

Main Menu of TOP

Touch screen has [Menu screen] and [Operation screen].

[Menu screen] is the setting mode of touch screen, it can recognize model name of touch screen and used OS version, set current date, time, communications setting, initial setup. Also, it can check if touch screen works normally by diagnosis menu.

[Operation screen] displays painting-picture program of users.

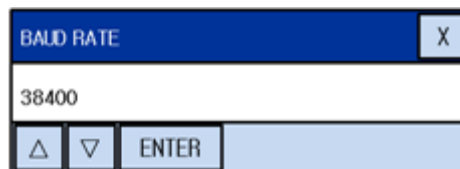
Menu screen and operation screen can be converted easily.

(☞ How to convert screen is explained in [1.1.6] of [chapter 1].)

(1) How to change setting values in menu screen

Black texts of [Menu screen] are only displayed parts, and blue or red texts are the parts to change settings by touch.

If you touch blue or red texts in [menu screen] to change settings, the following window will show available values and enable you to change settings.



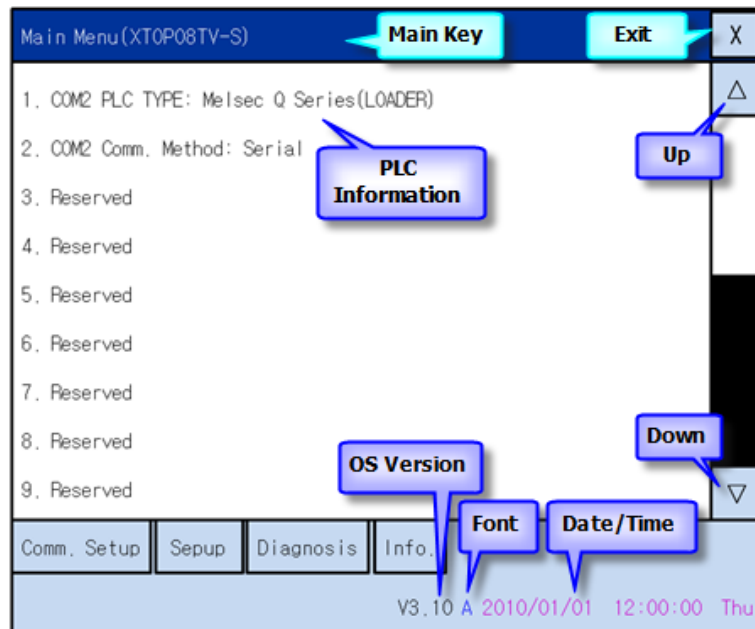
[Figure. Window of changing setting]

It displays the part to change in the title area in blue and shows setting value at center area in white. Setting value can be changed to other value by pressing [arrow] button and input new value by pressing [ENTER] button.

Button	Explanation
[△]	Scroll up in the list of setting values.
[▽]	Scroll down in the list of setting values.
[ENTER]	Input currently-displayed value and close window.
[X]	Close window of current setting.

(2) Main menu

Main menu is the first page of [menu screen].



[Figure. Main menu]

Main menu	Explanation
Main Menu Screen	Shows model name of touch screen set in design project and PLC information
Comm.Setup Button	Model name of touch screen to be displayed in the [Main Key] above Move to communications setup screen
Setup Button	Move to initial setup screen
Diagnosis Button	Move to diagnosis screen
Info. Button	Move to information screen
Main Key	Blue part at top in blue is the [Main Key]. Touch the [Main Key] in screen of communications setup, initial setup, diagnosis and information, it moves to main menu screen. Also can be used to convert [operation screen] to [menu screen]. (Please refer to how to convert screen in [1.1.6] of [chapter 1].)
[X]	Touch [X] exit button, it converts [menu screen] to [operation screen].
[△]	Scroll up on screen page
[▽]	Scroll down on screen page
OS Version	Displays OS version
Font (가/A)	Displays current language of [menu screen]. Can be changed to other language by touch (Korean to English, Chinese to English). English fonts are included with the default font, can be changed to Korean/Chinese font. Korean/Chinese font files can be downloaded from our homepage and transmitted to touch screen.
Date/Time	Displays date and time. Can be changed by touch.

(3) screen

This is the screen that setups communications setting between Touch machine and PLC.

The screenshot shows a 'Comm. Setup' window with a list of 18 parameters. Parameters 1-8 are for COM2 and parameters 9-15 are for COM1. Parameters 16-18 are for N:1 function. The status bar at the bottom shows 'V3.10 A 2010/01/01 12:00:00 Thu'.

No.	Parameter	Value	Unit
1.	COM2 Serial Baud Rate	38400	[BPS]
2.	COM2 Serial Data Bit	8	[BIT]
3.	COM2 Serial Stop Bit	1	[BIT]
4.	COM2 Serial Parity Bit	None	[BIT]
5.	COM2 Serial Signal Level	RS-232C	
6.	COM2 Station Num. In Diag.(0-31)	00	
7.	COM2 Time Out	10	* 100 [mSec]
8.	COM2 Send Wait	00	* 100 [mSec]
9.	COM1 Serial Baud Rate	38400	[BPS]
10.	COM1 Serial Data Bit	8	[BIT]
11.	COM1 Serial Stop Bit	1	[BIT]
12.	COM1 Serial Parity Bit	None	[BIT]
13.	COM1 Station Num. In Diag.(0-31)	00	
14.	COM1 Time Out	10	* 100 [mSec]
15.	COM1 Send Wait	00	* 100 [mSec]
16.	N:1 Use	No	
17.	N:1 Station Number(0-31)	00	
18.	N:1 Max Machine(2-32)	02	

[Figure. Communications setup]

No.	Explanation
1	Setup [communications Baud rate] of PLC connected with COM2 port.
2	Setup [Data Bit] of PLC connected with COM2 port.
3	Setup [Stop Bit] of PLC connected with COM2 port.
4	Setup [Parity Bit] of PLC connected with COM2 port.
5	Setup signal level(RS-232C/422/485) of PLC connected with COM2 port.
6	Setup [Station Number] (use when communications diagnosis) of PLC connected with COM2 port.
7	Setup [Time Out] of PLC connected with COM2 port. (Timeout:: waiting time for answer of PLC)
8	Setup [Send Wait] of PLC connected with COM2 port. (Send Wait: communicate after waiting setting time when touch screen requires communications.)
9~15	Communications setup of PLC connected with COM1 port which communicates by 232C. (same as COM2 above)
16	Decide if use function of [N:1] function. [N:1] is the communications between multiple Touch machines and one PLC. If set [No], setup of No.17 and 18 below are to be ignored.
17	Setup [Station Number] when use [N:1] function.
18	Setup number of touch machine when use [N:1] function.

Note It is the communications of the PLC loader (Loader: CPU direction communications) which adjusts the communications setting value automatically, it does not have to set communications setting separately because touch machine fixes communications setting internally. In this case, it cannot change communications setting value, a good connection between touch machine and it enables communicate.

Comm. Setup		X
19. Self Station Num.(0~31):	<u>00</u>	△
20. IP Address:	<u>192.168.0.100</u>	
21. Subnet Mask:	<u>255.255.255.0</u>	
22. Gateway:	<u>192.168.0.1</u>	
23. Port(0~9999):	<u>0100</u>	
24. Protocol:	<u>UDP</u>	
25. Ethernet Controller Num. In Diag.(0~31):	<u>00</u>	
26. Ethernet Time Out:	<u>10</u> * 100 [mSec]	
27. Ethernet Send Wait:	<u>00</u> * 100 [mSec]	▽
Comm. Setup	Setup	Diagnosis
V3.10 A 2010/01/01 12:00:00 Thu		

[Figure. Communications setup]

No.	Explanation
19	Setup [Station] when communicates using Ethernet [N:1].
20	Setup IP address of PLC connected with Ethernet.
21	Setup subnet mask of PLC connected with Ethernet.
22	Setup gateway of PLC connected with Ethernet.
23	Setup port of PLC connected with Ethernet.
24	Setup protocol of PLC connected with Ethernet.
25	Setup [Station Number] of counterpart equipment when you diagnosis Ethernet communications.
26~27	Setup timeout and send wait of PLC connected with Ethernet.

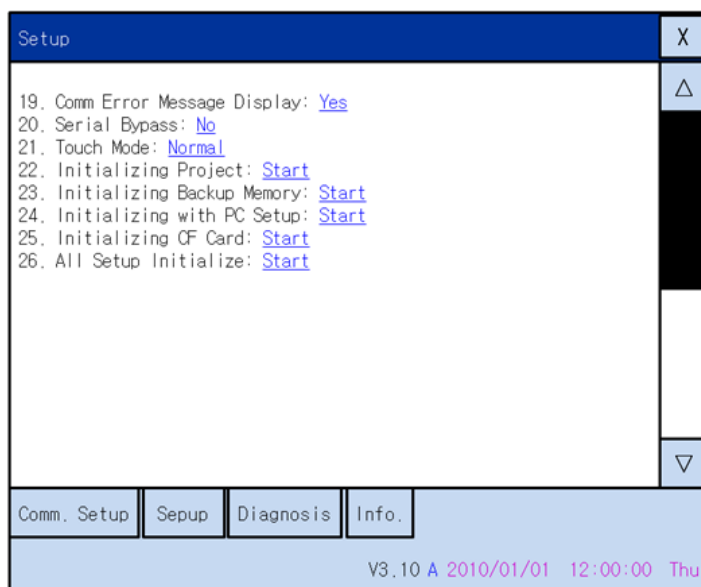
(4) Initial setup screen

This is the initial setup of the touch machine.

Setup		X
1. Power ON Mode:	<u>Menu</u>	△
2. Initial Screen Number:	<u>00001</u>	
3. Screen Save(0~99):	<u>00</u> [MINUTE]	
4. Touch Buzzer:	<u>On</u>	
5. Start of Latch(0~5119):	<u>0001</u>	
6. End of Latch(0~5119):	<u>0000</u>	
7. Printer:	<u>DeskJet Port., 2Color</u>	
8. Password(1~9999, 0:None):	<u>None</u>	
9. Touch Sensitivity:	<u>Normal</u>	
10. In Case of Sys. Err:	<u>Reset</u>	
11. Save to USB:	<u>시작</u>	
12. Get from USB:	<u>시작</u>	
13. TOP ID Num:	<u>00001</u>	
14. Get from CF User File:	<u>시작</u>	
15. LCD Brightness:	<u>Step0</u>	
16. LCD Contrast:	<u>Step10</u>	
17. Protocol Analyzer:	<u>No</u>	
18. Protocol Analyzer Port:	<u>Serial</u>	▽
Comm. Setup	Setup	Diagnosis
V3.10 A 2010/01/01 12:00:00 Thu		

[Figure. Initial setup]

No.	Explanation
1	Setup operation mode when power of touch machine is ON. [Menu] – start with menu screen. [Run] – start with operation screen.
2	Setup first screen number to start in operation screen.
3	If set time by minute unit and does not touch for the set time, screen turns off following turn-off of backlight. At this time, if touch the screen, screen turns on following turn-on of backlight. If use this function, life of backlight can be extended.
4	Decide if use 'beep' buzzer sound when touch.
5~6	Touch machine has internal address of [0~5119] by unit of 16 bit word. Data of this internal address will be deleted if power resets, but data is saved through the power of touch machine if [latch start buffer] and [latch end buffer] are set.
7	To connect printer, set width/length, color.
8	To input code number, it is required to input password when [download]/[upload]/[menu screen enter].
9	Set sensitivity of touch(Normal/Dull).
10	Set operation(Reset/Stop) when system error occurs. [Reset] – reset power of touch screen. [Stop] – stop operation of touch screen.
11~12	Copy data contained in USB memory to touch screen or data in touch screen to USB memory using USB memory storage unit.
13	Used when tries to collect logging or screen capture data in multiple touch screens using one USB memory storage unit. Saved logging or screen capture data is saved in folder classified as TOP ID.
14	Transmit the files such as [design/OS/Font] saved in [USER] folder of CF memory card to touch screen.
15	Control LCD brightness.
16	Control LCD contrast. (except TFT LCD)
17	Set yes or no to use Protocol Analyzer.
18	Choose transmitting method of Protocol Analyzer.

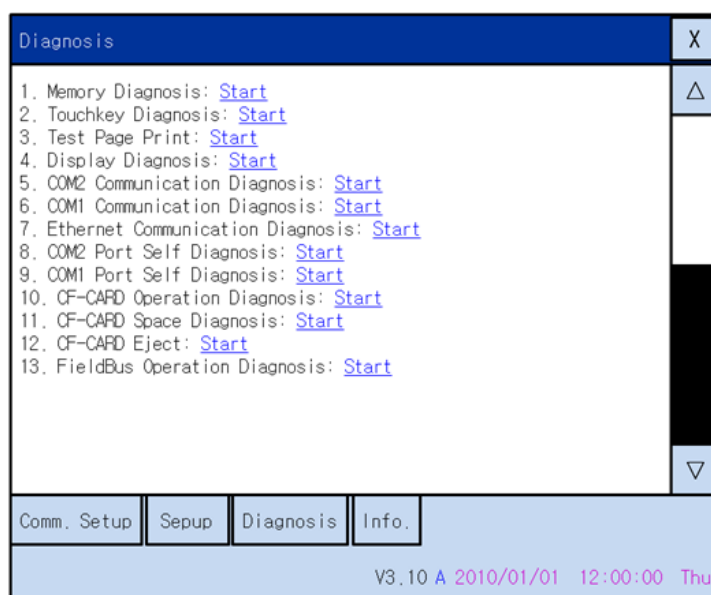


[Figure. Initial setup]

No.	Explanation
19	Set yes or no for automatic display function for communications error message. If set [Yes], it displays communications error message at lower part of operation screen.
20	Set yes or no to use serial bypass.
21	Set touch method. (safe: prevention two touches)
22	Initialize design project files.
23	Initialize backup memory data.
24	Initialize to set value of PC.
25	Initialize data of CF memory card.
26	Converts all setting input to communications setup and initial setup to initialized value. (If initialized, menu screen will be converted to English.)

(5) Diagnosis screen

Diagnosis hardware defects of touch machine or communications connected with PLC.



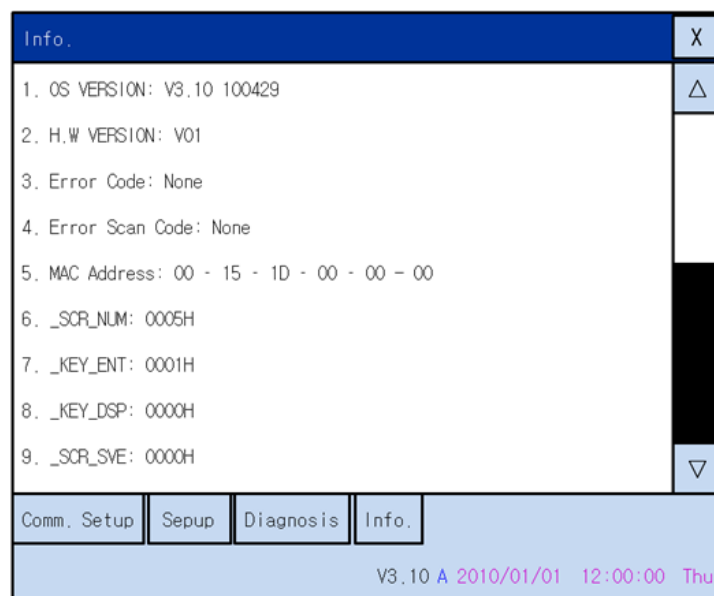
[Figure. Diagnosis]

No.	Detailed explanation
1	Diagnose if there is disorder of [SRAM(backup memory)], [OS], [Project].
2	Diagnose if there is disorder of touch position. Press [X] button at right above to exit from touch key diagnosis.
3	Execute test print of printer connected with touch screen.
4	Diagnose LCD screen condition. Press [X] button, to exit from display diagnosis.
5	Diagnose communications with PLC connected with COM2 (If there is nothing wrong, it will display 'OK').
6	Diagnose communications with PLC connected with COM1 (If there is nothing wrong, it will display 'OK').
7	Diagnose communications with PLC connected with Ethernet port (If there is nothing wrong, it will display 'OK').
8	Self -diagnosis of COM2 port. (Diagnose after short-circuiting transmit/receive of

	COM2.)
9	Self-diagnosis of COM1 port. (Diagnose after short-circuiting transmit/receive of COM1.)
10	Diagnose if there is a problem with the CF-card.
11	Diagnose capacity of CF-card.
12	To remove CF-card, select start to removed safely.
13	Runs a diagnosis check on the docking status of Field Bus.

(6) Information screen

It shows the version of touch screen and the status of special address.



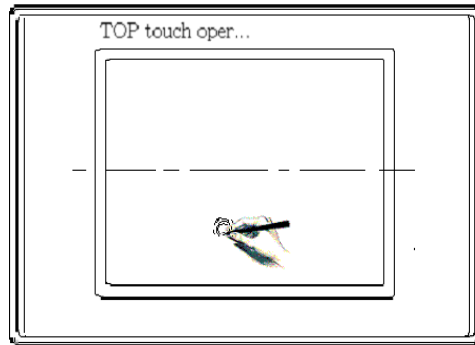
[Figure. Information]

No.	Detailed explanation
1	Displays OS version of touch screen. Displays created date of OS in OS version information.
2	Displays hardware version of touch screen.
3	Displays error code when it occurs.
4	Displays error position when it occurs.
5	Displays Mac address of Ethernet function-added model.
6~75	Displays data of special address.

1.1.1 How to calibrate touch position

In case of [Analog Touch], position of touch can vary due to external factors like temperature.

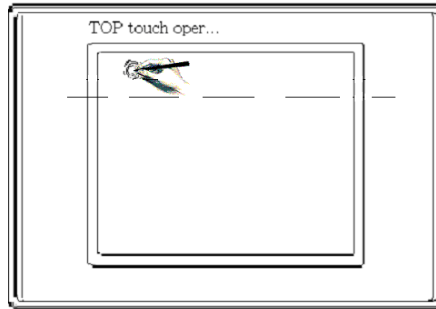
If position of touch gets distorted, calibrate it as following.



[Figure. Touch position calibration]

- ① Turn off power of touch screen. To divide screen by half, top and bottom, turn on power of touch screen by touching the bottom portion. When the screen turns to white, it resets into [the calibration mode] the moment when your pen/finger is removed from the screen.
- ② A Message [Touch any point to calibration] is displayed on screen and a countdown starts showing numbers [8,7,6,5 ... ,0]. Press any where before the countdown ends.
- ③ Black square is shown in center of screen with message [Touch the center point.]. Touch the point with a touch pen correctly. Touch continuously; left upper, right upper, left lower, right lower points along position of square according to displayed message.
- ④ After designating a position, a message [Touch to save.] is displayed. If touched one more time, touch calibration completes with message [Data writing...].

1.1.2 How to convert operation screen to menu screen



[Figure. Move to menu screen]

(1) Method 1

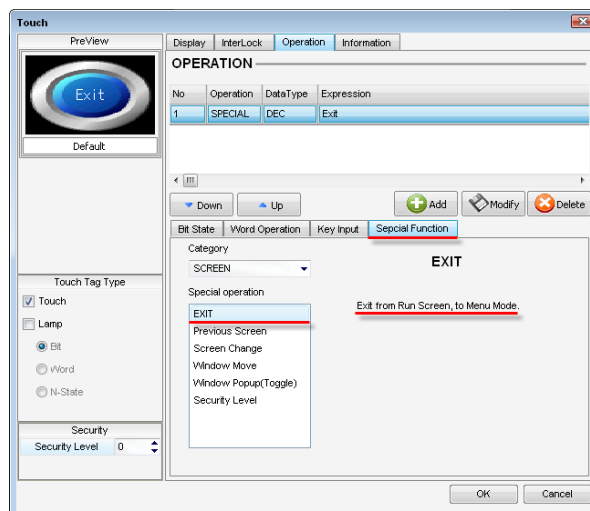
Turn off power of touch screen. If turn on power, [beep] buzzer alarms. As soon as hearing the buzzer sound, it converts to menu screen when you touch the main key part (LCD screen area under TOP logo) of main screen. If it is difficult to match the timing, touch main key part "Tock!, Tock!, Tock!" after power reset.



Note If power on with touch screen pressed, and it does not convert to menu screen.
After hearing buzzer sound, touch 'Tock!'

(2) Method 2

Can register touch button and convert it in design project.
Set [EXIT] out of [Special function] in [Operation] page of touch tag.
Touch this button on screen, it exits operation screen and moves to menu screen.



[Figure. Moves to menu screen using touch button]