

LCD Indicator Control Module Product Data Sheet

Model Name: **QCM-320** Rev.B2

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LCD Indicator Control Module Product Data Sheet

Model Name: **QCM-320** Rev.B2

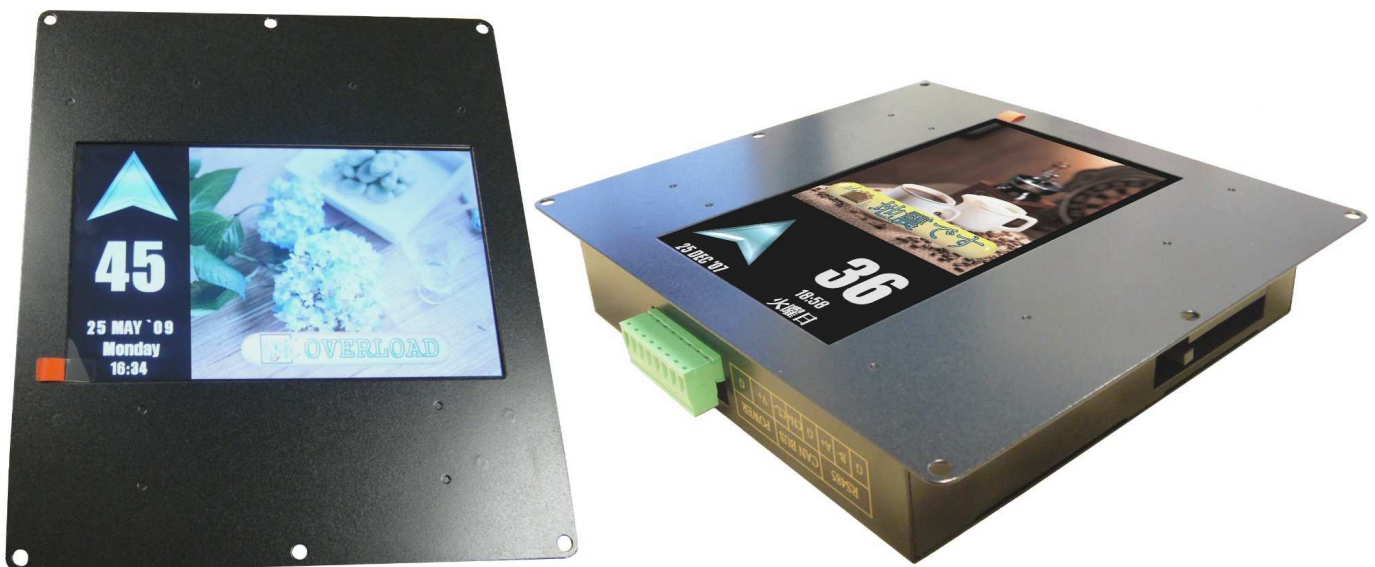
Introduction

QCM-320 COLOR LCD Indicator Control Module is designed innovatively to be configured into elevators. Different from LED matrix and 7-segment indicators, QCM-320 could edit/display preferred directional arrows, number characters, high resolution photos as well as time/date/messages like the company or building title.

Feature

- Adopt TFT LED back lighted module & saving mode
- Full color 24 Bit photo display. Time, directional arrows, photos and fonts are programmable
- Uploading graphic files, arranging the layout displays and editing the floor coding list can be operated via the software on PC
- Customized time/message display function
- Photo saving method: CF CARD

Product Photo



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Product Specification

● LCD Specification

LCD Type	Color TFT LCD
LCD Back-lighted Type	LED
LCD Viewing Area(m/m)	154.3 x 94.3mm / 7" (16:9)
LCD Resolution	800 x 3(RGB) x 480
LCD Dot Size	0.0635(W) x 0.1905(H) mm
LCD Screen Display	64K full color

● Electronic Feature

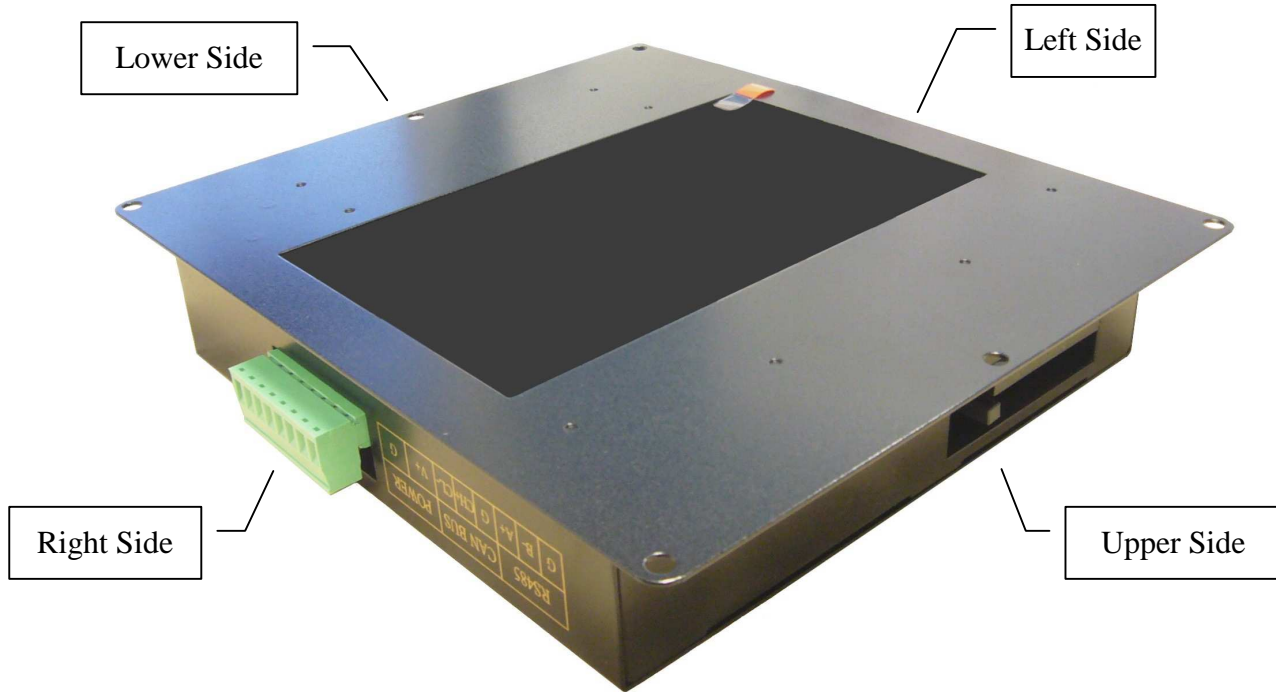
Voltage Supply	DC24V
Current Consumption	500mA at DC 24V
TVS Protection	Yes
Operating Temperature	0~60°C
Communication Interface	RS-485 / CAN BUS (Transceiver:TJA1040) (PARALLEL BINARY/GRAY CODE: Need I/O Module)
Download Communication Port	RS-232
Store Method	CF CARD
Available Display Photo	64 pcs
Metal Box	Yes

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Jumper/Connector Scheme for metal box

Front Side:



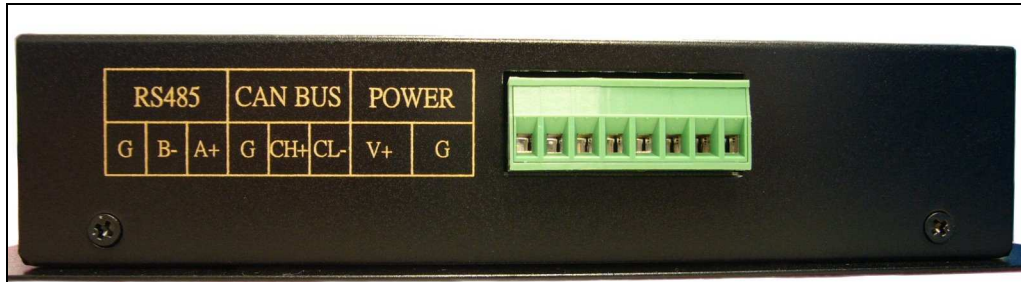
Back Side:



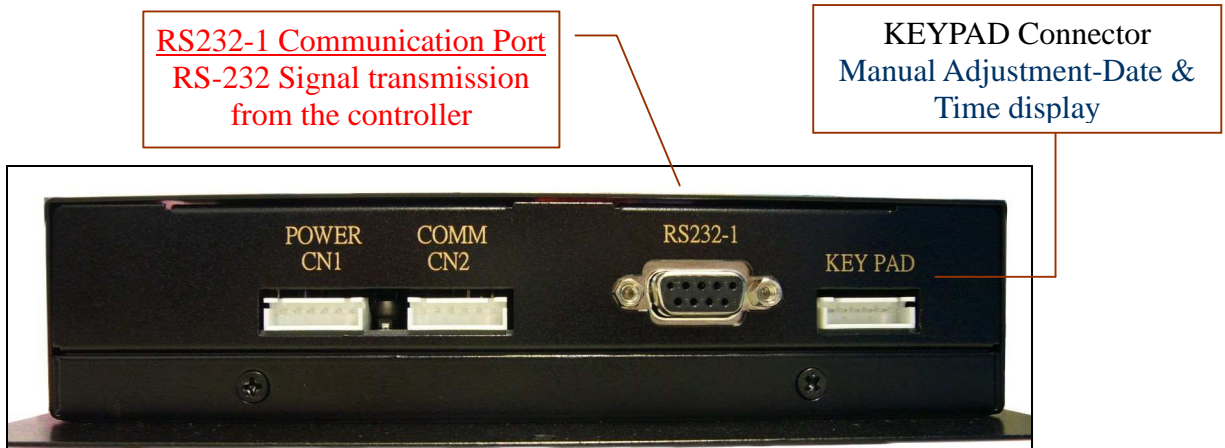
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- Input Signal Connector Scheme



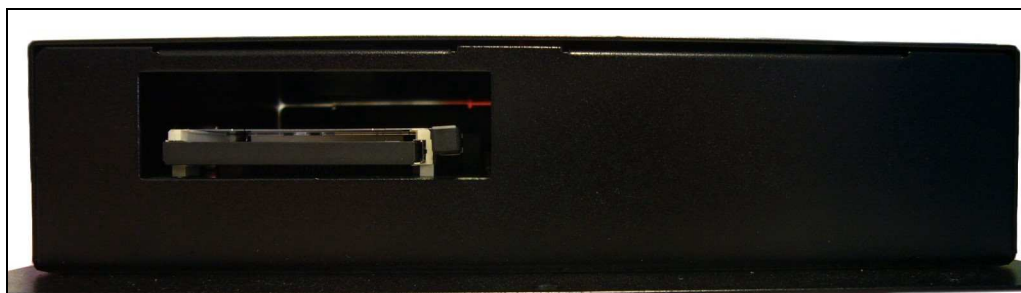
- Lower Side Connector Scheme



- Left Side Connector Scheme



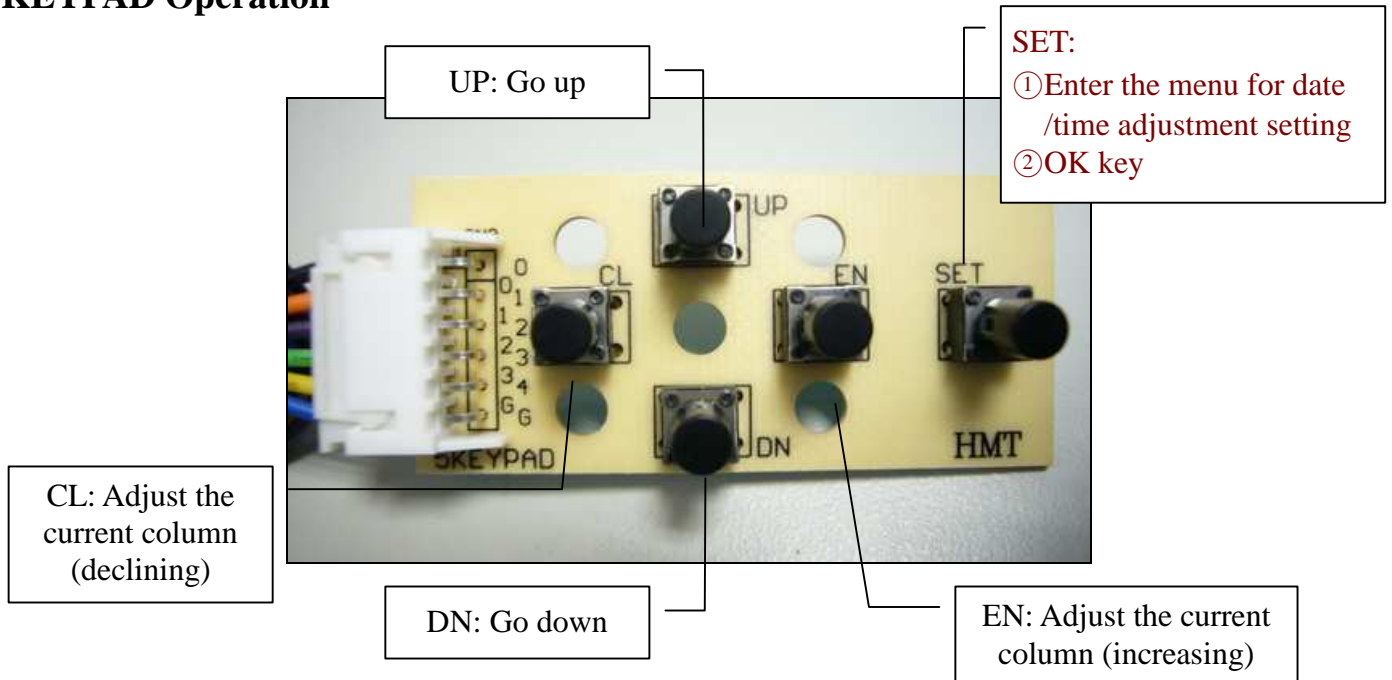
- Specification : CF CARD SOCKET TYPE2 –get the CF CARD by pushing the ejector.



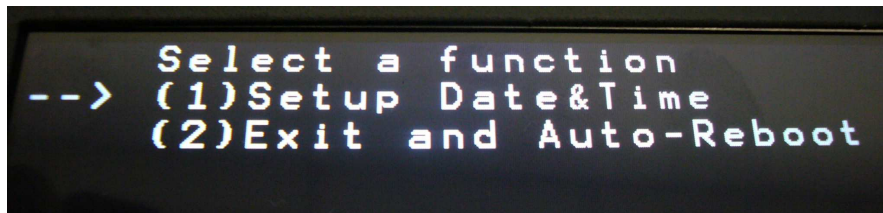
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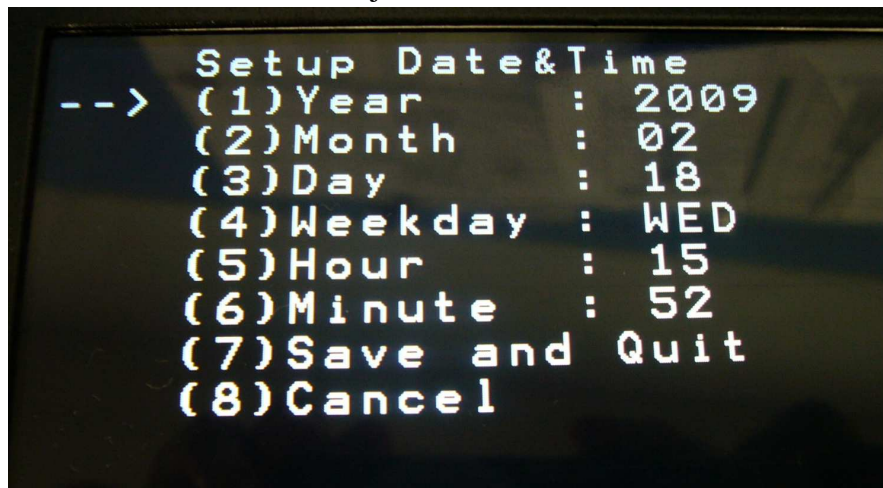
KEYPAD Operation



- SET: Enter the "Setup Date & Time" menu



- (1) Setup Data & Time: for date & time adjustment



****When the manual adjustment is done, pls save the setting on (7)Save and Quit before exiting this setting menu!!**

- (2) Exit and Auto-Reboot: Exit the date/time setting menu and restart the pc

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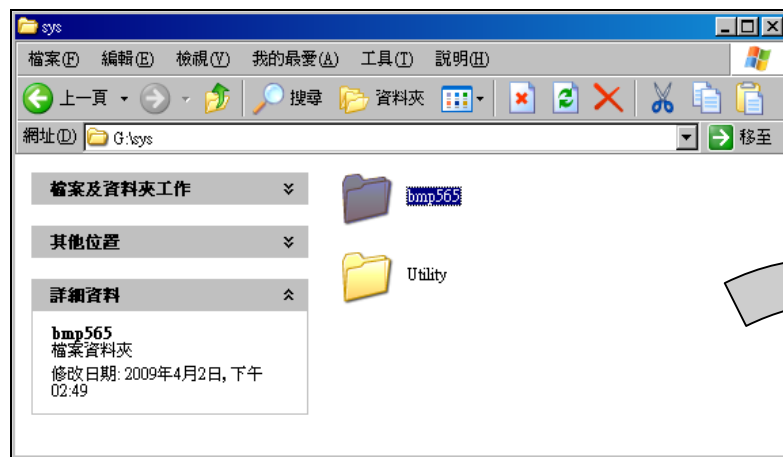
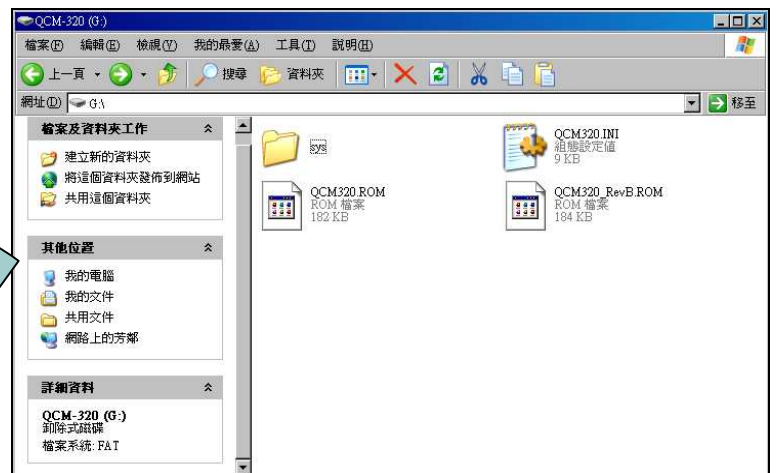
Model Name: **QCM-320** Rev.B2

CF CARD Editing

- Obtain the setting info and related data from the CF CARD to PC!

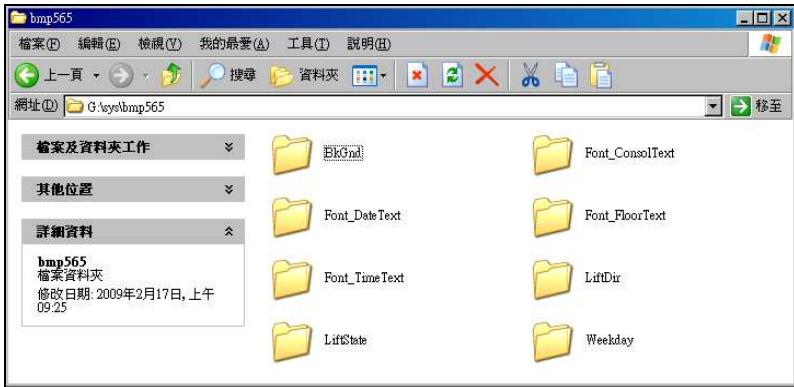


After “Make CF Card”, inside the CF CARD are four data ① sys folder (Display photos on LCD) ② file-QCM320.INI (status setting) ③ file-QCM320.ROM ④ file-QCM320_RevB.ROM.



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Contents from Bmp565 Folder	
BkGnd	All background image files
Font_ConsolText	UPDATE font image files
Font_DateText	Date font image files
Font_FloorText	Floor font image files
Font_TimeText	Time text image files
LiftDir	Directional arrow image files
LiftState	Emergency msg. image files
Weekday	Weekday font image files

Software Information

- **Software** : Setup_CM320_HMT_V1_R20090521.exe (Ver1.2.1)
- **Layout and Working-Mode Settings**

① LCD Placement & Layout selections:

LCD Placement	Layout Selections			Descriptions
	Style0	Style1	Style2	
 0 degree 				0° for equipping on the lower side of COP (For a disabled compliance COP use)
 90 degree 				90° for equipping on the right side of COP
 180 degree 				180° for equipping outside the COP/left or right side of COP. *For a standard COP use (Horizontal)
 270 degree 				270° for equipping on the left side of COP Suitable on the left side of COP

Style0- When the module places on 0°, the floor position display will be on the left side of LCD (180°) / When on 90°, it will be on the lower side of the LCD (270°)

Style1- When the module places on 0°, the floor position display will be on the right side of LCD (180°) / When on 90°, it will be on the upper side of the LCD (270°)

Style2- the background for floor display area will be the background of the LCD! When the module places on 0° & 180°, the floor position display will be on the left side of LCD / when on 90° & 270°, it will be on the lower side of the LCD

***COP**: car operation panel

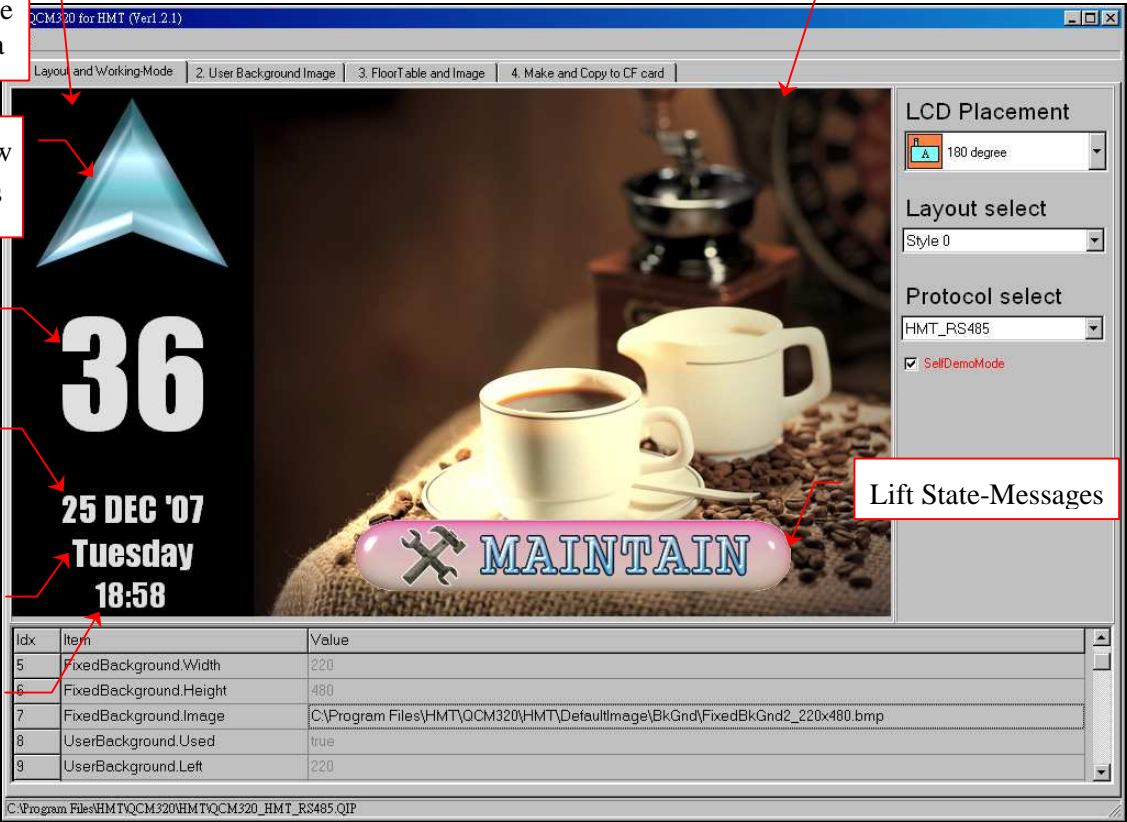
Protocol select: HMT_RS485

SelfDemoMode (Auto Run) (Tick here to activate the auto demo mode)

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② Layout & Preview Descriptions:



Fixed Background background for the floor display area

UserBackground

LiftUpDownArrow Directional arrows

Floor Text

Date Text

Weekday Text

TimeText

Lift State-Messages

Idx	Item	Value
5	FixedBackground.Width	220
6	FixedBackground.Height	480
7	FixedBackground.Image	C:\Program Files\HMT\QCM320\HMT\DefaultImage\BkGnd\FixedBkGnd2_220x480.bmp
8	UserBackground.Used	true
9	UserBackground.Left	220

③ Layout Setting List:

Layout Index	
Item	IDX
AutoTurnOffLcdBacklight LCD – backlight saving mode settings	0~1
FixedBackground – floor background settings	2~7
UserBackground – LCD background settings	8~13
LiftUpDownArrow – directional arrow settings	14~22
FloorText – floor position display settings	23~29
DateText – date display settings	30~37
WeekdayText – weekday display settings	38~51
TimeText – time display settings	52~59
LiftState – message display settings	60~78
AutoSequencePlayUserBkGndByTime – auto display with time setting	79~80

1. “ ν ” means the value in the item is programmable. Vice versa. The color for not programmable values is shown in gray. “#” means the item is available to preview.
2. If the character of the value is shown in black, it means the value is programmable. To Double click on the left key to program the settings.
3. * true→ON , false→OFF.

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IDX	Item	Value	Note	
0	AutoTurnOffLcdBacklight.Used	false	Turn off the LCD back light saving mode	
1	AutoTurnOffLcdBacklight.Seconds	300	Time duration setting for LCD back light saving mode (In Value, to set the time unit: SEC. Then turn off the backlight.)	
2	FixedBackground.Used	True	Start the background display for the floor position area	
3	FixedBackground.Left	0	x position	
4	FixedBackground.Top	0	y position	
5	FixedBackground.Width	220	Selected Object Width (W)	
6	FixedBackground.Height	480	Selected Object Height (H)	
∪	7	FixedBackground.Image	graphic file path	Setting for the background for the floor position display area
8	UserBackground.Used	True	Start the background display	
9	UserBackground.Left	220	x position	
10	UserBackground.Top	0	y position	
11	UserBackground.Width	580	Selected Object Width (W)	
12	UserBackground.Heighth	480	Selected Object Height (H)	
#	13	UserBackground.PreViewImage	...graphic file path	Background Preview
14	LiftUpDownArrow.Used	True	Start the directional arrows display	
15	LiftUpDownArrow.Left	0	x position	
∪	16	LiftUpDownArrow.Top	2	y position
17	LiftUpDownArrow.Width	220	Selected Object Width (W)	
∪	18	LiftUpDownArrow.Height	168	Selected Object Height (H)
∪	19	LiftUpArrow.Image0	...graphic file path	Upload the up arrow graphic file (no larger than the W*H value in item17,18 when upload and make the graphic file)
∪	20	LiftUpArrow.Image1	...graphic file path	
∪	21	LiftDownArrow.Image0	...graphic file path	Upload the down arrow graphic file (no larger than the W*H value in item17,18 when upload and make the graphic file)
∪	22	LiftDownArrow.Image1	...graphic file path	
∪	23	FloorText.Font	...PC Sys. Font Type	Floor Position Display-font type setting Attention: The font size may not larger than "28" value in FloorText.Height!
∪	24	FloorText.FontColor	...PC palette	Floor Position Display-font color setting
25	FloorText.Left	0	x position	
∪	26	FloorText.Top	200	y position
27	FloorText.Width	220	Selected Object Width (W)	
∪	28	FloorText.Height	118	Selected Object Height (H)
#	29	FloorText.PreViewText	N	Floor Position Display Preview Key in the floor position in "Value" for preview
∪	30	DateText.Used	True/false	Date Display: On / Off

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IDX	Item	Value	Note
∪ 31	DateText.Format	25 DEC '07	Date Display -Formats ①2007/12/25 ②12/25 ③25 DEC '07 ④25 DEC ⑤12月25日(Mandarin Ver.) Available format selections for the date display. For the local date, adjust it via the software in PC, connecting from RS-232 to PC!
∪ 32	DateText.Font	...PC sys. Font Type	Date Display –font type setting Attention: The font size may not larger than "37" value in DateText.Height! 37.DateText.Height!
∪ 33	DateText.FontColor	...PC palette	Date Display-font color setting
∪ 34	DateText.Left	0	x position
∪ 35	DateText.Top	366	y position
∪ 36	DateText.Width	220	Selected Object Width (W)
∪ 37	DateText.Height	32	Selected Object Height (H)
∪ 38	WeekdayText.Used	True/false	Weekday Display
∪ 39	WeekdayText.Font	...PC sys. Font Type	Weekday Display –font type setting Attention: The font size may not larger than value "44" in WeekdayText.Height!
∪ 40	WeekdayText.FontColor	...PC palette	Weekday Display-font color setting
∪ 41	WeekdayText.Left	0	x position
∪ 42	WeekdayText.Top	406	y position
∪ 43	WeekdayText.Width	220	Selected Object Width (W)
∪ 44	WeekdayText.Height	32	Selected Object Height (H)
∪ 45	WeekdayText.Monday	Monday	Weekday Display Setting (can be shown immediately on the lcd) Flexible weekday formats by request for the Item -WeekdayText.Monday → Value-Mon When it's Monday, the LCD displays "Mon" if key in "Mon".
∪ 46	WeekdayText.Tuesday	Tuesday	
∪ 47	WeekdayText.Wednesday	Wednesday	
∪ 48	WeekdayText.Thursday	Thursday	
∪ 49	WeekdayText.Friday	Friday	
∪ 50	WeekdayText.Saturday	Saturday	
∪ 51	WeekdayText.Sunday	Sunday	
∪ 52	TimeText.Used	True/false	Time Display
∪ 53	TimeText.Font	...PC sys. Font Type	Time Display-font type setting Attention: The font size may not larger than value "58" in TimeText.Height!
∪ 54	TimeText.FontColor	...PC palette	Time Display-Font color setting
∪ 55	TimeText.Left	240	x position
∪ 56	TimeText.Top	20	y position
∪ 57	TimeText.Width	220	Selected Object Width (W)
∪ 58	TimeText.Height	32	Selected Object Height (H)

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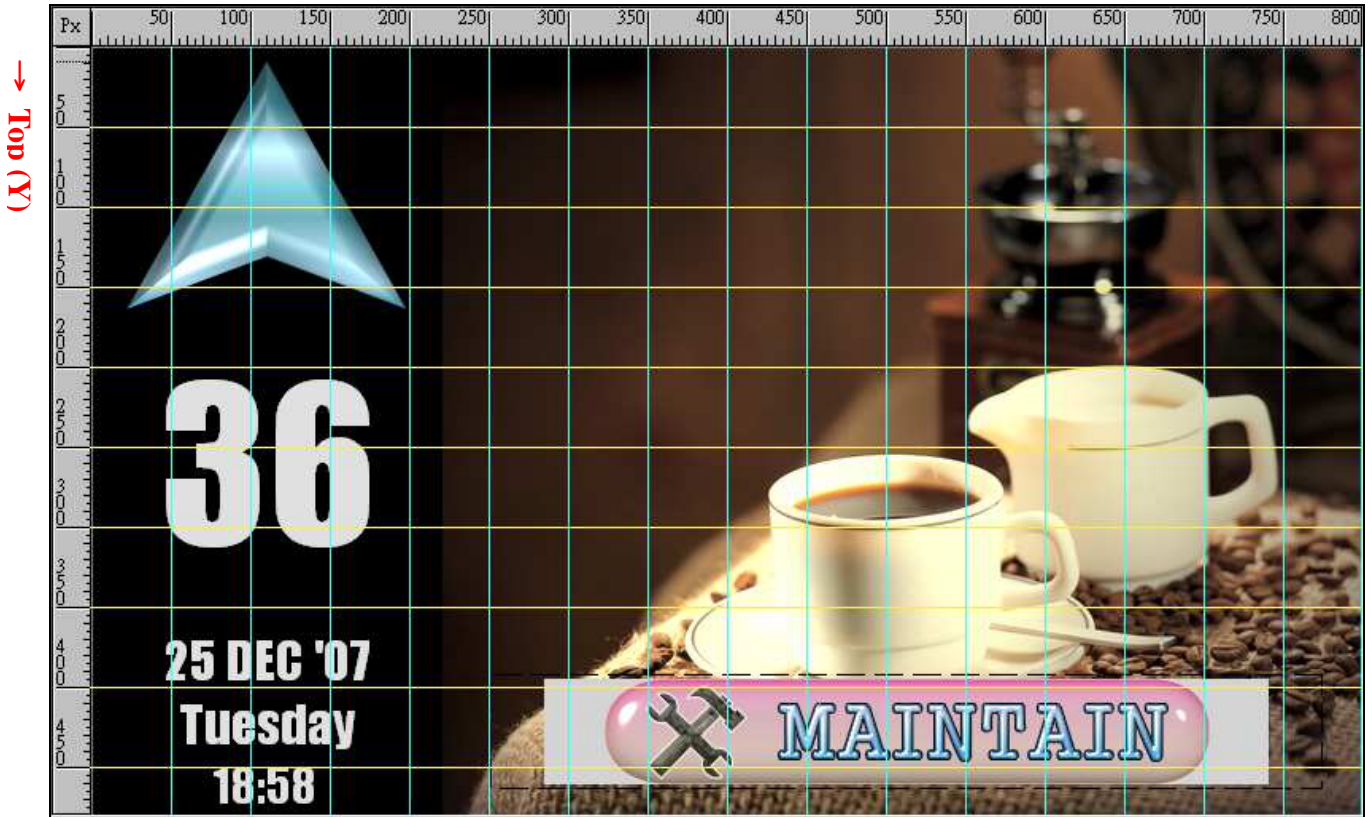
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IDX	Item	Value	Note
59	TimeText.PreViewText	18:58	Time Display Preview
∪ 60	LiftState.Used	True/false	Message Display: On/Off
∪ 61	LiftState.Left	250	x position
∪ 62	LiftState.Top	392	y position
∪ 63	LiftState.Width	524	Selected Object Width (W)
∪ 64	LiftState.Height	72	Selected Object Height (H)
∪ 65	LiftState.Maintain.Image0	...graphic file path	Maintenance msg. (The photo size for making and uploading may not larger than the "LiftState.Width" &"LiftState.Height")
∪ 66	LiftState.Maintain.Image1	...graphic file path	
∪ 67	LiftState.FullLoad.Image0	...graphic file path	Full load mg. (The photo size for making and uploading may not larger than the "LiftState.Width" &"LiftState.Height")
∪ 68	LiftState.FullLoad.Image1	...graphic file path	
∪ 69	LiftState.OverLoad.Image0	...graphic file path	Overload msg. (The photo size for making and uploading may not larger than the "LiftState.Width" &"LiftState.Height")
∪ 70	LiftState.OverLoad.Image1	...graphic file path	
∪ 71	LiftState.Fire.Image0	...graphic file path	Fire Alarm msg.(The photo size for making and uploading may not larger than the "LiftState.Width" &"LiftState.Height")
∪ 72	LiftState.Fire.Image1	...graphic file path	
∪ 73	LiftState.Earthquake.Image0	...graphic file path	Earthquake msg. (The photo size for making and uploading may not larger than the "LiftState.Width" &"LiftState.Height")
∪ 74	LiftState.Earthquake.Image1	...graphic file path	
∪ 75	LiftState.PowerFailure.Image0	...graphic file path	Power Failure msg. (The photo size for making and uploading may not larger than the "LiftState.Width" &"LiftState.Height")
∪ 76	LiftState.PowerFailure.Image1	...graphic file path	
∪ 77	LiftState.VIP.Image0	...graphic file path	VIP msg. (The photo size for making and uploading may not larger than the "LiftState.Width" &"LiftState.Height")
∪ 78	LiftState.VIP.Image1	...graphic file path	
∪ 79	AutoSequencePlayUserBkGndByTime_Used	True/false	UserBackground – LCD background: auto-play and change the background with <u>time (sec.) setting</u> On/Off *Default value: True (On) Background display will follow the photo sequence in 2.User Background Image.
∪ 80	AutoSequencePlayUserBkGndByTime_Seconds	5	Time (sec.) duration setting Double click left key to key in the duration of time (sec.)-range from 1 sec.~865400 sec.(one day long) *Default value: 5 sec. It means the background photo will be varied every 5 sec.!

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- ④ Left (X),Top (Y) position:
→ **Left (X)**



- ⑤ Descriptions of Selected Object Size: width (W) & height(H)



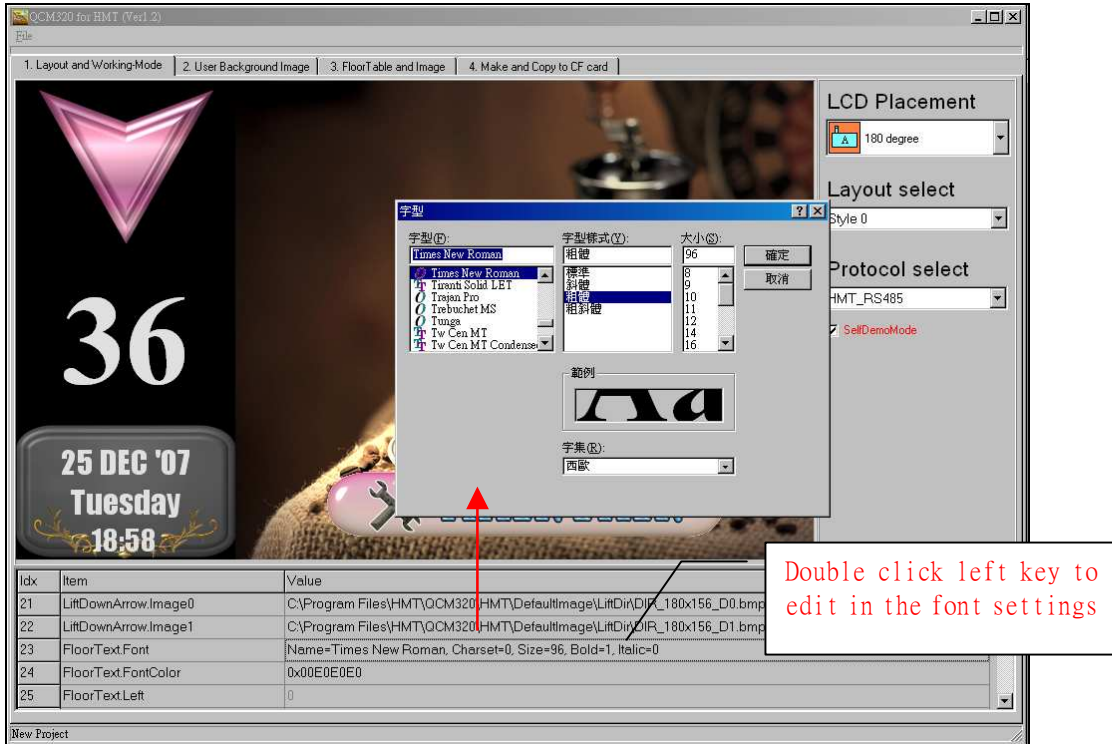
The size of the graphic file in this object may not larger than the user's setting size!
(avoid displaying incompletely)

Double click on the left key to check the X,Y positions and the width & height of this object.
The width and height are for user's setting size.

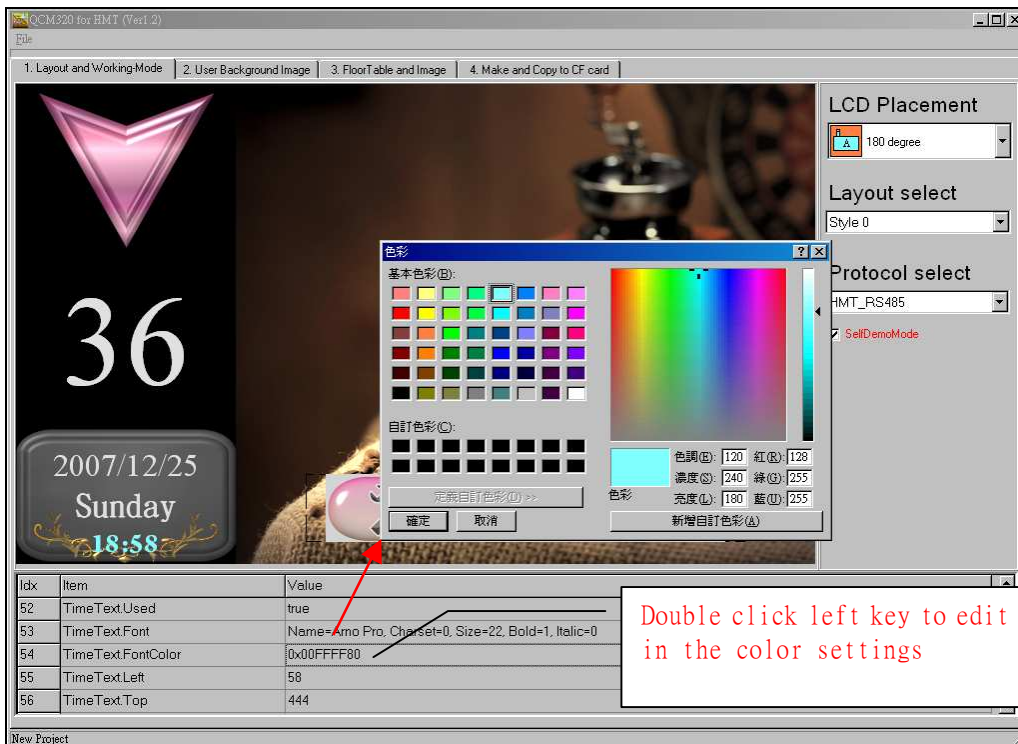
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- ⑥ Font Style Edit: * Double click left key to edit the Value in the font style item.
 - a. Font styles from the PC system are available for display.
 - b. Fonts in standard or bold style would be better **to avoid displaying incompletely!**
 - c. Font size needs to be within the setting value of Height **to avoid displaying incompletely!**



- ⑦ Font Color: * Double click left key to edit the Value in the font color item.



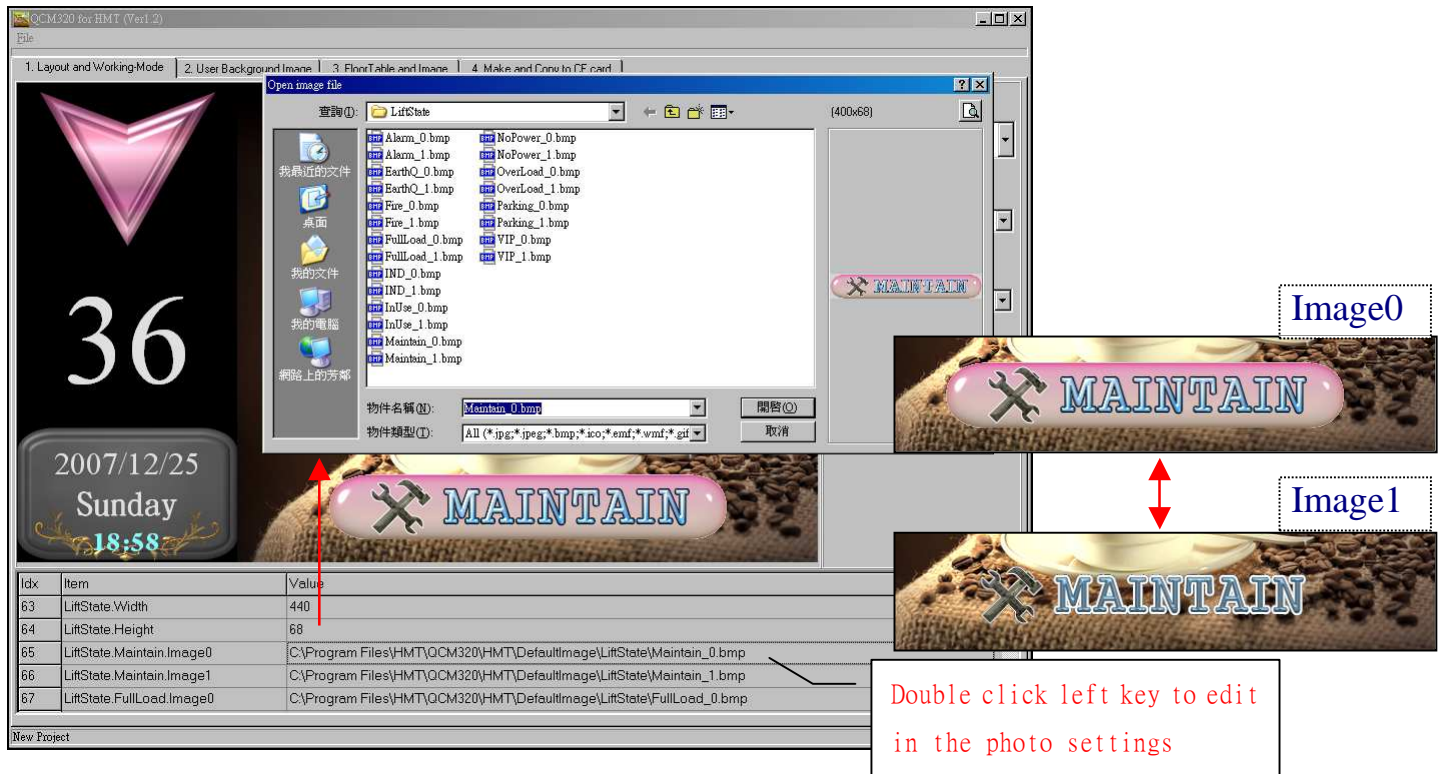
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⑧Lift State Edit: Each message can be display with two different photos, so when the message displays, it will look like the message is flashing!

If not prefer the message is flashing, please select the same photo in Image0 & Image1 in setting.

***Built-in English messages**



Idx	Item	Value
63	LiftState.Width	440
64	LiftState.Height	68
65	LiftState.Maintain.Image0	C:\Program Files\HMT\QCM320\HMT\DefaultImage\LiftState\Maintain_0.bmp
66	LiftState.Maintain.Image1	C:\Program Files\HMT\QCM320\HMT\DefaultImage\LiftState\Maintain_1.bmp
67	LiftState.FullLoad.Image0	C:\Program Files\HMT\QCM320\HMT\DefaultImage\LiftState\FullLoad_0.bmp

Double click left key to edit in the photo settings

***Photo size please follow the instructions in Idx63. LiftState.Width & Idx64. LiftState.Width to avoid displaying incompletely!**

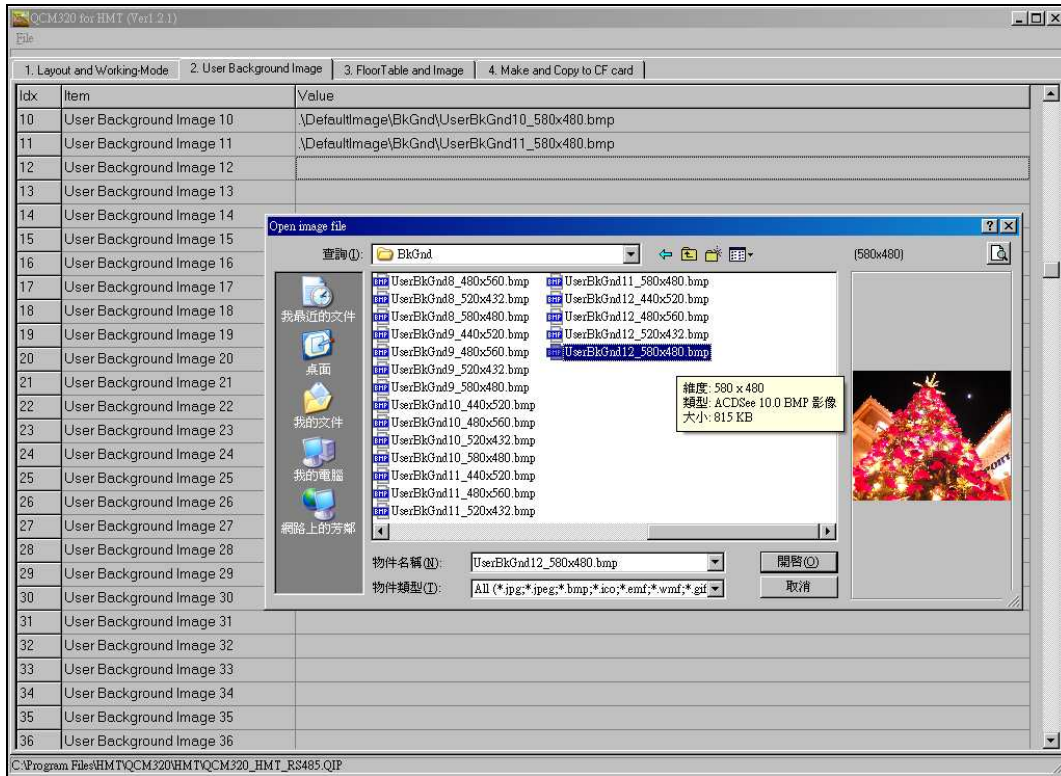
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● User Background Image

Able to upload 64 background images to the CF CARD equipped in the QCM-320 (User Background Image 0 ~ User Background Image 63).

On “Value” column, double click on the left key to open the graphic file path.



When uploaded graphic files repeat, a warning will appear!! It shows the path for the uploaded Item.

***When make and upload the background image, pay attention to the resolution & size. Please refer it to the Layout Select version. Bmp& JPG files are available. (bmp files would be better for display)**

Display Size Chart for Background Photo:

(Size : Pixel)		Style0	Style1	Style2
Horizontal (0°/180°)	FixedBackground-background for floor	220*480	220*480	800*480
	UserBackground-LCD background	580*480	580*480	520*432
Vertical (90°/270°)	FixedBackground-background for floor	480*240	480*240	480*800
	UserBackground-LCD background	480*560	480*560	440*520

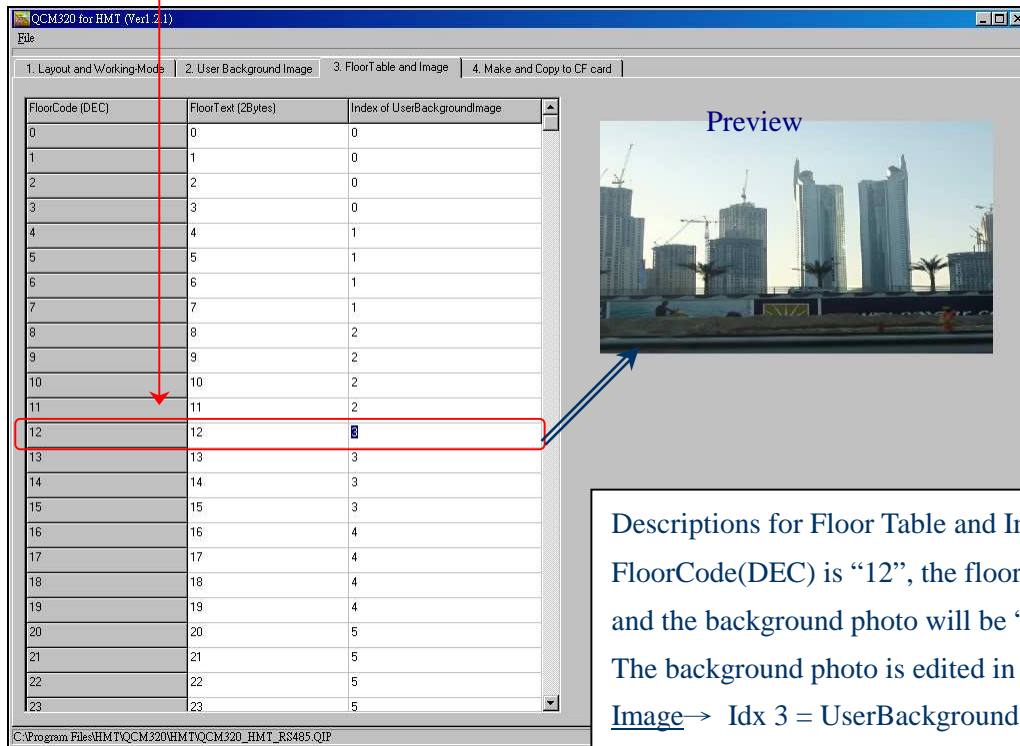
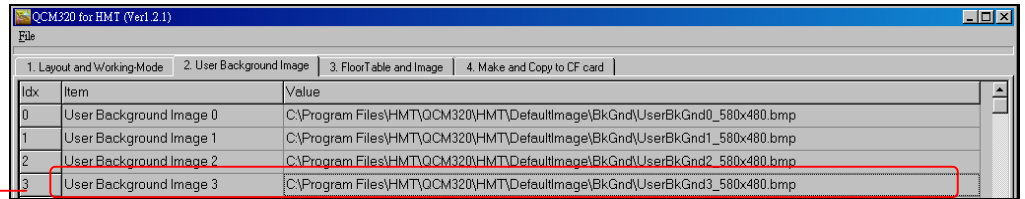
*** UserBackground-the background display can be varied with the settings of ①floor position or ② time duration!!**

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● FloorText and Image List

There are 64 floor codes for editing-FloorCode(DEC) 0~63 (FloorText). **Able to place and select the background image in the “Index of UserBackgroundImage” (item 2).** When program the floorText and User Background in “Index of UserBackgroundImage”, it can show which photo to which floor position. Selected photo can be viewed in the window next to the list!



Background Photo Display Edit: Varied with the floor position

- ① Please set “false” in AutoSequencePlayUserBkGndByTime_Used item from 1.Layout and Working-Mode
- ② Back to “Index of UserBackgroundImage” item from 3.FloorTable and Image.

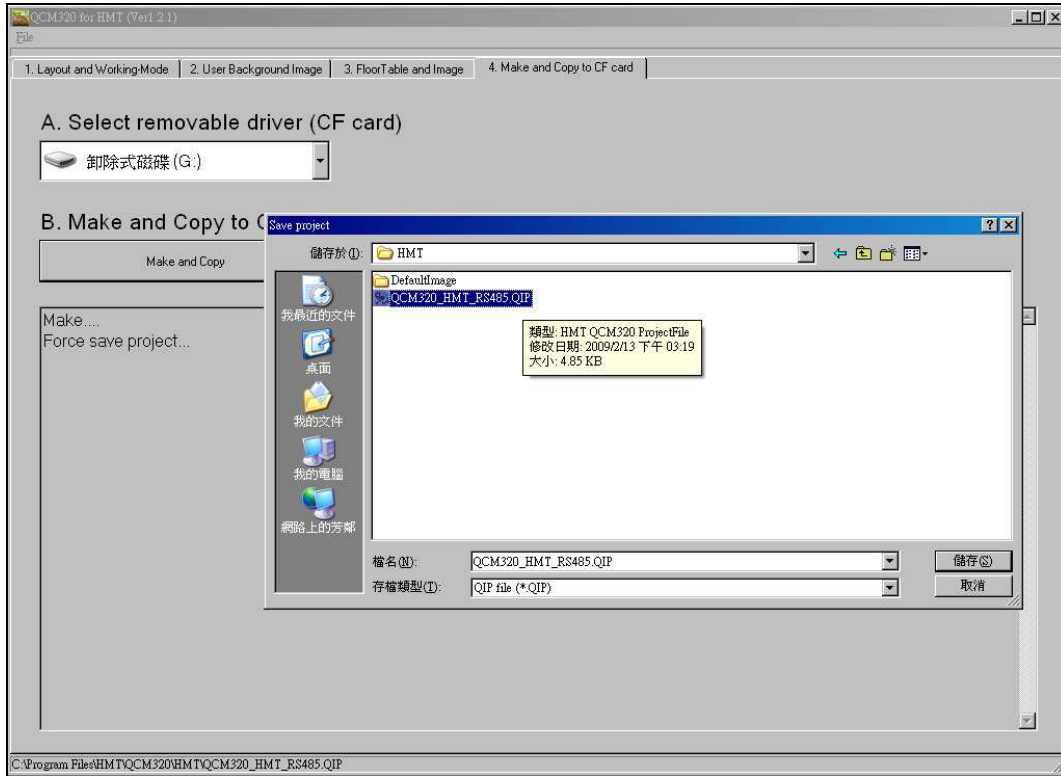
In “Index of UserBackgroundImage”, key in the Idx numbers from “ 2.User BackgroundImage”

****Background Photo Edit:** ”Time duration (sec.)” is the default setting. If prefer the photos changing with the “floor position”, please set “false” in the item79, AutoSequencePlayUserBkGndByTime_Used in advance, or the function of the photo varied with “floor position” would be invalid.

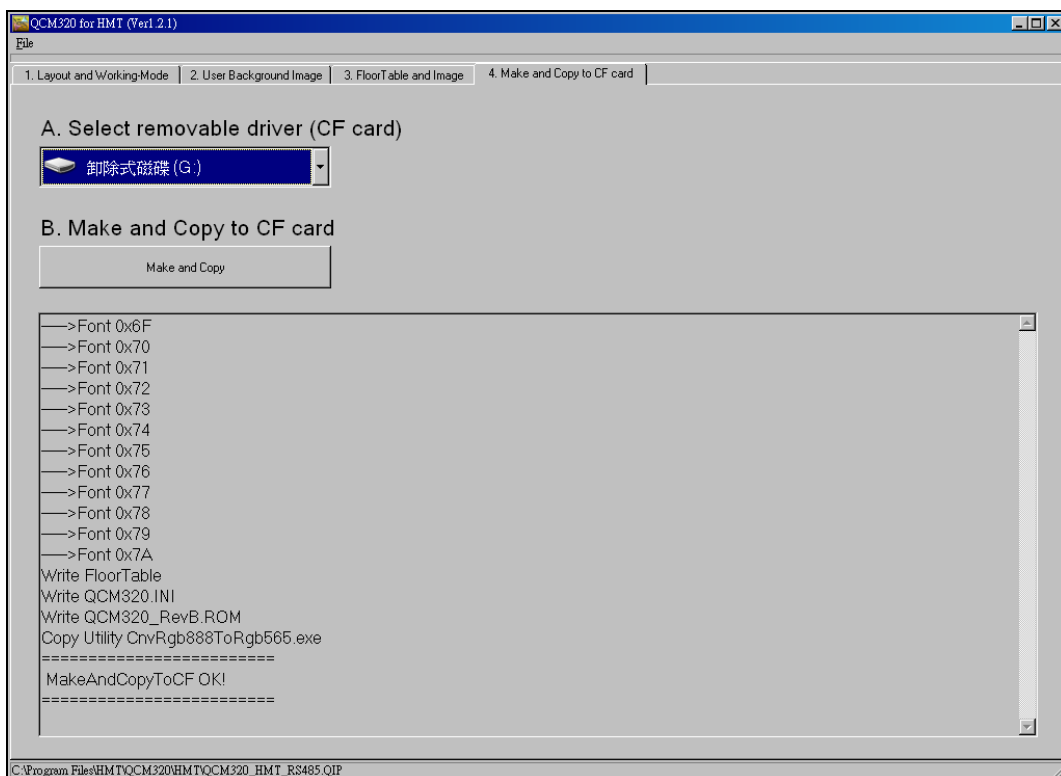
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- **Make and Copy to CF card** ① Before “Make CF Card”, please save the files in advance or save the file again. **The extension file name for QCM-320 is *.QIP**



- ② Insert the CF CARD and select the “Select removable drive”→ **Make and Copy**



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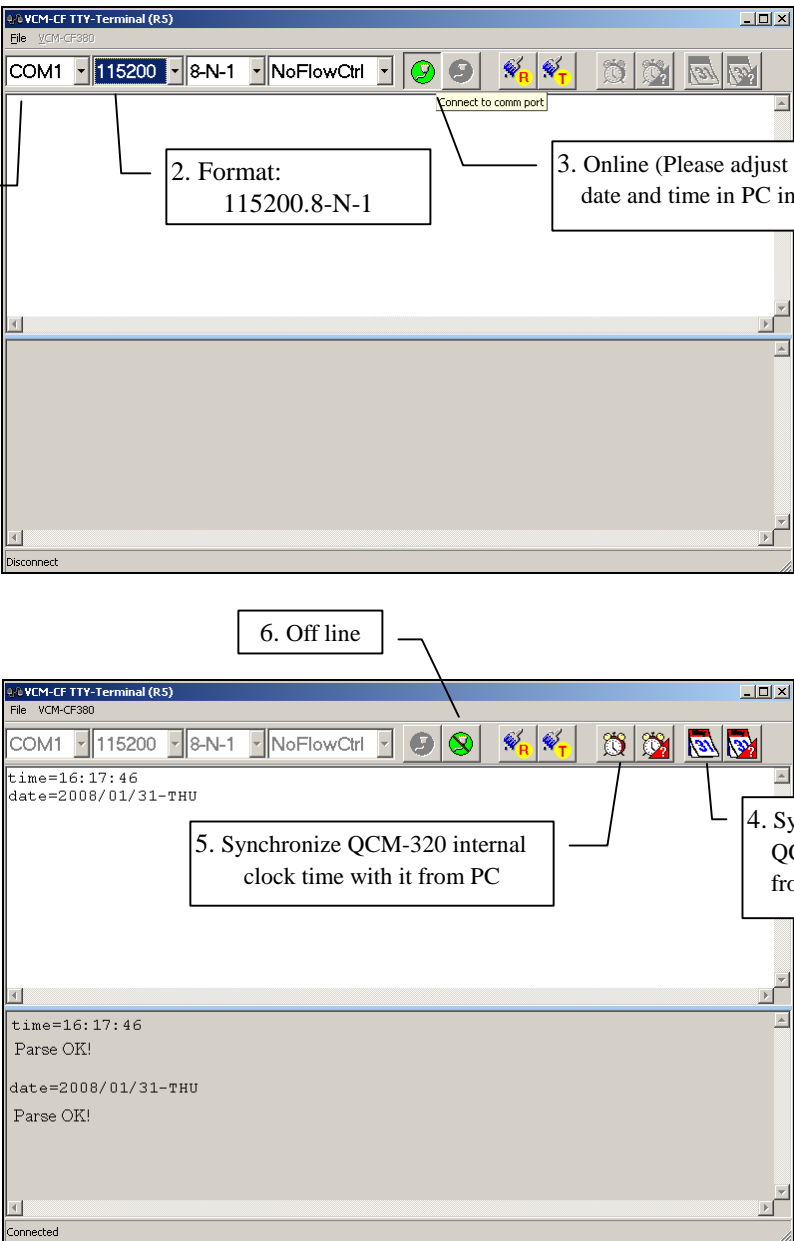
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- **VCM-CF TTY-Terminal (R5) Software:** PC software for time adjustment on QCM-320.



Operation Notes :

- ① Connect the RS-232 wire to the preferred port from the PC...
- ② Run the software “VCF_TTY”...



1. Communication Port Options

2. Format: 115200.8-N-1

3. Online (Please adjust the clock date and time in PC in advance)

6. Off line

5. Synchronize QCM-320 internal clock time with it from PC

4. Synchronize the date in QCM-320 internal time with it from PC

```

time=16:17:46
date=2008/01/31-THU

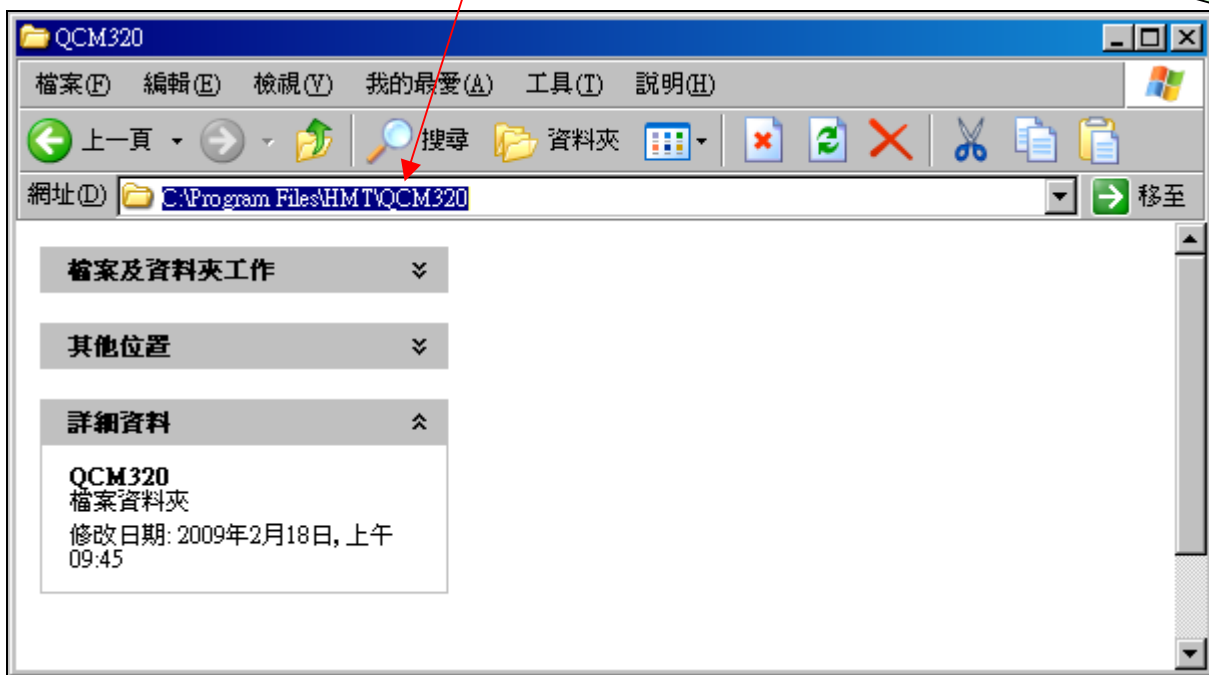
time=16:17:46
Parse OK!

date=2008/01/31-THU
Parse OK!
    
```

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- **Uninstall QCM-320 Program Software Operation:**



***When uninstall the QCM-320 program software, the PC will clear all the folders from the target catalog completely!! Before clearing the folders, please make sure any setting files needed to be saved in advance left here.**

