



TVAC10000



User manual

Version 12/2010



Original English user manual. Keep for future use.

Introduction

Dear Customer,

Thank you for purchasing this product.

This product meets the requirements of the applicable European and national guidelines. The corresponding declarations and documents can be obtained from the manufacturer (www.abus-sc.com).

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

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

Important safety advice

	The warranty will expire for damage due to non-compliance with these operating instructions. ABUS will not be liable for any consequential loss!
	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.

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° - +50°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.
- Localized black (dark) or bright spots can appear and stay on the screen. Such spots are normal for LCD screens and do not represent a malfunction. In spite of high precision technology used in manufacturing, a very small number of dark and permanently bright pixels are unavoidable. After turning it off, it is also possible that a distorted picture remains visible for several seconds.

	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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1. Intended use

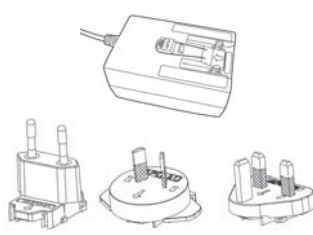
This light and slender LCD monitor has a sturdy design and numerous excellent features. The 8.4" TFT monitor has two BNC outputs and inputs, an S-Video input as well as one VGA and two audio inputs. Two stereo loudspeakers are integrated on the front for direct audio output.

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

2. Scope of delivery



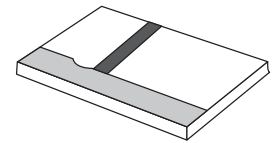
Monitor



Power supply unit incl.
EU, AU and UK plugs



VGA cable



Manual



PC audio cable



Chinch audio cable



Remote control










3. Features and functions

- Full-contrast 8.4" TFT monitor
- SVGA resolution 800 x 600
- Many useful inputs: 2x BNC, 1x S-Video, 1x VGA, 1x PC Audio
- OSD (on-screen display)
- Integrated loudspeakers
- PIP (picture-in-picture) function with various viewing options

4. Overview – type numbers

Article number	TVAC10000
Screen size	8,4"
Resolution	800 (H) x 600 (V) SVGA
Brightness	250 cd/ m ²

5. Physical descriptions

 AUDIO IN	AUDIO IN	Audio signal input for use with the BNC and S-Video inputs
 IN V1	V1 IN	Composite video signal input (BNC)
 OUT	V1 OUT	Looped through video output
 IN V2	V2 IN	Composite video signal input (BNC)
 OUT	V2 OUT	Looped through video output
 S-VIDEO IN	S-VIDEO IN	Analogue signal input
 VGA IN	VGA-IN	PC and DVR signal input
 PC AUDIO IN	PC AUDIO IN	Audio signal input coupled with the VGA input
 DC 12V IN	DC 12V IN	12 V DC/5 A power supply

6. Mounting

6.1 Power supply

Before starting installation, ensure that the mains voltage and the rated voltage of the monitor are identical.

6.2 Ventilation

Please ensure that there is adequate ventilation. In order to guarantee adequate ventilation, it is important that the ventilation openings are not covered.

6.3 Wall Mount

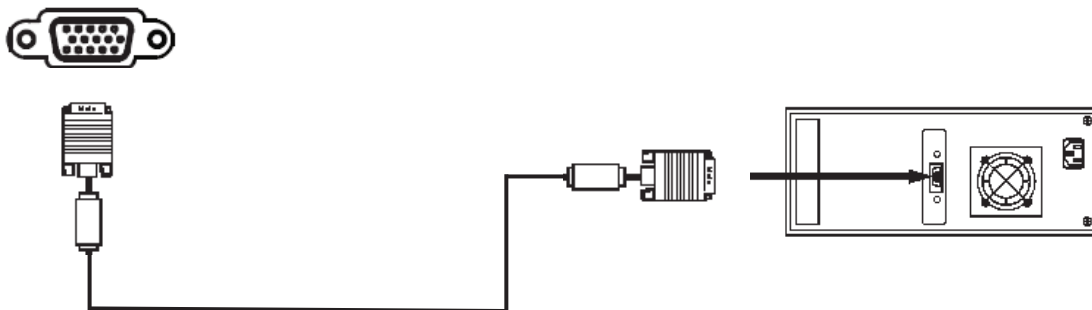
For wall-mounting, please use a VESA compatible wall bracket. The mounting holes are arranged in a square on the back of the monitor (centre-to-centre distance: 75 mm). They are compatible with the ABUS TVAC10500 wall bracket.

Please observe the installation instructions accompanying the wall bracket.

	The TFT monitor must be disconnected from the mains power during installation.
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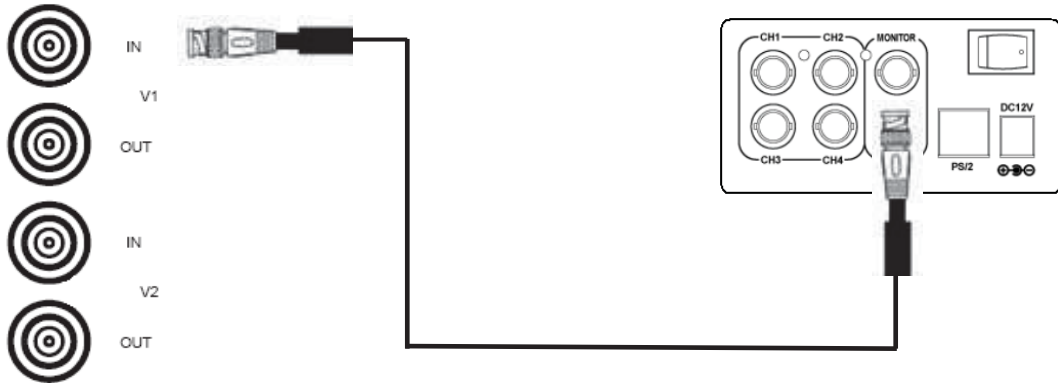
7. Connections

7.1. Connect the monitor to a PC or recorder via VGA.



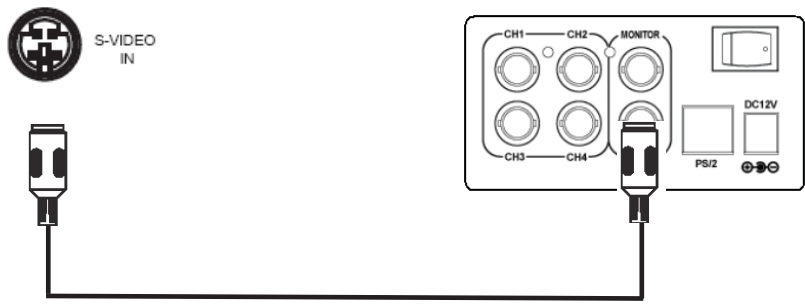
Use a VGA cable for connecting the monitor to a PC or recorder.

7.2 Connect the monitor to a camera or recorder via BNC.



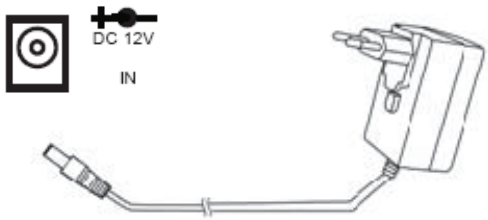
Use a coaxial cable with BNC plugs (male) for the connection. Connect one of the monitor's video inputs with the video output of a camera or the monitor output of a recorder.

7.3 Connect the monitor with a camera or recorder via S-Video.

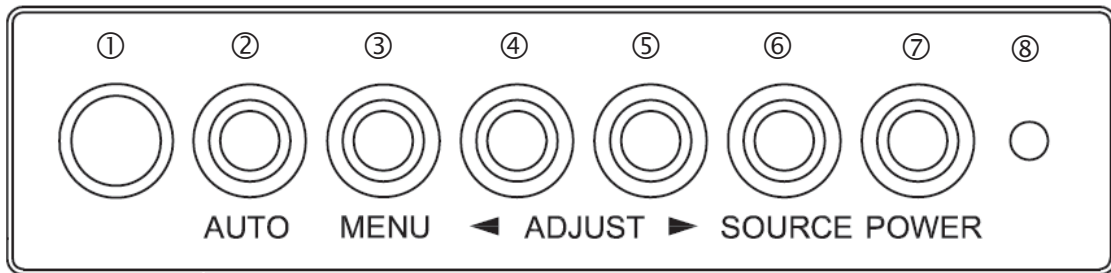


Use an S-Video cable for the connection. Connect the monitor's S-Video input with the S-Video output of the recorder.

7.4 Finally, connect the supplied power supply unit to the monitor and the 230 V AC power supply.

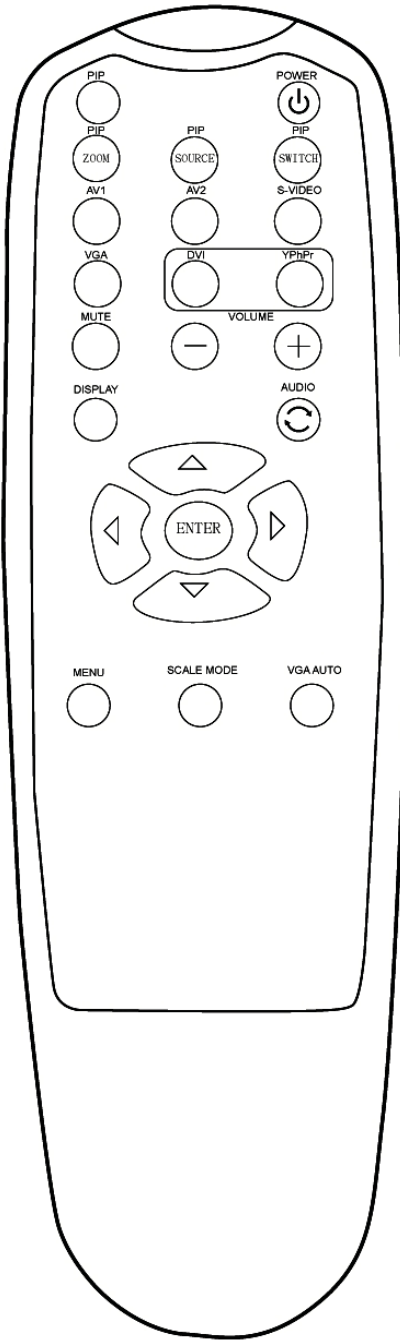


8. Button description



Number	Button	Description
①	IR receiver	<ul style="list-style-type: none"> • IR LED for operating the unit with the remote control
②	Auto	<ul style="list-style-type: none"> • Automatic adjusting in the VGA-mode • Call a menu item • Select a menu item for adjustment
③	MENU	<ul style="list-style-type: none"> • Show the OSD (on-screen display) • Confirm a selected value • Exit a menu item and the menu
④	◀	<ul style="list-style-type: none"> • Reduce the value in the OSD • Switch between menu items
⑤	▶	<ul style="list-style-type: none"> • Increase the value in the OSD • Switch between menu items
⑥	Source	Select the different input signals: <ul style="list-style-type: none"> • VGA (PC or DVR signal input) • AV1 (analogue video input) • AV2 (analogue video input) • S-Video (analogue video input)
⑦	Power	<ul style="list-style-type: none"> • Switch monitor on / off
⑧	Power LED	<ul style="list-style-type: none"> • Red: off • Orange: standby (only VGA) • Green: on

9. Button description of the remote control



Button	Function
PiP Mode	Select the PIP mode
POWER	Switch monitor on / off
PIP-ZOOM	Select the picture-in-picture size: Off/ PIP small / PIP large/ POP
PIP-SOURCE	Select the input for the Picture-in-Picture function
PIP-SWITCH	With this function you can swap the main picture with the overlaid picture.
AV1	AV1 (analogue video input)
AV2	AV2 (analogue video input)
S-VIDEO	S-Video (analogue video input)
VGA	VGA (PC or DVR signal input)
MUTE	Switch off loudspeakers
VOLUME -	Reduce the volume
VOLUME +	Increase the volume
DISPLAY	Displays the source information
AUDIO Swap	No function
▲	Increase the value in the OSD, Call a menu item
◀	Reduce the value in the OSD
ENTER	Confirm a selected value, Select a menu item for adjustment
▶	Increase the value in the OSD
▼	Select a menu item for adjustment , Reduce the value in the OSD
MENU	Show the OSD (on-screen display), Switch between menu items
SCALE MODE	Screen view settings. You have the following options: Full scan, overscan, underscan
VGA AUTO	Automatic adjustment of the desktop display.

10. Source selection

To select the input signal, press the source button.
The selected input will be displayed on the upper right of the screen.

You can choose between BNC1, BNC2, VGA and S-Video.

To set the volume of the monitor, press the ◀ and ▶ buttons in normal operation and set the value that you want with these buttons.

11. 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.

Image	PIP	Setup	VGA	Language
Brightness			< 50 >	
Contrast			< 50 >	
Color Temp.			< 9300 >	
Saturation			< 50 >	
Hue			< 50 >	
Zoom Mode			< Fullscan >	
Sharpness			< 5 >	
CCD Mode			< OFF >	

Image	Settings for the picture display
PIP	Settings for the picture-in-picture function
Setup	Basic settings for the monitor
VGA	VGA mode settings
Language	Language selection

11.1 Image

To make settings for the picture display, press the menu button and then press the AUTO button to select the first menu item. The selected menu item is highlighted in black; the sub-menu item has a grey background.

You can switch between sub-menu items with the ◀ and ▶ buttons. By pressing the AUTO button, you can select an item and reduce or increase the value with the ◀ and ▶ buttons.

Image	PIP	Setup	VGA	Language
Brightness			< 50 >	
Contrast			< 50 >	
Color Temp.			< 9300 >	
Saturation			< 50 >	
Hue			< 50 >	
Zoom Mode			< Fullscan >	
Sharpness			< 5 >	
CCD Mode			< OFF >	

Brightness	Picture brightness settings (value ranging from 0% to 100%)
Contrast	Picture contrast settings (value ranging from 0% to 100%)
Color Temp.	Colour temperature settings. You have the following options: 6.500 °K or 9.300 °K
Saturation	Colour intensity settings (value ranging from 0% to 100%)
Hue	Colour saturation settings (value ranging from 0% to 100%)
Zoom Mode	Screen view settings. You have the following options: Full scan, overscan, underscan
Sharpness	Picture sharpness settings (value ranging from 0 to 20)
CCD Mode	Optimised settings for usage with cameras

11.2 PIP

With this menu item you can adjust the settings of the picture in picture function.


	<p>Please note: If you switch off the monitor the PIP settings will be lost.</p>
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Image	PIP	Setup	VGA	Language
			< None >	
			< BNC2 >	
			< 10 >	
			< 10 >	
			>	

PIP Mode	Select the picture-in-picture size.
PIP Source	Select the input for the Picture-in-Picture function
PIP H Position	Adjusting the horizontal position of the picture-in-picture input. Selection range 0 (left) till 10 (right)
PIP V Position	Adjusting the vertical position of the picture-in-picture source. Selection range 0 (top) till 10 (bottom)
PIP Swap	With this function you can swap the main picture with the overlaid picture. Choose the menu sub item and confirm this with the ► button.

11.3 Setup

Using this menu item you can choose the settings for the OSD menu display as well as advanced monitor settings.

Image	PIP	Setup	VGA	Language
OSD Timer		<	30	>
OSD H Position		<	5	>
OSD V Position		<	5	>
Mute		<	OFF	>
Source		<	ON	>
Auto scan		<	OFF	>
Key Lock		<	OFF	>
Recall		>		

OSD Timer	Setting of the OSD dwell time (selection range 5 till 60)
OSD H. Position	Manual setting of the horizontal OSD Position. Selection range 0 (left) till 10 (right)
OSD V. Position	Manual setting of the vertical OSD position Selection range 0 (top) till 10 (bottom)
Mute	Switch off loudspeakers
Source	Selection of the input signal
Auto scan	All inputs will be automatically scanned if the monitor is switched on.
Key Lock	Activation of the key lock. To deactivate the key lock, please press the MENU and AUTO buttons at the same time.
Recall	Recall the standard settings.

11.4 VGA

With this menu item you can select the settings for the VGA mode. Please take notice that this menu item is only available if the monitor is connected to a VGA signal.

Image	PIP	Setup	VGA	Language
H Position			<	40 >
V Position			<	44 >
Phase			<	24 >
Clock			<	40 >
Auto Adjust			>	

H Position	Manual setting of the horizontal picture position (Selection range 0% till 100%)
V Position	Manual setting of the vertical picture position (Selection range 0% till 100%)
Phase	Horizontal synchronisation (Selection range 0% till 63%)
Clock	Vertical synchronisation (Selection range 0% till 90%)
Auto Adjust	Automatic adjustment of the desktop display.

11.5 Language

With this menu item you can select the OSD language. You can choose between following languages: German, English, French, Dutch and Danish.

Image	PIP	Setup	VGA	Language
German				
English				
French				
Dutch				
Danish				

12. Maintenance and cleaning

12.1 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



Please note:

The product is absolutely maintenance-free for you. There are no components on the inside of the product to be checked or serviced by you, never open it.

12.2 Cleaning

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



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).

13. Disposal



Devices with this marking should not be put in the household garbage. Dispose of the product at the end of its lifetime according to the applicable regulations.

14. Technical data

Type number	TVAC10000
Monitor type	Standard TFT LCD
Screen diagonal	8,4"
Resolution	800 (H) x 600 (V) SXGA
Dot pitch (H x V)	0,213 (H) x 0,213 (V) mm
Picture format	4:3
Video system	PAL / NTSC
Comb filter	3D
Signal detection	Automatic
Contrast ratio	600:1
Brightness	250 cd/m ²
Color levels	16.2 million
Viewing angle horiz. / vert.	150° (H) x 130° (V)
Response time	16 ms
Frequency range	31.5-80KHz (H) / 56-75Hz (V)
OSD menu	Graphical On-Screen-Display
OSD languages	German, English, French, Dutch, Danish
Inputs	1x VGA, 2x BNC, 1x S-Video, 2x Audio (3,5 mm phone jack)
Outputs	2x BNC
Loudspeakers	Integrated 2 x 1W
Housing material	Metall frame
Display	matt
Power supply	12 V DC / 5A
Power consumption	11,5 W
Operating temperature	-10 – +50°C
Humidity	Max 85%
Dimensions (WxHxD)	210 x 190 x 42 mm
Weight	1,3 kg