



# TVAC10031 TVAC10060



## User manual

Version 02/2019



*Original English user manual. Keep for future use.*

## Introduction

Dear Customer,

Thank you for purchasing this product.

**This device complies with the requirements of the applicable EU directives.  
The declaration of conformity can be ordered from:**

ABUS Security-Center GmbH & Co. KG  
Linker Kreuthweg 5  
86444 Affing  
GERMANY

To maintain this condition and to ensure risk-free operation, you as the user must observe these operation instructions!

Before initial start-up, read through the complete operating instructions observing operating and safety instructions.

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All rights reserved.**

**If you have any questions, please contact your installer or your local dealer!**



### Disclaimer




This user manual was prepared with greatest care. If you should notice omissions or inaccuracies, please inform us about these on the back of this manual given address.

The ABUS Security-Center GmbH assumes no liability for technical and typographical faults and reserves the right to make at any time modifications to the product or user manual without a previous announcement.



The company is not liable or responsible for direct and indirect subsequent damages which are caused in connection with the equipment, the performance and the use of this product.

No guarantee for the content of this document is taken.

## Icon explanation

	<b>A flash in the triangle is used if there is danger for the health, e.g. by an electric shock.</b>
	<b>An exclamation mark in the triangle points to an important note in this user manual which must be minded.</b>
	<b>This symbol can be found when you are to be given tips and information on operation.</b>

## Important safety advice

	<b>The warranty will expire for damage due to non-compliance with these operating instructions. ABUS will not be liable for any consequential loss!</b>
	<b>ABUS will not accept liability for damage to property or personal injury caused by incorrect handling or non-compliance with the safety-instructions. In such cases the warranty will expire.</b>

The device has been manufactured in compliance with international safety standards. Please read these safety advices carefully.

### Safety advice

- 1. Mains supply**  
Operate this product only from the type of power supply indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your local power company. Disconnect the product from the mains before you start any maintenance or installation procedures.
- 2. Overloading**  
Do not overload a wall outlet, extension cord or adapter as this may result in electric fire or shock.
- 3. Liquids**  
Setup the device only in dry and dust-protected rooms. Protect the device from any kind of liquids entering.
- 4. Cleaning**  
Disconnect the product from the wall outlet before cleaning. Use a light damp cloth (no solvents) to dust the product.
- 5. Ventilation**  
The slots on top of the product must be left uncovered to allow proper airflow into the unit. Do not stand the product on soft furnishings or carpets. Do not stack electronic equipments on top of the product.
- 6. Accessories**  
Do not use any unsupported accessories as these may be hazardous or cause damage the product.
- 7. Location**
  - Setup the device only in dry and dust-protected rooms.
  - Protect the device from any kind of liquids entering.
  - Do not place the device near a radiator or heat register.
  - Setup the device only in areas with the advised operating temperatures of -10° ~ +40°C.



## Warnings

Follow all safety and operating advises before starting-up the device!

1. Follow these directions in order to avoid damage of the power cord or plug:
  - Do not modify or process the power cord or plug arbitrarily.
  - Do not bend or twist the power cord.
  - Make sure to disconnect the power cord holding the plug.
  - Keep heating appliances as far as possible from the power cord in order to prevent the cover vinyl from melting.
2. Follow these directions. Failure to follow any of them may cause electrical shock:
  - Do not open the main body or the power supply.
  - Do not insert metal or inflammable objects inside the product.
  - In order to avoid any damage during lighting use a surge protection.
3. Do not use the product when it is out of order. If you continue to use the product when defective, serious damage can be caused to it. Make sure to contact your local product distributor if the product is out of order.


## LCD Screen

- Heavy pressure can destroy the LCD screen.
- Using the system in a cold environment can cause display errors. This is not a malfunction and the LCD screen will work normal again when the environment temperature increases.
- Despite high standards of quality during manufacture, black or light spots could appear on the screen in places, possibly for a long time. Such spots are normal with LED screens and do not mean there is a malfunction. Furthermore, after switching off, a distorted picture may still be seen for several seconds afterwards.

	During the installation into an existing video surveillance system make sure that all devices are disconnected from the low and supply voltage circuit.
	If in doubt allow a professional electrician to mount, install and wire-up your device. Improper electrical connection to the mains does not only represent a threat to you but also to other persons. Wire-up the entire system making sure that the mains and low voltage circuit remain separated and cannot come into contact with each other in normal use or due to any malfunctioning.

## Unpacking

While you are unpacking the device please handle it with utmost care.

	If you notice any damage of the original packaging, please check at first the device. If the device shows damages, please contact your local dealer.
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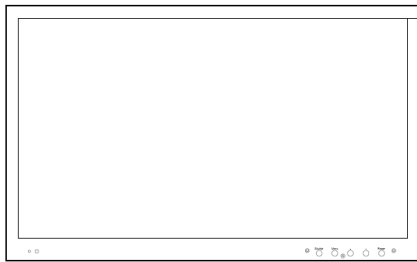
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## 1. Intended use

The 23.6" / 19.5" LED monitor displays Full HD 1080p / HD+ 960p pictures in 16:9 formats. Thanks to its 3 different connections it can be connected flexibly to ABUS DVR, NVR and computers at the same time. Integrated loudspeaker and audio inputs also allow soundtracks to be played. To fix it to a wall or ceiling, VESA standard mounts can be used.

A detailed description of all functions can be found in chapter „3 Features and functions“.

## 2. Scope of delivery



Monitor



Power supply unit incl. EU and UK cold device cable



HDMI cable

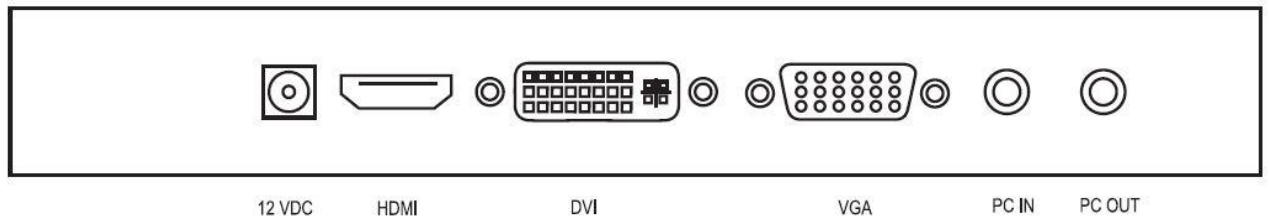


Remote control

## 3. Features and functions

- Higher contrast and improved color display thanks to LED backlighting
- Suitable for continuous operation
- Easy to install on the wall or ceiling with VESA standard mounts (VESA 100 x 100 mm)
- Versatile connection options
- Low energy consumption due to energy saving LED display

#### 4. Physical descriptions



1	Power supply	DC 12 V / 3 A, Only use the power supply unit provided for operating the monitor!
2	HDMI input	Port for multi-media data
3	DVI input	Port for multi-media data
4	VGA input	PC and DVR signal input
5	PC in	3.5 mm jack, audio signal input coupled with the VGA input
6	PC out	3.5 mm jack, audio signal output coupled with the VGA input

## 5. Mounting

### 5.1 Power supply

Before starting installation, ensure that the power supply voltage and the rated voltage on the power supply unit are identical.

### 5.2 Ventilation

Please provide sufficient ventilation. The cooling openings may not be covered for sufficient ventilation.

### 5.3 Wall Mount

For mounting the monitor at a wall please use a VESA compatible wall mount. At the backside of the monitor there are squarely arranged assembly holes (Middle distance 75 mm). These are compatible with the ABUS TVAC10500 wall mount.

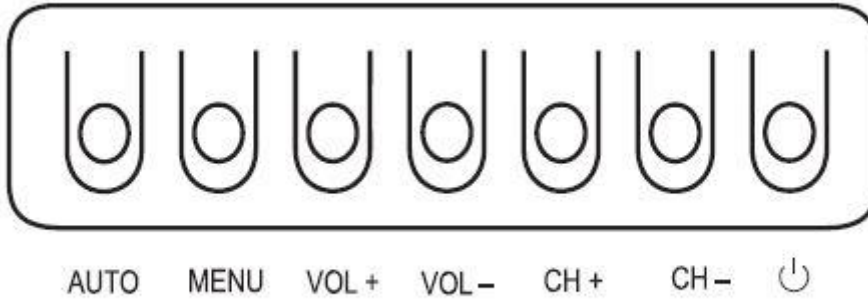
Please also pay attention to the installation manual of the wall mount.




During the mounting of the TFT monitor it must be separated from the mains voltage.



## 6. Button description



Button	Description
AUTO	Select one of the different input signals: <ul style="list-style-type: none"><li>• VGA</li><li>• HDMI</li><li>• DVI</li></ul>
MENU	<ul style="list-style-type: none"><li>• Show the OSD (on-screen display)</li><li>• Exit a menu item and the menu</li></ul>
VOL +	<ul style="list-style-type: none"><li>• Increase the volume during operation</li><li>• Increase the value in the OSD</li><li>• Adopt a signal input</li></ul>
VOL -	<ul style="list-style-type: none"><li>• Decrease the volume during operation</li><li>• Decrease the volume during operation</li><li>• Adopt a signal input</li></ul>
CH +	<ul style="list-style-type: none"><li>• In the menu: switch between main menu items</li></ul>
CH -	<ul style="list-style-type: none"><li>• In the menu: switch between main menu items</li></ul>
	<ul style="list-style-type: none"><li>• Switches monitor on or off</li></ul>

## **7. Selecting the input signal**

To select the input signal, press the AUTO button.

The selected input will be displayed on the upper left of the screen.






Press the Source button repeatedly until you reach the required input and confirm the entry with the VOL + or VOL - button.

You have the choice of HDMI, VGA and DVI.

## 8. On-screen menu

To call up the on-screen display, please press the “Menu” button.

To adjust the settings, you have the following screen menus at your disposal.

	Picture	Picture settings
	Position	Setting of position
	Color	Setting of Color temperature /color values
	OSD	OSD settings
	Setup	General settings



Please note that the menu structure depends from the input source!

## 8.1 Picture

To make settings for the picture display, press the MENU button and then press the SOURCE button to select the first menu item.

The selected menu item is shown by a frame. The sub-menu item is highlighted in yellow.

You can navigate between sub-menu items using the SOURCE button. Press the + / - button to increase or decrease the values of a sub-menu.



Menu item	Description	Available in mode
<b>Brightness</b>	Setting of picture brightness (Value from 0 to 100)	HDMI, DVI, VGA
<b>Contrast</b>	Setting of picture contrast (Value from 0 to 100)	HDMI, DVI, VGA
<b>Gamma</b>	Gamma on/off (Selection YES/No)	HDMI, DVI, VGA

## 8.2 Position

This menu item lets you make settings for the display size and position.

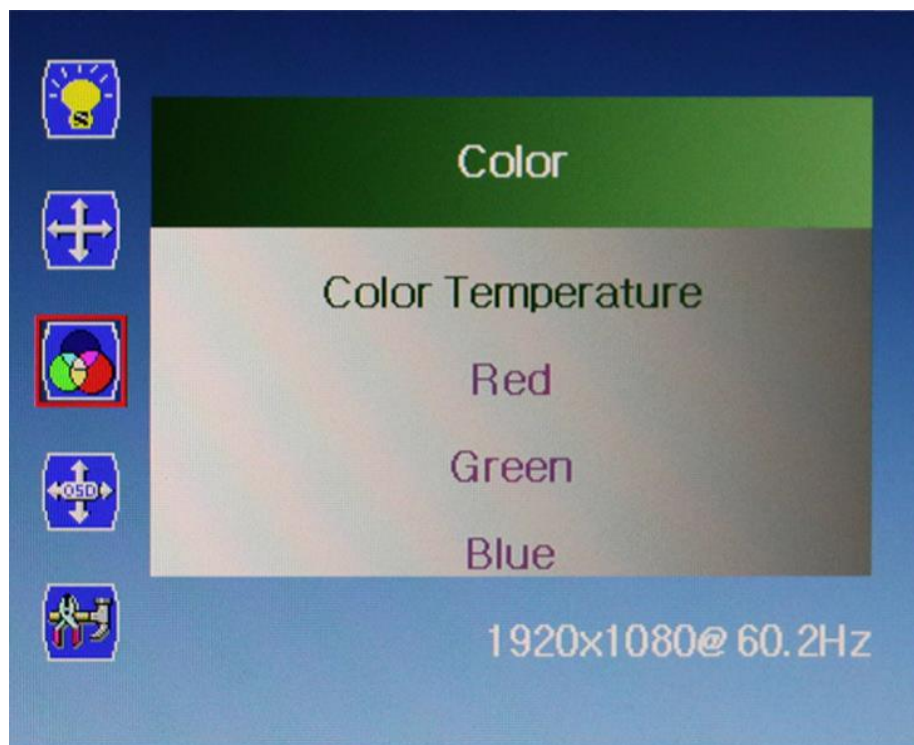


Menu item	Description	Available in mode:
Phase		VGA
Takt		VGA
H.Position	Manual setting of the horizontal picture position	VGA
V.Position	Manual setting of the vertical picture position	VGA

### 8.3 Color

Here you can setup the color temperature / color values of the display.

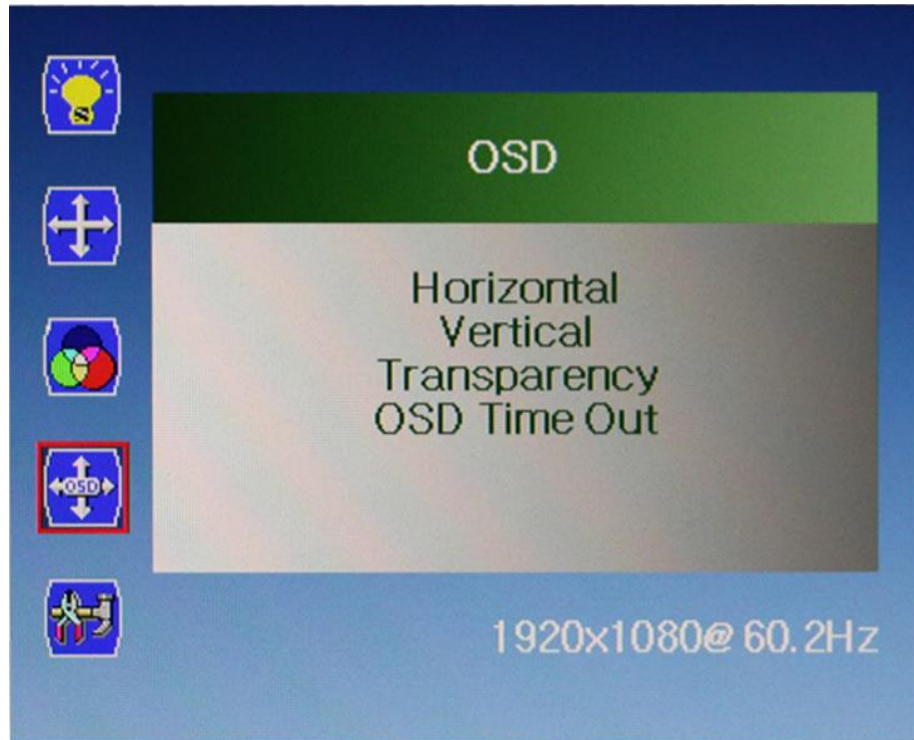
To change the color red/green/blue separately please choose „User“ in the menu item „Color Temperature“



Menu item	Description	Available in mode:
<b>Color Temperature</b>	Setting of color temperatur in „K“ or user-defined settings	HDMI, DVI, VGA
<b>Red</b>	Manual setting of red component	HDMI, DVI, VGA
<b>Green</b>	Manual setting of green component	HDMI, DVI, VGA
<b>Blue</b>	Manual setting of blue component	HDMI, DVI, VGA

## 8.4 OSD

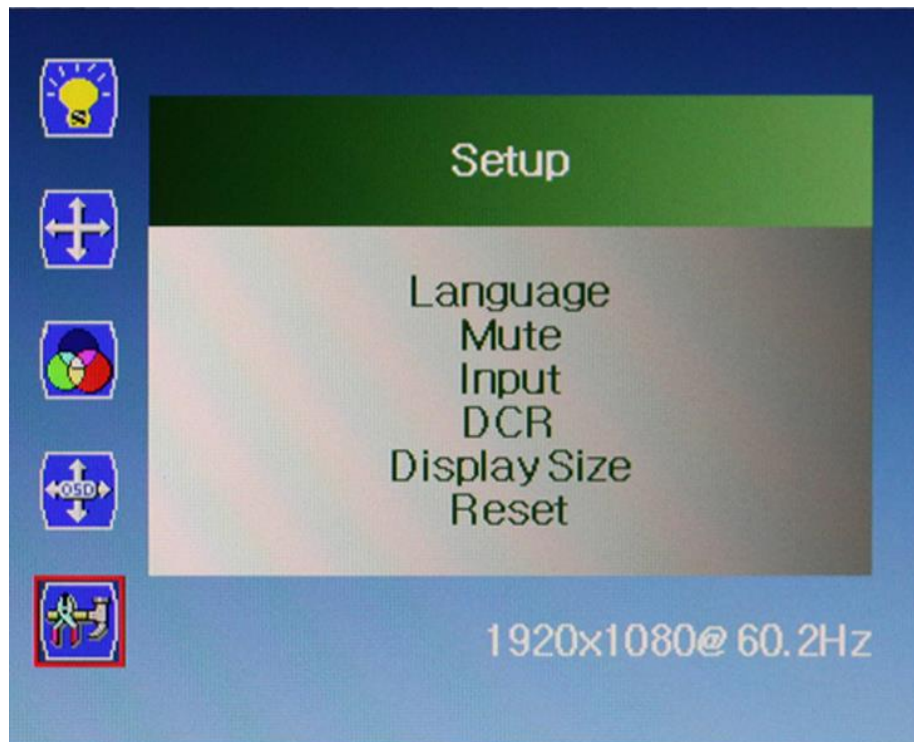
This menu item lets you make settings for the OSD display.



Menu item	Description
Horizontale	Manuel setting of the horizontal OSD position
Vertikal	Manuel setting of the vertical OSD position
Transparenz	Setting of the transparency of the OSD
OSD Time out	Setting specifying how long the menu remains on the screen (value from 5 to 60 seconds)

## 8.5 Setup

Here you can setup the general settings of the device.



Menu item	Description
<b>Language</b>	Selection of the language for the OSD.
<b>Mute</b>	Mute the audio interface on/off
<b>Input</b>	Selection of input source
<b>DCR</b>	Digital Contrast ratio (DCR) on / off
<b>Display Size</b>	Setting of picture size and ratio
<b>Reset</b>	Restoring the factory settings



## 9. Maintenance and cleaning


### 9.1 Maintenance

Regularly check the product's physical state, e.g. check for damage of the housing.

If you suspect that safe operation cannot be guaranteed anymore, disconnect the product and ensure that it cannot be used by mistake. Remove the batteries.


You can assume that safe operation is not possible anymore when

- the device shows visible damage,
- the device does not function anymore


	<p><b>Please note:</b></p> <p>The product is absolutely maintenance-free for you. There are no components on the inside of the product to be checked or services by you, never open it.</p>
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### 9.2 Cleaning

Wipe the product with a clean, dry cloth. If the device is very dirty, you can moisten the cloth with lukewarm water.

	<p>Ensure that no liquids can get into the device. Do not use any chemical cleaners, since they could damage the housing surface or the screen (discolorations).</p>
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## 10. Disposal

	<p>Important: The EU Directive 2002/96/EC regulates the proper return, treatment and recycling of used electronic devices. This symbol means that in the interest of environmental protection the device must be disposed of separately from household or industrial waste at the end of its service life in accordance with applicable local legal guidelines. Disposing of used devices can be done at official recycling centers in your country. Obey local regulations when disposing of material. Further details on returns (also for non-European countries) can be obtained at your local authority. Separate collection and recycling saves natural resources and ensures that all the provisions for protecting health and environment are observed when recycling the product.</p>
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## 11. Technical data

Model number	TVAC10031	TVAC10060
Monitor type	LED monitor	
Screen diagonal	19,5	23,5
Resolution	1600x900	1920x1080
Pixel pitch	0.2715 (H) x 0.2715 (V) mm	
Picture format	16:9	
Comb filter	3D	
Signal recognition	Automatic	
Contrast ratio	1.000:1	
Brightness	300 cd/m <sup>2</sup>	
Color gradations	16.7 million	
Viewing angle, horiz. / vert.	160° (H) x 170° (V)	
Response time	5 ms	
Frequency range	30 – 80 KHz (H) / 50 – 75 Hz (V)	
OSD menu	Graphic on-screen display	
OSD languages	German, English, French, Dutch, Danish, Polish, Italian, Spanish	
Inputs	1x DVI, 1x VGA, 1x HDMI, 1 x audio (3.5 mm jack),	
Outputs	1x audio	
Loudspeakers	2 integrated loudspeakers	
Display surface	Safety glass	
Power supply	12 V DC	
Power consumption	Max. 3 A	
Operating temperature	-10 °C – +40°C	
Humidity	Max. 70% (non-condensing)	
VESA	100 x 100 mm	
Dimensions (W x H x D)	470x360x143	580 x 407 x 75
Weight	2,8	4,0