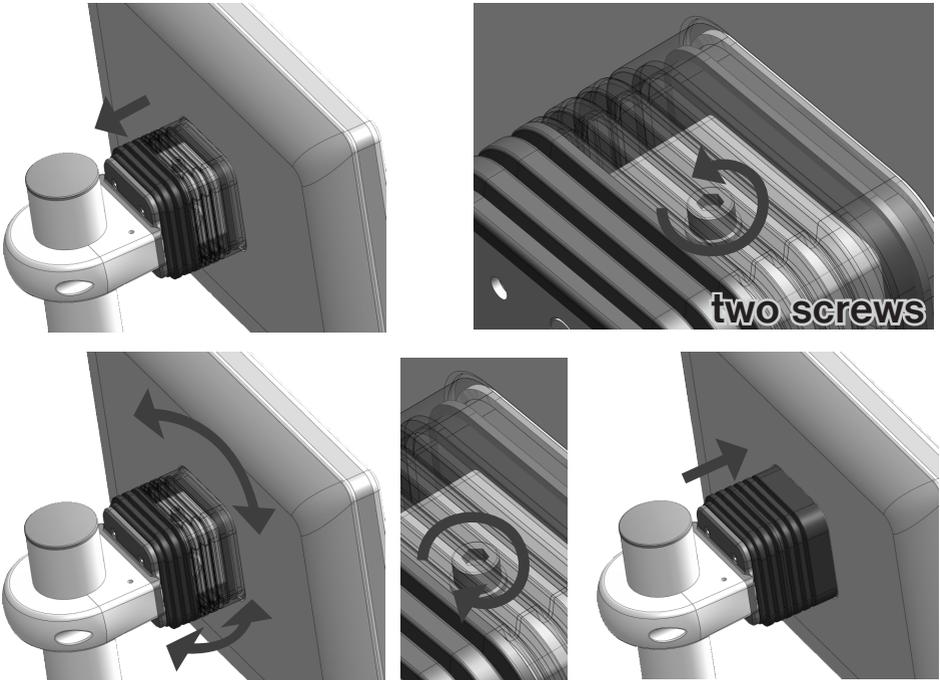
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### VESA stands

VESA stands are stands with standard screw attachment and are manufactured in various designs. They usually allow for adjustment of connected device's position. Many types of VESA stands are suitable for placement of UPC on moving supports (in vehicles), as they provide a solid connection between the support and UPC. Furthermore, since the UPC is bolted to the stand, it is to some extent also secured against unauthorized relocation off the range allowed by the stand.

**Figure 3.2.  Different VESA stand types**



a) table stand          b) tube mount          c) wall mount          d) presentation stand

## ADJUSTING ROTATION OF THE UPC JOINT

To change the rotation of the joint for UPC version with the joint, you must first loosen the locking screws which prevent the spontaneous change of position UPC due to vibrations. To reach these screws you must first loosen the protective cuff on the side closer to the UPC and slide it to the opposite side so that the screw heads were visible as shown in the figure below. Then loosen the two screws with an hex wrench. Adjust UPC position according to your requirements and tighten the locking screws. Finally, secure the sleeve in its original position. Be careful not to disturb watertightness of the system.

# CARE

Prior to cleaning the device, always switch it off and disconnect it from the power source.

For cleaning the external cover use a damp towel made of soft fibers. Do not use caustic cleaning agents or solvents as they can cause damage or discoloration of the cover's plastic casing.

For cleaning the surface of the display (the touch panel) use a dry cloth. If the display is very dirty, a apply small amount of a quality product for cleaning LCD displays on the dry dusting cloth. Never apply cleaning solutions directly onto the display.

Speaker area can be cleaned using in similar manner using damp towel and if needed with small amount of the suitable cleaning agent.

UPC19 is secured against the ingress of water, but it may not be cleaned by immersion. Prevent the penetration of liquids to the inside of the device as they can cause damage to it.

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# *TROUBLESHOOTING*

## WHAT TO DO IN CASE OF PROBLEMS

If problems occur when using the device that prevent its proper use, please look over this chapter, which will help you solve some common problems. If you do not find the solution to your problem in the table, contact the technical support team. You'll find contact information on the web site. If you have problems with the software applications not supplied by us, contact the supplier of the relevant application.

| Problem | Solution |
|---|---|
| After pressing the POWER button the computer does not switch on. | Check the power adapter connection, the LED on the adapter should be lit and green – if it is not lit the problem is either with the electrical socket connection or with the power adapter. |
| | If after pressing the button the LED on the front panel does not light up and the adapter is okay, then the probably a fault in the hardware is involved - contact service. |
| The computer starts but after initial text messages the operating system does not start (the screen remains black or blue with or without text) | WINDOWS: Connect an external keyboard and during starting up of the computer repeatedly press the F8 key. A menu should appear from which it is possible to select System restore to return to the previous state or start the computer in Safe mode, where it is possible to perform setting to remove the problem. |
| | Connect an external keyboard and during the computer start up repeatedly press the Delete key. This way you enter the system configuration program, where you can change system settings (Beware: Only do this if you know what you are doing!) or you can set standard system settings by selecting Restore Defaults from the Save and Exit menu. |
| | If the above-mentioned procedures fail, you may have the option of renewing the operating system from the hidden disk partition. The procedure is described below, in the section "Restoring the operating system in case of a malfunction". |
| No image appears on the display, or the display is too dark or too light. | If the control LED is blinking, press the POWER button; the device might be in sleep mode. |
| | Increase or lower the value of the brightness via the procedure presented in the section "Setting the contrast and brightness". |
| Image on the display is deformed or graphic elements are too large or blurred. | Check the settings for the screen resolution in the operating system. For the internal display the resolution should be set to a value of 1440 × 900. |
| Computer does not respond to commands from the touch panel, or responds faultily | If it is not possible to control the computer at all, connect an external mouse, and use it to launch the tools for calibration and setting of the touch panel. Calibrate the touch panel. |
| There is no sound during mutimedia playback. | Check the sound settings within your media player and your operating system. Sounds could be muted or the volume set to a low value. Check whether the drivers for the soundcard are installed and that correct device is selected for the sound playback. |
| A connected USB device does not work | Check that the device is not switched off or is not in a power-saving mode. |
| | Check that the port to which the device is connected is working correctly – connect a simple device, for example a USB mouse to see if it works properly. |
| | Check in the device manual whether it is necessary to install a driver or some other program before it is connected. |

## RESTORING THE OPERATING SYSTEM IN CASE OF ITS CORRUPTION

*Note : The presented procedure is valid only for devices supplied with the pre-installed operating system Windows 7. It is not valid for devices supplied with SSD disk with capacity smaller than 32 GB or without an operating system.*

If the system files of the operating system (OS) are damaged and it is not possible to repair them or if the operating system cannot be started, it is possible to perform a complete restore of the system. The hard disk contains a hidden disk partition on which the installation application for the operating system standardly supplied by the producer is installed. For a complete restore of the operating system, connect a keyboard to a USB port, switch on the device and repeatedly press the F10 key until the logo "rescue" appears and then the main menu with the options for system restore. This program is controlled using the arrow keys, which serve for navigating in the menus, and the keyboard Enter key, which serves for selection of the highlighted item.

**Figure 1.1. System restore menu**



Select the language of communication (Slovak or English) and from the main menu select option "2  Full system recovery".

***Beware!*** *This operation* **deletes all data on the disk** *and it is* **not possible to recover** *the lost data. It is usually possible to backup data even if it is not possible to launch the operating system. If you have valuable data stored on the disk, contact a service organization prior to performing this step.*

After confirming the deleting of all data a window is displayed with offering operating systems which can be restored. After selection of an operating system the system will launch installation. It is then necessary to proceed according to the instructions of the operating system.

ENGLISH

ENGLISH