

# VDSP12

## Operating Manual

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## Right of modification

We reserve the right to modify the technical information contained in this document without prior notice in the interests of ongoing improvements to our products and documentation.

## Printing

This manual was produced on a personal computer using MS-Word for Windows. The text was printed in Arial type.

## Fonts

*Italics* and **bold** type are used for the title of a document or to emphasize text passages.

Passages written in `Courier` show text which is visible on the display as well as software menu selections.

"< >" refers to keys on your computer keyboard (e.g. <RETURN>).

## Note

Text following the "NOTE" symbol describes important features of the respective product.

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## Revision History



**Note:**

The cover of this document shows the current revision status and the corresponding date.

Drawings which can be in the appendix have their own revision history.

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Rev.	Changes	Date

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## 1. Integration / Mounting

1. Do not place the industrial display in direct sun light.
2. The industrial display may only be operated in mounted situation
3. Mounting location must ensure air circulation needed for cooling.
4. Mounting must hold the industrial display free from buckling / torsional flexing.
5. Only the specific suspension mounts are designed to hold the display and to transfer forces from and to the industrial display.
6. Specified orientation is vertical with landscape orientation.

## 2. Connection

1. Disconnect your system and the flat screen display from 24 V power.
2. Connect the VGA cable (15 pin SubD) between the VGA output of your system and the VGA input of the display. If applicable connect the serial link between touch screen controller and your system.
3. Connect the display and your system with 24 V power.

## 3. Notes for Operation

1. Never exceed the rated supply voltage (24VDC  $\pm$  20%).
2. Prevent from displaying static images over a long period of time.
3. Maintain the surrounding conditions stated in the technical data sheet / specifications for this display.

## 4. Specifications

### TFT Module

Panel size .....	12,1"
Display type / Interface .....	a-Si TFT active matrix / TTL
Resolution / Display color .....	800x600 / 262.144
Pixel pitch .....	0,3075(H) x 0,3075(V)
Surface treatment .....	Antiglare & Hard- coating (3H)
Viewing angle .....	vertical 110° / horizontal 140°
Contrast / Brightness .....	370 cd/m <sup>2</sup>
Backlight unit .....	2 CCFTs / Lifetime typ. 50.000h

### Optional 8- Wire Touchscreen

Haze and clarity .....	Hard coat HCG12 – Haze 5%, clarity 77%
Point activation .....	min.1.000.000 activations at a single point
Gouge Hardness .....	4H

## 5. Main specifications

### Electrical data

Power supply .....	24VDC $\pm$ 20%
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### Environmental conditions

EMI .....	EN 50081-2; EN 55011, EN 50082-2; EN 50140 ENV 50141; EN 61000-4-2; EN 61000-4-4; EN 61000-4-5
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### Operating temperature [°C]

non-permanent .....	0..+50 °C / max. 240h under sufficient cooling
permanent .....	0..+45°C
Storage temperature [°C] .....	-20 .. +60°C
Humidity (rel) .....	90 % (non condensing)

## 6. Using the On Screen Display

With the OSD (On Screen Display) you can modify the settings and control the special features of the TFT.

The OSD uses a number of menus for making changes and turning the special features on or off. The configuration can be done via the backside OSD-keypad.

To start the OSD press the "MENU" button on the keypad, after switching the power supply on. Main Menu will be displayed.

- If the TFT Display don't power on, simply press the power button on the backside OSD.
- In the case of a valid connected VGA signal the TFT shows the normal picture.
- In the case of no valid connected VGA signal the TFT shows a message "no signal". In this case the TFT power offs automatically after round about 1 minute.

**To select an tab**, simply use the button "+" or "-" to move the cursor to the tab you want and press button "MENU". When you use the tab "Exit" and press the "CONFIRM"-button, the MENU will be closed.

**To use a tab menu**, simply use "MENU"-button to select the field. Use "+" or "-" to select a value for that field. The "Exit"-field on the bottom-side on the tab will go + to the tab-selection. Simply press the "MENU"-button.



**Note:**

**All changed values will only be saved by selecting "Exit" from the MENU.  
If not, the adjusted values will be lost after loss of power.**

## 7. Description of the selectable buttons / part 1

### 1.1. Input Select:

Feature	Button	Description
Select VGA	Press "MENU"	Select VGA input
Select DVI	Press "MENU"	Select DVI input
Exit	Press "MENU"	Exit MENU

### 1.2. Brightness

Feature	Button	Description
Brightness	Press "MENU" to enter Adjust with "+" and "-"	Adjust brightness
Contrast	Press "MENU" to enter Adjust with "+" and "-"	Adjust contrast
Backlight Brightness	Press "MENU" to enter Adjust with "+" and "-"	Adjust backlight brightness
Backlight Mode	Use "+" and "-"	Enter Backlight Mode submenu
- Manual Backlight	Use "+" and "-"	Control backlight over the MENU
- External Backlight Control	Use "+" and "-"	Enable external control of backlight
- Exit		Exit submenu
Exit	Press "MENU"	Exit MENU

### 1.3. Color Settings

Feature	Button	Description
Auto Color Adjust	Press "MENU"	Adjust colors automatically
Switch sRGB Mode	Press "MENU"	Switch to sRGB mode
Color Temperature	Press "MENU"	Enter Color Temperature submenu
- Select Color Temperature	Press "MENU"	Select predefined color temperatures
- Adjust RGB Values	Press "MENU"	Enter Adjust RGB Values submenu
- Red Color Value	Use "+" and "-"	User defined value of color temperature
- Green Color	Use "+" and "-"	User defined value of color temperature
- Blue Color	Use "+" and "-"	User defined value of color temperature
- 4200K	Press "MENU"	Set predefined color temperature of 4200K
- 5000K	Press "MENU"	Set predefined color temperature of 5000K
- 6500K	Press "MENU"	Set predefined color temperature of 6500K
- 7500K	Press "MENU"	Set predefined color temperature of 7500K
- 9300K	Press "MENU"	Set predefined color temperature of 9300K
- Exit	Press "MENU"	Exit submenu
Exit	Press "MENU"	Exit MENU

## 8. Description of the selectable buttons / part 2

### 1.4. Image Settings

Feature	Button	Description
Auto Adjust	Press "MENU"	Adjust image automatically
Adjust Width	Press "MENU" to enter Adjust with "+" and "-"	Adjust image width
Adjust Phase	Press "MENU" to enter Adjust with "+" and "-"	Adjust image phase
Horizontal Pos	Press "MENU" to enter Adjust with "+" and "-"	Adjust image horizontal position
Vertical Pos	Press "MENU" to enter Adjust with "+" and "-"	Adjust image vertical position
Exit	"MENU"	Exit menu

### 1.5. Tools

Feature	Button	Description
MENU Settings	Press "MENU"	Enter MENU Settings submenu
- MENU Timeout	Use "+" and "-"	Set the MENU time to close automatically
- MENU Hor. Position	Use "+" and "-"	MENU horizontal position
- MENU Ver. Position	Use "+" and "-"	Set MENU vertical position
- MENU Orientation	Press "MENU"	Enter MENU Orientation submenu
- Standard	Press "MENU"	MENU standard orientation
- Rotate 90	Press "MENU"	Set MENU orientation at 90 degrees
- Rotate 180	Press "MENU"	Set MENU orientation at 180 degrees
- Rotate 270	Press "MENU"	Set MENU orientation at 270 degrees
- Horizontal Mirror	Press "MENU"	View the MENU horizontally mirrored
- Exit		Exit submenu
Factory Reset	Press "MENU"	Recall all default factory settings
Factory Color Reset	Press "MENU"	Recall the factory default color settings
Factory Position Reset	Press "MENU"	Recall the factory default position of screen
Sharpness	Use "+" and "-"	Adjust level of sharpness
Overlapped Mode Select	Press "MENU"	Select overlapped mode
Exit	Press "MENU"	Exit menu

### 1.6. Exit MENU Menu

Feature	Button	Description
Exit	Press "MENU"	Exit the MENU and save changes



#### Notes for your best picture results:

TRs recommend the following display settings for the best picture results:

- Resolution: see Specifications (chapter 4)
- Frequency: 60 Hz.

After this, execute the auto adjust button (to be found under "Image Settings") one time for best picture result for the connected PC system.

All changed values will only be saved by selecting "Exit" from the MENU.

If not, the adjusted values will be lost after loss of power.