

C-more Micro

It's a touch panel... at a text panel price

Do more with C-more Micro-Graphic!

C-more Micro-Graphic panels are fast becoming one of the most popular and most reliable value packed operator interfaces in the industrial market. After all, the C-more Micro-Graphic panels are packed with features yet still priced for the tightest of budgets. With the addition of the larger 6-inch sizes, you can display even more text, graphics, or bitmaps to effectively communicate and display data to the operator. Touch and non-touch screen models are available, and the low prices allow customers with tight budgets to take advantage of graphic control panel features that are most often found in more expensive touch screen products.

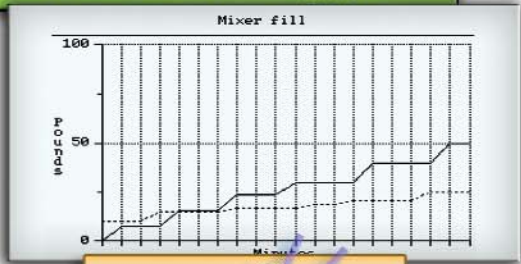
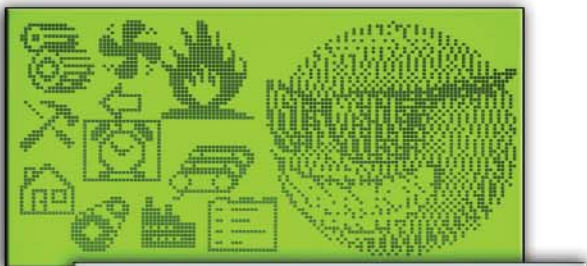
Both TFT Color and STN Monochrome panels are now available. The 3-inch and 6-inch STN monochrome versions each offer five selectable background colors that allow you to use color to convey meaning. The 6-inch TFT full color version offers up to 32,767 colors for more vibrant and colorful project screens. Several options, including plug-and-play keypad bezels, are available for both the 3-inch and 6-inch models.

NEW!
TFT model
Starting at
\$399

Prices
Starting at
\$149



C-more Micro Panel Selection Guide			
Feature	3-inch STN Monochrome Models	6-inch STN Monochrome Models	6-inch TFT Color Model
Display Resolution & Type	128 x 64, touch or non-touch	320 x 240, touch	320 x 240, touch
Ports	1 serial (RJ12) and Optional DSUB15	2 serial (RJ12 and DSUB15)	1 USB (Port 1: USB Type B) 1 Serial (Port 2: DSUB15)
User Project Memory	768KB	1,792KB	3.2MB
Portrait Mode	NO	YES	YES
Colors	Monochrome; backlight can be configured per screen and/or per alarm as: red, green, amber, lime, or yellow (standard); or red, white or three shades of pink (high-contrast)	Monochrome; backlight can be configured per screen and/or per alarm as: red, green, amber, lime, or yellow (standard); or red, white or three shades of pink (high-contrast)	32K colors



Bitmap graphics

- 3-inch models have 128 X 64 pixel graphical display that supports bitmap graphics
- 6-inch models have 320 X 240 pixel graphical display that supports bitmap graphics
- Use bitmap images of pushbuttons, switches, indicators, your company logo
- Use our library of bitmaps
- Create your own library of bitmaps

Real Time Graph

- Each pen displays the value of a single PLC memory location. Values are refreshed by either time or a trigger tag.
- One or two pens can be displayed on the STN models
- Up to Eight pens can be displayed on the TFT model
- Up to 24 values can be displayed for each pen

Controlled beep

- Beep to indicate an alarm
- Beep for a special message
- Beep to verify when button is pressed

Bar graphs

- Vertical, horizontal, thin, wide, multiple
- Combine with a numeric display for digital readout
- Scrolling text

Data entry

- Pop-up numeric keypad on the screen
- Increment/Decrement a value by touching arrows
- Add an optional keypad bezel

Recipes

Each recipe button transfers up to 99 values from PLC source registers to PLC destination registers and/or from the recipe table to PLC destination registers.

Change background colors

The screen colors are programmable! Use them to convey meaning - see a red alarm screen from across the room, or use a yellow screen as a caution.

All STN models support the following 5 background colors:

Green - Red - Yellow - Amber - Lime

All high-contrast STN models support the following 5 background colors:

White - Pink1 - Pink2 - Pink3 - Red

The TFT model allows 32K colors to flash for the background.

Alarm feature

C-more Micro has an Alarm action that can control:

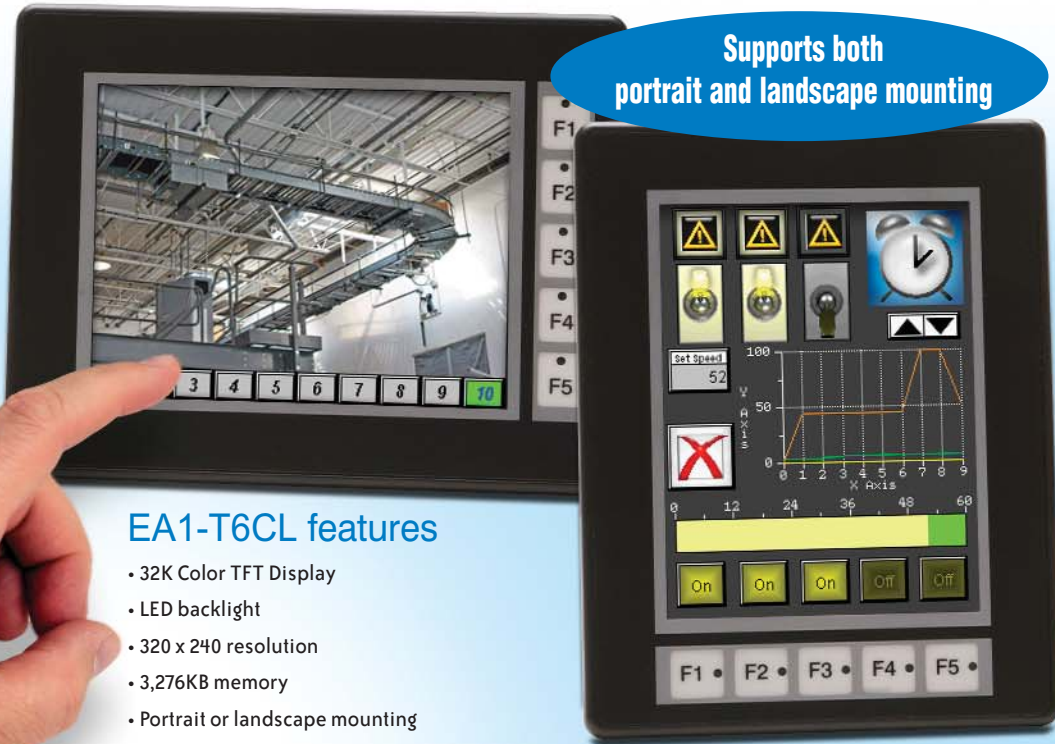
- Backlight color change/flash
- Function Key LED flash
- Beep activation
- Custom alarm banner display
- Up to 16 configurable alarm actions

6-inch TFT Color C-more Micro-Graphic Panels

**The #1 Value in Micro Panels just got better -
NEW! 6" TFT panel for only \$399!**

The C-more micro family now offers one of the most competitive priced 6-inch TFT 32,768 color touch screen HMI panels in the market. Users can take advantage of the clear and colorful graphics to create vibrant and intuitive screens. The free programming software offers the choice of using many built in graphics, or importing your own custom graphics.

Save time by creating and saving custom objects and graphics to software libraries for fast and easy access from multiple projects. Portrait or landscape modes allow for versatile mounting positions when space is a concern. All these features at a competitive price, in a rugged and reliable HMI, make this Micro one of the best values for any application.



Supports both portrait and landscape mounting

EA1-T6CL features

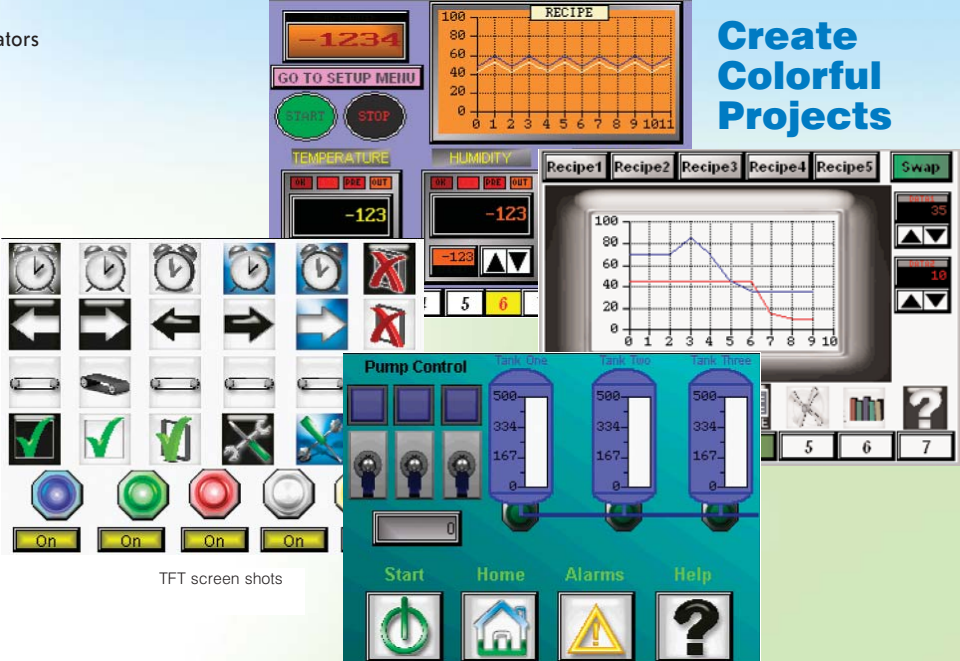
- 32K Color TFT Display
- LED backlight
- 320 x 240 resolution
- 3,276KB memory
- Portrait or landscape mounting
- LED backlights
- Standard Type B USB programming port
- Multistate bitmap support
- Five durable function keys with LED indicators
- Windows font support
- Enhanced objects and graphics

Available PLC drivers

C-More Micro-Graphic panels have the following drivers available for connection to DirectLOGIC and many other PLCs:

- AutomationDirect CLICK (Modbus)
- DirectLOGIC K-sequence, DirectLOGIC DirectNET, DirectLOGIC Modbus (Koyo Addressing)
- Modbus RTU
- Entivity Modbus RTU
- Allen-Bradley DF1 Full Duplex
- Allen-Bradley DF1 Half Duplex
- Allen-Bradley PLC5 DF1
- Allen-Bradley DH485
- Omron Host Link (C200 Adapter, C500),
- Omron FINS serial (CJ1, CS1),
- GE SNPX (90/30, 90/70, VersaMax Micro and Micro 90)
- Mitsubishi Melsec FX
- Mitsubishi Q and QnA
- Siemens PPI

Create Colorful Projects



TFT screen shots

TFT vs STN benefits

- Standard Type B USB programming port
- Multistate bitmap objects (not available in STN models)
- Line graph displays up to eight pens (STN models support up to two)
- Real time graph displays up to eight pens, with up to 24 values for each pen
- Enhanced objects and graphics
- Analog meter supports Low-low, Low, Normal range, High and High-high indication

6-inch STN Monochrome C-more Micro-Graphic Panels

Two 6-inch models are available (standard or high-contrast background), offering the same base features. Both units have touch screens and display STN monochrome graphics; the configurable screen backgrounds let you use color to convey meaning. The standard unit supports green, lime, yellow, amber and red back-

ground colors. The high contrast unit offers background colors that include white, pink1, pink2, pink3 and red. The background colors can be controlled by the operator or the PLC, based on the selected configuration.



Supports both portrait and landscape mounting

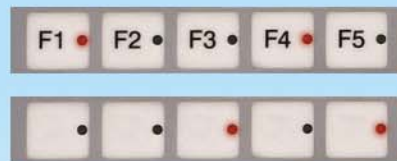


6-inch C-more micro: \$299.00
EA1-S6ML Touch Screen

6-inch C-more micro: \$299.00
EA1-S6MLW Touch Screen with High-contrast White

5 function keys and indicators

You can configure the five function keys to change meaning on every screen. The function key labels are simple to customize to your application. Use the programmable LEDs for alarms or status indication.



Optional keypads

Need a hardware keypad for your C-more 6" Micro-Graphic panels? No problem! Just mount and go - no programming, no external power needed!

- For Portrait (vertical) mounted panels - 21-button keypad bezel with numeric keypad
- For Landscape (horizontal) mounted panels - 20-button keypad bezel with numeric keypad



Portrait keypad bezel: \$99
EA-MG6-BZ2P

Landscape keypad bezel: \$99
EA-MG6-BZ2



UL, cUL, CE, NEMA 4, 4X indoor

3-inch STN Monochrome C-more Micro-Graphic Panels

3-inch C-more Micro with touch: \$189.00
EA1-S3ML and EA1-S3MLW

3-inch C-more Micro: \$149.00
EA1-S3ML-N and EA1-S3MLW-N



The choice is simple

Four 3-inch models are available, touch and non-touch, with either standard or high-contrast backgrounds, that offer the same base features. The touch units expand application possibilities for only \$40 more.

5 function keys and indicators

You can configure the five function keys to change meaning on every screen. The function key labels are simple to customize to your application. Use the programmable LEDs for alarms or status indication.

Optional keypads



8-key bezel:
\$55
EA-MG-BZ1

20-key bezel:
\$85
EA-MG-BZ2

Need a hardware keypad for your Micro-Graphic panels? No problem! Just mount and go - no programming, no external power needed!

- 20-key bezel is great for applications requiring extensive numeric entry
- 8-key bezel works well for simple setpoint adjustment and data entry

No extra power supply needed when connecting to many of our PLCs

Most AutomationDirect PLCs have a 6-pin, modular RJ12 communication port. The C-more Micro-Graphic panel can attach directly to this port for communications and power. In this configuration, no external power is needed, saving you time and money.

Optional power adapters for other configurations

If you are connecting to another brand of PLC, or to a non-RJ12 port on an AutomationDirect PLC, you will need one of the optional snap-on 12-24 VDC power supply units. Two models are available:



EA-MG-SP1:
12-24 VDC power supply with 15-pin D-sub serial port

- 12-24 VDC power adapter with 15-pin D-sub RS-232/RS-422/485 serial port used to connect to a PLC, which allows the panel's built-in port to be free for project development (EA-MG-SP1)
- 12-24 VDC power adapter only (EA-MG-P1)

Available PLC drivers

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UL, cUL, CE,
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4X indoor

FREE Configuration Software!

C-more Micro-Graphic Programming Software is based on its powerful sibling, the **C-more** Touch Panel. It offers high end features designed to reduce your configuration time. Simply drag and drop the objects from the Object list (right side of screen) on to the screen construction area. Then configure your PLC tags

and assign them to the objects. Use the built-in simulator to review your work on your PC before ever downloading your project! The time saving benefits of the **C-more** Micro configuration software could easily pay for the panel. Check out www.C-moreMicro.com for a demo.

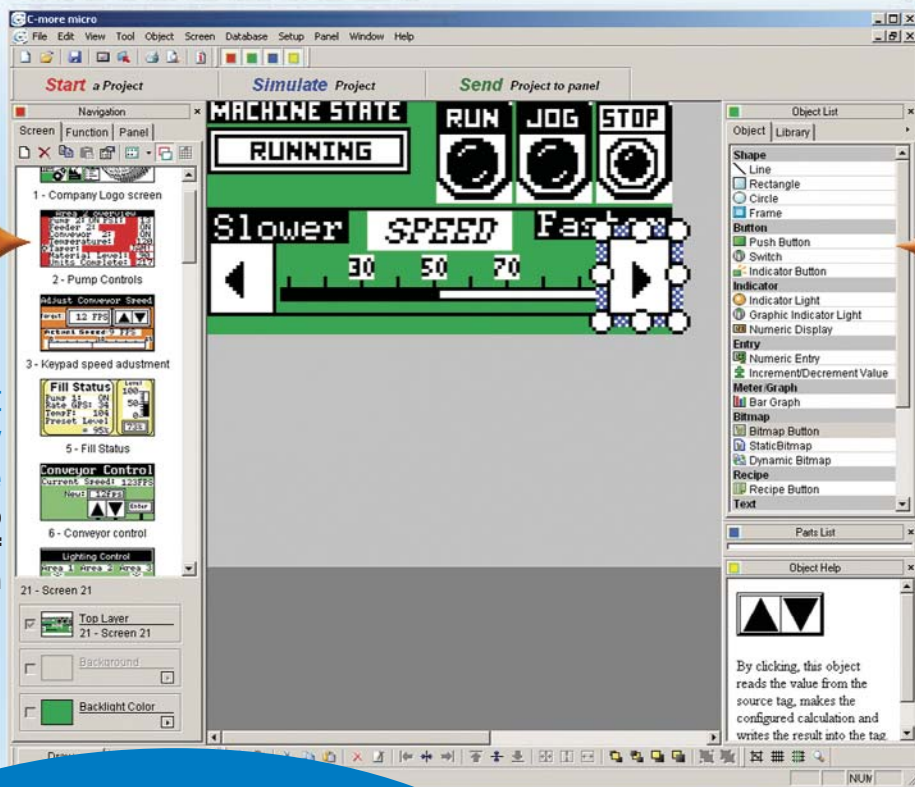
Built-in project simulator

- **Runs your project on your PC**
- **Test all of your screens before downloading**
- **Time savings pays for the panel!**

Built-in user object/screen libraries

Save time by re-using your custom objects and screens.

C-more Micro Programming Software



Thumbnail project preview pane
Helps keep track of multi-screen projects.

Scrolling object selection window
Lets you find the object you want fast. Just drag and drop it on the screen.

Scrolling help window

Gives you helpful information on each object

See page 11-51 for software specs and requirements.

Download the Software!

C-more Micro-Graphic Programming Software can be downloaded at no charge from the **AutomationDirect** web site, or a CD version may be purchased for \$25 by ordering p/n EA-MG-PGMSW. The software requires a USB port on your PC to connect to the **C-more** Micro-Graphic panel. Help files are included in the software. *This software can only be used to program the C-more Micro-Graphic panels, not the C-more 6" through 15" touch panels.*

Learn more! Go to:

www.C-moreMicro.com

for detailed specifications, a virtual tour of the product, programming examples, newest communication drivers...

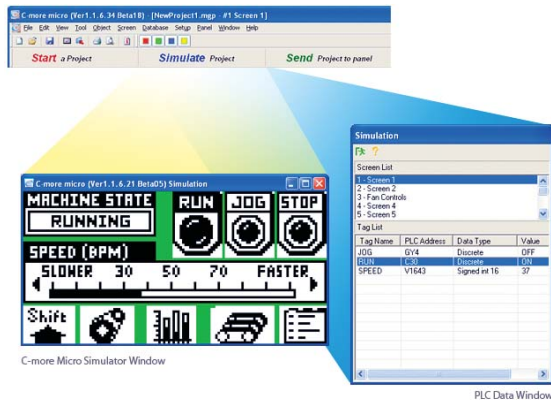
C-more Micro Productivity Tools

Built-in Project Simulator

The simulator is a real productivity booster that saves hours of trial-and-error programming and testing, with no need for a panel or controller.

The simulator pops up on your PC screen, along with the simulated controller Data Window. Use your mouse to activate objects on the simulated project screens while monitoring the simulated controller values in the data window.

Another option is to adjust simulated values directly in the data window, and see how your **C-more** Micro screens will react in the simulator window.



Build and Save Custom Objects

Store your objects in the library for fast and easy re-use.

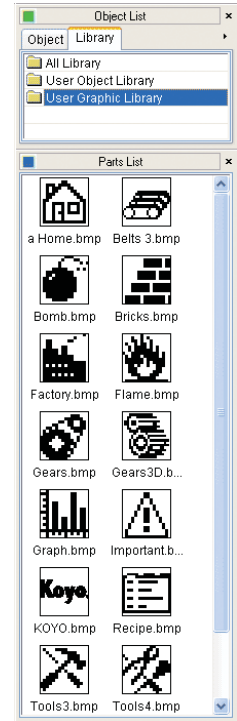
Once you've built a custom object, just right-click on it and select "Object -> Library"

You're then prompted to give your object a name, and you can choose whether to save the PLC tags with the object.

Drag and drop objects from the library onto the workspace.

It's easy to re-use an object. Just drag it from the library and drop it on the desired screen. Then double click it if you want to edit the tags or other options.

Download more objects and graphics from our online library at www.c-moremicro.com



Lots of memory lets you get creative

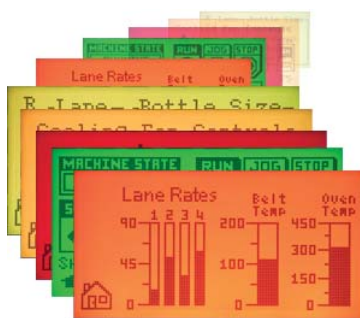
Screens

While many text panels are limited to 256 or fewer messages, **C-more** Micro allows up to 999 screens for every project. Create all the screens you need to control your machine or process.

Memory

Ample user memory allows tons of objects and graphics on your screens.

- Pictures and icons convey information faster than text
- Use bar graphs and indicator graphics to enhance comprehension



Note: Keep in mind that depending on the complexity of your screens, the limiting factor could be the 999 addressable screens or the panel's memory.

It's easy to track the size of your project:

When you download a project to a **C-more** Micro panel, the download dialog box shows you the current project size.

- If your project is large you may want to download only the Runtime File and the controller driver file, but not the entire Project File.
- If you download the Project File, you will be able to upload the entire project from the panel at a later date.

Overlapping Objects

Our customers loved overlapping objects on the larger C-more panels, and we knew you would expect the same capabilities with C-more Micro. Here are some examples of overlapping objects:

- Several "Text" objects and a "Bar Graph" object overlapped on a "Rectangle" object.
- "Dynamic Bitmap" object overlapped on an "Indicator Light" object



Obviously, some items should not be overlapped. Multiple overlapping touchable objects, for example, may yield undesirable results.

The C-more Micro programming software will provide warning messages at the time of download that some overlapping objects may be disabled, or not work as intended.

C-more Micro Productivity Tools

Alarm Control Setup

The Alarm Control Setup feature makes configuring alarms fast and easy. Use a controller tag to activate up to 16 alarm conditions with the built-in Alarm Control feature. Choose from:

- Beep
- LED blink
- Change backlight color
- Blink selectable colors
- Show a banner message

Event		Action				
No.	Alarm Notification	Beep	LED Blink	Backlight	Blink	Banner Message
01	[PUMP1TEMP] = 1	ON	<input checked="" type="checkbox"/> F1	<input checked="" type="checkbox"/> Current	<input checked="" type="checkbox"/> Yellow	<input checked="" type="checkbox"/> Pump One Alarm
02	[PUMP2TEMP] = 1	ON	<input checked="" type="checkbox"/> F1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Pump Two Alarm
03	[PUMP3TEMP] = 0	ON	<input checked="" type="checkbox"/> F1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Pump Three Alarm
04	[WASHTANK1_OVR] ...	ON	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Washtank One Overflow
05	[WASHTANK2_OVR] ...	OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Washtank Two Overflow
06	[WASHTANK1_LO] ...	OFF	<input type="checkbox"/>	<input checked="" type="checkbox"/> Current	<input checked="" type="checkbox"/> Red	<input checked="" type="checkbox"/> Washtank One Low Level
07	[WASHTANK2_LO] ...	OFF	<input type="checkbox"/>	<input checked="" type="checkbox"/> Current	<input checked="" type="checkbox"/> Red	<input checked="" type="checkbox"/> Washtank Two Low Level
08	[VALVE1_LOWAIR] ...	OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Valve One Low Air Pressure Level
09	[VALVE2_LOWAIR] ...	OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Valve Two Low Air Pressure
10						
11						
12						
13						
14						
15						
16						

Use the built-in alarm feature above or create a simple Alarm Screen (right) in conjunction with the message database to display HUNDREDS of different alarm messages.

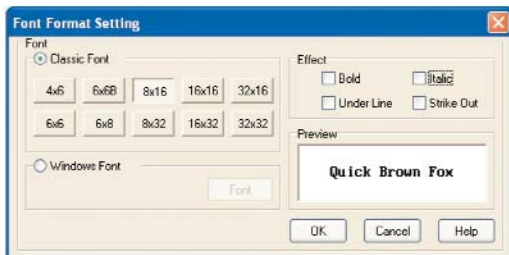
Look-up Text Object



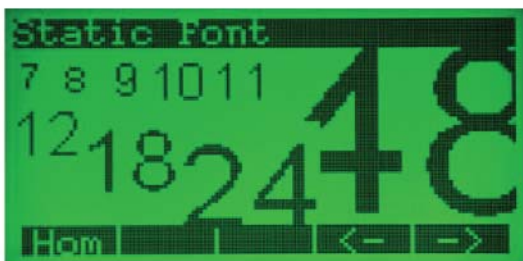
Use any font on your PC

C-more Micro offers 10 built-in fixed-width "Classic" fonts and allows the use of any Windows fonts present on the programming computer.

- Fixed-width fonts allow maximum lines and characters
- Windows fonts can be scaled to many sizes



Windows fonts can be sized with their familiar "point" values.



For 3-inch units, the "4x6" fixed font allows a maximum of 32 characters per line and 10 lines for static text.

The 6-inch units support up to 53 lines with 60 characters per line in portrait mode, or 40 lines with 80 characters per line in landscape mode.

