Imagine everything you know
about modern HMI solutions

Then think again

BeiJer
E L E C T R O N I C S

We have a groundbreaking technology for you

Beijer Electronics iX HMI solution will help you sharpen your competitive edge. It is based on thirty year's experience of working closely with customers from all types of industries around the world in combination with high technical expertise and a commitment to user-friendliness. It also represents a new ground-breaking HMI development tool built on leading .NET Framework technology, with few competitors world wide.

Need more freedom to express your ideas?

The state-of-the-art graphics of iX opens a world of opportunities to profile your application and build an efficient, user-friendly HMI. With the open architecture and the technologies that accompany .NET Framework you have great tools to create visual expression in line with the machine - and profile your application to harmonize with company brand.

Clear information to operators is a key factor to get faster response to alarms and prevent personal or property damages. With iX graphics you can provide safe and reliable operation creating customer satisfaction and trust in the system.

This is how you streamline your development process

You will save time and increase the quality of your application using the smart engineering tools in iX. The platform is packed with features that will help you create quality user interfaces efficiently. By taking advantage of vector-based graphics (free scaling), component library, Windows media objects, dynamic objects, multi-window environment and screen carousel navigation you can create consumer quality graphics at all levels.

Not just a pretty interface

The benefits with iX regarding looks, functionality and connectivity reduce engineering time significantly, leading to faster return on your investment. Create and configure your HMI solution in a streamlined user-friendly Windows environment – with ribbon tabs, tool tips, intuitive work flow and demo projects that make it easy to get started. Time saving features like templates, styles, format painters and multiple objects editing will help you keep a consistent look and feel.

Easy project recycling and updating guarantee you get a safe investment. You can easily adapt your projects to meet customer demands, for example requiring other PLC platforms (tag import module), or languages (import/export excel).

Let your HMI be all it can be

iX offers comprehensive built-in solid HMI functionality such as recipes, trends, schedulers and audit trails, and more, that enable you to create an efficient and safe operation of your application. Additionally, you can gain further competitive advantages by implementing third part .NET components and creating customized functionality through C# scripting. With iX you can incorporate just about any functionality. And you get higher production output and reduce maintenance costs.

What size and performance do you need?

No matter your application, we have the HMI to match it, from the ultra compact 4.3" operator panel to the high performance 21.5" HMI-IPC. Naturally, your iX application project is easily scaled to suit any of them, making sure that you can offer flexible solutions and be competitive in your market.

▶ **Learn more about the technical specifications and features of Beijer Electronics TxA, TxB and TxC families of HMI inside this folder.**

iX – Worlds most graphic HMI solution. Truly open.

Operator panel - iX Panel Series

iX Panel TxA

TECHNICAL DATA	iX Panel TxA		
iX Products	iX Panel T4A	iX Panel T7A	iX Panel T10A
Display size	4.3"	7"	10.4"
Display resolution, ratio	480 × 272 (16:9)	800 × 480 (16:9)	640 × 480 (4:3)
Display Colors	TFT-LCD 65 T		
Active Area of display, W×H (mm)	95.0 × 53.9	152.4 × 91.4	211.2 × 158.4
Brightness (cd/m2)	350		450
View angle (H/V)	115° / 140°	130° / 140°	140° / 160°
Backlight Life Time	> 40,000 hrs, LED backlight	> 20,000 hrs, LED backlight	> 40,000 hrs, LED backlight
Touch screen operations	Resistive touch, 1 million finger touch operations		
Processor	ARM9 (400 MHz)		
Main Memory	128 MB (DDR2)		
Application Memory	80 MB		
External Storage Media	1 × SD card (optional)		
Realtime clock	yes		
Ethernet	1 × 10 Base-T / 100 Base-T (shielded RJ 45)		
USB	1 × USB 2.0, max. 400 mA		
Serial Port 1/2	2 combined ports: 2 × RS232, 2 × RS422/485		
Communication Modules	CAN (FreeCAN), MPI*		
Dimension W×H×D (mm)	145 × 103 × 49	204 × 143 × 49	280 × 228 × 51
Cut-out Dimension W×H×D (mm)	128 × 87 × 43	187 × 126 × 43	262 × 209 × 46
Net Weight (kg)	ca. 0.5	ca. 0.8	ca. 1.5
Frame Material, Front foil	Powder-coated aluminum, Polyester Autotex F157 or F207		
Mounting	Panel Mount and VESA 50 × 50	Panel Mount and VESA 75 × 75	
Protection (front/rear)	IP65 / IP20		
Power Supply	+24 VDC (18-36 VDC)		
Power comsuption	3.6 W	6.0 W	9.6 W
Operating temperature	-10 to + 60 °C		
Storage temperature	-20 to + 70 °C		
Certification	CE, UL 508*, DNV*		

Software specifications	iX Panel TxA
WPF Graphic functions	-
Remote access	yes
Special Navigation	-
Multimedia functions	-
Object dynamics	-
Scripting	C# scripting with IntelliSense-Box
Configuration software	from iX Developer V1.30
Portrait mode	from iX 1.31

In Progress

iX Panel TxB

TECHNICAL DATA	iX Panel TxB		
iX Products	iX Panel T7B	iX Panel T12B	iX Panel T15B
Display size	7"	12.1"	15.4"
Display resolution, ratio	800 × 480 (16:9)	1280 × 800 (16:10)	
Display Colors	TFT-LCD 262 T		
Active Area of display, W×H (mm)	152.4 × 91.4	261.1 × 163.2	331.2 × 207.0
Brightness (cd/m2)	500	400	450
View angle (H/V)	140° / 120°	176° / 176°	160° / 140°
Backlight Life Time	> 50,000 hrs, LED backlight		
Touch screen operations	Resistive touch, 1 million finger touch operations		
Processor	Intel® Atom (1.1 GHz)		
Main Memory	1 GB DDR2		
Application Memory	>= 1.4 GB		
External Storage Media	1 × SD card (optional)		
Realtime clock	yes		
Ethernet	1 × 10/100/1000 Mbit/s and 1 × 10/100 Mbit/s		
USB	3 × USB 2.0		
Serial Port 1/2	2 combined ports: 2 × RS232, 2 × RS422/485		
Communication Modules	CAN (FreeCAN), MPI*		
Dimension W×H×D (mm)	204 × 143 × 51	340 × 242.2 × 57	410 × 286 × 61
Cut-out Dimension W×H×D (mm)	187 × 126 × 43	324 × 226 × 50	394 × 270 × 54
Net Weight (kg)	ca. 1.0	ca. 2.1	ca. 3.3
Frame Material, Front foil	Powder-coated aluminum, Polyester Autotex F157 or F207		
Mounting	Panel Mount and VESA 75 × 75	Panel Mount and VESA 100 × 100	
Protection (front/rear)	IP65 / IP20		
Power Supply	+24 VDC (18-36 VDC)		
Power comsuption	max. 50 W		
Operating temperature	-10 to + 50 °C		
Storage temperature	-20 to + 70 °C		
Certification	CE, UL 508*, DNV*		

Software specifications	iX Panel TxB
WPF Graphic functions	-
Remote access	yes
Special Navigation	-
Multimedia functions	yes
Object dynamics	-
Scripting	C# scripting with IntelliSense-Box
Configuration software	from iX Developer V1.40
Portrait mode	yes

In Progress

iX Panel TxC

TECHNICAL DATA	iX Panel TxC		
iX Products	iX Panel T12C	iX Panel T15C	iX Panel T21C
Display size	12.1"	15.4"	21.5"
Display resolution, ratio	1280 × 800 (16:10)		1920 × 1080 (16:9)
Display Colors	TFT-LCD 16 Mio		
Active Area of display, W×H (mm)	261.1 × 163.2	331.2 × 207.0	476.6 × 268.1
Brightness (cd/m2)	400	450	250
View angle (H/V)	176° / 176°	160° / 140°	170° / 160°
Backlight Life Time	> 50,000 hrs, LED backlight		
Touch screen operations	Resistive touch, 1 million finger touch operations		
Processor	Intel® Celeron® B810E (2× 1.6 GHz) / Intel® Core™ i3 2310E (2× 2.1 GHz) / Intel® Core™ i7-2715QE (4× 2.1 GHz)*2		
Main Memory	2 GB - 16 GB DDR3 (with ECC support)*2		
Application Memory	8 GB - 128 GB: CFast / 2.5" SSD *2		
External Storage Media	via USB		
Realtime clock	yes		
Ethernet	2 × 10/100/1000 Mbit/s		
USB	4 × USB 2.0		
Serial Port 1/2	2 combined ports: 2 × RS232, 2 × RS422/485		
Monitor	VGA + DVI-I		
Expansion slot	mini PCIe		
Communication Modules	CAN (FreeCAN), MPI*		
Dimension W×H×D (mm)	340 × 242 × 79	410 × 286 × 83	556 × 347 × 87
Cut-out Dimension W×H×D (mm)	324 × 226 × 72	394 × 270 × 76	539 × 331 × 79
Net Weight (kg)	ca. 4.2 kg	ca. 5.4 kg	ca. 8.1 kg
Frame Material, Front foil	Powder-coated aluminum, Polyester Autotex F157 or F207		
Mounting	Panel Mount and VESA 100 × 100		
Protection (front/rear)	IP65 / IP20		
Power Supply	autoranging +24 VDC (18-36 V DC) or 115-230 VAC		
Power comsuption*3	107 W	114 W	125 W
Operating temperature	0 to + 50 °C		
Storage temperature	-20 to + 70 °C		
Certification	CE, UL 508*, DNV*		
Operating system	Windows 7, Windows Embedded 7		

Software specifications	iX Panel TxC
WPF Graphic functions	yes
Remote access	3rd party software
Special Navigation	yes
Multimedia functions	yes
Object dynamics	yes
Scripting	C# scripting with IntelliSense-Box
Configuration software	from iX Developer V1.40
Portrait mode	yes

* In Progress

*2 Configuration depending on customer request

*3 Depending on configuration

The hardware features in one view

Performance
- Electronics built in with latest technology and high performance CPU.

Expansion possibilities
- USB connectivity, CF card expansion, CAN bus extension module.

Quality
- Developed with high accuracy in every part. No maintenance needed.

Connectivity
- Drivers to controlling systems from many vendors.

Usability
- Easy mounting and access to external connections.

PLC Compatibility List

- **ABB**
  ABB Comli Master

- **Allen-Bradley**
  Allen-Bradley ControlLogix
  Allen-Bradley DF1
  Allen-Bradley DH485
  Allen-Bradley SLC/PLC5 Ethernet
  Allen-Bradley MicroLogix Ethernet

- **Altus**
  Altus Alnet I

- **Animatics**
  Animatics SmartMotor

- **Beckhoff**
  Beckhoff ADS

- **Bosch Rexroth**
  Bosch Rexroth IndraDrive

- **CAN**
  FreeCAN J19398 custom CAN
  CANopen

- **CoDeSys ARTI**
  CoDeSys ARTI v2.x + v3.x

- **Control Techniques**
  Control Techniques Unidrive

- **Delta**
  Delta DVP

- **Emerson**
  EMERSON Modbus Master

- **Fatek**
  Fatek Facon

- **GE**
  GE Fanuc Ethernet
  GE Fanuc SNPX

- **Generic Profibus**
  Generic Profibus driver

- **Giddings&Lewis**
  G & L Motion Control Serial
  G & L Motion Control Ethernet

- **Hitachi**
  H-COMM

- **IAI**
  XSel

- **IDEC**
  IDEC Micro

- **J1939**
  J1939 via FreeCAN

- **KEB**
  COMBIVERT

- **Keyence**
  KV-Series

- **Koyo**
  DirectNET
  K-Sequence

- **Lenze**
  LECOM A/B

- **LS Industrial Systems**
  LS Glofa
  LS Master-K

- **Matsushita**
  MEWTOCOL-COM

- **Mitsubishi**
  Alpha2
  A-Series (C24)
  A-Series (CPU)
  A-Series (E71)
  Freqrol FR-A PLC

FX Series ENET
FX Series Serial
FX Series ADP/BD
FX3U Ethernet
MC Protocol
QnA/Q Profibus DP driver
MR-J2/MR-J3-T
QnA/Qnn Serial
QnA/Qnn-Series (C24)

- **Modbus**
  Modbus Master RTU/ASCII
  MODBUS Slave RTU/TCP

- **NMEA 0183**
  NMEA 0183

- **OMRON**
  OMRON FINS
  Host Link

- **SAIA**
  S-BUS Serial/Ethernet

- **SIEMENS**
  S7 MPI (EM)
  S7 MPI (HMI Adapter)
  S7 ProfiNET ISO (ISO-TCP)
  S7 MPI Direct
  S7 200 PPI
  TI500

- **WAGO**
  WAGO Modbus TCP

- **Vigor**
  Vigor

- **Yamaha**
  Yamaha VIP

- **YASKAWA**
  Memobus Master

- **Yokogawa**
  FA-M3 Serial/Ethernet

About Beijer Electronics

Beijer Electronics is a fast growing technology company with extensive experience of industrial automation and data communication. The company develops and markets competitive products and solutions that focus on the user. Since its start-up in 1981, Beijer Electronics has evolved into a multinational group present in 17 countries and sales of 130 Mio. €. The company is listed on the NASDAQ OMX Nordic Exchange Stockholm Small Cap list under the ticker BELE.

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