



DeltaVarioMon Sales Guide

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Distinctive features

DeltaVarioMon Series



DeltaVarioMon is one of DELTA COMPONENTS proprietary product series. These LCD-TFT vehicle displays are designed for use in automotive and other mobile applications. Available in four different sizes (6,5", 8,4", 10,4" and 12,1") the displays differ – besides the integrated panel, design and possible options – basically in respect to the following criteria:





Standard interface 

TouchScreen control 

Backlight 

1. DeltaVarioMon Series with LED Backlight VGA/CRT, DVI, Power USB LED


Article-Nr. Short description

DMXX1140	DeltaVarioMon 10,4" XGA 1.024x768, 1.000cd/m ² , without TouchScreen		Option Sound + USB Hub
DMXX1141	DeltaVarioMon 10,4" XGA 1.024x768, 1.000cd/m ² , with TouchScreen		
DMXX1160	DeltaVarioMon 12,1" XGA 1.024x768, 1.000cd/m ² , without TouchScreen		Option Sound + USB Hub
DMXX1161	DeltaVarioMon 12,1" XGA 1.024x768, 1.000cd/m ² , with TouchScreen		

- Features:**
- Wide operating temperature range
 - DC Power Input
 - Large dimming range
 - 1.000 cd/m² sunlight readable
 - High uniformity
 - Multiple mounting possibilities
 - High shock- and vibration resistance
 - Low noise
 - Low power-, voltage- and current consumption
 - Mercury- and lead free
 - High life time
 - Excellent design for optimal heat dissipation
 - LED Driving Board

2. DeltaVarioMon Series with CCFL Backlight VGA/CRT, DVI, Power USB CCFL

Article-Nr. Short description

DMXX1069	DeltaVarioMon 6,5" VGA 640x480, 600cd/m ² , ohne TouchScreen		
DMXX1070	DeltaVarioMon 6,5" VGA 640x480, 600cd/m ² , mit TouchScreen		
DMXX1063	DeltaVarioMon 8,4" SVGA 800x600, 650cd/m ² ohne TouchScreen		Option Sound + USB Hub
DMXX1064	DeltaVarioMon 8,4" SVGA 800x600, 650cd/m ² mit TouchScreen		
DMXX1073	DeltaVarioMon 12,1" XGA 1.024x768, 1.250cd/m ² , ohne TouchScreen, 220VAC		
DMXX1074	DeltaVarioMon 12,1" XGA 1.024x768, 1.250cd/m ² , mit TouchScreen, 220VAC		

3. DeltaVarioMon II Series VGA/CRT, Power PS/2 CCFL

Article-Nr. Short description

DMXX1050	DeltaVarioMon II 6,5" VGA 640x480, 300cd/m ² , without TouchScreen
DMXX1051	DeltaVarioMon II 6,5" VGA 640x480, 300cd/m ² , with TouchScreen
DMXX1055	DeltaVarioMon II 8,4" SVGA 800x600, 350cd/m ² , without TouchScreen
DMXX1056	DeltaVarioMon II 8,4" SVGA 800x600, 350cd/m ² , with TouchScreen

DeltaVarioMon Series



	DeltaVarioMon Series LED Backlight (VGA/CRT + DVI Interface; TouchScreen USB)		DeltaVarioMon Series CCFL Backlight (VGA/CRT + DVI Interface; TouchScreen USB)		
	10.4" DeltaVarioMon LED Backlight	12.1" DeltaVarioMon LED Backlight	6.5" DeltaVarioMon CCFL Backlight	8.4" DeltaVarioMon CCFL Backlight	12.1" DeltaVarioMon CCFL Backlight
Ordering Number	DM0X1140 / DMXX1141	DM0X1160 / DMXX1161	DM0X1069 / DMXX1070	DM0X1063 / DMXX1064	DM0X1067/1068/1073/1074
Viewing Area / Diagonale	10.4"	12.1" 310mm	6.5"/170mm	8.4"/213mm	12.1" 310mm
Touch Panel	with/ without TouchScreen analog resistive	with/ without TouchScreen analog resistive	with/ without TouchScreen analog resistive	with/ without TouchScreen analog resistive	with/ without TouchScreen analog resistive
Pixel Pitch (mm)	0.0695 x 0.2055	0.240 x 0.240	0.207 x 0.207	0.213 x 0.213	0.240 x 0.240
Resolution (mm)	1.024 x 768 XGA	1.024 x 768 XGA	640 x 480 VGA	800 x 600 SVGA	1.024 x 768 XGA
Effective Display Area	210,4 x 157,8	245,75 x 194,32 mm	132,48 x 99,36 mm	170,496 x 127,672 mm	245,75 x 194,32 mm
Color	16,2M	262.144 colors	6-bit digital, 262.144		6-bit, 262.144 colors
Response Time (tr/rf)	40ms	33ms	25ms	25ms	50ms
Contrast Ratio	800:1	800:1	600:1	600:1	500:1
Brightness	1.000cd/m ²	1.000cd/m ²	600cd/m ²	650cd/m ²	1.250cd/m ²
Dimmable	yes Incl. Brightness-control via potl and lightsensor or OSD	yes Incl. Brightness-control via potl and lightsensor or OSD	yes Incl. Brightness-control via potl and lightsensor or OSD	yes Incl. Brightness-control via potl and lightsensor or OSD	yes Incl. Brightness-control via potl and lightsensor or OSD
Viewing Angel	150° (H) 150° (V)	up 70° down 70° right 70° left 70° (typ.)	up 80° down 80° right 80° left 60° (typ.)	up 80° down 80° right 80° left 60° (typ.)	up 70° down 70° right 55° left 70° (typ.)
Backlight	LED Backlight	LED Backlight	2x CCFL	2x CCFL	6x CCFL
Lamp Life					
Input Signal	VGA/CRT, DVI-D	VGA/CRT, DVI-D	VGA/CRT, DVI-D	VGA/CRT, DVI-D	VGA/CRT, DVI-D
Input Connector	LEMO/ 15Pin HD-Sub, DVI, USB (TouchScreen)	LEMO/ 15Pin HD-Sub, DVI, USB (TouchScreen)	LEMO/ 15Pin HD-Sub, DVI, USB (TouchScreen)	LEMO/ 15Pin HD-Sub, DVI, USB (TouchScreen)	LEMO/ 15Pin HD-Sub, DVI, USB (TouchScreen)
Polarized Penoil Hardness	Anti glare coating (Haze 25%) Hard coating 3H	Anti glare coating (Haze 25%) Hard coating 3H	2H (min.)	2H (min.)	2H (min.)
Power Supply	7.5-33VDC	7.5-33VDC	8-28VDC	7.5-33VDC	8-38VDC
Power Supply Cable	2-pin cable with open ends, Length ca.2m	2-pin cable with open ends, Length ca.2m	2-pin cable with open ends, Length ca.2m	2-pin cable with open ends, Length ca.2m	2-pin cable with open ends, Length ca.2m
Consumption			4,4W		
Operating Temperature	-10° - +50°C	-20° - +50°C	-10° - +70°C	-10° - +70°C	0° - +50°C
Storage Temperature	-20° - +70°C	-40° - +80°C	-20° - +80°C	-20° - +80°C	-20° - +70°C
Dimension (mm)	250,0 x 201,0 x 41,0	292,0 x 232,0 x 41,0	206,4 x 150,2 x 35,0	218,0 x 182,0 x 39,0	292,0 x 234,5 x 47,0
Net Weight (Kg)	1.300g (DM0X1141)	1.650g (DMXX1161)		ca. 950g	ca. 1.400g
Case	aluminium softtouch special paint black	aluminium powder-coated black	aluminium softtouch special paint black	aluminium softtouch special paint black	aluminium powder-coated black
Protection Class	IP30, e1 projected	IP30, e1 projected	IP30, e1 projected	IP30, e1 projected	IP20
Pixel (MHz)					
Options	USB-Hub, Sound Codec, Sound Amplifier and Integrated speakers	USB-Hub, Sound Codec, Sound Amplifier and Integrated speakers		USB-Hub, Sound Codec, Sound Amplifier and Integrated speakers	



	DeltaVarioMon II Series CCFL Backlight (VGA/CRT Interface; TouchScreen PS/2)		
Model	6.5" DeltaVarioMon II transrefektiv	6.5" DeltaVarioMon II transmissiv	8.4" DeltaVarioMon II
Ordering Number	DM0X1048 / DM0X1049	DM0X1050 / DM0X1051	DM0X1055 / DM0X1056
Viewing Area / Diagonale	6.5" 165mm	6.5" 165mm	8.4" / 213.3mm
Touch Panel	with/ without TouchScreen analog resistive	with/ without TouchScreen analog resistive	with/ without TouchScreen analog resistive
Pixel Pitch (mm)	0,2070 x 0,2070 (H x V)	0,2070 x 0,2070 (H x V)	0,213 x 0,213 (W x H)
Resolution (mm)	640 x 480 VGA	640 x 480 VGA	800 x 600 SVGA
Effective Display Area	132,5 x 99,4	132,5 x 99,4	170,4 x 127,8
Color	262k	262k	262k
Response Time (tr/rf)	48ms (Typ.)	13ms	50ms
Contrast Ratio	400:1	250:1	250:1
Brightness	500 cd/m ²	300 cd/m ²	350 cd/m ²
Dimmable	yes Incl. Brightness-control via potl and lightsensor or OSD	yes Incl. Brightness-control via potl and lightsensor or OSD	yes Incl. Brightness-control via potl and lightsensor or OSD
Viewing Angle	up 35° down 45° right 50° left 50° (typ.)	up 35° down 45° right 50° left 50° (typ.)	up 30° down 45° right 100° left 100° (typ.)
Backlight	2x CCFL	2x CCFL	2x CCFL
Lamp Life			50.000 h
Input Signal	VGA/CRT	VGA/CRT	VGA/CRT
Input Connector	LEMO / 15Pin HD-Sub / PS/2	LEMO / 15Pin HD-Sub / PS/2	LEMO / 15Pin HD-Sub / PS/2
Polarized Penoil Hardness	2H (min.)	2H (min.)	
Power Supply	8 - 28VDC	8 - 28VDC	8 - 28VDC
Power Supply Cable	2-pin cable with open ends, Length ca.2m	2-pin cable with open ends, Length ca.2m	2-pin cable with open ends, Length ca.2m
Consumption	5,0W	5,0W	6,4W
Operating Temperature	0°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C
Storage Temperature	-20°C ~ +70°C	-25°C ~ +70°C	-20°C ~ +50°C
Dimension (mm)	206,4 x 150,2 x 35,0	206,4 x 150,2 x 35,0	220,0 x 180,0 x 35,0
Net Weight (Kg)			1,0 Kg
Case	aluminium softtouch special paint black	aluminium softtouch special paint black	aluminium softtouch special paint black
Protection Class	IP20	IP20	IP20
Pixel (MHz)	25.175 MHz	25.175 MHz	

Features DeltaVarioMon

Overview



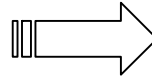
DeltaVarioMon is an all-purpose display, which is particularly developed for mobile- and vehicle-applications. Beyond that, the monitor is also suitable as a desktop solution. This display-series combines numerous features which you will not find in this form in any other display:

1



Housing:

- Aluminium housing
- Powder coating (12,1" (special-finish with high abrasion resistance)
- Softtouch coating with high abrasion resistance (6.4"-10.4")
- Little weight
- Individual mounting systems



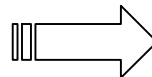
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BRIGHTNESS CONTROL :

- Manual brightness control via potentiometer
- Automatic brightness control via light sensor



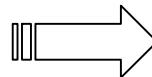
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SPECIFICATION:

- Wide viewing angle
- High brightness up to 1.250 cd/m²
- High contrast up to 800:1
- Extended temperature range
- Extended input voltage range 7.5-33VDC (with protection against reverse-polarity and transients)
- LED / CCFL Backlight



Model	Viewing Angel
Ordering Number	Backlight
Viewing Area / Diagonale	Lamp Life
Touch Panel	Input Signal
Pixel Pitch (mm)	Input Connector
Resolution (mm)	Polarized Pencil Hardness
Effective Display Area	Power Supply
Color	Power Supply Cable
Response Time (tr/r)	Consumption
Contrast Ratio	Operating Temperature
Brightness	Storage Temperature
Dimmable	Dimension (mm)

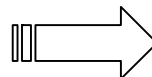
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INTERFACES:

- VGA/CRT
- DVI-D
- Voltage supply over high-quality 2-pin lemosa-metal-plug connector with interlocking
- Lemosia plug: silicone-voltage-supply-line
- Optional resistive TouchScreen-surface with USB / PS/2 touchcontroller
- Free USB slot Type A
- USB sound card:
 - 1x MIC-IN (optional)
 - 1x Line-OUT over internal loudspeakers (2x 2W)



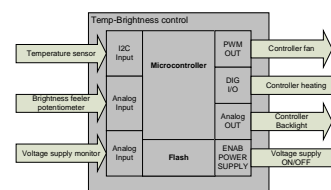
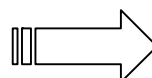
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INTEGRATED MICROCONTROLLER:

- Optional temperature control / controller of the integrated fan (only 10,4" and 12,1" DeltaVarioMon)
- turn-off at over-/undervoltage
- Heating by means of a heating mat (OEM Option)



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Features DeltaVarioMon

Housing and Brightness Control



1 HOUSING



The EMC compatible aluminium housing provides a special, black, softtouch-finish with high abrasion resistance. DeltaVarioMon 12,1", which is equipped with a particularly resistant high-quality powder coating, offers a variant to this standard version. Due to its small weight, the DeltaVarioMon is particularly suitable for all applications, where durable, compact and light housings are required.

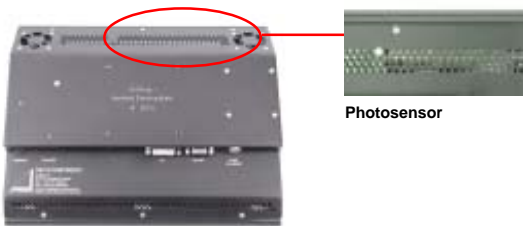


Housing DeltaVarioMon 12,1"
(CCFL Backlight)

2 BRIGHTNESS CONTROL



A microcontroller based regulation allows the dimming of brightness from 0% to 100%. A photosensor attached at the upper back of the housing detects the environmental brightness, the integrated microcontroller adapts the screen brightness automatically. Different trigger level values are specified within the microcontroller. By this function the optimal brightness adjustment of the screen is provided (e.g. at tunnel entries, nightfall) without necessity of any manual interferences.



Photosensor

Photosensor DeltaVarioMon 12,1" with CCFL Backlight

In case the user prefers manual adjustment of brightness, the attached potentiometer provides this function. When the dimmer is on minimum position (0%), backlight and photosensor will be completely deactivated. Thus the monitor can be switched dark manually.



Potentiometer DeltaVarioMon II 8,4"



Potentiometer DeltaVarioMon 8,4"
(CCFL Backlight)



Potentiometer DeltaVarioMon 12,1"
(CCFL Backlight)

3 SPECIFICATION



See tabular overview on page 2.

4 INTERFACES

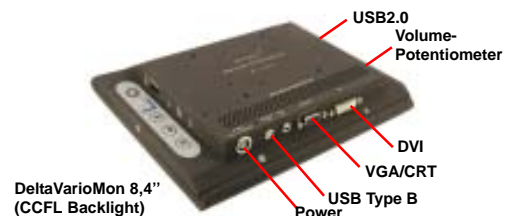


DeltaVarioMon displays possess several standard interfaces with different functions:

Interface	Connector	Function
VGA/CRT	9pin D-Sub	Analogue video interface
DVI*	24pin DVI-D	Digital video interface
Power Vin	2pin Lemos	Power supply (wide input voltage range for 12VDC and 24VDC vehicle power)
USB* / PS/2	USB-B / PS/2	Optional TouchScreen control
USB Typ A*	USB-A	Optional free USB port
MIC-IN*	3,5mm Jack	Microfon In

* not available at DeltaVarioMon II Series

An elaborate connection concept allows a proper ducting. With the option TouchScreen selected, the controller will be connected over an USB-B interface, or, with DeltaVarioMon II series, over a PS/2 interface. DeltaVarioMon 8,4" and all LED-Models provide an optional USB-Hub (USB-A interface) together with an USB-soundcodec, an amplifier 2 x 2 Watt, two loudspeakers and a potentiometer for manual volume control.

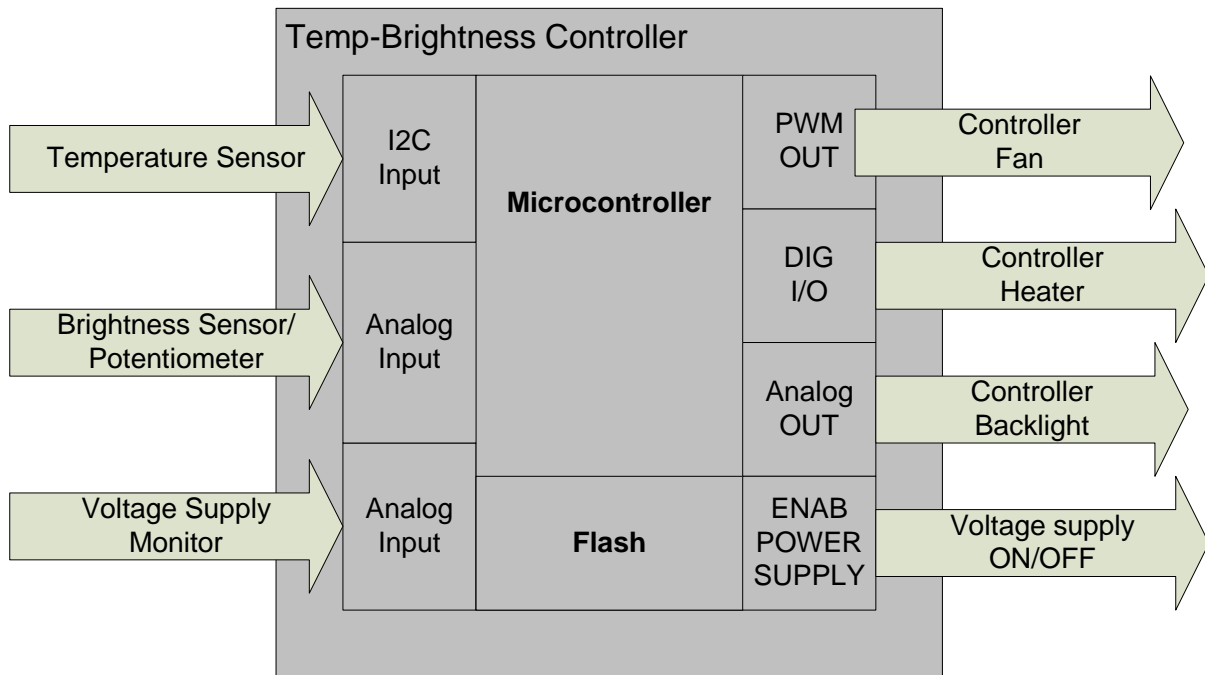


5 INTEGRATED MICROCONTROLLER

μC

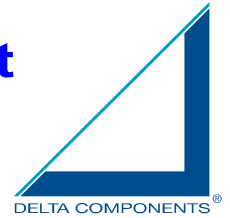
Apart from brightness control (see point 2) also temperature management can be controlled optionally by the integrated microcontroller. Using data of the integrated thermal sensor, the microcontroller regulates the speed of the fans. These fans support heat dissipation through natural convection whenever necessary. When facing low ambient temperature conditions, the display can be preheated by an optional heating mat. These functions of temperature management do have a positive effect on the product life of the device and do expand the range of possible applications.

Furthermore, DeltaVarioMon is protected against over- and undervoltage: voltage is permanently monitored and whenever necessary, the device will be switched off by means of the microcontroller.



DeltaVarioMon 10,4" XGA / LED Backlight

DMXX1140/DMXX1141

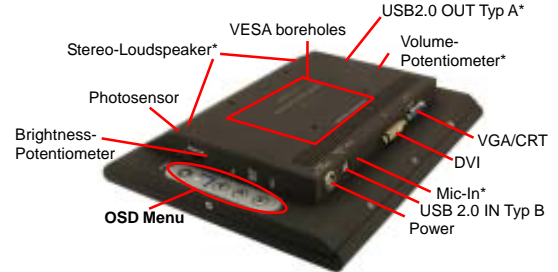


DeltaVarioMon 10,4" LED is an all-purpose monitor for mobile and automotive applications.



FEATURES:

- USB2.0 / DVI-D / VGA/CRT
- Brightness-Potentiometer
- Integrated Photosensor
- High Brightness 1.000cd/m²
- VESA boreholes
- USB-Hub, Sound Amplifier, integrated Loudspeakers and Volume-Potentiometer optional



(*) Only in connection with option DMXO1000 USB-Hub and Sound

Side- and rear view DeltaVarioMon 10,4" LED

Rear view DeltaVarioMon 10,4" LED

Specification

Display:	10,4" LCD-TFT Display with VGA/CRT and DVI-D interface	Surface:	Softtouch special-finish with high abrasion resistance, powder coating OEM
Display Area:	210,4 x 157,8 mm	Housing:	Aluminum housing, mounting possibility through 4 insert nuts M4 on the back according to VESA-standard 75mm
Backlight:	LED	Colour:	Black
Resolution:	1.024 x 768 Dot / XGA	Operating Temp.:	-10°C bis +60°C
Brightness:	1.000 cd/m ² dimmable over Poti and Photosensor [ⓐ]	Storage Temp.:	-20°C bis +70°C
Contrast:	800:1	Voltage Supply Line:	Silicone-line with 2-pin LEMO-connector and open ends; length approx. 2m
Response time:	40ms (Typ.)	Certification:	IP30, e1 in preparation
Colour:	16.2M	Operation:	Keys for OnScreen Menu, ON/OFF as well as operating-LED are easily accessible from rear
Viewing Angle:	H: 150° V: 150°	Optional:	USB-Hub, soundcodec, soundamplifier, loudspeakers and volume potentiometer (DMXO1000)
TouchScreen:	analog-resistive with USB Interface (DMXX1141)		
Voltage Supply:	7,5-33 VDC with protection against reverse-polarity and transients		
Dimensions:	ca. 250 x 201 x 41 mm WxHxD)		
Weight	1.300g (DMXX1141)		
Current Consumption:	27 W		
@ max. brightness:	2.45A/12VDC (+150mA @ DMXO1000)		
@ min. brightness:	40mA/12VDC (+150mA @ DMXO1000)		
@ Standby:	6mA/12VDC		

[ⓐ] Integrated microcontroller-based brightness control of backlight: Data on ambient brightness is collected by means of a photosensor. Depending on the ambient brightness the microcontroller regulates the backlight brightness in order to achieve an optimal level. A potentiometer at lateral position allows to set brightness manually from 100% to 0%. 0% = backlight off

Mounting Systems*

1. Ball mounting system with VESA mounting plate
2. Ball mounting plate height adjustable
3. LCD-Monitor stand with vacuum cup holder



Ordering information

DMXX1140	DeltaVarioMon 10,4"XGA with LED Backlight, LCD-TFT Monitor aluminium housing, 1.000cd/m ² , VGA+DVI,without TouchScreen
DMXX1141	DeltaVarioMon 10,4" XGA with LED Backlight, LCD-TFT Monitor aluminium housing, 1.000cd/m ² , VGA+DVI, with TouchScreen resistive
Option:	
DMXO1000	Option DeltaVarioMon: USB-Hub and Sound for DeltaVarioMon 8,4" CCFL / 10,4" LED / 12,1" LED

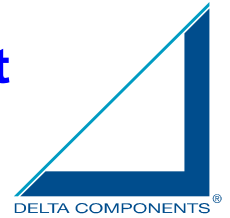
Accessories*:

GZSX2100	Ball mount with prism support for VESA-mounting plate; with quick-coupling system <i>Click</i>
GZSX2101	VESA-mounting plate with prism for vacuum cup holder
GZSX2105	Ball mount with height adjustable VESA-plate
PKKC1301	Monitor stand for variable assembly with vacuum cup
GZSX3000	Vehicle-specific mounting system
BPLK1845/1846/1847	USB (A<>A)-connector lead 2m / 3m / 5m
BPLK1069/1070/1071	DVI-connector lead 2m / 3m / 5m
BPLK1018/1053/1034	VGA/CRT connector lead 1,8m / 3m / 5m

* Further mounting systems and accessories on request

DeltaVarioMon 12,1" XGA / LED Backlight

DMXX1160/DMXX1161

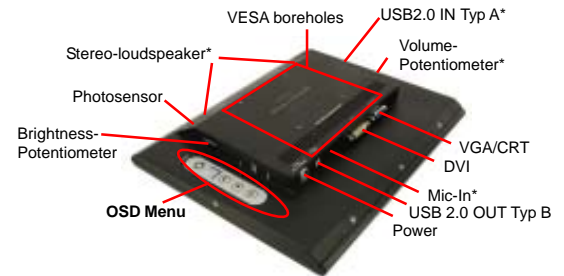


DeltaVarioMon 12,1" LED is an all-purpose monitor for mobile and automotive applications.



FEATURES:

- USB2.0 / DVI-D / VGA/CRT
- Brightness-Potentiometer
- Integrated Photosensor
- High Brightness 1.000cd/m²
- VESA boreholes
- USB-Hub, Sound Amplifier, integrated Loudspeakers and Volume-Potentiometer optional



(*) Only in connection with option DMXO1000 USB-Hub and Sound

Side- and rear view DeltaVarioMon 12,1"

Rear view DeltaVarioMon 12,1"

Specification

Display:	12,1" LCD-TFT Display with VGA/CRT and DVI-D Interface	Surface:	Powder coating
Display Area:	245,76 x 184,32 mm	Housing:	Aluminum housing, mounting possibility through 4 insert nuts M4 on the back according to VESA-standard 75mm
Backlight:	LED	Colour:	Black
Resolution:	1.024 x 768 Dot / XGA	Operating Temp.:	-20°C bis +60°C
Brightness:	1.000 cd/m ² dimmable over Poti and Photosensor [⊗]	Storage Temp.:	-40°C bis +80°C
Contrast:	800:1	Voltage Supply Line:	Silicone-line with 2-pin LEMO-connector and open ends; length approx. 2m
Response time:	33ms (Typ.)	Certification:	IP30, e1 in preparation
Colour:	262k	Operation:	Keys for OnScreen Menu, ON/OFF as well as operating-LED are easily accessible from rear
Viewing Angle:	H: 140° V: 140°	Optional:	USB-Hub, soundcodec, soundamplifier, loudspeakers and volume potentiometer (DMXO1000)
TouchScreen:	analog-resistive with USB Interface (DMXX1161)		
Voltage Supply:	7,5-33 VDC with protection against reverse-polarity and transients		
Dimensions:	ca. 292 x 232 x 41 mm (WxHxD)		
Weight:	1.650g (DMXX1161)		
Current Consumption:	27 W		
@ max. brightness:	2.45A/12VDC (+150mA @ DMXO1000)		
@ min. brightness:	40mA/12VDC (+150mA @ DMXO1000)		
@ Standby:	6mA/12VDC		

[⊗] Integrated microcontroller-based brightness control of backlight: Data on ambient brightness is collected by means of a photosensor. Depending on the ambient brightness the microcontroller regulates the backlight brightness in order to achieve an optimal level. A potentiometer at lateral position allows to set brightness manually from 100% to 0%. 0%= backlight off

Mounting systems*

1. Ball mounting system with VESA mounting plate
2. Ball mounting plate height adjustable
3. LCD-Monitor stand with vacuum cup holder



Ordering information

DMXX1160	DeltaVarioMon 12,1"XGA with LED Backlight, LCD-TFT Monitor aluminium housing, 1.000cd/m ² , VGA+DVI, without TouchScreen
DMXX1161	DeltaVarioMon 12,1" XGA with LED Backlight, LCD-TFT Monitor aluminium housing, 1.000cd/m ² , VGA+DVI, with TouchScreen resistive
Option:	(description see rear page)
DMXO1000	Option DeltaVarioMon: USB-Hub and Sound for DeltaVarioMon 8,4" CCFL / 10,4" LED / 12,1" LED
PKKZ1300	Mounting option DeltaVarioMon 12,1" LED Handholds with mouse buttons and trackball right
PKKZ1301	Gehäuseoption DeltaVarioMon 12,1" LED Handholds with mouse buttons and trackball left

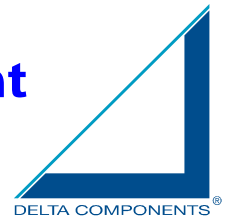
Accessories*:

GZSX2100	Ball mount with prism support for VESA-mounting plate; with quick-coupling system <i>Click</i>
GZSX2101	VESA-mounting plate with prism for vacuum cup holder
GZSX2105	Ball mount with height adjustable VESA-plate
PKKC1301	Monitor stand for variable assembly with vacuum cup
GZSX3000	Vehicle-specific mounting system
BPLK1845/1846/1847	USB (A<->A)-connector lead 2m / 3m / 5m
BPLK1069/1070/1071	DVI-connector lead 2m / 3m / 5m
BPLK1018/1053/1034	VGA/CRT connector lead 1,8m / 3m / 5m

* Further mounting systems and accessories on request

DeltaVarioMon 12,1" XGA / LED Backlight

DMXX1160/DMXX1161



PKKZ1300 Handholds with mouse buttons and trackball right
PKKZ1301 Handholds with mouse buttons and trackball left

Handholds on the left and right side of the monitor, made from solid aluminium, black, RAL9005 fine textured, powder-coated, matt.

A 16mm trackball (IP40) with USB - interface to be connected to the USB-Hub of DMXO1000 is integrated into left or right handhold. Left and right mouse buttons are on both handholds.

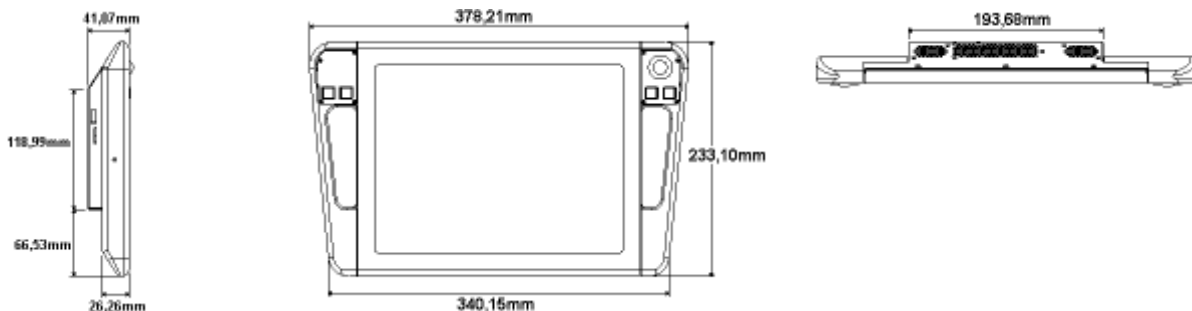
The mouse buttons on both sides allow to control the trackball single-handedly, though you may also use both hands. Likewise the trackball can be used in connection with a touchscreen.

This Option is only available in connection with the option DMXO1000 (USB-Hub), as the Trackball with USB-interface occupies the free USB-port of option DMXO1000!

The option handholds for DeltaVarioMon can be ordered with trackball left for sinistrals.



Dimension:



DMXO1000 Option DeltaVarioMon: USB-Hub and Sound for DeltaVarioMon 8,4"CCFL / 10,4" LED / 12,1" LED

USB-Hub V2.0 at DeltaVarioMon for

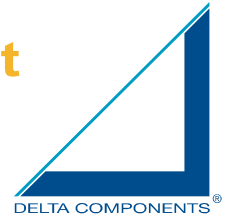
- 1x TouchController
- 1x Sound Codec
- 1x USB Port V2.0 at DeltaVarioMon for peripheral devices

Sound Codec with USB-input, MIC-IN, Line-Out, Stereo Soundamplifier with 2x2 Watt, Integrated Loudspeaker 2x2 Watt / 8 Ohm, adjustable volume via potentiometer.

Option DMXO1000 is integrated into DeltaVarioMon 8,4"CCFL / 10,4" LED / 12,1" LED and does not change the dimensions of the monitor. With integrated Option USB-Hub and Sound the current consumption of DeltaVarioMon 8,4"CCFL / 10,4" LED / 12,1" LED increases at 150mA.

DeltaVarioMon 6,5" VGA / CCFL Backlight

DMXX1069/DMXX1070



preliminary data sheet

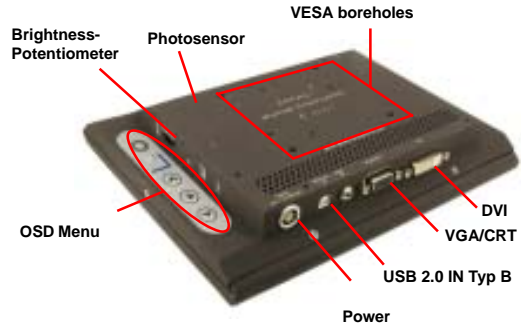
DeltaVarioMon 6,5" is an all-purpose monitor for mobile and automotive applications.



Side view DeltaVarioMon 6,5" ^

FEATURES:

- DVI-D / VGA/CRT
- Photosensor
- Brightness Potentiometer
- Integrated Photosensor
- High Brightness 600cd/m²
- VESA boreholes



Rear view DeltaVarioMon 6,5" ^

^Illustrations alike

Specification

Display:	6,5" LCD-TFT Display with VGA/CRT and DVI-D Interface	Surface:	Softtouch special-finish with high abrasion resistance, powder coating OEM
Display Area:	132,48 x 99,36 (HxV) mm	Housing:	Aluminum housing, mounting possibility through 4 insert nuts M4 on the back according to VESA-standard 75mm
Backlight:	2 x CCFL	Colour:	Black
Resolution:	640 x 480 Dot / VGA	Operating Temp.:	-10°C bis +70°C
Brightness:	600 cd/m ² dimmable over Poti and Photosensor ☉	Storage Temp.:	-20°C bis +80°C
Contrast:	600:1	Voltage Supply Line:	Silicone-line with 2-pin LEMO-connector and open ends; length approx. 2m
Response time:	25ms (tr/lf)	Certification:	IP30, e1 in preparation
Colour:	262k	Operation:	Keys for OnScreen Menu, ON/OFF as well as operating-LED are easily accessible from rear
Viewing Angle:	160° (H), 140° (V)		
TouchScreen:	Analog-resistive with USB Interface (DMXX1070)		
Voltage Supply:	7,5-33 VDC with protection against reverse-polarity and transients		
Dimensions:	approx. 206,4 x 150,2 x 35.0 mm (WxHxD)		
Weight:	tbd.		
Current Consumption:	tbd.		

☉ Integrated microcontroller-based brightness control of backlight: Data on ambient brightness is collected by means of a photosensor. Depending on the ambient brightness the microcontroller regulates the backlight brightness in order to achieve an optimal level. A potentiometer at lateral position allows to set brightness manually from 100% to 0%. 0% = backlight off

Mounting systems*

1. Ball mounting system with VESA mounting plate
2. Ball mounting plate height adjustable
3. LCD-Monitor stand with vacuum cup holder



Ordering information

DMXX1069	DeltaVarioMon 6,5" 640x480 without TouchScreen LCD-TFT Monitor aluminium housing 600cd, VGA+DVI (Coming soon)
DMXX1070	DeltaVarioMon 6,5" 640x480 with TouchScreen USB LCD-TFT Monitor aluminium housing 600cd, VGA+DVI (Coming soon)

Accessories*:

GZSX2100	Ball mount with prism support for VESA-mounting plate; with quick-coupling system <i>Click</i>
GZSX2101	VESA-mounting plate with prism for vacuum cup holder
GZSX2105	Ball mount with height adjustable VESA-plate
PKKC1301	Monitor stand for variable assembly with vacuum cup
GZSX3000	Vehicle-specific mounting system
BPLK1845/1846/1847	USB (A<>A)-connector lead 2m / 3m / 5m
BPLK1069/1070/1071	DVI-connector lead 2m / 3m / 5m
BPLK1018/1053/1034	VGA/CRT connector lead 1,8m / 3m / 5m

*Further mounting systems and accessories on request

DeltaVarioMon 8,4" SVGA / CCFL Backlight

DMXX1063/DMXX1064

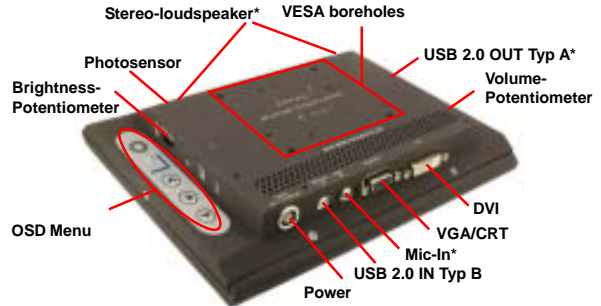


DeltaVarioMon 8,4" is an all-purpose monitor for mobile and automotive applications.



FEATURES:

- USB2.0 / DVI-D / VGA/CRT
- Photosensor
- Brightness-Potentiometer
- Integrated Photosensor
- High Brightness 650cd/m²
- VESA boreholes
- USB-Hub, Sound Amplifier, integrated Loudspeakers and Volume-Potentiometer optional



(*) Only in connection with option DMXO1000 USB-Hub and Sound

Front view DeltaVarioMon 8,4"

Rear view DeltaVarioMon 8,4"

Specification

Display:	8,4" LCD-TFT Display with VGA/CRT and DVI-D interface
Display Area:	170,496 x 127,872 mm
Backlight:	2 x CCFL
Resolution:	800x600 / SVGA
Brightness:	650 cd/m ² dimmable over Poti and Photosensor [ⓐ]
Contrast:	600:1
Response time:	25ms (Typ.)
Colour:	16.7M
Viewing Angle:	H: 160° V: 140°
TouchScreen:	analog-resistive with USB Interface (DMXX1064)
Voltage Supply:	7,5-33 VDC with protection against reverse-polarity and transients
Dimensions:	218,0 x 182,0 x 39,0 mm (WxHxD)
Weight:	950g (DMXX1064)
Current Consumption:	10,6 W
@ max. brightness:	0,88A/12VDC (+150mA @ DMXO1000)
@ min. brightness:	0,54A/12VDC (+150mA @ DMXO1000)
@ Standby:	6mA/12VDC

Surface:	Softtouch special-finish with high abrasion resistance, powder coating OEM
Housing:	aluminium housing, mounting possibility through 4 insert nuts M4 on the back according to VESA-standard 75mm
Colour:	Black
Operating Temp.:	-10°C bis +70°C
Storage Temp.:	-20°C bis +80°C
Voltage Supply Line:	Silicone-line with 2-pin LEMO-connector and open ends; length approx. 2m
Certification:	IP30, e1 in preparation
Operation:	Keys for OnScreen Menu, ON/OFF as well as operating-LED are easily accessible from rear
Optional:	USB-Hub, soundcodec, soundamplifier, loudspeakers and volume potentiometer (DMXO1000)

[ⓐ] Integrated microcontroller-based brightness control of backlight: Data on ambient brightness is collected by means of a photosensor. Depending on the ambient brightness the microcontroller regulates the backlight brightness in order to achieve an optimal level. A potentiometer at lateral position allows to set brightness manually from 100% to 0%. 0% = backlight off

Mounting systems*

1. Ball mounting system with VESA mounting plate
2. Ball mounting plate height adjustable
3. LCD-Monitor stand with vacuum cup holder



Ordering information

DMXX1063	DeltaVarioMon 8,4" SVGA without TouchScreen, LCD-TFT Monitor aluminium housing, 650cd/m ² , VGA+DVI
DMXX1064	DeltaVarioMon 8,4" SVGA with TouchScreen USB, LCD-TFT Monitor aluminium housing 650cd/m ² , VGA+DVI
Option:	
DMXO1000	Option DeltaVarioMon: USB-Hub and Sound for DeltaVarioMon 8,4" CCFL / 10,4" LED / 12,1" LED

Accessories*:

GZSX2100	Ball mount with prism support for VESA-mounting plate; with quick-coupling system <i>Click</i>
GZSX2101	VESA-mounting plate with prism for vacuum cup holder
GZSX2105	Ball mount with height adjustable VESA-plate
PKKC1301	Monitor stand for variable assembly with vacuum cup
GZSX3000	Vehicle-specific mounting system
BPLK1845/1846/1847	USB (A<->A)-connector lead 2m / 3m / 5m
BPLK1069/1070/1071	DVI-connector lead 2m / 3m / 5m
BPLK1018/1053/1034	VGA/CRT connector lead 1,8m / 3m / 5m

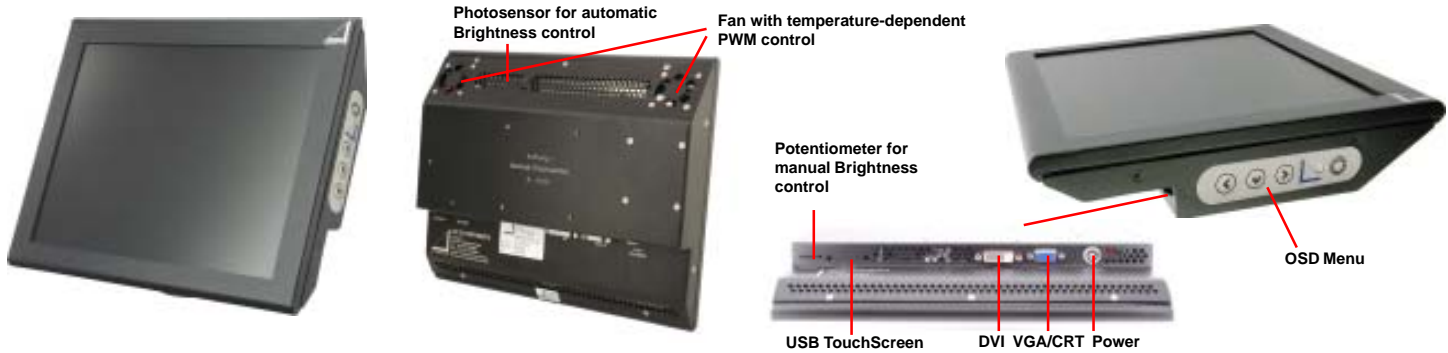
*Further mounting systems and accessories on request

DeltaVarioMon 12,1" XGA / CCFL Backlight

DMXX1073/1074



DeltaVarioMon 12,1" is an all-purpose monitor for mobile and automotive applications.



Front view and Rear view DeltaVarioMon 12,1"

Interfaces DeltaVarioMon 12,1"

Specification

Display:	12,1" LCD-TFT Monitor with VGA/CRT and DVI-D Interface	Surface:	Powder coating
Display Area:	245,76 x 184,32 mm	Housing:	Aluminum housing, mounting possibility through 4 insert nuts M4 on the back according to VESA-standard 75mm
Backlight:	6 x CCFL	Colour:	Black
Resolution:	1.024 x 768 Dot / XGA	Operating Temp.:	-10°C bis +60°C
Brightness:	1.250 cd/m ² dimmable over Poti and Photosensor Ⓞ	Storage Temp.:	-20°C bis +70°C
Contrast:	500:1	Voltage Supply Line:	Silicone-line with 2-pin LEMO-connector and open ends; length approx. 2m
Response time:	50ms (tr/ff)	Certification:	IP30, e1 in preparation
Colour:	262k	Operation:	Keys for OnScreen Menu, ON/OFF as well as operating-LED are easily accessible from rear
Viewing Angle:	H: 70° (R) 70° (L), V: 55° (T) 70° (B)		
TouchScreen:	analog-resistive with USB Interface (DMXX1074)		
Voltage Supply:	9-36 VDC with protection against reverse-polarity and transients		
Dimensions:	292,0 x 234,5 x 47,0 mm (WxHxD)		
Weight:	1.400g		
Current Consumption:	40 W		
@ max. brightness:	3,33A/12VDC (+150mA @ DMXO1000)		
@ min. brightness:	58mA/12VDC (+150mA @ DMXO1000)		
@ Standby:	6mA/12VDC		

Ⓞ Integrated microcontroller-based brightness control of backlight: Data on ambient brightness is collected by means of a photosensor. Depending on the ambient brightness the microcontroller regulates the backlight brightness in order to achieve an optimal level. A potentiometer at lateral position allows to set brightness manually from 100% to 0%. 0% = backlight off

Mounting systems*

1. Ball mounting system with VESA mounting plate



2. Ball mounting plate height adjustable



3. LCD-Monitor stand with vacuum cup holder



Ordering information

DMXX1073	DeltaVarioMon 12,1" XGA without TouchScreen LCD-TFT Monitor aluminium housing, 1.250cd/m ² , VGA+DVI
DMXX1074	DeltaVarioMon 12,1" XGA with TouchScreen LCD-TFT Monitor aluminium housing, 1.250cd/m ² , VGA+DVI

Accessories*:

GZSX2100	Ball mount with prism support for VESA-mounting plate; with quick-coupling system <i>Click</i>
GZSX2101	VESA-mounting plate with prism for vacuum cup holder
GZSX2105	Ball mount with height adjustable VESA-plate
PKKC1301	Monitor stand for variable assembly with vacuum cup
GZSX3000	Vehicle-specific mounting system
BPLK1845/1846/1847	USB (A<->A)-connector lead 2m / 3m / 5m
BPLK1069/1070/1071	DVI-connector lead 2m / 3m / 5m
BPLK1018/1053/1034	VGA/CRT connector lead 1,8m / 3m / 5m

*Further mounting systems and accessories on request

DeltaVarioMon II 6,5" VGA

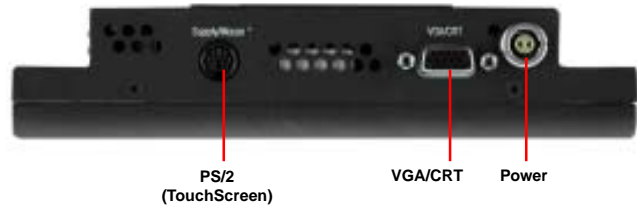
DMXX1050/DMXX1051



DeltaVarioMon II 6,5" is an all-purpose monitor for mobile and automotive applications.



Side view DeltaVarioMon II 6,5"



One single line each for VGA/CRT port, voltage supply and PS/2 connection (TouchScreen) is needed.

Interfaces DeltaVarioMon II 6,5"

Specification

Display:	6,5" LCD-TFT Monitor with VGA/CRT Interface
TouchScreen Surface:	analog-resistive with PS/2 Interface (DMXX1049)
Resolution:	640x480 / VGA
Brightness:	600 cd/m ² dimmable over Poti and Photosensor
Pixel Pitch:	0,2070 x 0,2070 (H x V)
Viewing Angle:	up 35° down 45° right 50° left 50°
Contrast Ratio:	250:1
Voltage supply:	8 - 28VDC
Current Consumption:	tbd.
Dimensions:	206,4 x 150,2 x 35,0 mm (WxHxD)
Housing:	Aluminium housing with softtouch special -finish with high abrasion resistance mounting possibility through 4 insert nuts M4 on the back according to VESA-standard 75mm
Colour:	Black
Operating temperature:	0°C bis +60°C
Storage temperature:	-25°C bis +70°C
Voltage supply:	Silicone-line with 2-pin LEMO-connector and open ends; length approx. 2m
Certification:	IP20, e1

Mounting systems*

1. Ball mounting system with VESA mounting plate
2. Ball mounting plate height adjustable
3. LCD-Monitor stand with vacuum cup holder



Ordering information

DMXX1050	DeltaVarioMon II 6,5", without TouchScreen 6,5" LCD-TFT Monitor VGA 640x480, VGA/CRT
DMXX1051	DeltaVarioMon II 6,5", with TouchScreen PS/2 6,5" LCD-TFT Monitor VGA 640x480, VGA/CRT

Accessories*:

GZSX2100	Ball mount with prism support for VESA-mounting plate; with quick-coupling system <i>Click</i>
GZSX2101	VESA-mounting plate with prism for vacuum cup holder
GZSX2105	Ball mount with height adjustable VESA-plate
PKKC1301	Monitor stand for variable assembly with vacuum cup
GZSX3000	Vehicle-specific mounting system

BPLK1018/1053/1034	VGA/CRT connector lead 1,8m / 3m / 5m
BPLK1800	PS/2 connector lead 5 m

*Further mounting systems and accessories on request

DeltaVarioMon II 8,4" SVGA

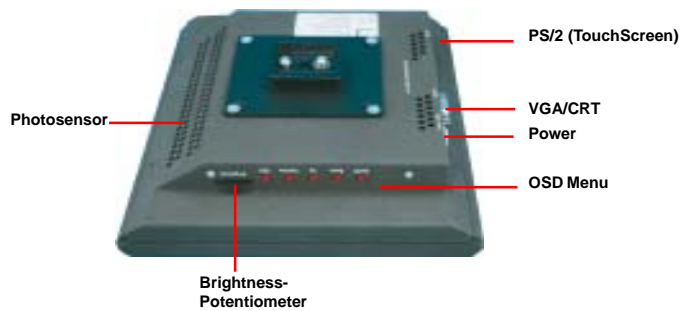
DMXX1055/DMXX1056



DeltaVarioMon 8,4" is an all-purpose monitor for mobile and automotive applications.



Front view DeltaVarioMon II 8,4"



Rear view DeltaVarioMon II 8,4" with VESA-mounting plate and retaining prism

Specification

Display:	8,4" LCD-TFT Monitor with VGA/CRT Interface
TouchScreen Surface:	analog-resistive with PS/2 Interface (DMXX1056)
Resolution:	800x600 / SVGA
Brightness:	350 cd/m ² via Photosensor + Potentiometer dimmable
Pixel Pitch:	0,213 x 0,213
Viewing Angle:	up 90° down 45° right 100° left 100°
Contrast Ratio:	250:1
Voltage supply:	8-28 VDC
Current Consumption:	11,8W
@ max. brightness:	0,98A//12VDC (+150mA @ DMXO1000)
@ min. brightness:	0,4A//12VDC (+150mA @ DMXO1000)
@ Standby:	8mA//12VDC
Dimenisions:	ca. 220,0 x 180,0 x 35,0 mm
Housing:	Softtouch special-finish with high abrasion resistance, powder coating OEM Aluminium housing, mounting facility through 4 insert nuts M4 on the back according to VESA-standard 75mm
Colour:	Black
Operating temperature::	0°C bis +50°C
Storage:	-20°C bis +60°C
Voltage supply:	Silicone-line with 2-pin LEMO-connector and open ends; length approx. 2m
Certification:	IP20, e1

Mounting plate systems*

1. Ball mounting system with VESA mounting plate



2. Ball mounting plate height adjustable



3. LCD-Monitor stand with vacuum cup holder



Ordering information

DMXX1055	DeltaVarioMon II 8,4", without TouchScreen PS/2 8,4" LCD-TFT Monitor SVGA, VGA/CRT
DMXX1056	DeltaVarioMon II 8,4", with TouchScreen PS/2 8,4" LCD-TFT Monitor SVGA, VGA/CRT

Accessories*:

GZSX2100	Ball mount with prism support for VESA-mounting plate; with quick-coupling system <i>Click</i>
GZSX2101	VESA-mounting plate with prism for vacuum cup holder
GZSX2105	Ball mount with height adjustable VESA-plate
PKKC1301	Monitor stand for variable assembly with vacuum cup
GZSX3000	Vehicle-specific mounting system
BPLK1018/1053/1034	VGA/CRT connector lead 1,8m / 3m / 5m
BPLK1800	PS/2 connector lead 5 m

*Further mounting systems and accessories on request

Mounting Systems DeltaVarioMon

Optional Accessories



Optional accessories: mounting systems for monitors



GZSX2100

Ball mounting plate with prism support for VESA mounting plate (incl. VESA mounting plate with retaining prism). With quick-coupling system *Click* for fast assembly and disassembly of the display, for example at the dashboard.



GZSX2105

Ball mount with height adjustable VESA plate, 85x115x3mm, aluminum, black, hole spacing: 75mm. Variable positioning of the monitor is possible through height adjustable VESA plate.



GZSX2001

Prism support for VESA mounting plate with quick-coupling system *Click*.

GZSX2003

Prism support for VESA mounting plate with quick-coupling system *Click*. Backfilled, with large aluminium mounting plate (diameter: 90mm). Rugged design.



GZSX2101

VESA mounting plate with retaining prism for vacuum cup holder.



PKKC1300

Monitor stand for screw assembly with star handle. Adjustable display support with quick-coupling system *Click*, incl. VESA mounting plate with retaining prism, 85x85x3mm, aluminium, black. Mounting holes according to VESA standard 75mm.

PKKC1300-1

Optionally with backfilled base. Rugged design.



PKKC1301

Monitor stand for vacuum cup assembly for windshield. Adjustable display support with quick-coupling system *Click*, incl. VESA mounting plate with retaining prism, 85x85x3mm, aluminium, black. Mounting holes according to VESA standard 75mm.



PKKZ1300

Handhold option DeltaVarioMon 12,1" LED
Handholds with Mousebuttons and Trackball right

PKKZ1301

Handhold option DeltaVarioMon 12,1" LED
Handholds with Mousebuttons and Trackball left

Handholds on left and right side of the monitor, made from solid aluminium, black, RAL9005 fine textured, powder-coated, matt. A 16mm trackball (IP40) with USB- interface to be connected to the USB-Hub of DMXO1000 is integrated into left or right handhold. Left and right mousebuttons on both handholds.



Mounting Systems DeltaVarioMon

Optional Accessories



Optional accessories: vehicle-specific mounting systems* for monitors



Height adjustable
Monitor mounting plate systems



Automotive PC-solution DeltaCar-PC® with
visualisation-unit DeltaTerminal and
DeltaSoft HMI Solutions

GZSX3000

Vehicle-specific mounting plate for assembly at the vehicle dashboard. Since these retaining systems are related to the respective vehicle type, they fit precisely and the vehicle will not be damaged by the assembly/disassembly. The vehicle-specific mounting plate is optimized for ball mounting systems. Thus further mounting systems (e.g. GZSX2105) can be added, which do support the displays (see photos right).



GZSX2105 with DeltaVarioMon

Examples:



GZSX9005

Vehicle-specific mounting plate for Mercedes Benz C-Class W202;
Year of construction 1993-2000



GZSX9005 with GZSX2105



GZSX9033

Vehicle-specific mounting plate for BMW 5xx/E60;
as from Year of construction 2005.



GZSX9033 with GZSX2105



GZSX9008

Vehicle-specific mounting plate for AUDI A6;
as from year of construction 1997.



GZSX9008 with GZSX2105



GZSX9036

Vehicle-specific mounting plate for OPEL Astra G;
Year of construction 1998 -2004.



GZSX9036 with GZSX2105

* Retaining systems are available for nearly any motor vehicle type.



DeltaSoft was designed to tap the full potential of a PC-System in a vehicle. The innovative user interface is suitable for all mobile and automotive applications. DeltaSoft displays a particularly well designed user interface to operate the PC intuitively over TouchScreen. Standard functionalities of a desktop-PC, as access to all Microsoft® Office programs (Word®, Excel®, Powerpoint®, Access®), are extended by special functionalities:

1. Driver Assistance



Navigation, Traffic Sign Recognition, Lane Departure Warning, Travelbook

2. Audio-/ Videoapplications



CD-/ MP3-/ DVD-/ Video-Player, Radio, Image Viewer, Video-In and Digital Video Recorder, Night Vision Camera

3. Communication



Phone, SMS, E-Mail, Internet

DeltaSoft can be adapted to the requirements of Microspace® PC-systems MPCX47 and MPCX48. Therefore the specification of Digital-Logic AG is required.

Ordering information:

PSAS1300

User program for MPCX48-Standard (in preparation)

PSAS1310

User program für MPCX47-Standard (in preparation)

PSAC1300

Customized adjustment DeltaSoft in national language.

Warranty and operating conditions DELTA COMPONENTS GmbH:

Warranty time is 12 months after date of delivery. Warranty includes free repair or exchange of defective or faulty parts during the warranty period. Defective devices are to be sent to the manufacturer carriage paid and are sent back carriage paid. The devices must be used according to the legal regulations. Not covered by warranty are:

- Damages by any handling or use other than described in the product manual.
- Wear and tear parts, connectors, batteries, accumulators etc.
- resulting travel expenses (time, room and board, car rental, etc.) are charged on time and material basis
- Any other claims for compensation of damages.

Support for Hard- and Software:

Support for hard- and software will be supplied within the limits of a service contract, which has to be negotiated separately. DeltaCar-PC is designed for use in the European Union and Switzerland. The use of the system in other countries requires a separate agreement. In case of use of the system outside the above mentioned countries without any special agreement or written authorisation, any warranty- and other claims are void.