



CUE-Y Instruction Manual

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CUE-Y instruction manual
E-M-0006 -00

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Chapter 1: Getting Started

If you haven't installed your new software, begin by following the direction in the Quick Start Guide.

Installation

Requirements

Microsoft® Windows® XP or Windows Vista®
300 KB of hard disk space

Install the software

- 1 Close any other Noritake applications opened on your computer.
- 2 Insert the installation disc into the disc drive, and follow the on-screen instructions.

Note: For more information, see the Quick Start Guide on the installation disc.

Supported displays

CU20027-Y1A / Y100

20x2 character display with 7mm character height. Same display size as 20x2 with 5mm character height. Available in CMOS (-Y1A) and RS232 (-Y100) logic signal.

CU24043-Y1A / Y100

24 characters by 4 lines. Total of 96 characters in 20x2 character display size. Available in CMOS (-Y1A) and RS232 (-Y100) logic signal.

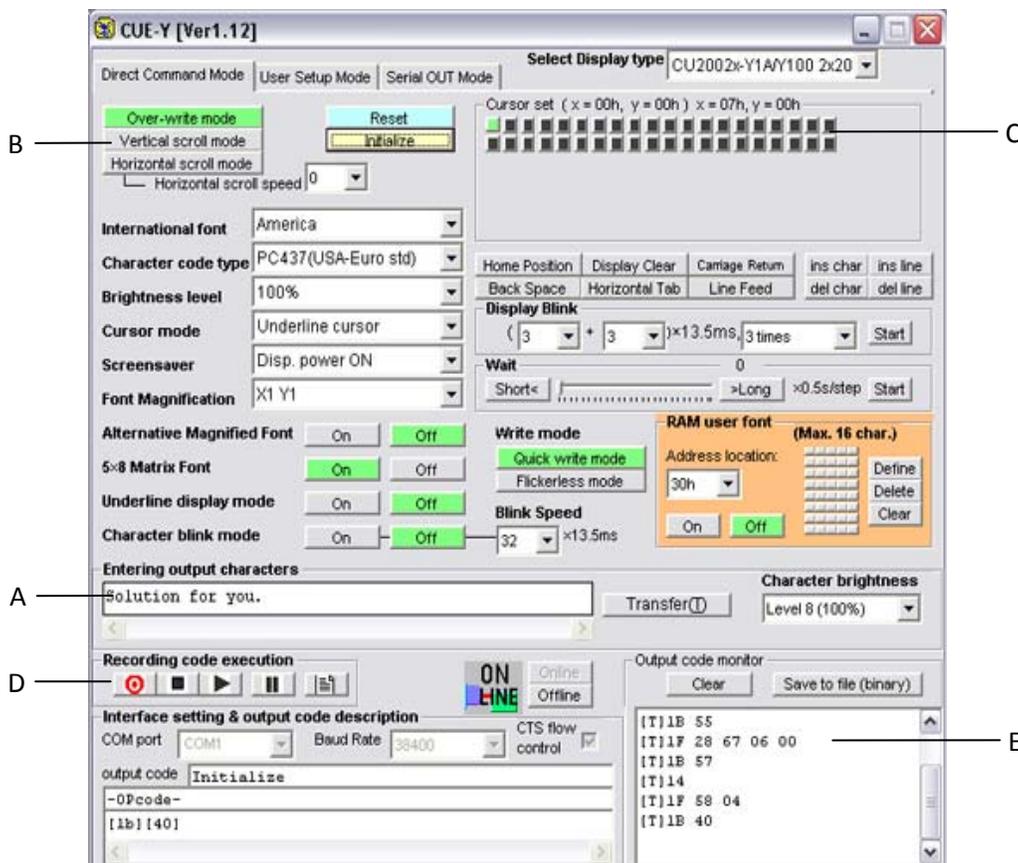
CU24063-Y1A / Y100

24 characters by 6 lines. Total of 144 characters in compact PCB size. Available in CMOS (-Y1A) and RS232 (-Y100) logic signal.

Chapter 2: Workspace

The CUE-Y workspace is arranged to help evaluate your VFD module. The workspace includes type settings, creating custom characters, cursor settings, view output, record and play routines, and save routines.

Workspace basics



CUE-Y Workspace

*A. Text B. Display C. Cursor D. Record and play E. Output log
F. Communication*

Workspace overview

CUE-Y workspace makes evaluation process fast and easy by allowing the user to execute commands with the click of a button. CUE-Y is divided up in the following sections:

Type The *Type* section contains the buttons to output the characters to the display, change the font table, font size, character format, and brightness of the character, underline characters, and blink the character.

Display The *Display* section contains the buttons to initialize the display, reset the display, clear display, change the brightness, wait, screensaver, display settings, and blink the screen.

Cursor The *Cursor* section contains the buttons to set the cursor position, move the cursor to the home position, carriage return, backspace, horizontal tab, line feed, insert character, insert line, delete character, delete line, and cursor settings.

Record and play The *Record and play* section contains buttons to record, stop, pause, and open code editor.

Output log The *Output log* displays the code and the description of the executed command and allows the user to save the log.

Communication The *Communication* section contains the drop down menu to select the COM port (communication port) and baud rate and check box for the CTS flow control.

User setup mode The *User setup mode* contains the buttons to enable/disable *User setup mode* and to display status information to the VFD module.

Serial OUT mode The *Serial OUT mode* contains the buttons to enable/disable *Serial OUT mode* and to read status information from the VFD module.

See also

“Type” on page 4

“Display” on page 14

“Cursor” on page 19

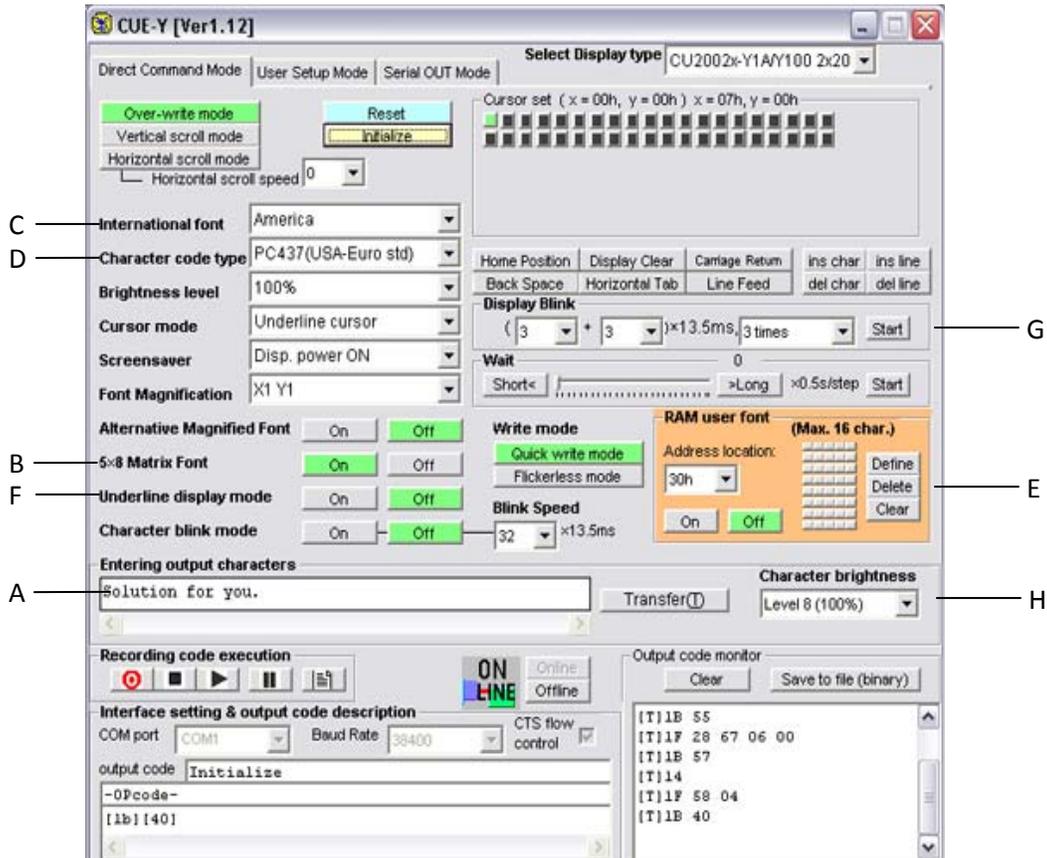
“Record and play” on page 27

“Output log” on page 37

“Communication” on page 39

Chapter 3: Type

Type in CUE-Y consists of useful buttons which allows the user to output the characters to the display, change the font table, change the font size, change the character format, change the brightness of the character, underline characters, and blink the character.



Type

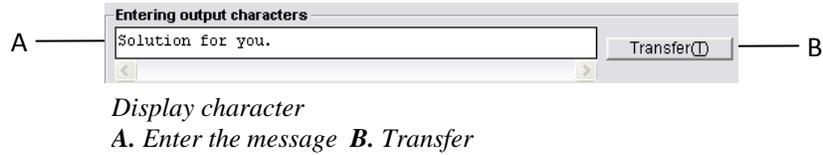
- A. Display character
- B. 5x8 character format
- C. International font table
- D. Extended ASCII
- E. Custom character
- F. Underline
- G. Blink
- H. Brightness level

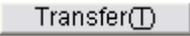
Display Characters

Output messages to your VFD module

The text written in the input field below the *Entering output characters* is outputted to your VFD module once the *Transfer* button is pressed.

Note: To insure the text is successfully displayed on to your VFD module, please make sure the COM port and baud rate is set, CTS flow control is checked, and the Online button is enabled.



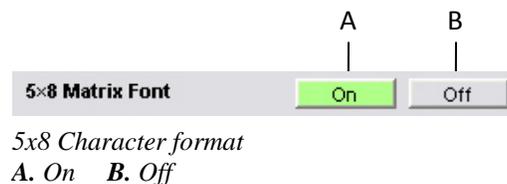
- 1 Enter the characters.
- 2 Click on the *Transfer* button. 

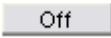
5x8 character format

Enable or disable the 5x8 character format

Y Series is the first series to have both 5x7, ASCII character format and 5x8, ASCII with descender character format.

Descender is the portion of a lowercase letter that extends below the baseline of a font. For example, in the letter y, the descender would be the "tail," or that portion of the diagonal line which lies below the v created by the two lines converging.



- 1 Do one of the following:
 - Click on the *On* button  to enable 5x8 character format.
 - Click on the *Off* button  to disable 5x8 character format.

Note: 5x8 character is enabled by default.

Changing the International font table

14 built-in international font tables

Available international font tables: America, Denmark, Denamrk2, England, France, Germany, Italy, Japan, Korea, Latin America, Norway, Spain, Spain2 and Sweden.



- ❖ Select the font table from the drop down menu.

Note: For more information, see the Y Series font table specification on the installation disc.

Changing the extended ASCII font table

10 built-in extended ASCII font tables

Available extended ASCII font tables: PC437 (USA / European standard), Katakana – Japanese, PC850 (Multilingual), PC860 (Portuguese), PC863 (Canadian-French), PC865 (Nordic), WPC1252, PC866 (Cyrillic #2), PC852 (Latin 2), PC858, and custom font table.



- ❖ Select the font table from the drop down menu.

Note: For more information, see the Y Series font table specification on the installation disc.

Changing the font size

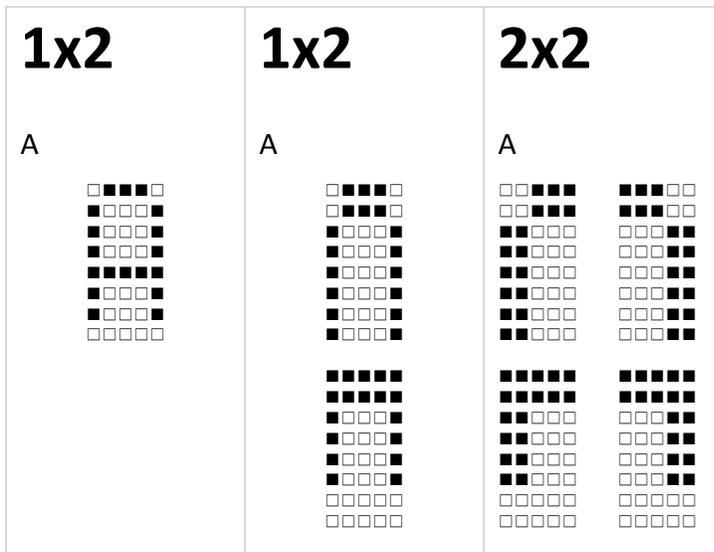
Change font size

Choose from 1x1, 1x2, and 2x2 font sizes.



Changing the font size

A. *List of font sizes*



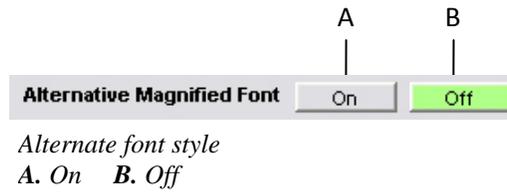
❖ Select the font size from the drop down menu.

Note: 5x8 character format is available to all 3 font sizes.

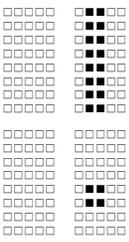
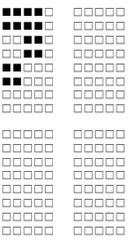
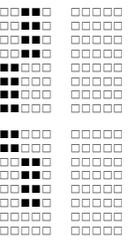
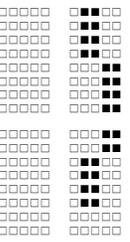
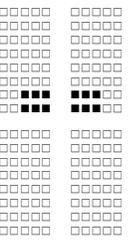
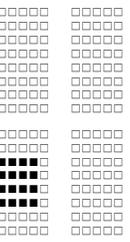
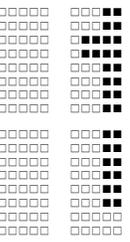
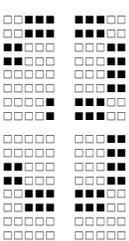
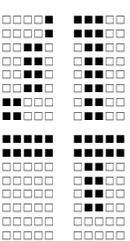
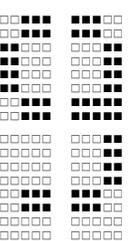
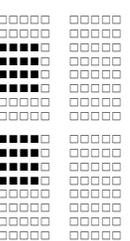
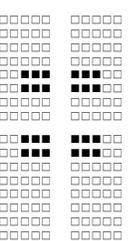
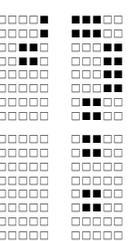
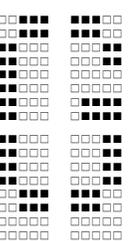
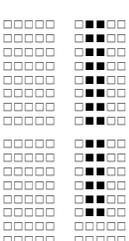
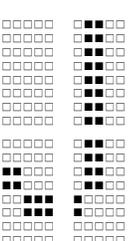
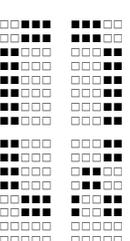
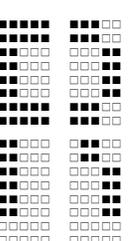
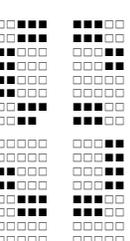
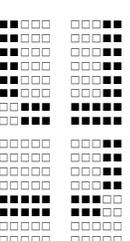
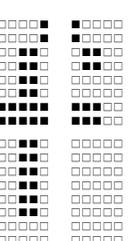
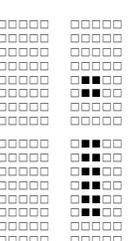
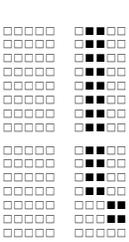
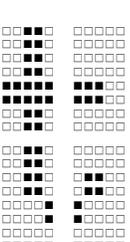
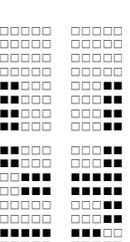
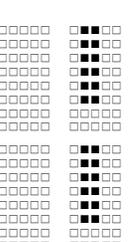
See also

“5x8 character format” on page 5

Display alternate font style for 2x2 characters

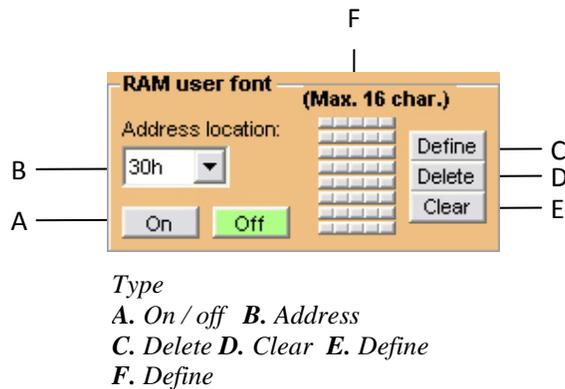


Enable the *Alternate magnified font* to display the following characters.

<p>! 21h</p> 	<p>' 27h</p> 	<p>(28h</p> 	<p>) 29h</p> 	<p>, 2Ch</p> 	<p>- 2Dh</p> 	<p>. 2Eh</p> 	<p>1 31h</p> 
<p>3 33h</p> 	<p>4 34h</p> 	<p>9 39h</p> 	<p>: 3Ah</p> 	<p>; 3Bh</p> 	<p>= 3Dh</p> 	<p>? 3Fh</p> 	<p>G 47h</p> 
<p>I 49h</p> 	<p>J 4Ah</p> 	<p>Q 51h</p> 	<p>R 52h</p> 	<p>S 53h</p> 	<p>Y 59h</p> 	<p>f 66h</p> 	<p>i 69h</p> 
<p>l 6Ch</p> 	<p>t 74h</p> 	<p>y 79h</p> 	<p>l 7Ch</p> 				

- 1 Do one of the following:
 - Click on the *On* button to enable alternate characters.
 - Click on the *Off* button to disable alternate characters.

Custom characters



Enable/disable custom characters

When the custom character is disabled, the default character will be displayed on to your VFD module in place of the custom character.

- 1 Do one of the following:
 - Click on the *On* button to enable custom characters.
 - Click on the *Off* button to disable custom characters.

Note: If you disabled the custom character, the custom character already displayed on your VFD module will not revert back to the default character.

Create custom characters

Create up to 16 custom characters. The custom characters will remain in the RAM until the power is unplugged from the VFD module, reset command is executed, and/or initialize command is executed.

- 1 Select the address from the *Address location* drop down menu.



- 2 Create the custom character by clicking on the dots.
- 3 Click on the *Define* button.
- 4 Click on the *On* button.

See also

“Creating custom characters” on page 35

Delete custom characters

- 1 Select the address from the *Address location* drop down menu.
- 2 Click on the *Delete* button.
- 3 Click on the *Off* button.

Clear the grid

- 2 Click on the *Clear* button.

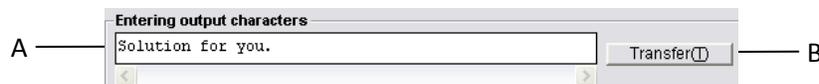
Underline

Enable the underline

Once enabled, the underline will be added to the outputted characters.

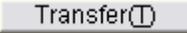


Underline
A. On B. Off

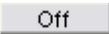


Display character
A. Enter the message B. Transfer

- 1 Click on the *On* button to enable the underline.
- 2 Enter the characters.

3 Click on the *Transfer* button. 

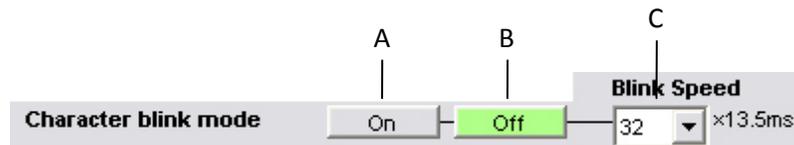
Disable the underline

❖ Click on the *Off* button  to disable the underline.

Blink

Enable the blinking effect

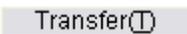
Once enabled, the blinking effect will be added to the outputted characters. Blinking speed can be set in increments of 13.5ms, between 13.5ms and 1728ms.



Blink
A. On B. Off C. Blink speed



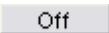
Display character
A. Enter the message B. Transfer

- 1 Select the blinking speed  from the *Blink Speed* drop down menu.
- 2 Click on the *On* button  to enable the blinking effect.
- 3 Enter the characters.
- 4 Click on the *Transfer* button. 

See also

“Display characters” on page 4

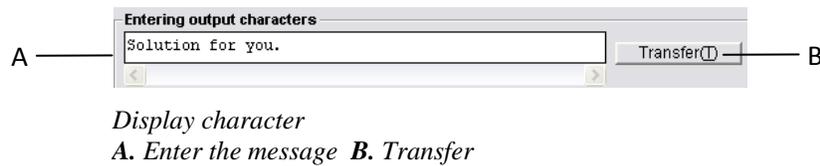
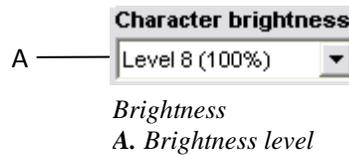
Disable the blinking effect

❖ Click on the *Off* button  to disable the blinking effect.

Change the brightness

Brightness level

Change the brightness of the outputted character. There are 8 brightness level settings to choose from: 0%, 14%, 29%, 43%, 57%, 71%, 86%, and 100%.



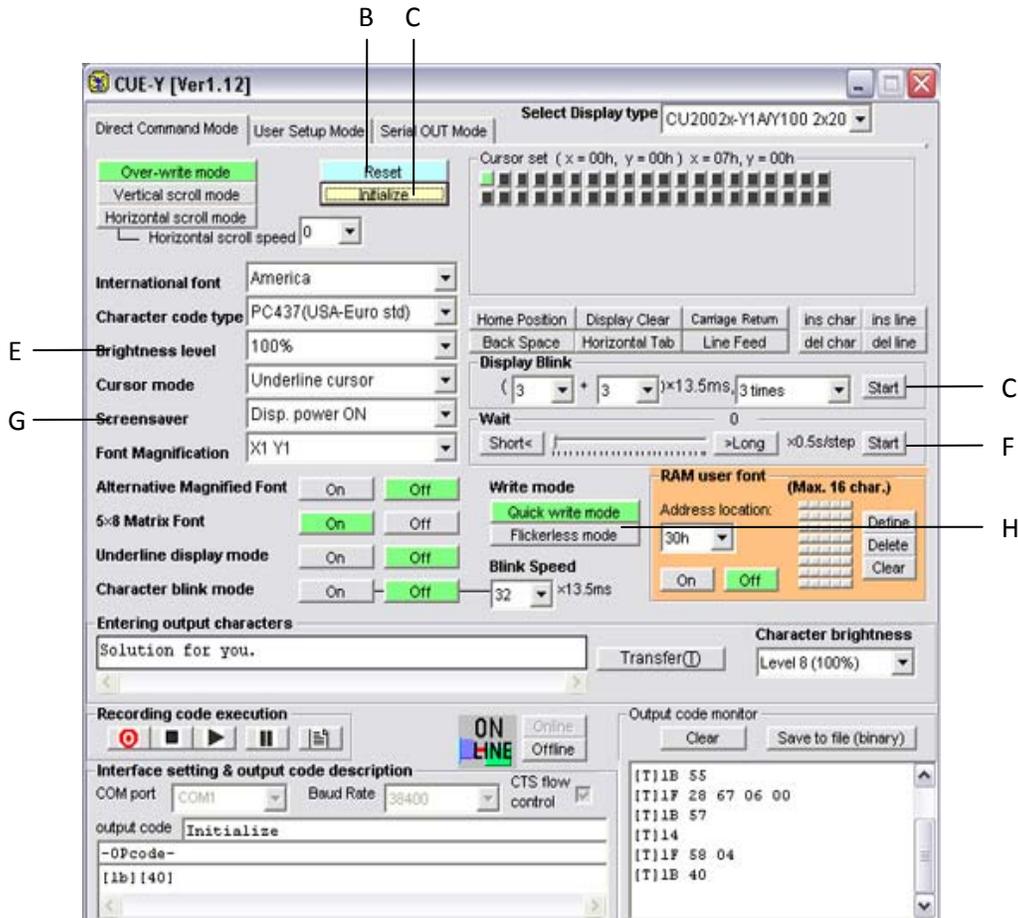
- 1 Select the brightness level from the *Character brightness* drop down menu.
- 2 Enter the characters.
- 3 Click on the *Transfer* button.

See also

- “Display characters” on page 4
- “Highlight” on page 36

Chapter 4: Display

Display in CUE-Y consists of buttons which allows the user to initialize the display, reset display, clear display, blink display, change the brightness, wait, screen saver, and change display settings.



Type

A. Initialize B. Reset C. Clear D. Blink E. Brightness level F. Wait
G. Screensaver H Display settings

Initialize display

Initialize your VFD module

Initialize your VFD module to the default settings.

- ❖ Click on the *Initialize* button. 

Reset display

Reset your VFD module

Restart your VFD display.

- ❖ Click on the *Reset* button. 

Clear display

Clear the display

Clear the screen and returns the cursor to the upper left position.

- ❖ Click on the *Clear* button. 

Blink

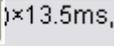
Blinking effect

Blinking effect will alternate between displayed content and blank screen.



Blinking effect

- A. Displayed content B. Blank screen C. Repetition
 D. Start

- 1 Select how long the display content  will remain on the screen before switching to blank screen.
- 2 Select how long the blank screen   will remain on the screen before switching to display content.
- 3 Select how many times the screen will blink  from the *Display Blink* drop down menu.
- 4 Click on the *Start* button. 

Change the brightness

Brightness level

Change the brightness of the display. There are 8 brightness level settings to choose from: 25%, 50%, 75%, 100%, 125%, 150%, 175%, and 100%.



Brightness level
 A. List of brightness settings

- ❖ Select the brightness level  from the drop down menu.

Wait

Wait

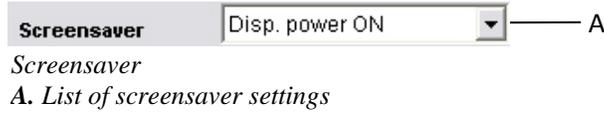
Adds delay in a routine. *Wait* command is set in increments of 0.5 sec.



Wait
 A. Shorten the delay B. Slider C. Extend the delay D. Start

- Do one of the following:
 - Slide the slider to  set the wait length. Wait length is set in increments of 0.5 sec.
 - Click on the *Short* button  to decrease wait length by 0.5 sec. or *Long*  button to increase the wait length by 0.5 sec.
- Click on the *Start* button. 

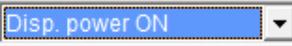
Screensaver



Display power on/off

Turn display power on/off.

1 Do one of the following:

- To turn the display power on, select the *Display power on*  from the *Screensaver* drop down menu.
- To turn the display power off, select the *Display power off*  from the *Screensaver* drop down menu.

Note: The content on the display prior to executing the display off command will be displayed back on to the display after display on command is executed.

All dots on/off

Turn all dots on the display on or all off.

1 Do one of the following:

- To turn the display on, select the *All dots on*  from the *Screensaver* drop down menu.
- To turn the display off, select the *All dots off*  from the *Screensaver* drop down menu.

Note: The content on the display prior to executing the all dots on command will be displayed back on to the display after all dots off command is executed.

Display settings



Type

A. *Quick write mode* B. *Flickerless mode*

Quick write mode

When displaying contents to the VFD module, the quick write mode prioritizes on speed at which the content is executed on to the screen.

- ❖ Click on the *Quick write mode*  under *Write mode*.

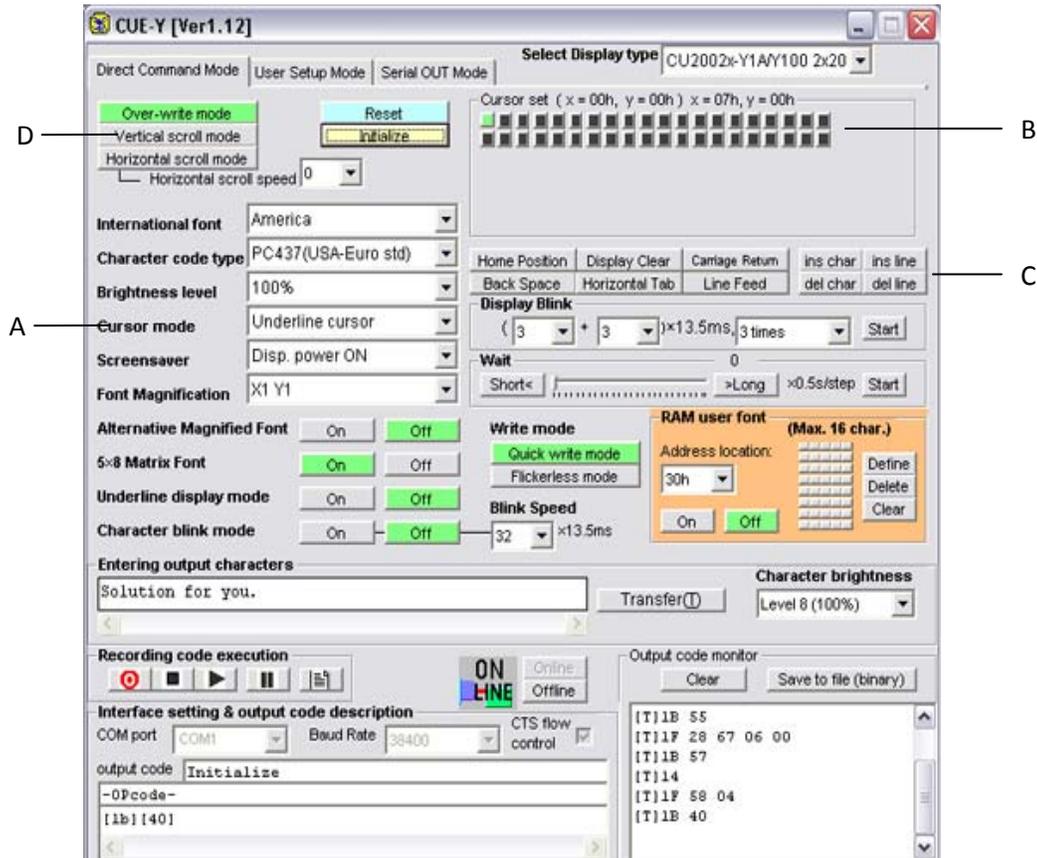
Flickerless mode

Enable this mode to prevent flicker on the display.

- ❖ Click on the *Flickerless mode*  under *Write mode*.

Chapter 5: Cursor

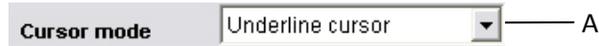
Cursor in CUE-Y consists of buttons which allows the user to set cursor position, move to home position, carriage return, backspace, horizontal tab, line feed, insert character, insert line, delete character, delete line.



Type

A. Cursor type B. Set cursor C. Move cursor D. Cursor settings

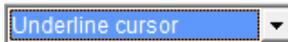
Cursor type



Cursor type
 A. Type of cursors

Underline cursor

Underline will be displayed at the current cursor position.

- ❖ Select *Underline cursor*  from the *Cursor mode* drop down menu.

Cursor off

Turn cursor off

- ❖ Select *Cursor off*  from the *Cursor mode* drop down menu.

Block cursor

Block cursor will be displayed at the current cursor position.

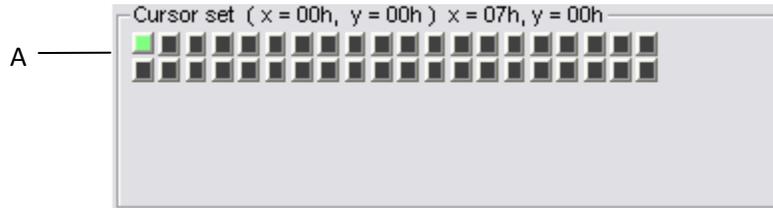
- ❖ Select *Block cursor*  from the *Cursor mode* drop down menu.

Underline cursor blink

Blinking underline cursor will be displayed at the current cursor position.

- ❖ Select *Underline cursor blink*  from the *Cursor mode* drop down menu.

Cursor position



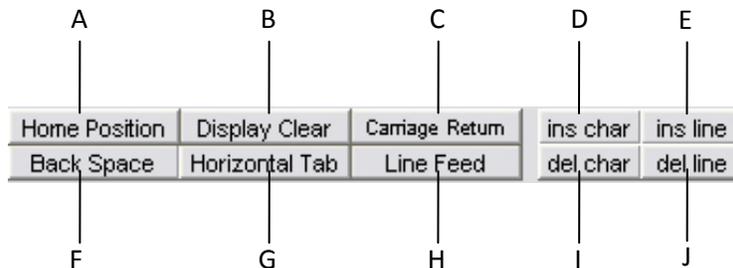
Cursor position
 A. Set cursor

Set cursor

Each box represents each character on the VFD module. Cursor position is set by clicking on the box.

- ❖ Click on the box that represents the character position on the VFD module.

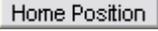
Moving cursor



Cursor position
 A. Home B. Clear C. Carriage return D. Insert character
 E. Insert line F. Backspace G. Horizontal tab H. Line feed
 I. Home J. Delete line

Home position

Move cursor to the upper left position.

- ❖ Click on the *Home Position* button. 

Carriage return

Move cursor to the first character, same row.

- ❖ Click on the *Carriage Return* button. 

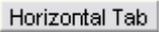
Backspace

Move cursor to the left one character.

- ❖ Click on the *Backspace* button. 

Horizontal tab

Move cursor to the right one character.

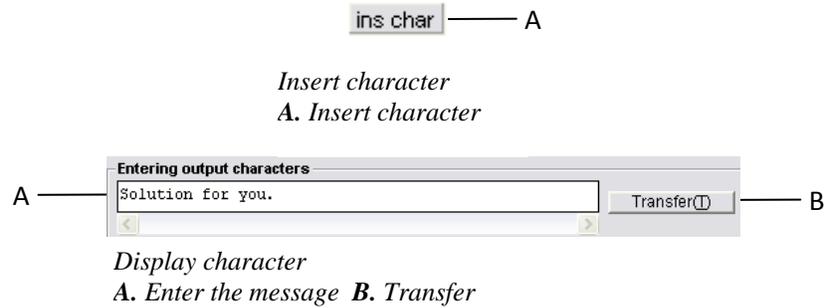
- ❖ Click on the *Horizontal tab* button. 

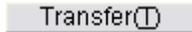
Line feed

Move cursor down one row.

- ❖ Click on the *Line feed* button. 

Insert character



- 1 Click on the *ins char* button. 
- 2 Enter the characters.
- 3 Click on the *Transfer* button. 

See also

“Display characters” on page 4

Insert line

- ❖ Click on the *ins line* button. 

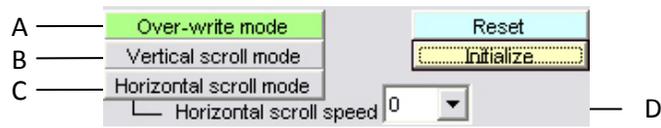
Delete character

- ❖ Click on the *del char* button. 

Delete line

- ❖ Click on the *del line* button. 

Cursor settings



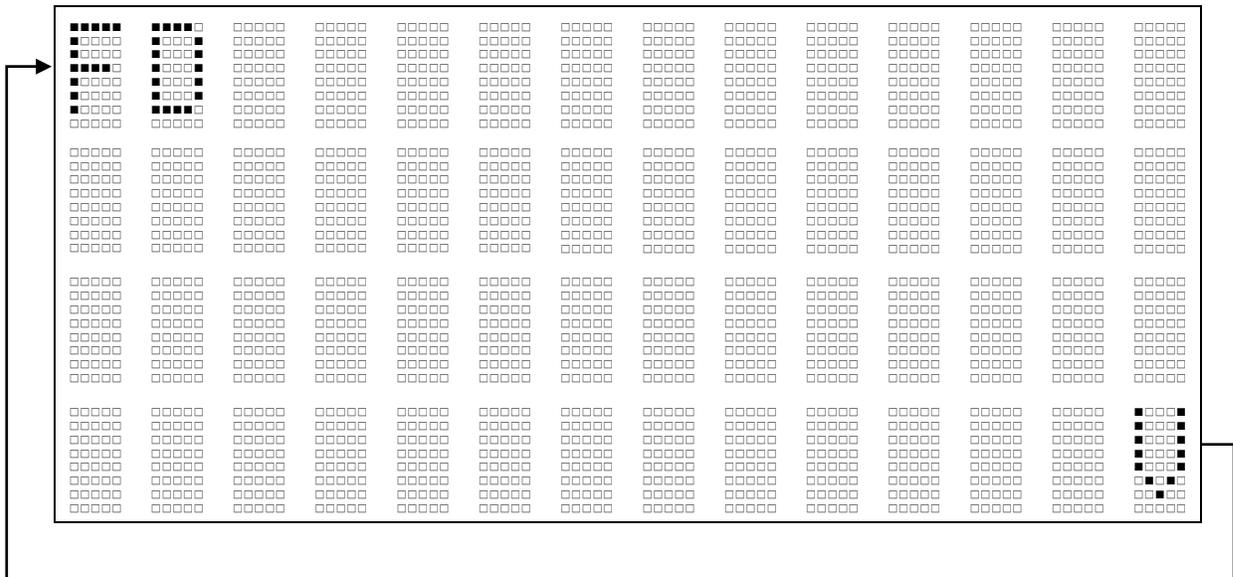
Cursor settings

- A. Over write mode
- B. Vertical scroll mode
- C. Horizontal scroll mode
- D. Horizontal scroll speed

Over-write mode

After displaying the character on the last line of the last row, cursor will return to the top left position and over write the display content.

If the cursor position is at the last column of the last row and you send the command to display “VFD”

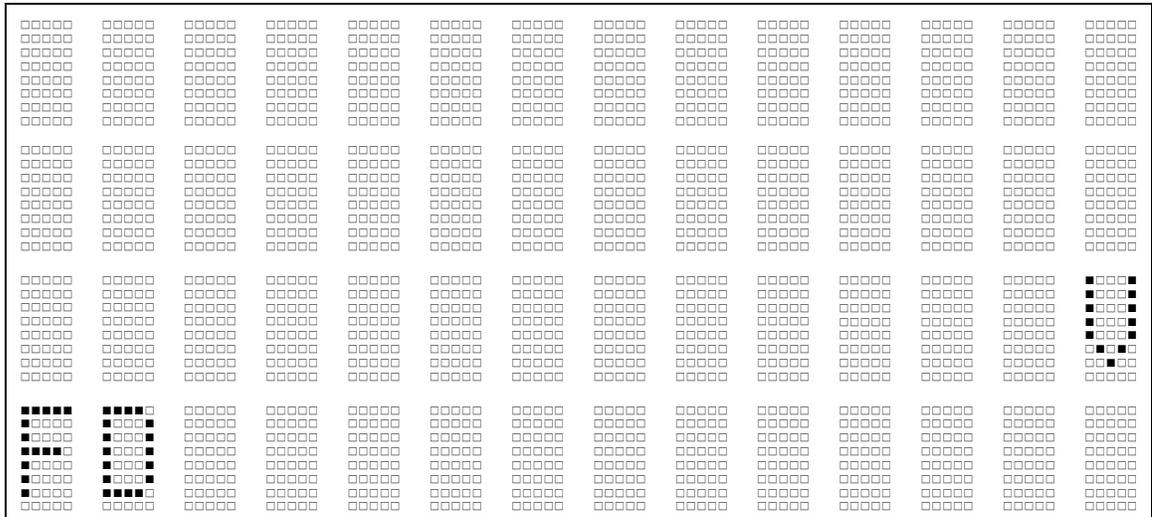


- ❖ Click on the *Over-write mode* button. Over-write mode

Vertical scroll mode

After displaying the character on the last column of the last row, display will shift up one row and move the cursor to the first column of the last row. The content of the first row will be replaced by the contents from the second row.

If the cursor position is at the last column of the last row and you send the command to display “VFD”

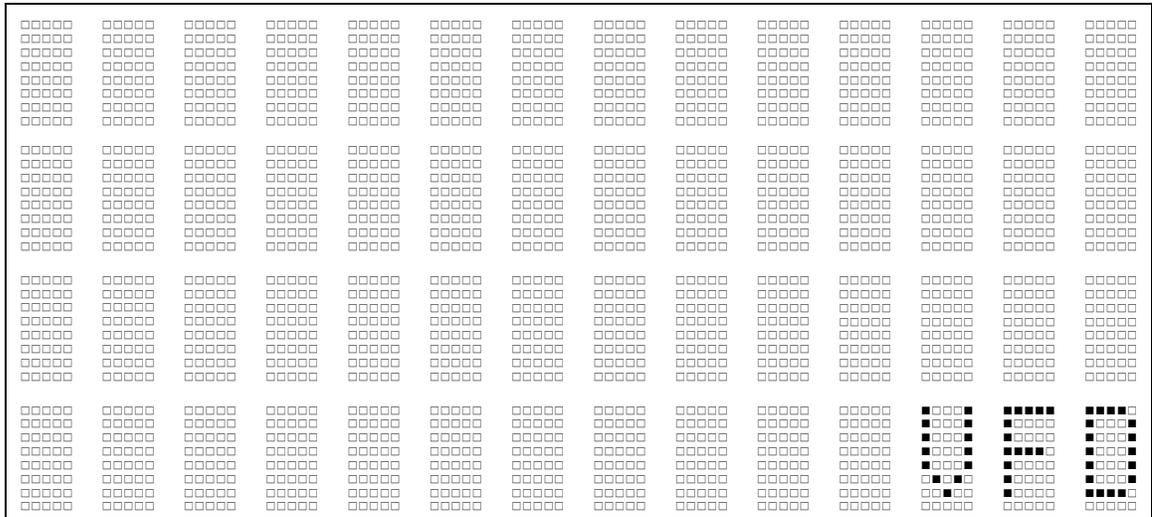


❖ Click on the *Vertical scroll mode* button.

Horizontal scroll mode

After displaying the character on the last column of the last row, display will shift one character to the right and move the cursor back to the last column of the last row. The first character of the first row will be replaced by the second character of the first row.

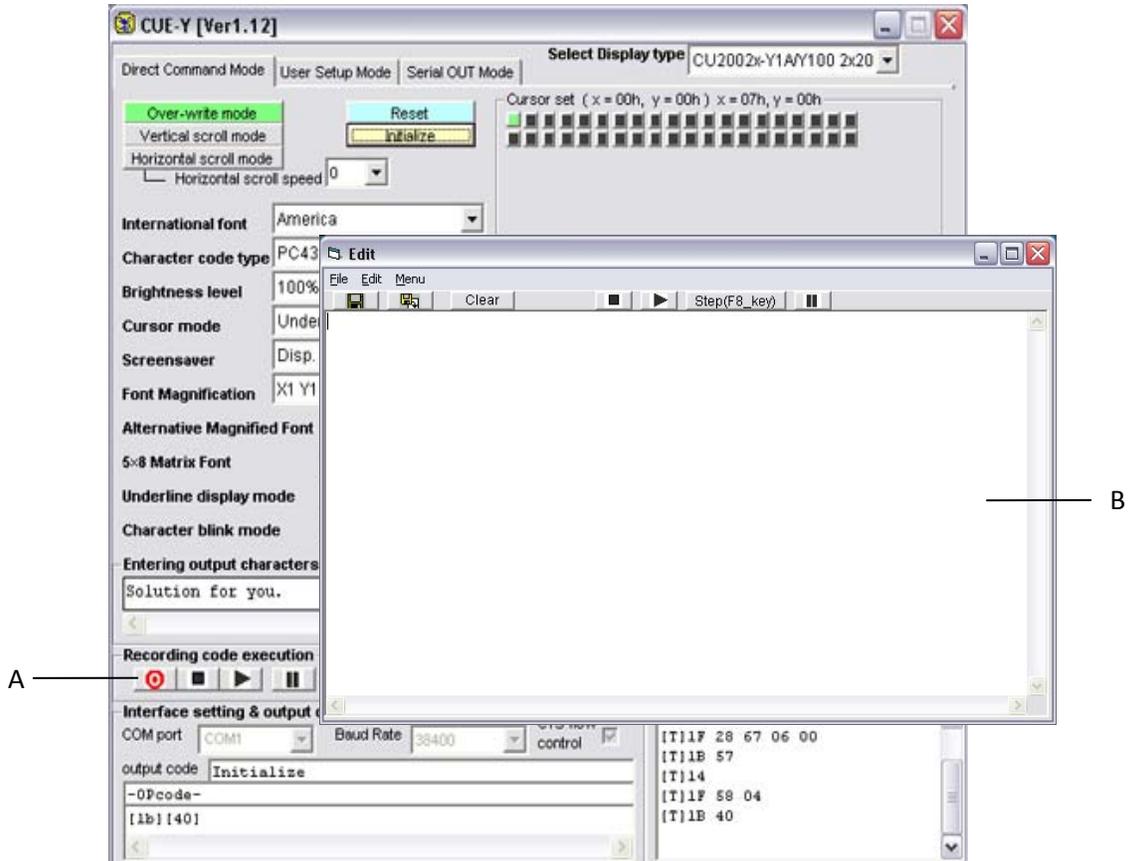
If the cursor position is at the last column of the last row and you send the command to display “VFD”



- ❖ Click on the *Horizontal scroll mode* button. Horizontal scroll mode

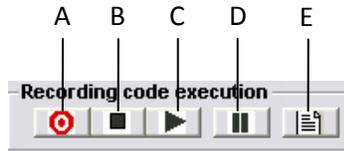
Chapter 6: Record and play

Record and play in CUE-Y consists of buttons which allows the user to record routines, execute routines, stop the routine, pause, and edit the routines.



Record and play
 A. *Record and play* B. *Code editor*

Record



Record
A. Record B. Stop C. Play D. Pause
E. Open code editor

Record routine

CUE-Y can record all actions, execute routines, and save to a file for later use.

- 1 Click on the *Record* button  under the *Recording code execution*.
- 2 Click on the buttons to be recorded.

Execute routine

Execute the routine you recorded.

- ❖ Click on the *Play* button  under the *Recording code execution*.

Stop routine

Stop the routine.

- ❖ Click on the *Stop* button  under the *Recording code execution*.

Pause routine

Pause the routine.

- ❖ Click on the *Pause* button  under the *Recording code execution*.

Code editor

Clicking on the *Editor* button  will open the code editor. After clicking on the *Record* button, all executed commands will be recorded in this editor. Recorded commands will be listed in the editor along with the description of the commands.

The user can manually edit the routine, execute the routine, stop the routine, execute routine in steps, pause the routine, clear the routine, save the routine and open the routine.

Note: Executing the routine will automatically stop the recording.

- ❖ Click on the *Editor* button  under the *Recording code execution*.

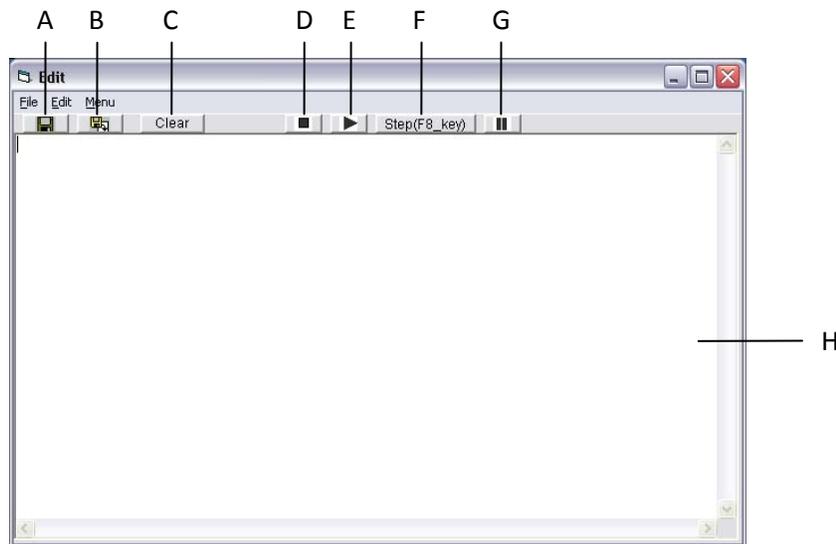
See also

“Code editor” on page 30

Chapter 7: Code editor

Code editor allows the user to edit, execute, stop, pause, open, save, and execute the routine in steps. After clicking on the *Record* button, all executed commands will be recorded in this editor. Recorded commands will be listed in the editor along with the description of the commands.

All executable command set starts with capital “PRT” and ends with a “;”. All executable commands are in hexadecimal and in the following format: xxh, where xx = hexadecimal.



Code editor
 A. Save B. Open C. Clear D. Stop F. Play G. Pause
 H. Edit code

Write a routine

Format

- All command set starts with the capital “PRT” and end with a “;”.
- All hexadecimal needs to be in the following format: xxh, where xx = hexadecimal.

Example

Command set	Output	Description
PRT 31h;	0x31	0x31 = 1 in ASCII "1" is displayed on the VFD module.
PRT 1fh 58h 08h;	0x1f, 0x58, 0x08	Changes the brightness of the display to 200%.
PRT 1fh 28h 67h 40h 01h 02h; PRT 49h 54h 52h 4fh 4eh;	0x1f, 0x28, 0x67, 0x40,0x01, 0x02, 0x49, 0x54, 0x52, 0x4f, 0x4e	First command set changes the font size to 1x2 then outputs "ITRON".
prt 1fh 58h 08h;	Invalid	"prt" is lowercased. Command set is ignored.
1fh 58h 08h;	Invalid	Missing "PRT". Command set is ignored.
PRT 1f 58 08	Invalid	Missing "h" and ";". Command set is ignored.

Note: For command listings, see the product specification on the installation disc.

- 1 Open the code editor by clicking on the *Editor* button. 
- 2 Do one of the following:
 - Type in the command set.
 - Edit the command set already in the editor.

Saving the routine

Save changes to the current file

- ❖ Choose File > Save.

Save a file with a different name, location, or format

- 1 Choose File > Save As.
- 2 Select the file format from the *Save as type* drop down menu.
- 3 Specify a filename and location.
- 4 Click Save.

File formats

CUE-Y offers file formats in popular programming languages and in Noritake Itron file format that can be opened in the Noritake Itron software.

TXT (Text Files) Text file usually contain little or no formatting and can easily be read or opened by other programs.

SEI (7000SeiData) CUE-Y file format which can be opened with the Noritake Itron software CUE-Y and GUD10-K.

HEX (Intel hex file) Intel hex file format is for conveying binary information for programming microcontrollers, and EPROM. The format is a text file, with each line containing hexadecimal values encoding a sequence of data and their starting offset or absolute address.

ASM (Assembler) Assembly language consists of a series of instructions / mnemonics that correspond to a stream of executable instructions.

C (C) C is a general-purpose computer programming language and is one of the most popular programming languages.

Open the routine

Open a file using the Open command

- ❖ Choose File > Open.

Execute the routine

See also

“Execute routine” on page 28

Stop the routine

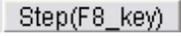
See also

“Stop routine” on page 28

Execute codes in steps

Steps

Commonly used for debugging, the *Step* button executes a command line and stops.

- 1 Click on the *Step* button. 
- 2 Press *F8* to step down.

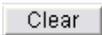
Pause the routine

See

“Pause routine” on page 28

Clear

Clear the code editor

- 1 Click on the *Clear* button. 
- 2 Click “OK” to confirm.

Sample codes

Built-in symbols

There are varieties of symbols in the extended ASCII font tables. The sample code below will display symbols from various extended ASCII font tables.

```

*** DisplayClear ***
*** -Op- ***
PRT 0ch;

*** Character code type: PC437(USA-Euro std) ***
*** -OpCode- n (n:code type 0<=n<=5,16<=n<=19,255) ***
PRT 1bh 74h 00h;

*** CharacterDisplay text=&h80&h81&h82&h83&h84&h85&h94&h8F&h8E&h8D&h8C ***
*** &h80&h81&h82&h83&h84&h85&h94&h8F&h8E&h8D ***
PRT 80h 81h 82h 83h 84h 85h 94h 8fh 8eh 8dh;

*** Character code type: Katakana ***
*** -OpCode- n (n:code type 0<=n<=5,16<=n<=19,255) ***
PRT 1bh 74h 01h;

*** CharacterDisplay text=&h80&h81&h82&h83&h84&h85&h94&h8F&h8E&h8D&h8C ***
*** &h80&h81&h82&h83&h84&h85&h94&h8F&h8E&h8D ***
PRT 80h 81h 82h 83h 84h 85h 94h 8fh 8eh 8dh;

*** LineFeed ***
*** -Op- ***
PRT 0ah;

*** CarriageReturn ***
*** -Op- ***
PRT 0dh;

*** Character code type: PC863(Canadian-French) ***
*** -OpCode- n (n:code type 0<=n<=5,16<=n<=19,255) ***
PRT 1bh 74h 04h;

*** CharacterDisplay text=&hE3&hE4&hE8&hE9&hEA&hF1&hF2&hF3&hFB&hFC ***
*** &hE3&hE4&hE8&hE9&hEA&hF1&hF2&hF3&hFB&hFC ***
PRT e3h e4h e8h e9h eah f1h f2h f3h fbh fch;

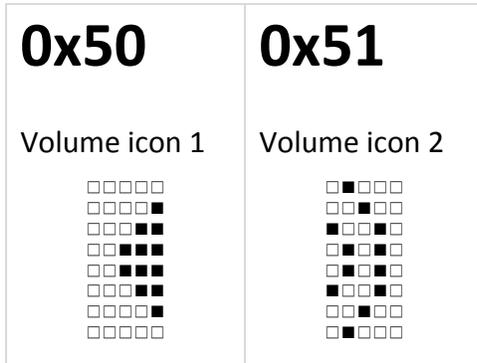
*** Character code type: Katakana ***
*** -OpCode- n (n:code type 0<=n<=5,16<=n<=19,255) ***
PRT 1bh 74h 01h;

*** CharacterDisplay text=&h97&h98&h99&h9A&hE8&hE9&hEA&hEB&hEE&hEF ***
*** &h97&h98&h99&h9A&hE8&hE9&hEA&hEB&hEE&hEF ***
PRT 97h 98h 99h 9ah e8h e9h eah ebh eeh efh;

```

Creating custom character

The following sample code will create and display the volume icon using two custom characters.



```

*** Define RAM User Font startCode=50 endCode=50 fontData ***
*** ---OpCode--- c1 c2 (c1:StartCode c2:EndCode &h20<=c1<=c2<=&hff)(d:BmpData) ***
PRT 1bh 26h 01h 50h 50h 05h 00h 62h ceh 31h 04h;

*** Define RAM User Font startCode=51 endCode=51 fontData ***
*** ---OpCode--- c1 c2 (c1:StartCode c2:EndCode &h20<=c1<=c2<=&hff)(d:BmpData) ***
PRT 1bh 26h 01h 51h 51h 05h 82h 24h a5h 12h 11h;

*** HomePosition ***
*** -Op- ***
PRT 0bh;

*** CharacterDisplay text=SPEAKER VOLUME ***
*** S P E A K E R V O L U M E ***
PRT 53h 50h 45h 41h 4bh 45h 52h 20h 56h 4fh 4ch 55h 4dh 45h 20h;

*** RAM user font = On ***
*** -OpCode- n ***
PRT 1bh 25h 01h;

*** CharacterDisplay text=&h50&h51 25 ***
*** &h50&h51 2 5 ***
PRT 50h 51h 20h 32h 35h;

*** RAM user font = Off ***
*** -OpCode- n ***
PRT 1bh 25h 00h;

```

Highlight

Highlight effect can be achieved by changing the brightness of the display and the character. Common use for this effect is to emphasize a value or menu selection.

```

*** DisplayClear ***
*** -Op- ***
PRT 0ch;

*** Character code type: PC850(Multilingual) ***
*** -OpCode- n (n:code type 0<=n<=5,16<=n<=19,255) ***
PRT 1bh 74h 02h;

*** Brightness: 200% ***
*** -OpCode- n (n:Brightness 1<=n<=8) ***
PRT 1fh 58h 08h;

*** Character Brightness : Level 3 (29%) ***
*** -----OpCode----- d1 d2 d3 (d1: Level 1<=d1<=8) ***
PRT 1fh 28h 67h 50h 03h 00h 00h;

*** FontMagnified: X1 Y2 ***
*** -----OPcode----- xX xY (X:MagnifiedX 1<=X<=2)(Y:MagnifiedY 1<=Y<=2) ***
PRT 1fh 28h 67h 40h 01h 02h;

*** CharacterDisplay text=Flow Rate: ***
*** F l o w R a t e : ***
PRT 46h 6ch 6fh 77h 20h 52h 61h 74h 65h 3ah;

*** Character Brightness : Level 8 (100%) ***
*** -----OpCode----- d1 d2 d3 (d1: Level 1<=d1<=8) ***
PRT 1fh 28h 67h 50h 08h 00h 00h;

*** CharacterDisplay text= 800 ***
*** 8 0 0 ***
PRT 20h 38h 30h 30h;

*** Character Brightness : Level 3 (29%) ***
*** -----OpCode----- d1 d2 d3 (d1: Level 1<=d1<=8) ***
PRT 1fh 28h 67h 50h 03h 00h 00h;

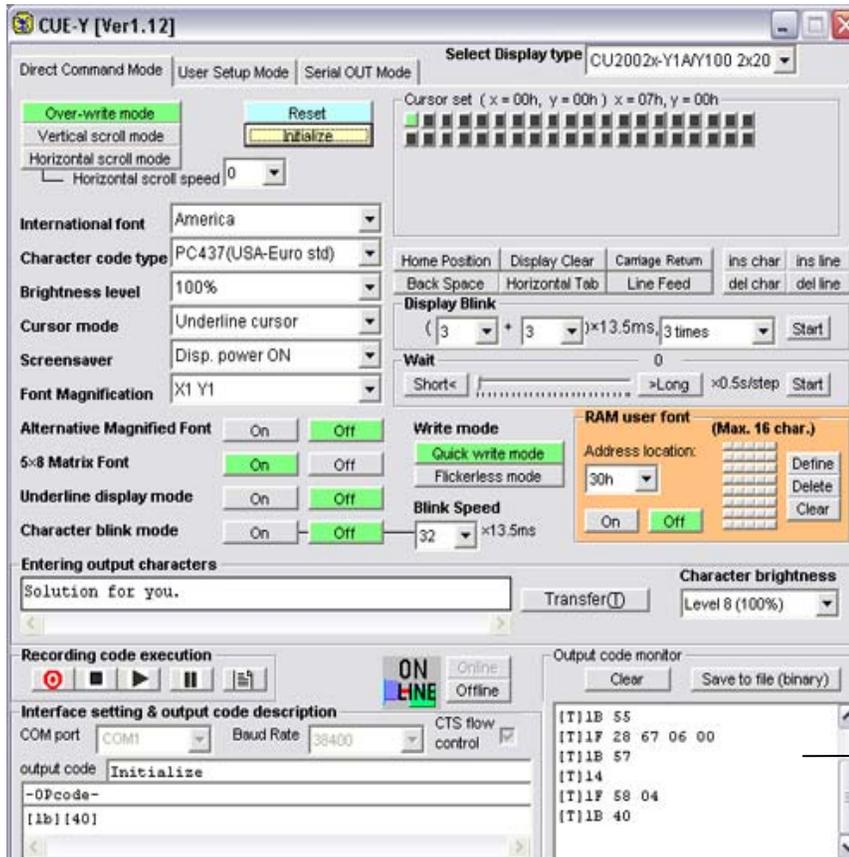
*** CharacterDisplay text= ft3 ***
*** f t ***
PRT 20h 66h 74h fch;

*** CharacterDisplay text=/s ***
*** / s ***
PRT 2fh 73h;

```

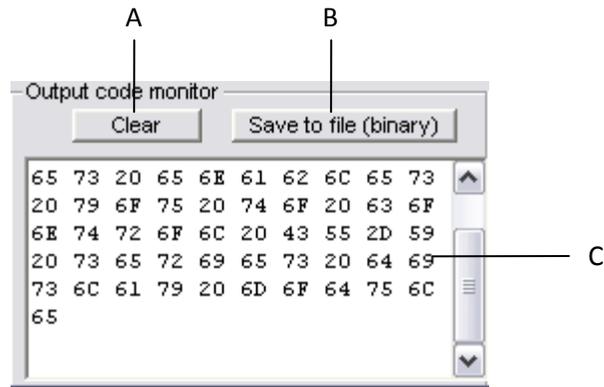
Chapter 8: Output log

Whether you are changing the brightness or changing the cursor position, CUE-Y keeps log of successfully executed commands in the *Output code monitor* and displays the command and description in the *output code*.



Output log
 A. Log

Log



Record
A. Clear B. Save to file C. Log

Save output

- ❖ Click on the *Save to file* button under the *Output code monitor*.

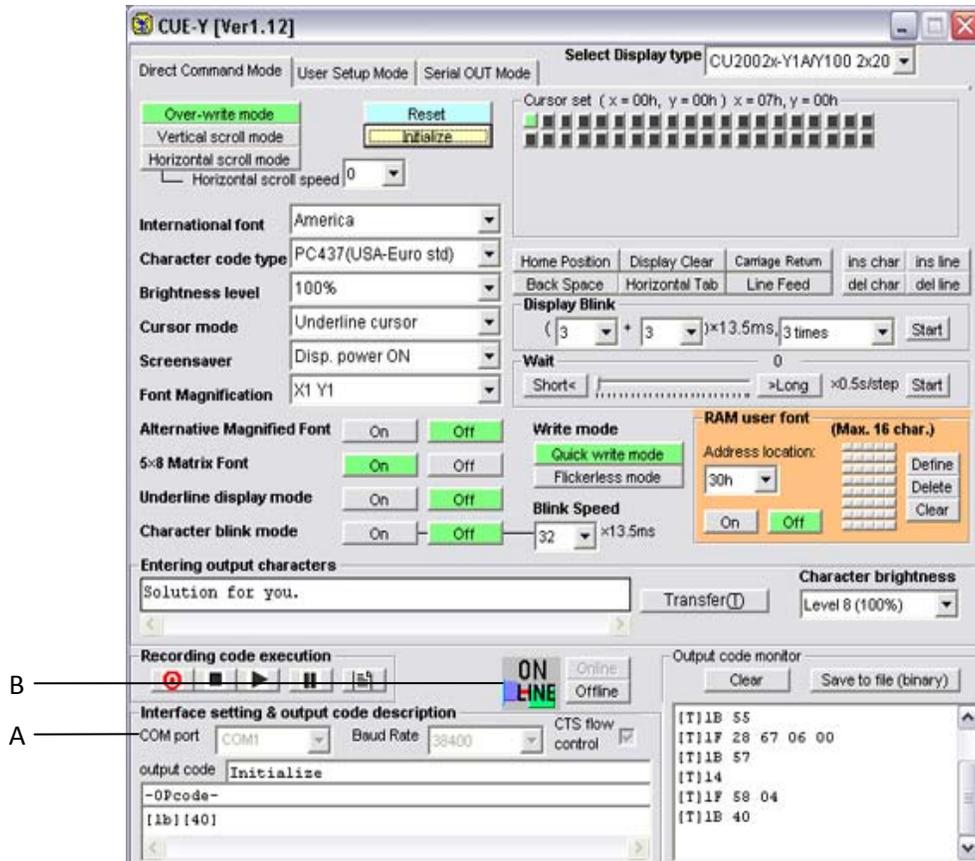
Clear log

- ❖ Click on the *Clear* button under the *Output code monitor*.

Chapter 9: Communication

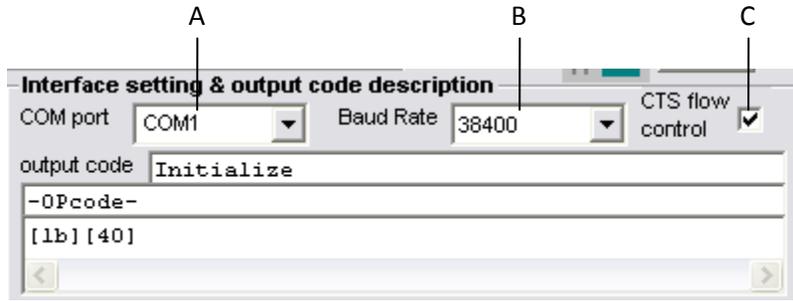
You connected the VFD module then applied power. Next step is to open up the communication between the VFD module and CUE-Y software through RS-232 protocol.

In RS-232, user data is sent as a time-series of bits. Y Series supports asynchronous RS-232 transmissions.



Communication
 A. Communication settings B. Online / Offline

Communication port



Record
 A. COM port B. Baud rate C. CTS flow control

Choose the port number

Port number is required to communicate between VFD module and CUE-Y software.

- ❖ Select the communication port  from the *COM port* drop down menu.

Baud rate

Change baud rate

Default baud rate for the Y Series VFD module and CUE-Y software is 38400. Baud rate needs to be the same for the VFD module and CUE-Y software for the VFD module to communicate properly.

- ❖ Select the baud rate  from the *Baud Rate* drop down menu.

Note: To change the baud rate on the VFD module, see the specification on the installation disc.

CTS flow control

Enable/disable CTS flow control

CTS flow control checks for the busy flag before sending data to the VFD module. By default the CTS flow control is disabled.

1 Do one of the following:

- To enable the CTS flow control, check the box next to the *CTS flow control*.
- To disable the CTS flow control, uncheck the box next to the *CTS flow control*.

Connection

Online/Offline

Start the communication with the VFD module or end communication with the VFD module. VFD module will not receive any data if the communication between the VFD module and CUE-Y software is offline.

1 Do one of the following:

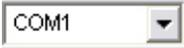
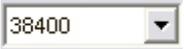
- Click on the *Online* button  to start the communication.

- Click on the *Offline* button  to end the communication.

Connecting to the VFD module

Start communication with the VFD module

When you first open the CUE-Y software, please make sure the display type, COM port, baud rate, and the CTS flow control is configured properly before opening the connection with the VFD module.

- 1 Select your model from the *Select display type*  drop down menu.
- 2 Select the communication port  from the *COM port* drop down menu.
- 3 Select the baud rate  from the *Baud Rate* drop down menu.
- 4 Enable the CTS flow control, check the box  next to the CTS flow control..
- 5 Click on the *Online* button  to start the communication..