

# Product Specifications Manual

# SCD122U

Rev. No. 0.00

Star Micronics Co., Ltd.  
Special Products Operating Division

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## 1. GENERAL DESCRIPTION

SCD122U is a compact customer display that uses a USB interface, and employs a fluorescent character display tube that can display two lines of 20 positions composed of 5 x 7 dots.

### Features

1. Power supply from host USB interface Power cable unnecessary
2. Display panel adjusts up, down, left and right, and has a four-level adjustment that uses extension support pillars.
3. Display position of alphanumerical characters (ANK) and Kana. Blue-green fluorescent character display method
4. Wide-angle recognition of a 20 position x 2 line dot matrix display
5. Two types of stand plate; three types of extension support pillar combinations available

## 2. BASIC SPECIFICATIONS

- (1) Display method: Fluorescent character display tube (VFD)
- (2) Number of characters: 20 position x 2 lines
- (3) Dot configuration: 5x7
- (4) Character size: 3.5 mm (H) x 5.0 mm (V)
- (5) Display color: Blue-green
- (6) Brightness: Min. 350 cd/m<sup>2</sup>
- (7) Character set:

Alphanumeric	95 Characters
International Character Set	37 Characters
Graphics/Katakana Characters	128 Characters x 8 pages
User Defined Characters	5 Characters
Code Pages	8 Pages

- (8) Display region: 102.3 mm (W) x 16.0 mm (H)
- (9) Interface: USB 2.0
- (10) Life: 20,000 Hours (Time until intensity of fluorescent character display tube reaches 1/2 of the standard value of 350 cd/m<sup>2</sup>)
- (11) Power supply: DC 5 V 500 mA max (Supplied via USB interface)
- (12) Power consumption: 2 W typ
- (13) Angle adjustment range: Tilt angle: Max. 30°  
Horizontal rotation angle Max. 300°

### 3. EXTERNAL SPECIFICATIONS

#### 3.1 Outer Dimensions

Display Unit:	175 mm (W) x 53 mm (D) x 72 mm (H)
Base:	175 mm (W) x 110 mm (D) x 61 mm (H) Square type base for installation Φ80 x 40 mm (H) Round type stand for fastening
Height:	142 mm, 272 mm, 387 mm, 517 mm When using the square type stand for installation 124 mm, 254 mm, 369 mm, 499 mm When using the round type stand for fastening

#### 3.2. Weight

Approx. 0.84 Kg (when using the square stand and three supports)  
Approx. 1.4 kg (packaged weight)

#### 3.3. DIP Switches

DIP switches are operated by removing the rubber cover on the bottom right-hand side of the display unit.

Functions and factory settings of switches 1 to 10

Switch	Function	Factory Setting
SW1	Demo mode selection ON: Demo mode selection OFF: Normal Mode	OFF
SW2	Select international characters	OFF
SW3		OFF
SW4		OFF
SW5		ON
SW6	Select code page	ON
SW7		OFF
SW8		OFF
SW9	Select cursor display	OFF
SW10	Select command group OFF: Star command set ON: DMD110 compatible command set	OFF

\* When started with SW1 ON, you can check the DIP switch settings and firmware version.

#### SW2 to SW5

SW5	SW4	SW3	SW2	Character Sets
OFF	OFF	OFF	OFF	USA
OFF	OFF	OFF	ON	France
OFF	OFF	ON	OFF	Germany
OFF	OFF	ON	ON	UK
OFF	ON	OFF	OFF	Denmark 1
OFF	ON	OFF	ON	Sweden
OFF	ON	ON	OFF	Italy
OFF	ON	ON	ON	Spain
ON	OFF	OFF	OFF	Japan
ON	OFF	OFF	ON	Norway
ON	OFF	ON	OFF	Denmark 2
ON	OFF	ON	ON	Spain 2
ON	ON	OFF	OFF	Latin America
ON	ON	OFF	ON	Korea
ON	ON	ON	OFF	Ireland
ON	ON	ON	ON	Legal

## SW6 to SW8

SW8	SW7	SW6	Code Page Name	Page No.
OFF	OFF	OFF	PC437 (USA, Standard Europe)	0
OFF	OFF	OFF	Katakana	1
OFF	OFF	ON	PC860 (Portuguese)	3
OFF	OFF	ON	PC863 (Canadian-French)	4
OFF	ON	OFF	PC865 (Nordic)	5
OFF	ON	OFF	PC866 (Cyrillic Russian)	17
OFF	ON	ON	PC858 (Europe)	19
OFF	ON	ON	Katakana 2 (DMD110 Compatible)	255

\* See Chapter 9. Character Codes for details on international character codes and code pages.

## 4. AMBIENT SPECIFICATIONS

### 4-1. Temperature and Humidity

- (1) When Operating
  - Temperature: 5°C to 45°C
  - Humidity: 10% to 90% RH (No condensation)
- (2) At Storage
  - Temperature: -20°C to 60°C
  - Humidity: 10% to 90% RH (No condensation)

### 4.2. Static Electricity Tolerance (ESD)

	Test Specifications	
	Error Rate: 5% Max.	Must be no damage to elements
Direct Contact Discharge (Self-Print) Outside of External Cover	±6 kV	±8kV
Direct Through-air Discharge (When Idling) Inside of External Cover	±8kV	±15kV
Indirect Contact Discharge	±6 kV	-

### 4.3 Vibration/Falling Shocks

- (1) Vibration Tests (When Packing)
  - Direction of Oscillation: X, Y and Z
  - Oscillation Frequency: 7 Hz to 100Hz
  - Sweep Time: Logarithmic Frequency Sweep Rate: Reciprocal at 15 minutes
  - Vibration Acceleration Speed: 1.5 G (Constant)
  - Charging Time: One hour (Total 3 hours)
  - Packaging Status: Minimum Packaging (Individual boxes)

Must be no visual or operational problems externally or internally after applying vibration.

- (2) Drop Shock Tests (When Packaged)

- Height of Drop: 1 angle; 3 corners from 80cm; 6 surfaces from 1m
- Direction of Drop: 1 angle; 3 corners; 6 surfaces
- Number of Drops: Once each time (Total of 10 drops)
- Packaging Status: Minimum Packing

Must be no visual or operational problems externally or internally after dropping.

- (3) Shock Tests (When Not Packaged)

- Height of Drop: 90cm
- Direction of Drop: 6 Directions
- Number of Drops: 1 time each

There should be no problem in operations after dropping.

## 5. SAFETY

### 5.1. Standards

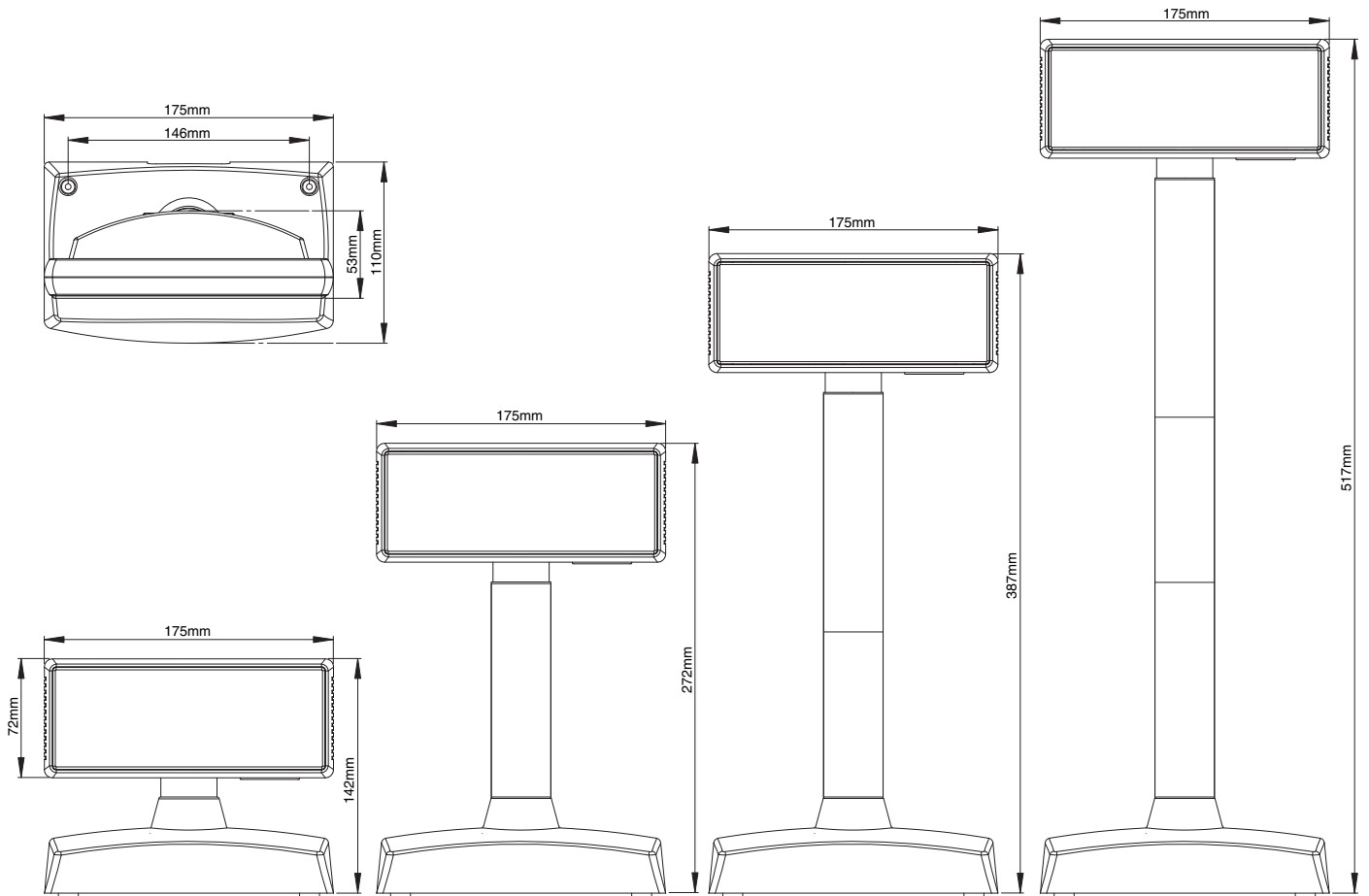
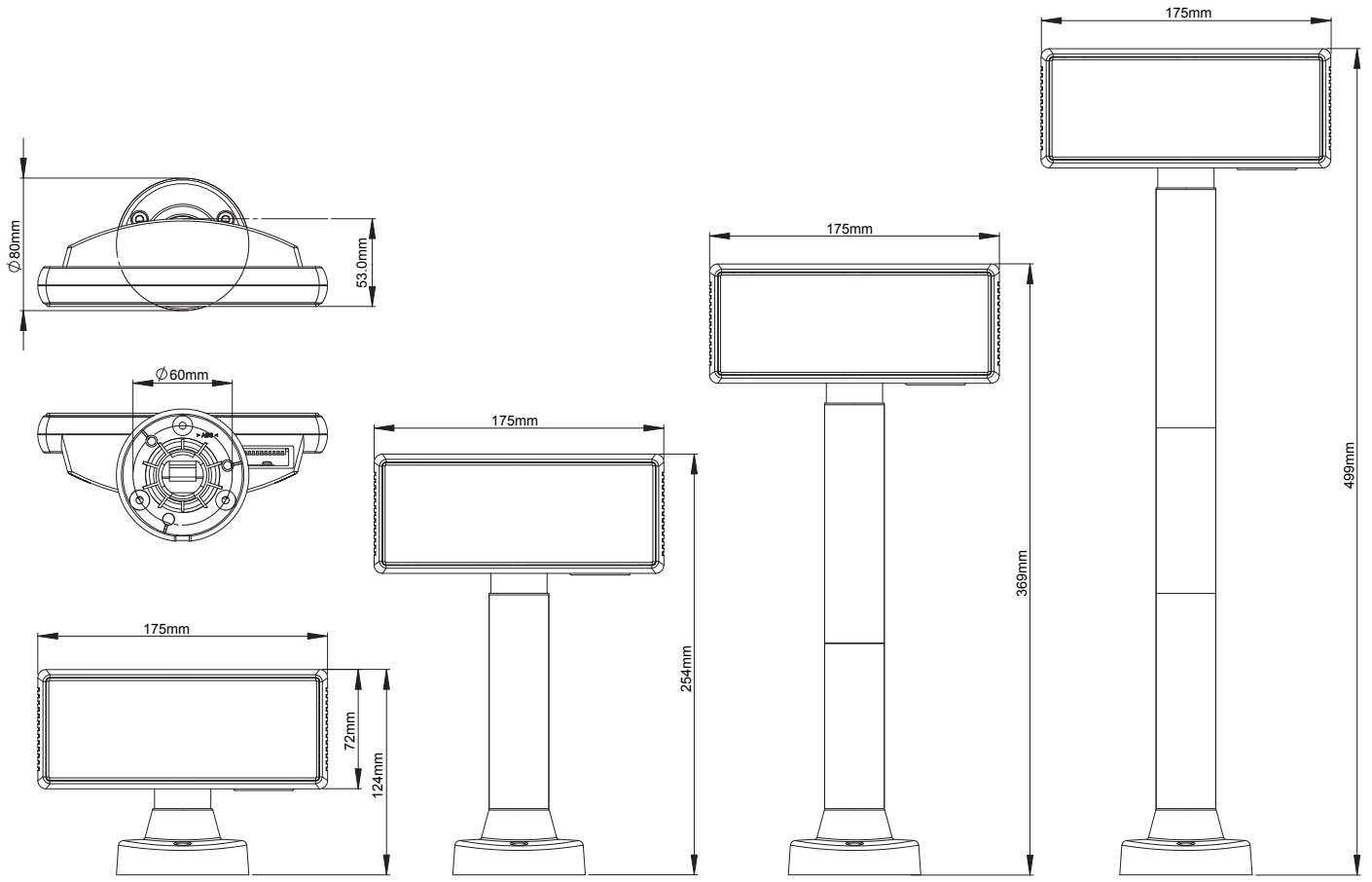
- 1) Safety Rating: EN60950-1
- 2) EMI Standard
- |         |         |
|---------|---------|
| FCC     | Class A |
| VCCI    | Class A |
| EN55022 | Class A |
- 3) CE Marking
- EMC Directive; Low Voltage Directive (EN60950-1)

EMI	VCCI, FCC, EN55022	Class A
ESD	EN61000-4-2	±6 kV (Contact), ±8 kV (In air)/±15 kV (In air • Breakdown)
EMS	EN61000-4-3 (Emission)	4V/m
	EN61000-4-6 (Conduction)	4V
EFT	EN61000-4-4	± 1 kV (Power line), ± 0.5 kV (Signal line)
Surge	EN61000-4-5	± 1 kV between L-N; ± 2 kV between L-PE, N-PE
Power Frequency Magnetic Field	EN61000-4-8	4A/m
Power Harmonic	EN61000-3-2	
Flicker	EN61000-3-3	
Voltage Dips	EN61000-4-11	

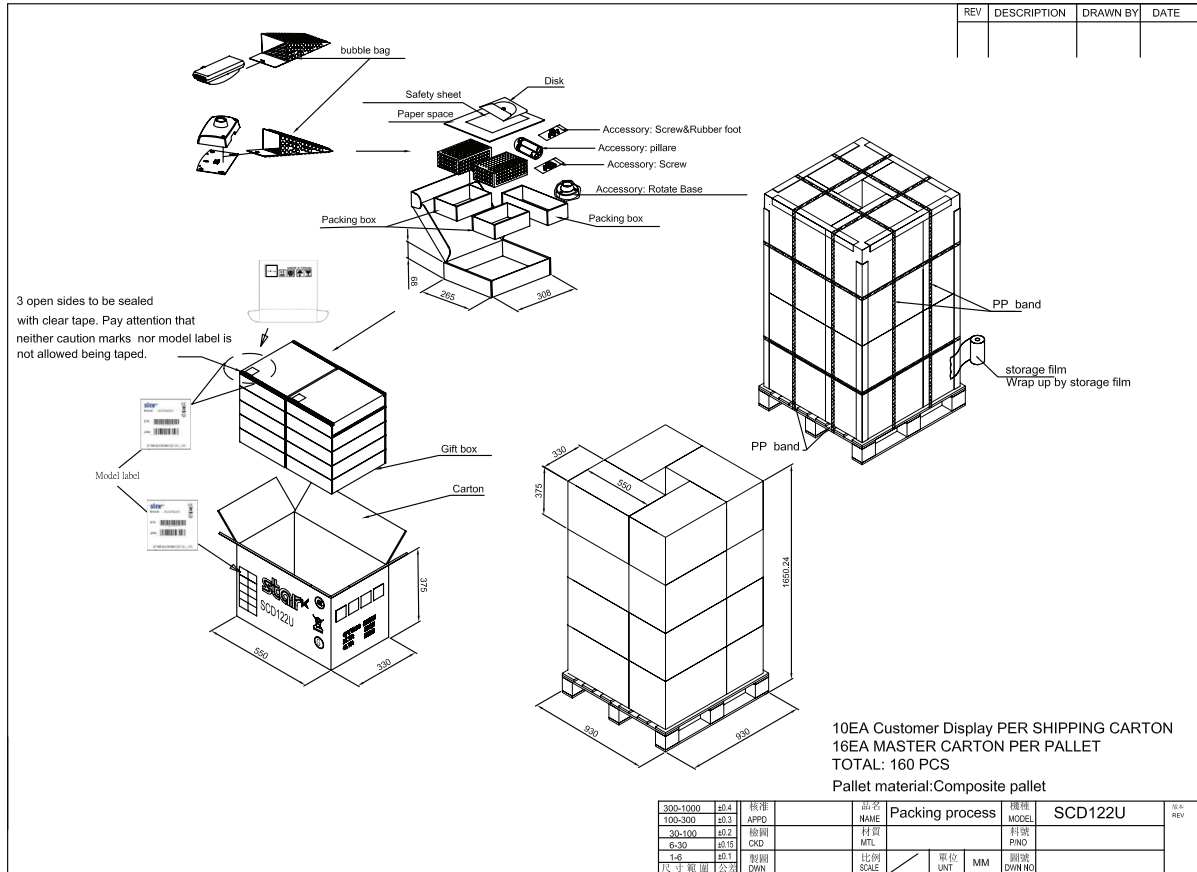
### 5.2 Environment Specifications

Supports RoHS, and WEEE

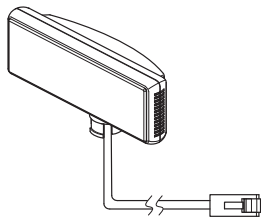
6. EXTERNAL DRAWINGS



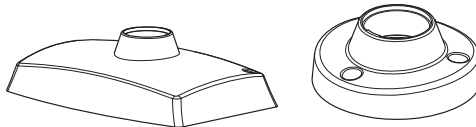
## 7. PACKING SPECIFICATIONS



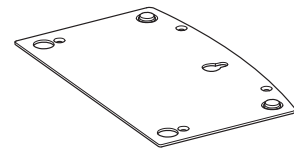
### Package Content



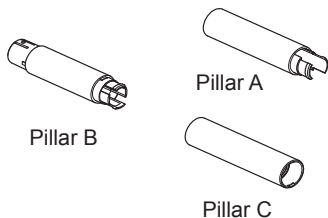
Display (1 unit)



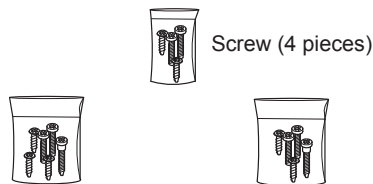
Stand (2 items)



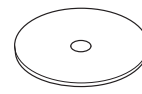
Stand Plate (2 units)



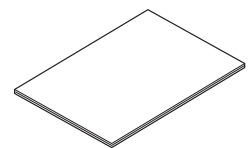
Extension Support (3 pieces)


 Screw (4 pieces)  
Nut (3 pieces)  
Washer (6 pieces)


Screw (4 pieces)



CD-ROM (1 piece)



Safty Instruction Sheet (1 piece)



Rubber Foot (2 pieces)

## 8. COMMANDS

### 8.1 STAR Commands

#### With Response

Commands	Hexadecimal	Function
<EOT><SOH>"B" n "N"<ETB>	040142n4E17	Sets baud rate and parity (dummy command)
<EOT><SOH>"I"n<ETB>	040149n17	Selects international character set
<EOT><SOH>"S"n<ETB>	040153n17	Saves displayed message
<EOT><SOH>"P"n<ETB>	040150n17	Sets cursor position
<EOT><SOH>"C"n1n2<ETB>	040143n1n217	Clears display message
<EOT><SOH>"T"<ETB>	04015417	Sends displayed message to host
<EOT><SOH>"D"n1n2<ETB>	040144n1n217	Displays saved message
<EOT><SOH>"t"n<ETB>	040174n17	Selects character code page
<ESC>"U"n1n2	1B55n1n2	Registers download characters
<ESC>"?"n	1B3Fn	Deletes download characters

#### Without Response

Commands	Hexadecimal	Function
<ESC>"@"	1B 40	Initializes display
<US>"MD1"	1F01	Screen display: Set to overwrite mode
<US>"MD2"	1F02	Screen display: Set to vertical scroll mode
<US>"MD3"	1F03	Screen display: Set to horizontal scroll mode
<US>"C" n	1F43n	Specifies/cancels cursor display specification
<US>"E"n	1F45n	Specifies/cancels blinking display specification
<US>"r"n	1F72n	Specifies/cancels inverted character specification
<CLR>	0C	Clears display
<CAN>	18	Clears cursor line
<HOM>	0B	Moves cursor to home position (upper left)
<US>"B"	1F42	Moves cursor to home position (lower right)
<US><CR>	1F0D	Moves cursor to right edge of same line
<CR>	0D	Moves cursor to left edge of same line
<US><LF>	1F0A	Moves cursor up
<LF>	0A	Moves cursor down
<BS>	08	Moves cursor to left one character
<HT>	09	Moves cursor to right one character

**COMMAND DETAILS**

• With response

<b>Function</b>	Sets baud rate and parity (dummy command)
-----------------	---

Code: <EOT><SOH>"B" n "N" <ETB>  
 (04)H (01)H (42)H n (4E)H (17)H

(Byte) 1 1 1 1 1 1

Return Value: ACK  
 (06)H

(Byte) 1

General Description: This is a dummy command for getting compatibility with other models.

<b>Function</b>	Selects international character set
-----------------	-------------------------------------

Code: <EOT><SOH> "I" n <ETB>  
 (04)H (01)H (49)H n (17)H

(Byte) 1 1 1 1 1

Defined Area: (30)H ≤ n ≤ (39)H or (40)H or (41)H ≤ n ≤ (45)H

Return Value: ACK or NAK (When command fails)  
 (06)H or (15)H

(Byte) 1

General Description: Selects and sets international characters according to n value.

n =	30H : USA	31H : France
	32H : Germany	33H : UK
	34H : Denmark 1	35H : Sweden
	36H : Italy	37H : Spain 1
	38H : Japan	39H : Norway
	41H : Denmark 2	42H : Spain 2
	43H : Latin America	44H : Korea
	45H : Ireland	40H : Legal

<b>Function</b>	Saves displayed message to save layer n
-----------------	---

Code: <EOT> <SOH> "S" n <ETB>  
 (04)H(01)H(53)H n (17)H

(Byte) 1 1 1 1 1

Defined Area: (31)H ≤ n ≤ (33)H

Return Value: ACK or NAK (When command fails)  
 (06)H or (15)H

(Byte) 1

General Description: Saves displayed message to layer that corresponds to n value

n =	31H : Layer 1
	32H : Layer 2
	33H : Layer 3

Note: Messages are stored in EEPROM so they are maintained after the power is turned off.

Left Edge; Top Level: 31H													Right Edge; Top Level: 44H						
31H	32H	33H	34H	35H	36H	37H	38H	39H	3AH	3BH	3CH	3DH	3EH	3FH	40H	41H	42H	43H	44H
45H	46H	47H	48H	49H	4AH	4BH	4CH	4DH	4EH	4FH	50H	51H	52H	53H	54H	55H	56H	57H	58H
Left Edge; Bottom Level: 45H													Right Edge; Bottom Level: 58H						

Table 1 Display Character Positions (Hexadecimal)

Function	Sets cursor position
Code:	<EOT> <SOH> "P" n <ETB> (04)H(01)H(50)H n (17)H
(Byte)	1 1 1 1 1
Defined Area:	(31)H ≤ n ≤ (58)H
Return Value:	ACK or NAK (When command fails) (06)H or (15)H
(Byte)	1

General Description: Moves cursor to character position specified by n.  
Numbers are assigned to display character positions as shown in table 1.

Function	Clears display messages
Code:	<EOT> <SOH> "C" n1 n2 <ETB> (04)H(01)H(43)H n1 n2 (17)H
(Byte)	1 1 1 1 1 1
Defined Area:	(31)H ≤ n1 ≤ (58)H , (31)H ≤ n2 ≤ (58)H
Return Value:	ACK or NAK (When command fails) (06)H or (15)H
(Byte)	1

General Description: Clears the display between character positions specified by n1 (starting position) and n2 (ending position)

Function	Sends displayed message to host computer
Code:	<EOT> <SOH> "T" <ETB> (04)H(01)H(54)H(17)H
(Byte)	1 1 1 1
Return Value:	<SOH> XXXX (40 characters) <ETB> or NAK (When command fails) (01)H XXXX (40 characters) (17)H or (15)H
(Byte)	1 40 1 or 1

General Description: Returns a character displayed in the current SCD122U as a return value.  
Returns a space character (20H) for the portion where no character is displayed.

**Function** Displays saved message

Code: <EOT> <SOH> "D" n1 n2 <ETB>  
(04)H(01)H(44)H n1 n2 (17)H

(Byte) 1 1 1 1 1 1

Defined Area: (31)H ≤ n1 ≤ (37)H  
(31)H ≤ n2 ≤ (37)H

Return Value: ACK or NAK (When command fails)  
(06)H or (15)H

(Byte) 1

General Description: The contents of the saved layer specified by n1 can be displayed according to the display mode specified by n2 by using this command.

- Display mode 1: Horizontal scroll mode
- Display mode 2: Vertical scroll mode
- Display mode 3: Blinking display mode

When a plurality of layers is specified, the specified layers are shown in order repeatedly.

When a plurality of modes is specified, operations of the specified modes are repeated in order.

n1: Specifies a saved layer to specify

- 31H : Displays the content of the saved layer 1.
- 32H : Displays the content of the saved layer 2.
- 33H : Displays the content of the saved layer 1 and 2.
- 34H : Displays the content of the saved layer 3.
- 35H : Displays the content of the saved layer 1 and 3.
- 36H : Displays the content of the saved layer 2 and 3.
- 37H : Displays the content of the saved layer 1, 2 and 3.

n2: Specifies display mode

- 31H : Displays message with display mode 1.
- 32H : Displays message with display mode 2.
- 33H : Alternates display of message between display modes 1 and 2.
- 34H : Displays message with display mode 3.
- 35H : Alternates display of message between display modes 1 and 3.
- 36H : Alternates display of message between display modes 2 and 3.
- 37H : Displays message in order with display modes 1, 2 and 3.

**Function** Selects character code table

Code: <EOT> <SOH> "t" n <ETB>  
(04)H (01)H (74)H n (17)H

(Byte) 1 1 1 1 1

Defined Area: n = (00)H, (01)H, (03)H, (04)H, (05)H, (11)H, (13)H, (FF)H

Return Value: ACK or NAK (When command fails)  
(06)H or (15)H

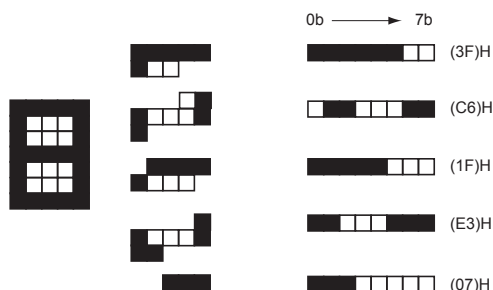
(Byte) 1

General Description: According to n value:

- |     |             |                  |
|-----|-------------|------------------|
| n = | 00H : PC437 | 01H : Katakana   |
|     | 03H : PC860 | 04H : PC863      |
|     | 05H : PC865 | 11H : PC866      |
|     | 13H : PC858 | FFH : Katakana 2 |

<b>Function</b>	Registers download characters
Code:	<ESC> "U" n1 n2 (1B)H(55)H n1 n2
(Byte)	1 1 1 5
Defined Area:	(20)H ≤ n1 ≤ (FF)H      (00)H ≤ n2 ≤ (FF)H
Return Value:	ACK or NAK (When command fails) (06)H or (15)H
(Byte)	1

General Description: Registers 5 x 7 dot external characters to ASCII code numbers specified by n1.  
Splits 5 x 7 dot external character patterns into five parts, and species to n2.  
An example of setting the external character pattern to ASCII 240 (F0)H is below.



Command: (1B)H (55)H (F0)H (3F)H (C6)H (1F)H (E3)H (07)H

When the command is executed, the external pattern is written to EEPROM.  
The external character can be checked by specifying ASCII240.

**Note: The displayed characters also change.  
Up to five characters can be registered.**

<b>Function</b>	Deletes download characters
Code:	<ESC> "?" n (1B)H(3F)H n
(Byte)	1 1 1
Defined Area:	(20)H ≤ n ≤ (FF)H
Return Value:	ACK or NAK (When command fails) (06)H or (15)H
(Byte)	1

General Description: Discards the external character registered in the ASCII code number specified by n and returns to the original font.

## • No Response

<b>Function</b>	Initializes customer display
-----------------	------------------------------

Code: <ESC> “@”  
(1B)H(40)H

General Description: Initializes customer display and moves the cursor to its home position.

<b>Function</b>	Screen display: Set to overwrite mode
-----------------	---------------------------------------

Code: <US> “MD1”  
(1F)H(01)H

General Description: Sets the screen display mode to overwrite mode.

<b>Function</b>	Screen display: Set to vertical scroll mode
-----------------	---

Code: <US> “MD2”  
(1F)H(02)H

General Description: Sets the screen display mode to vertical scroll mode.

<b>Function</b>	Screen display: Set to horizontal scroll mode
-----------------	---

Code: <US> “MD3”  
(1F)H(03)H

General Description: Sets the screen display mode to horizontal scroll mode.

<b>Function</b>	Specifies/cancels cursor display
-----------------	----------------------------------

Code: <US> “C” n  
(1F)H(43)H n

Defined Area: n = (00)H, (01)H, (30)H, (31)H

General Description: Selects and sets cursor display according to n value.

n = (01)H or (31)H : Set (00)H or (30)H : Cancel

**Function** Specifies/cancels cursor display

Code: <US> "E" n  
(1F)H(45)H n

Defined Area: (00)H ≤ n ≤ (FF)H

General Description: Sets/cancels the blinking display and sets the blinking speed according to the n value.

n = (00)H : Cancel blinking

(FF)H : Hide display

(01)H to (FE)H : Sets the blinking speed.

ON: n \* 50 ms OFF: n \* 50 ms

**Function** Specifies/cancels inverted characters

Code: <US> "r" n  
(1F)H(72)H n

Defined Area: n = (00)H, (01)H, (30)H, (31)H

General Description: Sets/cancels inverted display according to the n value.

n = (01)H or (31)H : Set (00)H or (30)H : Cancel

Note: Inverts/cancels inversion of all displayed characters.

**Function** Clears display

Code: <CLR>  
(0C)H

General Description: Clears the display and moves the cursor to its home position.

**Function** Clears cursor line

Code: <CAN>  
(18)H

General Description: Clears the cursor line and moves the cursor to the left edge of the same line.

**Function** Moves the cursor to its home position (upper left)

Code: <HOM>  
(0B)H

General Description: Moves the cursor to its home position (upper left).

**Function** Moves the cursor to its bottom position (bottom right).

Code: <US> "B"  
(1F)H(42)H

General Description: Moves the cursor to its home position (bottom right).

**Function**

Moves the cursor to the right edge of the same line

 Code: <US> <CR>  
(1F)H(0D)H

General Description: Moves the cursor to the right edge of the same line.

**Function**

Moves cursor to left edge of same line

 Code: <CR>  
(0D)H

General Description: Moves the cursor to the left edge of the same line.

**Function**

Move cursor to top

 Code: <US> <LF>  
(1F)H(0A)H

General Description: Moves the cursor to the top.

If the cursor is at the top level, a different operation will occur depending on the set display mode.

Overwrite mode: The cursor moves to the same column position of the bottom level.

Vertical scroll mode: Scrolls the character displayed at the top level to the bottom and clears the top level. The cursor position remains the same.

Horizontal scroll mode: Cursor does not move.

**Function**

Moves cursor down

 Code: <LF>  
(0A)H

General Description: Moves the cursor down.

If the cursor is at the bottom level, a different operation will occur depending on the set display mode.

Overwrite mode: The cursor moves to the same column position of the top level.

Vertical scroll mode: Scrolls the character displayed at the bottom level to the top and clears the bottom level. The cursor position remains the same.

Horizontal scroll mode: Cursor does not move.

**Function**

Moves cursor to left one character

 Code: <BS>  
(08)H

General Description: Moves the cursor to the left one character.

**Function**

Moves cursor to right one character

 Code: <HT>  
(09)H

General Description: Moves the cursor to the right one character.

## 8.2. ESC/POS Commands

Commands	Function
BS	Moves cursor to left one character
HT	Moves cursor to right one character
LF	Moves cursor down
US LF	Moves cursor up
HOM	Moves cursor to home position (upper left)
CR	Moves cursor to left edge of same line
US CR	Moves cursor to right edge of same line
US B	Moves cursor to home position (lower right)
US \$	Moves display position to arbitrary position
CLR	Clears display screen
CAN	Clears cursor line
ESC @	Initializes display
ESC %	Specify/cancel download character set
ESC &	Defines download characters
ESC ?	Deletes download characters
ESC R	Select international characters
ESC t	Selects code page
US MD1	Screen display: Set to overwrite mode
US MD2	Screen display: Set to vertical scroll mode
US MD3	Screen display: Set to horizontal scroll mode
US C	Specifies/cancels cursor display specification
US E	Specifies/cancels blinking display specification
US r	Specifies/cancels inverted character specification
US @	Executes self-test

### 8.3 OPSO Functions

Type	Name	OPOS APG Ver	
Properties	CheckHealthText	1.0	
	Claimed	1.0	
	DeviceEnabled	1.0	
	FreezeEvents	1.0	
	PowerState	1.3	
	ResultCode	1.0	
	ResultCodeExtended	1.0	
	State	1.0	
	ControlObjectDescription	1.0	
	ControlObjectVersion	1.0	
	ServiceObjectDescription	1.0	
	ServiceObjectVersion	1.0	
	DeviceDescription	1.0	
	DeviceName	1.0	
	CapBlink	1.0	
	CapCharacterSet	1.0	
	CapCustomGlyph	1.6	
	CharacterSet	1.0	
	CharacterSetList	1.0	
	Columns	1.0	
	CursorColumn	1.0	
	CursorRow	1.0	
	CursorUpdate	1.0	
	CustomGlyphList	1.6	
	DeviceColumns	1.0	
	DeviceRows	1.0	
	GlyphHeight	1.6	
	GlyphWidth	1.6	
	Rows	1.0	
	Methods	Open	1.0
Close		1.0	
Claim		1.0	
ClaimDevice		1.6	
Release		1.0	
ReleaseDevice		1.5	
CheckHealth		1.0	
DirectIo		1.0	
ClearText		1.0	
DisplayText		1.0	
DisplayTextat		1.0	
DefineGlyph		1.6	
ReadCharacterAtCursor		1.6	
Events		DirectIOEvent	1.0
		StatusUpdateEvent	1.0

## 9. CHARACTER CODES

### International Character Set

Country	23	24	40	58	5A	5B	5C	5D	5E	60	7B	7C	7D	7E
U.S.A	#	\$	@	X	Z	[	\	]	^	`	{		}	~
France	#	\$	à	X	Z	"	ç	§	^	`	é	ù	è	~
Germany	#	\$	§	X	Z	Ä	Ö	Ü	^	`	ä	ö	ü	ß
UK	£	\$	@	X	Z	[	\	]	^	`	{		}	~
Denmark I	#	\$	@	X	Z	Æ	Ø	Å	^	`	æ	ø	å	~
Sweden	#	¤	É	X	Z	Ä	Ö	Å	Ü	é	ä	ö	å	Ü
Italy	#	\$	@	X	Z	"	\	é	^	ù	à	ò	è	ì
Spain I	₧	\$	@	X	Z	í	Ñ	¿	^	`	í	ñ	}	~
Japan	#	\$	@	X	Z	[	¥	]	^	`	{		}	~
Norway	#	¤	É	X	Z	Æ	Ø	Å	Ü	é	æ	ø	å	Ü
Denmark II	#	\$	É	X	Z	Æ	Ø	Å	Ü	é	æ	ø	å	Ü
Spain II	#	\$	á	X	Z	í	Ñ	¿	é	í	ñ	ó	ú	~
Latin America	#	\$	á	X	Z	í	Ñ	¿	é	ü	í	ñ	ó	ú
Korea	#	\$	@	X	Z	[	₩	]	^	`	{		}	~
Ireland	#	\$	@	Ú	'	[	\	]	^	`	Á	É	Ó	~
Legal	#	\$	§	X	Z	"	'	"	¶	`	©	®	†	™

Character Code Table

• PC437 (USA,Standard Europe) :(00)H

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	@	P	`	p	ç	É	á	⌘	L	±	α	=			
1	!	1	A	Q	a	q	ú	é	í	⌘	±	β	±			
2	"	2	B	R	b	r	ó	é	ó	⌘	±	γ	±			
3	#	3	C	S	c	s	á	ó	ú		±	x	±			
4	\$	4	D	T	d	t	á	ó	ñ	±	-	±	±			
5	%	5	E	U	e	u	á	ó	ñ	±	±	±	±			
6	&	6	F	V	f	v	á	ó	ñ	±	±	±	±			
7	'	7	G	W	g	w	ç	ú	é	ñ	±	±	±			
8	(	8	H	X	h	x	é	ý	¿	±	±	±	±			
9	)	9	I	Y	i	y	é	ó	ñ	±	±	±	±			
A	*	A	J	Z	j	z	é	ó	ñ	±	±	±	±			
B	+	B	K	[	k	[	é	ó	ñ	±	±	±	±			
C	.	C	<	L	\		í	é	ó	ñ	±	±	±			
D	-	D	=	M	]m	)	í	é	ó	ñ	±	±	±			
E	.	E	>	N	^	n	^	é	ó	ñ	±	±	±			
F	/	F	?0	_o	á	f	>	±	±	±	±	±	±			

• カタカナ :(01)H

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	@	P	`	p	┘	-	ㇰ	ㇱ	ㇲ	ㇳ	ㇴ				
1	!	1	A	Q	a	q	┘	ㇵ	ㇶ	ㇷ	ㇸ	ㇹ				
2	"	2	B	R	b	r	ㇺ	ㇻ	ㇼ	ㇽ	ㇾ	ㇿ				
3	#	3	C	S	c	s	ㇽ	ㇾ	ㇿ	ㇿ	ㇿ	ㇿ				
4	\$	4	D	T	d	t	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
5	%	5	E	U	e	u	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
6	&	6	F	V	f	v	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
7	'	7	G	W	g	w	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
8	(	8	H	X	h	x	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
9	)	9	I	Y	i	y	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
A	*	A	J	Z	j	z	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
B	+	B	K	[	k	[	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
C	.	C	<	L	\		ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
D	-	D	=	M	]m	)	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
E	.	E	>	N	^	n	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				
F	/	F	?0	_o	ㇿ	f	>	ㇿ	ㇿ	ㇿ	ㇿ	ㇿ				

• PC860 (Portuguese) : (03)H

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	@	P	`	p	Ç	É	á	ã	õ	ú	ü	ç	é	á	ã
1	!	1	A	Q	a	q	ú	á	ã	õ	ú	ü	ç	é	á	ã
2	"	2	B	R	b	r	é	é	ó	ó	ú	ü	ç	é	á	ã
3	#	3	C	S	c	s	á	ó	ó	ú	ü	ç	é	á	ã	õ
4	\$	4	D	T	d	t	á	ó	ó	ú	ü	ç	é	á	ã	õ
5	%	5	E	U	e	u	á	ó	ó	ú	ü	ç	é	á	ã	õ
6	&	6	F	V	f	v	á	ó	ó	ú	ü	ç	é	á	ã	õ
7	'	7	G	W	g	w	ç	ú	ó	ó	ú	ü	ç	é	á	ã
8	(	8	H	X	h	x	é	ó	ó	ú	ü	ç	é	á	ã	õ
9	)	9	I	Y	i	y	é	ó	ó	ú	ü	ç	é	á	ã	õ
A	*	A	J	Z	j	z	é	ó	ó	ú	ü	ç	é	á	ã	õ
B	+	B	[	k	[	k	ç	ú	ó	ó	ú	ü	ç	é	á	ã
C	,	C	<	L	<	l	ç	ú	ó	ó	ú	ü	ç	é	á	ã
D	-	D	=	M	=	m	ç	ú	ó	ó	ú	ü	ç	é	á	ã
E	.	E	>	N	>	n	ç	ú	ó	ó	ú	ü	ç	é	á	ã
F	/	F	?	0	_	o	ç	ú	ó	ó	ú	ü	ç	é	á	ã

• PC863 (Canadian-French) : (04)H

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	@	P	`	p	Ç	É	á	ã	õ	ú	ü	ç	é	á	ã
1	!	1	A	Q	a	q	ú	á	ã	õ	ú	ü	ç	é	á	ã
2	"	2	B	R	b	r	é	é	ó	ó	ú	ü	ç	é	á	ã
3	#	3	C	S	c	s	á	ó	ó	ú	ü	ç	é	á	ã	õ
4	\$	4	D	T	d	t	á	ó	ó	ú	ü	ç	é	á	ã	õ
5	%	5	E	U	e	u	á	ó	ó	ú	ü	ç	é	á	ã	õ
6	&	6	F	V	f	v	á	ó	ó	ú	ü	ç	é	á	ã	õ
7	'	7	G	W	g	w	ç	ú	ó	ó	ú	ü	ç	é	á	ã
8	(	8	H	X	h	x	é	ó	ó	ú	ü	ç	é	á	ã	õ
9	)	9	I	Y	i	y	é	ó	ó	ú	ü	ç	é	á	ã	õ
A	*	A	J	Z	j	z	é	ó	ó	ú	ü	ç	é	á	ã	õ
B	+	B	[	k	[	k	ç	ú	ó	ó	ú	ü	ç	é	á	ã
C	,	C	<	L	<	l	ç	ú	ó	ó	ú	ü	ç	é	á	ã
D	-	D	=	M	=	m	ç	ú	ó	ó	ú	ü	ç	é	á	ã
E	.	E	>	N	>	n	ç	ú	ó	ó	ú	ü	ç	é	á	ã
F	/	F	?	0	_	o	ç	ú	ó	ó	ú	ü	ç	é	á	ã

• PC865 (Nordic) : (05)H

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	@	P	`	p	Ç	É	á	ã	õ	ú	ü	ç	é	á	ã
1	!	1	A	Q	a	q	ú	á	ã	õ	ú	ü	ç	é	á	ã
2	"	2	B	R	b	r	é	é	ó	ó	ú	ü	ç	é	á	ã
3	#	3	C	S	c	s	á	ó	ó	ú	ü	ç	é	á	ã	õ
4	\$	4	D	T	d	t	á	ó	ó	ú	ü	ç	é	á	ã	õ
5	%	5	E	U	e	u	á	ó	ó	ú	ü	ç	é	á	ã	õ
6	&	6	F	V	f	v	á	ó	ó	ú	ü	ç	é	á	ã	õ
7	'	7	G	W	g	w	ç	ú	ó	ó	ú	ü	ç	é	á	ã
8	(	8	H	X	h	x	é	ó	ó	ú	ü	ç	é	á	ã	õ
9	)	9	I	Y	i	y	é	ó	ó	ú	ü	ç	é	á	ã	õ
A	*	A	J	Z	j	z	é	ó	ó	ú	ü	ç	é	á	ã	õ
B	+	B	[	k	[	k	ç	ú	ó	ó	ú	ü	ç	é	á	ã
C	,	C	<	L	<	l	ç	ú	ó	ó	ú	ü	ç	é	á	ã
D	-	D	=	M	=	m	ç	ú	ó	ó	ú	ü	ç	é	á	ã
E	.	E	>	N	>	n	ç	ú	ó	ó	ú	ü	ç	é	á	ã
F	/	F	?	0	_	o	ç	ú	ó	ó	ú	ü	ç	é	á	ã

• PC866 (CyrillicRussian) : (011)H

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	@	P	`	p	Ç	É	á	ã	õ	ú	ü	ç	é	á	ã
1	!	1	A	Q	a	q	ú	á	ã	õ	ú	ü	ç	é	á	ã
2	"	2	B	R	b	r	é	é	ó	ó	ú	ü	ç	é	á	ã
3	#	3	C	S	c	s	á	ó	ó	ú	ü	ç	é	á	ã	õ
4	\$	4	D	T	d	t	á	ó	ó	ú	ü	ç	é	á	ã	õ
5	%	5	E	U	e	u	á	ó	ó	ú	ü	ç	é	á	ã	õ
6	&	6	F	V	f	v	á	ó	ó	ú	ü	ç	é	á	ã	õ
7	'	7	G	W	g	w	ç	ú	ó	ó	ú	ü	ç	é	á	ã
8	(	8	H	X	h	x	é	ó	ó	ú	ü	ç	é	á	ã	õ
9	)	9	I	Y	i	y	é	ó	ó	ú	ü	ç	é	á	ã	õ
A	*	A	J	Z	j	z	é	ó	ó	ú	ü	ç	é	á	ã	õ
B	+	B	[	k	[	k	ç	ú	ó	ó	ú	ü	ç	é	á	ã
C	,	C	<	L	<	l	ç	ú	ó	ó	ú	ü	ç	é	á	ã
D	-	D	=	M	=	m	ç	ú	ó	ó	ú	ü	ç	é	á	ã
E	.	E	>	N	>	n	ç	ú	ó	ó	ú	ü	ç	é	á	ã
F	/	F	?	0	_	o	ç	ú	ó	ó	ú	ü	ç	é	á	ã

• PC858 (Euro) : (13)H

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	@	P	`	p	Ç	É	á	ã	õ	ú	ü	ç	é	á	ã
1	!	1	A	Q	a	q	ú	á	ã	õ	ú	ü	ç	é	á	ã
2	"	2	B	R	b	r	é	é	ó	ó	ú	ü	ç	é	á	ã
3	#	3	C	S	c	s	á	ó	ó	ú	ü	ç	é	á	ã	õ
4	\$	4	D	T	d	t	á	ó	ó	ú	ü	ç	é	á	ã	õ
5	%	5	E	U	e	u	á	ó	ó	ú	ü	ç	é	á	ã	õ
6	&	6	F	V	f	v	á	ó	ó	ú	ü	ç	é	á	ã	õ
7	'	7	G	W	g	w	ç	ú	ó	ó	ú	ü	ç	é	á	ã
8	(	8	H	X	h	x	é	ó	ó	ú	ü	ç	é	á	ã	õ
9	)	9	I	Y	i	y	é	ó	ó	ú	ü	ç	é	á	ã	õ
A	*	A	J	Z	j	z	é	ó	ó	ú	ü	ç	é	á	ã	õ
B	+	B	[	k	[	k	ç	ú	ó	ó	ú	ü	ç	é	á	ã
C	,	C	<	L	<	l	ç	ú	ó	ó	ú	ü	ç	é	á	ã
D	-	D	=	M	=	m	ç	ú	ó	ó	ú	ü	ç	é	á	ã
E	.	E	>	N	>	n	ç	ú	ó	ó	ú	ü	ç	é	á	ã
F	/	F	?	0	_	o	ç	ú	ó	ó	ú	ü	ç	é	á	ã

• カタカナ 2 : (FF)H

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	@	P	`	p	Ç	É	á	ã	õ	ú	ü	ç	é	á	ã
1	!	1	A	Q	a	q	ú	á	ã	õ	ú	ü	ç	é	á	ã
2	"	2	B	R	b	r	é	é	ó	ó	ú	ü	ç	é	á	ã
3	#	3	C	S	c	s	á	ó	ó	ú	ü	ç	é	á	ã	õ
4	\$	4	D	T	d	t	á	ó	ó	ú	ü	ç	é	á	ã	õ
5	%	5	E	U	e	u	á	ó	ó	ú	ü	ç	é	á	ã	õ
6	&	6	F	V	f	v	á	ó	ó	ú	ü	ç	é	á	ã	õ
7	'	7	G	W	g	w	ç	ú	ó	ó	ú	ü	ç	é	á	ã
8	(	8	H	X	h	x	é	ó	ó	ú	ü	ç	é	á	ã	õ
9	)	9	I	Y	i	y	é	ó	ó	ú	ü	ç	é	á	ã	õ
A	*	A	J	Z	j											



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