

Operator Interface Touchscreen Family

Smart design to fit your needs

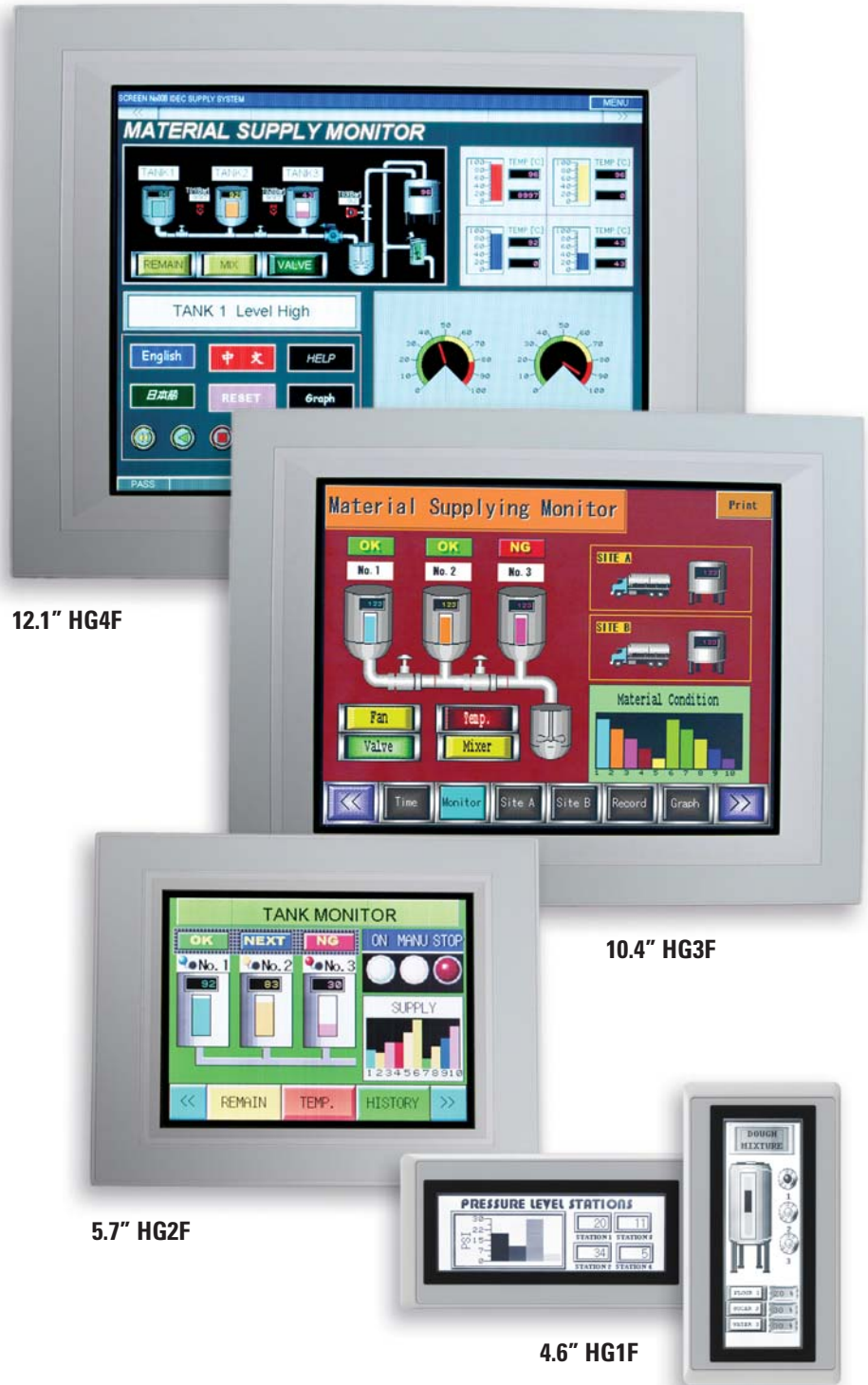
From the large 12.1" TFT LCD Screen, to the compact 4.6" STN LCD, our screens support either monochrome or 256 colors with high pixel resolution to give you sharp images and excellent visibility. In keeping with IDEC's attention to detail, our slim-body design adapts to applications where space is limited. With up to 8MB of memory and a 200MHz 32-bit RISC CPU, IDEC Touchscreens put control, power and speed at your fingertips.

Versatile, High functionality

IDEC Touchscreens can function as either a stand alone controller or communicate with IDEC PLCs and a wide array of major manufacturers' PLCs. Touchscreens interface with any of your equipment to provide graphical data presentations in vivid color and to display bar graphs and meters to represent analog data. Illuminated pushbuttons can replace physical mechanical switches; pilot lamps can display on/off states and show almost any production information you need to monitor.

Programming power made easy

IDEC's powerful WindO/I-NV2 software lets you create colorful graphical interfaces for easier production supervision and control. A built-in library of over 5000 bitmap images helps you easily display almost every manufacturing activity you want to control. Our programming software is intuitive and user-friendly. With re-sizeable pop-up screens, Windows compatible fonts, and multilingual text capabilities, you enjoy the utmost flexibility in designing and programming.



12.1" HG4F

10.4" HG3F

5.7" HG2F

4.6" HG1F



PLCs

Operator Interfaces

Automation Software

Power Supplies

Sensors

Communication & Networking

Features

The OI Touchscreen Family is ideally matched to today's sophisticated technology. Using a wide range of graphical options, you can represent specific equipment, make production information immediately apparent and instantly display safety problems. Consolidating controls on an IDEC touchscreen eliminates costly investments in wiring and installation of multiple pushbutton indicators on a traditional control panel. Just think how you can benefit with touchscreens.



Expansion I/O

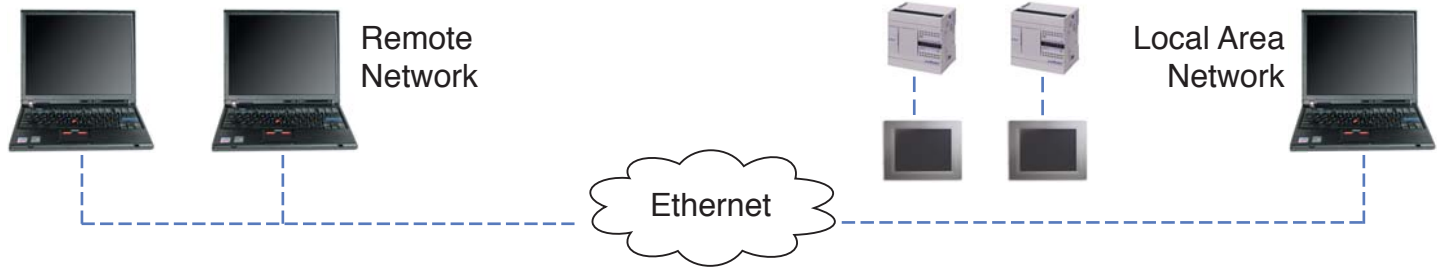
An expansion digital I/O module gives you the option of expanding your system with 16 DC inputs and 16 transistor outputs for basic PLC control (excluding 4.6" HG1F touchscreen).



Basic Data Representation

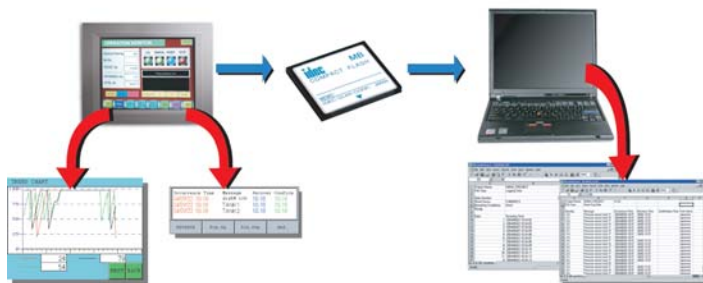
A built-in software library of over 5000 bit-mapped images lets you graphically represent almost any plant activity or equipment that you want to monitor or control. In addition to representing meters, bar graphs and switches, you can also incorporate keypads to facilitate changing values. Our user-friendly programming software lets you design each screen by simply selecting objects from a pull-down menu or from a row of object icons and dropping it onto the screen work area. All bitmap images are available in 256 colors and are easily re-configurable.

Ethernet Support



The built-in 10BaseT Ethernet port found on the 10.4" and 12.1" touchscreens allow communications with PLCs using Ethernet/IP, Modbus TCP/IP or IDEC networking protocol. The touchscreens also allow you to remotely monitor machine-operating status via the Internet or your Local Area Network using any web browser. Regardless of your location, you can use your PC's browser (Netscape or Internet Explorer) to collect data about any touchscreen project. You can efficiently monitor and manage production activity from your office without the time or expense of travel.

Recipe, Alarm and Trend Logging



The Recipe function allows you to conveniently set operational parameters, which can be individually defined for different processes. The Alarm function stores historical events with a date and time stamp compliant to the ISA (Instrument Society of America) Standards, adding additional options to display and manage alarm messages. Trend Logging expresses data in graphical form according to the time period you define. Using these functions, you can quickly view production information and collect and manage data.

Compact Flash Card



OI Touchscreens (excluding 4.6" HG1F) support Compact Flash (CF) Cards with up to 512 MB of memory. In addition to storing recipe, alarm and trending data, the CF Card can also store screen captures in a BMP format for documentation purposes. The CF Card can hold one or more projects and you can easily transfer a project directly to another touchscreen by simply inserting the card into the second touchscreen and downloading what you need.

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To meet your application needs, IDEC offers 12.1" and 10.4" TFT LCD screens, and 4.6" and 5.7" STN LCD screens that come with 256 colors or in monochrome to provide you with either multicolored or gray scale graphics. All screens have high pixel resolution and super bright LCD screens with 400 cd/m² for the 12.1", 450 cd/m² for the 10.4" screen, 250 cd/m² for the 5.7" and 500 cd/m² for the 4.6" screen to provide sharp quality images, with RS-232 / RS-485 / RS-422 communication. In addition, all IDEC

Touchscreens communicate with IDEC as well as many other industry leading PLC manufacturers.

Their slim body style of: 35.3mm depth for the 4.6" HG1F, 50mm depth for the 5.7" HG2F, 49.6mm depth for the 10.4" HG3F, and 52.1mm depth for the 12.1" HG4F, provide an advantage in space in a panel.



OI Link Communication



This permits a single PLC to communicate with multiple IDEC touchscreens, where one touchscreen serves as the master and up to 15 as slaves. An OI Link will accommodate communications over a maximum distance of 200 meters. The OI Link should be used whenever you are using more than one touchscreen in a location to monitor and control a single PLC.

1:N PLC Communication



This mode allows a single IDEC touchscreen to communicate with multiple PLCs. It is used when you need only one centrally located touchscreen to monitor and control PLCs in different locations. Depending on the PLC type, a maximum of 31 PLCs can be connected to one touchscreen. PLC manufacturers supported for 1:N communication are: IDEC OpenNet Controller and MicroSmart family, Automation Direct (Koyo): DirectLogic-DL205/405 and Modicon: Modbus RTU.

Pass Thru Function

This function lets you download a PLC program from a PC through the touchscreen without interrupting operations. Only one cable is needed to program both units. The Pass Thru communications function is applicable to the following PLCs: IDEC OpenNet Controller and MicroSmart family, and Mitsubishi MELSEC-FX, FX3UC and Q.

Support of Leading Manufacturer's PLCs

IDEC Touchscreen communications capabilities expand well beyond IDEC brand PLCs. Other major PLC manufacturers supported are: Allen Bradley, Mitsubishi, Omron, Automation Direct (Koyo), Keyence, GE, Modicon, Siemens, Sharp, Hitachi, Schneider, Yaskawa, Fanuc, Matsushita Electric Works (Panasonic) and Yokogawa.

The 10.4" and 12.1" IDEC Touchscreens can remotely communicate with multiple devices or PLCs over an Ethernet network, using Ethernet/IP, Modbus TCP/IP, or IDEC 1:N drivers. Only one centrally located IDEC touchscreen is necessary to communicate with up to 16 PLCs that are located in different locations. The Ethernet/IP driver supports the following Allen Bradley Series PLCs: Micrologix, SLC500, PLC5 and ControlLogix.

Approvals and International Ratings

The OI Touchscreen Family is UL listed for use in hazardous locations (Class I Div. 2). In addition the 4.6" and 5.7" screens are IP65 and Nema Type 13 rated, while the 10.4" and 12.1" screens are IP66, Nema Type 4, 4X, 13 rated so they can be used in the most demanding industrial applications.



Printer Function



Use this capability to print alarm data so a hard-copy record of specific events can be maintained. Copies of screens can also be printed when needed for documentation. Serial printers are supported on all OI Touchscreens, while Parallel Printers are supported on 10.4" and 12.1" models.

Barcode Reader Support

IDEC Touchscreens provide a serial port that you can configure for use by special communication devices such as barcode readers. A barcode reader can send data directly to the touchscreen, where it can be used for quick viewing before being transferred to the PLC for further data manipulation.



Debugging Functions

Two modes are available for either monitoring data or troubleshooting. Once you download the project you created in WindO/I-NV2 to the touchscreen, you can use the Debugging Mode to communicate directly with the touchscreen and switch between screens or view and modify batch data from the controls of your PC. In Simulation Mode, you can use simple On/Off control without connecting to the PLC.

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WindO/I-NV2 Programming Software

Easy Programming: Intuitive Drag & Drop Functionality

The WindO/I-NV2 software for all OI Touchscreens is the programming tool that lets you create colorful graphical interfaces to visualize operating conditions. The software is very intuitive with drag and drop functionality. The Help menus are a great source of information and a built-in library of bitmaps provides over 5000 images to help expand your creativity. The software also includes a debug function where you can go online with the touchscreen for monitoring and changing data.

Flexible Screen Display for Efficient Editing

With WindO/I-NV2 software, screens can be easily arranged. A total of 3000 base screens can be created (as allowed by the memory size). Sub-screens known as pop-up menus can be resized, made (showing backgrounds) using the superimpose function, and can be made to appear anywhere inside the base screen.

Easy to manage Projects and Screens

Screens and Project Settings List:

- Screens can be duplicated and their properties can be changed easily.
- Project settings can be edited.
- Devices, text, and images can be imported or exported.

Screen Preview List:

- Screens can easily be selected using the preview image function.

Object List:

- Each object displays its properties such as; type of device used, conditions and operations.

Buttons:

- A button selected from an object list is shown on the editing screen.

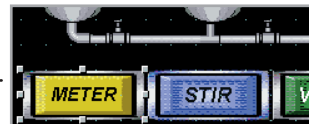
Extensive Image Library



A built-in symbol library provides over 5000 symbols to help you create cutting-edge graphical screens. Image data from BMP, JPG, DXF, WMF, and ICO files can also be imported.

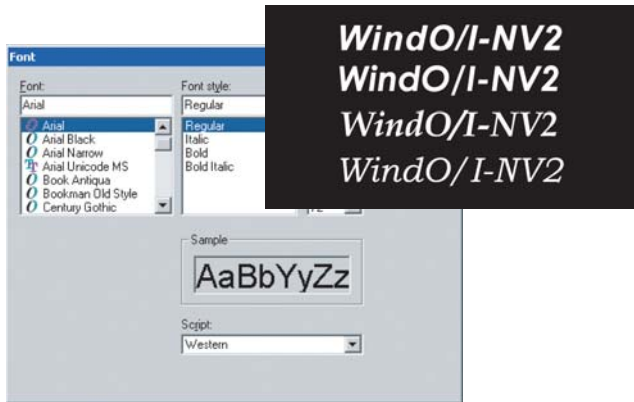


No.	Name	Type	Device	Trigger Type	Trigger Condition
55	Rectangle	Rectangle			
56	Bitmap	Bitmap			
57	Rectangle	Rectangle			
58	Rectangle	Rectangle			
59	Line	Line			
60	WordCommand13	Word Write	LDR 70	1: Falling-edge	[LSM 2]
61	WordCommand10	Word Write	LDR 67	2: Satisfy the c...	[D 6] == 5 & 3
62	BarGraph4	Bar Graph	LDR 71		
63	BarGraph5	Bar Graph	LDR 72		
64	BarGraph6	Bar Graph	LDR 75		
65	NumDisplay1	Numerical	LDR 71		
66	NumDisplay2	Numerical	LDR 73		
67	NumDisplay3	Numerical	LDR 67		
68	NumDisplay1	Numerical	LDR 75		
69	BitSwitch3	Bit Button	LM 10	3: Always ON	
70	BitSwitch4	Bit Button	LM 10	3: Always ON	
71	BitSwitch5	Bit Button	LM 1	3: Always ON	
72	BitSwitch6	Bit Button	LM 2	3: Always ON	
73	Lamp2	Pilot Lamp	LX 0	6: While safety...	[O 150] >= [D
74	BitSwitch7	Bit Button	LM 3	3: Always ON	
75	ScreenSwitch1	Auto Screen	10	3: Always ON	
76	WordCommand1	Word Write	LDR 71	6: While safety...	0 == [LDR 71]
77	WordCommand55	Word Write	LDR 73	0: Rising-edge	[LSD 11-0]
78	WordCommand55	Word Write	LDR 73	6: While safety...	20 >= [LDR 73]
79	WordCommand11	Word Write	LDR 68	2: Satisfy the c...	100 == [LDR 68]
80	NumDisplay2	Numerical	LDR 73		
81	NumDisplay2	Numerical	LDR 73		
82	NumDisplay2	Numerical	LDR 73		
83	BarGraph1	Bar Graph	LDR 58		
84	BarGraph1	Bar Graph	LDR 58		
85	NumDisplay3	Numerical	LDR 67		
86	NumDisplay2	Numerical	LDR 67		



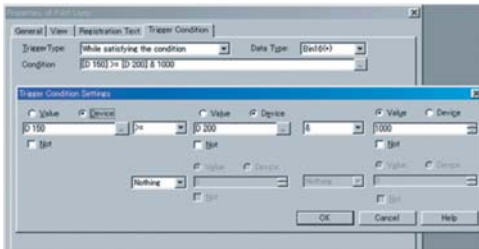
WindO/I-NV2 Software, con't

Compatible with Standard Windows™ Fonts



Fonts used in Windows™ can be used on the OI Touchscreens, making it possible to choose from a variety of text styles.

Easy Programming of Operating Conditions



- Operating conditions for objects such as switches, lamps, bit/word write, screen switching, and many more are easy to use. Step by step wizards guide the user through the set-up process.

Create Recipes to set parameters for different processes

- Upload or download parameters to and from the PLC
- 1,024 available channels; store up to 8,000 parameters per channel

Set up Alarm Log function for messages and alerts

- Monitors alarm conditions from a PLC and stores historical events with a date and time stamp
- Meets ISA standards for visual alarm management
- Select size and contrast of alarm message and status
- Scroll a list of alarm messages

Create Trend Graphs to monitor critical data points

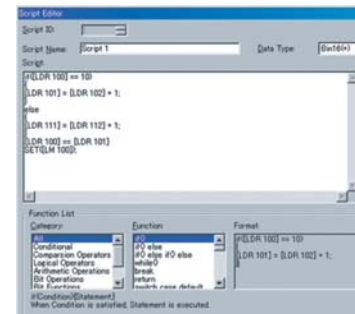
- Quickly view production information
- Collect and manage data
- Up to 16 channels in a graph

Multilingual Capabilities for Worldwide Applications



- The OI Touchscreen family can support other languages. With the text group function you can create a text database in different languages. Once the touchscreen is in a different country (e.g. China or Mexico) the customer can easily switch all text messages from English to Chinese or Spanish by a touch of a button.
- Windows 2000, Vista and XP make it possible to input Japanese, Simplified Chinese, Traditional Chinese, and Korean languages. Western European languages (English, German, French, Italian, Spanish, Dutch, Norwegian, Danish, Finnish, Swedish, etc.) Central European languages (Czech, Hungarian, Romanian, Croatian, Slovene, Polish, and Slavic), Baltic languages, Cyrillic languages (Russian, Ukrainian, Bulgarian, Macedonian).

Script function



- Users with programming knowledge in C can combine conditional statements, mathematical operations and other functions to create simple and complex processes.
- Greatly reduce the programming required in the PLC.
- A syntax check function is also available to provide easy program troubleshooting.

Security function

- Provides different levels of security and restrictions for multiple users on editing projects or displaying screens and objects.