

# ADDITIONAL MARINE PRODUCTS

BELONGS TO MARINE CATALOG 2010





## iX Panel TA bl

The iX Panel TA black are designated for sophisticated marine applications for operating and monitoring of process data and messages. Appealingly designed black with powder-coated aluminium frame and casing the units are qualified to operate in various nautical conditions, like control panels on fly bridges or installed into diesel generators.

The product series with three different display sizes meets the specifications of the marine requirements. With two included Ethernet 10/100 Base-T interfaces and additional serial and USB ports, the panels are ready to connect to nearly any device. iX Panel TA bl can be dimmed infinitely variable to 0% brightness, which ensures a non-dazzling control for the crew.

Every iX Panel Nautic comes loaded with a runtime version of iX at no additional charge. iX, the world's most graphic HMI solution offers fast screen design and easy integration into existing control hardware. Read more about iX on page 6.

- Compass save distance defined
- Rugged design for the specifics of the marine requirements
- 100% dimmable backlight preserves optimal night vision
- State-of-the-art screen design with iX for efficient work flow
- Various certifications for major classification societies

### TECHNICAL DATA

Display
Size in inches
WxH resolution in pixels
Coloration
Type of data entry
Degree of protection
Voltage supply
Operating voltage
Power consumption
System
Processor
Main memory
Internal storage memory
External storage media
Operating system
Interfaces
Serial
Ethernet
USB
Communication modules
General information
Frame material
Front foil
Outer dimensions in mm WxHxD
Panel profile in mm WxH
Weight
Certifications
Operating temperature
Storage temperature
Order information
Description of item
Order number Lauer
Order number Beijer Electronics



**iX Panel TA70 bl**



**iX Panel TA100 bl**



**iX Panel TA150 bl**

6.5"	10.4"	15"
640 x 480	800 x 600	1024 x 768
	64K color TFT	
	Resistive Touch	
	IP66 / NEMA 4	
	24 VDC (20 - 30 V)	
	max. 2 A	
	Intel™ Atom® Z-series 1.1 GHz	
	1024 MB	
	2 GB	
	SD card	
	Windows CE	
	RS232/422/485	
	2x 10/100 Mbit/s RJ45	
	USB 2.0	
	Profibus DP, MPI, CAN	
	Aluminum	
	acid-resistant polyester foil	
219 x 154 x 61	302 x 228 x 64	398 x 304 x 66
189 x 138	265 x 206	356 x 279
ca. 1.3 kg	ca. 2.5 kg	ca. 4 kg
	DNV <sup>2</sup>	
	0 to 55° C	
	-20 to 60° C	
iX Panel TA70 bl	iX Panel TA100 bl	iX Panel TA150 bl
On Demand	On Demand	On Demand
On Demand	On Demand	On Demand

<sup>2</sup> in progress



## iX PANEL PRO C2D NAUTIC

The marine touch panel PC range iX Panel Pro Nautic has been developed with a particular focus on usability and operation in typical marine environments. They are used in all types of vessels, where high PC performance and a long lifetime is mandatory.

Every iX Panel Pro Nautic is equipped with an iX runtime version for instant operation. The open platform architecture offers a wide range of opportunities to enhance the functionality of marine HMI applications.

The internal dimming function allows seamless backlight dimming from 100 % to 0 %. This qualifies the iX Panel Pro Nautic for perfect night visions on fly bridges. Connected to a dimming network, up to 6 units can be remote dimmed simultaneously by using serial, USB or LAN interface.

- Powerful open PC platform
- Pre-installed iX runtime version for instant operation
- Rugged design for specifics of marine requirements
- Network dimming function preserves optimal night vision
- Various certifications for major classification societies
- Long life components for long term availability



iX Panel Pro T150 C2D Nautic

### TECHNICAL DATA

Front panel	
Size in inches	15" TFT
WxH resolution in pixels	1024 x 768
Contrast ratio	450:1
Luminous intensity	250 cd/m <sup>2</sup> (typical)
Angle of vision	150° (H) / 110° (V)
Type of data entry	Resistive touch <sup>1</sup> (Option: anti-reflective glass)
Degree of protection	IP65 front end; IP20 back end
Power supply	
Operating voltage	24 VDC +/- 15% or 115-230 +/- 15% VAC
Power consumption	ca 4.0 A / 1.0 A
System	
Processor	Intel Core2Duo 2.2 GHz
Main memory	2 GB / 4 GB
External storage media (CFC)	2 GB - 8 GB
Internal mass memory	CFC 4 GB - 8 GB / HDD automotive 80 GB
Operating system	Windows XP Embedded / Windows XP Professional
Interfaces	
Serial	2 x RS232
Ethernet	2 x 10/100/1000 Mbps
Keypad / mouse	2 x PS/2
Monitor	VGA + DVI-I
USB	4 x USB 2.0
Slots	2 x PCI (max 220 mm)
Communication modules	-
General information	
Frame material	Aluminum
Front foil	acid-resistant polyester foil
Outer dimensions in mm WxHxD	412 x 351 x 142.5
Panel profile in mm WxH	369 x 324
Weight	ca. 9 kg
Certifications	GL, ABS, DNV, BV, LR <sup>2</sup>
Type approved HW base	EPC T150 C2D Nautic
Operating temperature	0 to 55° C
Storage temperature	-20 to 70° C
Order information	
Description of item	iX Panel Pro T150 C2D Nautic DC / iX Panel Pro T150 C2D Nautic AC
Order number Lauer	933.400.0010 / 933.400.0030
Order number Beijer Electronics	603016001 / 603016003



**iX Panel Pro T170 C2D Nautic**



**iX Panel Pro T190 C2D Nautic**



**iX Box Pro C2D Nautic**

17" TFT	19" TFT	-
1280 x 1024	1280 x 1024	-
600:1	1000:1	-
250 cd/m <sup>2</sup> (typical)		-
178° (H/V)		-
Resistive touch <sup>1</sup> (Option: anti-reflective glass)		-
IP65 front end; IP20 back end		IP 20 on all sides
24 VDC +/- 15% or 115-230 +/- 15% VAC		
ca 4.0 A / 1.0 A		
Intel Core2Duo 2.2 GHz		
2 GB / 4 GB		
2 GB - 8 GB		
CFC 4 GB - 8 GB / HDD automotive 80 GB		
Windows XP Embedded / Windows XP Professional		
2 x RS232		
2 x 10/100/1000 Mbps		
2 x PS/2		
VGA + DVI-I		
4 x USB 2.0		
2 x PCI (max 220 mm)		
-		
Aluminum		-
acid-resistant polyester foil		-
430 x 390 x 142.5	483.2 x 444 x 142.5	389 x 276 x 114
396 x 364	438 x 416	-
ca. 10 kg	ca. 13 kg	ca. 5.5 kg
GL, ABS, DNV, BV, LR <sup>2</sup>		GL, ABS, DNV, BV, LR <sup>2</sup>
EPC T170 C2D Nautic	EPC T190 C2D Nautic	EPC Box C2D Nautic
0 to 55° C		
-20 to 70° C		
iX Panel Pro T170 C2D Nautic DC / iX Panel Pro T170 C2D Nautic AC	iX Panel Pro T190 C2D Nautic DC / iX Panel Pro T190 C2D Nautic AC	iX Box Pro Nautic DC / iX Box Pro C2D Nautic AC
933.400.0050 / 933.400.0070	933.400.0090 / 933.400.0110	933.400.0130 / 933.400.0140
603016005 / 603016007	603016009 / 603016011	603016013 / 603016014

<sup>1</sup> also available with anti-reflection glass without touch screen feature.

<sup>2</sup> in progress



Process visualization is in a state of change. Now, modern user interfaces take on inspiration from consumer-oriented products like smart phones, play consoles, etc. with advanced 3D-style graphics, icon based navigation and controls, resulting in visually impressive user interfaces.

However, impressive user interfaces have a wider perspective reaching beyond the good looks. They motivate users and operators to interact with the working environment in a positive way, which leads to a more efficient work flow and reduced downtime.

iX is a complete HMI solution including both, software and hardware providing solutions for a wide range of application scenarios. The open iX platform architecture enhances the functionality of HMI applications in ship automation to a new level.

### State-of-the-art graphics

Take advantage of vector-based graphics, enabling you to scale and rotate objects which stay crystal clear without jagged edges or inconsistent color transitions.

- Vector based objects for crystal clear objects
- Graphical effects for enhanced design
- Windows media objects for clear explanations
- Dynamics to draw operators attention

### Solid HMI functionality

Adopt the comprehensive HMI functionality in iX to increase productivity and user acceptance

- Alarm management for several channels
- Security for clear defined operator access
- Data logging for time or event based records
- Scheduler for automatic event control

### Smarter design and engineering tools

You create and configure HMI solutions in a streamlined user-friendly Windows environment with ribbon tabs, tool tips and an intuitive work approach.

- Multiple object editing for efficient engineering
- Templates for time saving design and editing
- Navigation manager for quick project overview
- Simulation for runtime tests

### Truly open platform

Select your favorite runtime platform; from compact iX Panel TA bl to iX Panel Pro Nautic industrial PC, depending on your individual application needs.

- Import of .Net controls for third party components
- OPC connectivity for easy communications
- SQL connectivity for relational database
- C# scripting for individual object customizing



Desktop mount bracket  
17" + 19"



Desktop mount bracket  
21" + 23"

**TECHNICAL DATA**

Display				
For Size in inches	17"	19"	21"	23"
General information				
Frame material	Powder coatet hot-dip galvanized steel		Powder coatet hot-dip galvanized steel	
Outer dimensions in mm WxHxD	437 x 408 x 185.9	489.2 x 408 x 185.9	532 x 487.8 x 214.1	584 x 487.8 x 214.1
Weight	ca. 6 kg		ca. 8 kg	
Order information				
Description of item	Device holder 17" / 19" nautic		Device holder 21" / 23" nautic	
Order number Lauer	950.516.0200		950.516.0430	
Order number Beijer Electronics	603000039	603000043	603000044	

## DESKTOP MOUNT BRACKET

The device holders are special developed for rugged marine environments. It is manufactured to install Beijer Electronics marine monitors and panel PCs in an accurate style. Appealingly black designed, the device holders matches perfect in extravagant floating bridges as well as in lower deck control rooms. Thanks to the robust hot-dip galvanized steel, it is extremely solid. For optimum display orientation, the inclination angle can be adjusted in several steps. Each device holder can be used for two different unit sizes.

- Adjustable inclination angle for monitor flexible orientation
- Robust construction ensures perfect standing
- Rugged design meets specifics of marine requirements
- Appealing black marine design
- Each holder suits two display sizes

Panel/System	CE	LR	BV	GL	DNV	ABS	RS	RINA	BSH (Modul B)	Acc. <sup>1</sup> EN 60945
MT 230 Nav AC (only with glass)	✓								✓	✓
MTe T150 Nautic DC * / AC *	✓	✓	✓	✓	✓	✓	✓			✓
MTe T170 Nautic DC * / AC *	✓	✓	✓	✓	✓	✓	✓			✓
MTe T190 Nautic DC * / AC *	✓	✓	✓	✓	✓	✓	✓			✓
EPC Box C2D Nautic DC / AC	✓	✓	✓	✓	✓	✓	✓			✓
EPC T150 C2D Nautic DC * / AC *	✓	✓	✓	✓	✓	✓	✓			✓
EPC T170 C2D Nautic DC * / AC *	✓	✓	✓	✓	✓	✓	✓			✓
EPC T190 C2D Nautic DC * / AC *	✓	✓	✓	✓	✓	✓	✓			✓
EPC T80 LX Nautic	✓			✓						
EPC T100 LX Nautic	✓			✓						
EXTER T70-bl	✓			✓	✓	✓	✓			✓
EXTER T100-bl	✓			✓	✓	✓	✓			✓
EXTER T150-bl	✓			✓	✓	✓	✓			✓
EXTER T70sr-bl	✓			✓	✓	✓	✓			
EXTER T100sr-bl	✓			✓	✓	✓	✓			
EXTER T150sr-bl	✓			✓	✓	✓	✓			
EXTER K10m	✓				✓	✓	✓	✓		
EXTER K20m	✓				✓	✓	✓	✓		
EXTER K30m	✓			✓	✓	✓	✓	✓		
EXTER T40	✓			✓	✓	✓	✓	✓		
EXTER K60	✓				✓	✓	✓	✓		
EXTER T60	✓				✓	✓	✓	✓		
EXTER K70	✓				✓	✓	✓	✓		
EXTER T70	✓			✓	✓	✓	✓	✓		✓
EXTER K100	✓			✓	✓	✓	✓	✓		
EXTER T100	✓			✓	✓	✓	✓	✓		✓
EXTER T150	✓			✓	✓	✓	✓	✓		✓
iX Panel TA T70 bl	✓				✓					
iX Panel TA T100 bl	✓				✓					
iX Panel TA T150 bl	✓				✓					
iX Box Pro C2D Nautic DC * / AC *	✓	✓	✓	✓	✓	✓	✓			✓
iX Panel Pro T150* C2D Nautic DC * / AC *	✓	✓	✓	✓	✓	✓	✓			✓
iX Panel Pro T170* C2D Nautic DC * / AC *	✓	✓	✓	✓	✓	✓	✓			✓
iX Panel Pro T190* C2D Nautic DC * / AC *	✓	✓	✓	✓	✓	✓	✓			✓

## LEGEND

Lloyd's Register (LR)



Bureau Veritas (BV)



Germanischer Lloyd (GL)



Det Norske Veritas (DNV)



American Bureau  
of Shipping (ABS)



Russian Maritime Register  
of Shipping (RS)



Register Italiano Navale (RINA)



Bundesamt für Seeschifffahrt  
und Hydrographie (BSH)



\* Panels available with  
anti-reflective glass  
in progress

<sup>1</sup> for Bridge Applications