NOTES

Notice :

1. When unpacking the units, check carefully for any external scratches or other damage. Also, shake the units gently and check for any abnormal sound.
2. Turn OFF the power supply to the PT before mounting or dismounting I/F Units such as a Memory unit. Correctly mount the I/F Units according to the User's Manual of the PT.
3. Do not touch the PCBs with bare hands. Discharge static electricity accumulated in your body in advance.
4. Tighten the mounting brackets evenly. Make sure the panel is not dirty or warped and that it is strong enough to hold the units.
5. Do not let metal particles enter the units when preparing the panel.
6. Double check all the wiring before turning ON the power supply.
7. Do not connect an AC power supply to the DC power supply terminals. (in case of *NT2S-SF121B-E)*.
8. Do not perform a dielectric voltage test.
9. For *NT2S-SF121B-E*, use a DC power supply with minimal fluctuation voltage.
   Rated power supply voltage : 10-30 VDC. Capacity 1.5W max.
   The *NT2S-SF122B-E* draws power from the PLC.
10. Use a twisted-pair cable of atleast 2 mm^2 to connect to the power supply terminals and always use an M3.5 crimp terminal. Make sure that the screws are properly tightened.
11. Turn OFF the supply to the *NT2S-SF121B-E/NT2S-SF122B-E* before connecting or disconnecting cables between devices.

NOTES

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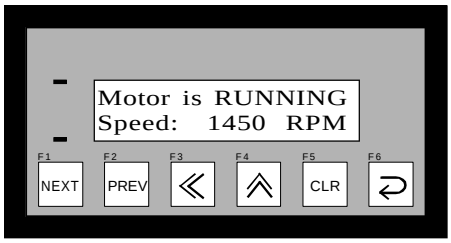
NT2S-SF121B-E
NT2S-SF122B-E
Programmable Terminal

INSTRUCTION SHEET

Thank you for purchasing this OMRON product.
Please read this Instuction sheet and thoroughly familiarize yourself with functions and characteristics of the product before use. Please retain this sheet for future.
For more information on specifications and usage, please refer to each PT & Support Tool.



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12. Always tighten the connector screws after connecting communication cables.

13. The max. pull load for cables is 30N. Do not apply loads greater than this.

14. Confirm the safety of the system before turning ON or OFF the power supply.

15. Start actual application only after sufficiently checking screen data and the operation of the program in the PC (host).

16. When using the Programming Console functions, confirm system safety and then perform the following operations :
- Changing monitor data
- Changing operation modes
- Forced setting or resetting
- Changing preset values or set values.

17. Do not press the key switch with a force greater than 30N.

18. Do not accidently press key switches when the backlight is not lit or when the display does not appear. Confirm the safety of the system before pressing key switches.

19. Set memory addresses so that the PT Control Area and PT Notification Area do not overlap.

20. When transferring data in screen data units, also transfer data associated with changes in the memory tables or direct connection.

21. Do not attempt to disassemble, repair or modify the units in any way.

22. Do not use benzene, paint thinner or other volatile solvents and do not use chemically treated cloths.

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NOTES

To define the screen specific keys :
You can define the key task, specific for the screen while editing the screen. You can click on the key to be redefined and configure the task as needed.

How are screens defined?

Screen text can be configured by using the Edit-Screen menu or by clicking on the Screen tool.

First the software will prompt you to enter the screen number to be edited or defined. If it is a new screen, then you will be asked to select the type of screen i.e. normal, special, link screen or function key.

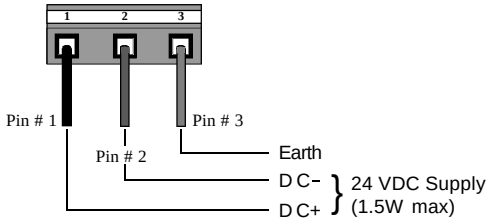
The screen definition dialogue allows you to enter in your screen in a "what you see is what you get" format. Simply type in your text. To embed any dynamically animated register variable, press the "Embed Register" button. It allows you to select the tag as well as format the embedded data. It is possible to display register values in a bar graph format. Similarly, bit sensitive text can also be entered by pressing the "Embed bit" button. The text when bit is ON as well as when the bit is OFF can be entered here.

The screen dialogue allows editing of the screen attributes. Note that a scrolling screen text can not flash. If chaining is used then the "chained to" screen must be defined.

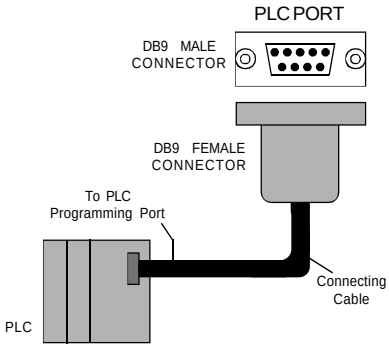
A list of screen texts called a link screen can be defined. It allows you to pick a list from the already defined screens and these screens can be viewed by pressing the NEXT or PREV keys. This mode can be simulated in the software itself. A standard Drag and Drop format can be used for this definition.

Power Supply

Power Supply for NT2S-SF121B-E : The power supply to the NT2S-SF121B-E is through the 3 pin terminal of the unit. The connections are as given below.



Power Supply for NT2S-SF122B-E : The power supply to the NT2S-SF122B-E is from the PLC. The figure below shows the connection between the PLC and the unit through a cable.



Note on RTC

(This feature is optional for *NT2S-SF122B-E*).
The RTC values are downloaded in the PLC as follows :

LED Register + 1 (Higher byte)	----	Hours	(HH)
LED Register + 1 (Lower byte)	----	Minutes	(MI)
LED Register + 2 (Higher byte)	----	Seconds	(SS)
LED Register + 2 (Lower byte)	----	Date	(DD)
LED Register + 3 (Higher byte)	----	Month	(MO)
LED Register + 3 (Lower byte)	----	Year	(YY)
LED Register + 4 (Lower byte)	----	Day of week (Sunday=1)	

The RTC can be set in the Unit as follows:

During the power-on sequence, press the F1 + F3 keys together. *NT2S-SF121B-E* will go in the RTC setting mode. You can set individual values for the RTC in a menu format. NT2S will show you the current value for each field and ask you to enter the new value for the field. This can be done just as any other data entry, using the UP, LEFT, CLR and ENT keys. You can scroll through this menu list and set all the values for RTC as needed. These values will be in effect immediately.

You can embed each field in the RTC just like any other register. The format for embedding is $$.
The tags for each RTC field are predefined in the Tag database, as soon as a new project is created.

23. Do not install the units in any of the following locations :
- Locations subject to rapid changes in temperature
- Locations subject to temperatures or humidities outside the range specified in the specification
- Locations subject to condensation as the result of high humidity
- Locations subject splashing chemicals or solvents
- Locations subject to oil splashes
- Locations subject to corrosive or flammable gases
- Locations subject to strong shock or vibration
- Locations outdoors subject to direct wind and rain
- Locations subject to strong ultraviolet light

24. Take appropriate and sufficient countermeasures when installing systems in the following locations :
- Locations subject to static elctricity or other forms of noise
- Locations subject to strong electromagnetic or magnetic fields
- Locations subject to possible exposure to radioactivity

25. The whole system may stop depending on how the power supply is turned ON or OFF. Turn ONor OFF the power supply according to the specified procedure.

26. Signals from the key switches may not be input if the switches are pressed consecutively at high speed. Confirm each input before proceeding to the next one.

27. To ensure greater safety for numeric inputs, first check for proper limits in the PLC.

Pin Connections

Following are the IBM port pin designations for NT2S models :

IBM port pin #	Designation
2	TXD (Transmit)
3	RXD (Receive)
9	Circuit GND

Following are the PLC port pin designations for NT2S-SF121B-E:

PLC port pin #	Designation
2	TX232 (Transmit RS232)
3	RXD (Receive RS232/CMOS)
4 & 5	Circuit GND
6	VCC (+5V)
7	TXD (Transmit CMOS)
8	PLC Attach
9	Direction Control

Following are the PLC port pin designations for NT2S-SF122B-E:

PLC port pin #	Designation
2	Direction Control
3	TX232 (Transmit RS232)
4	VCC (+5V)
5	Circuit GND
6	TXD (Transmit CMOS)
7, 8	RXD (Receive RS232/CMOS)

Standard cables that are available to connect to Omron PLC peripheral port are :

For NT2S-SF121B-E:	For NT2S-SF122B-E:
NT2S-CN212 (2 meter)	NT2S-CN222 (2 meter)
NT2S-CN215 (5 meter)	NT2S-CN225 (5 meter)

How is the unit panel mounted?

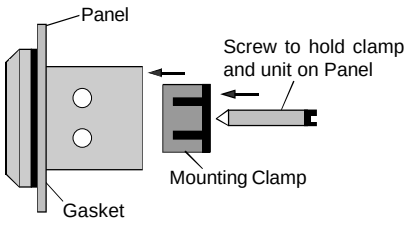


Fig. A

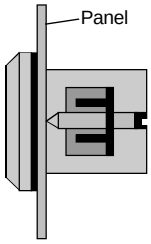


Fig. B

For any project, you must define the Tag database first. Tag is a register or coil which is used in your application. Tags can be defined by using either Edit-Tag database menu or Tag tool. A tagname can be assigned to each tag and the tag can be referred to by it's name subsequently, making it very convenient to use. Tag database can be accessed from anywhere in the software. It is advised to define all the registers/coils you will be using in your project ahead of time.

Once the Tag database is defined, assign the STR and the LED register. This can be done using Edit-Setup menu or by clicking on the PLC-*NT2S-SF121B-E/NT2S-SF122B-E* link on the Toolstation. Use a bit addressable register as the LED register so that each LED can be easily controlled.

How are function keys configured?

To define the global task for the keys :

The *NT2S-SF121B-E/NT2S-SF122B-E* has 6 keys that can be assigned user definable functions by using the pull down menu of Edit-Function keys or by clicking on the *NT2S-SF121B-E/NT2S-SF122B-E* key tool on the tool station. The dialogue shows the function keys along with the user assignable legends. Click on the key you wish to define, select the tag on which the key operates on and the action. Depending on what type of tag (bit or register) is selected, only actions that can be performed on that tag will be enabled.

DO NOT USE THE FUNCTION BUTTONS FOR EMERGENCY STOP APPLICATIONS!

It is advised that separate switches be used outside the PLC for ANY emergency stops.

How to download to the unit?

The project can be downloaded to the *NT2S-SF121B-E/NT2S-SF122B-E* by selecting the *Communicate-Download to Unit* menu or by clicking the link between the PC and *NT2S-SF121B-E/NT2S-SF121B-E* on the toolstation. Connect the PC to the unit for downloading on the serial port. Use a simple DB9 cable.

System requirements for NT2 ST

- **Processor** : 386 or higher.
- **Windows** : 3.1 or higher.
- **Screen Display** : VGA or better, Color monitor.
- **Mouse** : Optional.
- **Memory** : 2 MB or more.

The following programming sequence is suggested

- Start a new project. Select *NT2S-SF121B-E/NT2S-SF122B-E* and PLC model.
- Create the Tag database.
- Set the STR and the LED register.
- Program in screens.
- Define the function keys, if applicable to your application.
- Save your work to disk.
- Download work to Unit.

Another method is to use a special screen which allows data entry. Here, the format in which data is edited is user definable. When this special screen is triggered, the operator can enter the new data using the arrow keys and the CLR and ENT keys. Coils can also be edited this way.

How is the unit configured?

Each unit MUST be configured using the Windows based setup software provided with the unit. The software is quite easy to use and contains comprehensive online help.

Invoke the NT2 ST software that is installed on your PC.

The software can be used either from the pull down menus or by using the comprehensive Toolstation that appears on the bottom half of the Window. Each tool has balloon help associated with it to help identify the function. If the Toolstation does not appear on your screen, it can be turned on using the "Options" pull down menu.

Select NEW project by clicking on the corresponding tool.

A window will appear showing all the available products.
Select the *NT2S-SF121B-E/NT2S-SF122B-E*. The bitmap of the unit will appear on the screen.

Select your PLC from the list of available drivers. Also select the correct PLC model that you are using.

The Toolstation now will allow you to configure the *NT2S-SF121B-E/ NT2S-SF122B-E.* If any error screen indicating that "PLC driver is not found" appears, contact factory for support.

What does the unit do?

The *NT2S-SF121B-E/NT2S-SF122B-E* connects to YOUR PLC over it's programming or standard communications port. It is capable of displaying screens based on conditions in the PLC and is capable of changing data in the PLC registers/coils. It can also print screen text over the serial port.

What does the unit have?

The *NT2S-SF121B-E/NT2S-SF122B-E* has the following functional blocks:

- *NT2S-SF121B-E* - 10-30 VDC power supply
- *NT2S-SF122B-E* - Supply from the PLC
- 2 lines of 16 character backlit LCD
- 6 keys keypad
- 2 LEDs for annunciation
- 8K / 32K EEPROM memory for PLC driver and screens
- RS232C Port to connect the PLC for programming
- RS232C Port to connect the PC for programming and also for printing
- RTC (Optional for *NT2S-SF122B-E*)

How does the unit work?

The *NT2S-SF121B-E/NT2S-SF122B-E* must be configured for YOUR application. It stores the configuration details and screens in it's memory. Based on conditions in the PLC the configured screens are displayed. When a key is pressed, the configured action is taken. The unit continuously communicates with the PLC to detect conditions for displaying screens, to control the 2 LEDs on the unit and for it's internal operations.

How are screens displayed?

Each screen has a unique number. The *NT2S-SF121B-E/NT2S-SF122B-E* scans a user definable register called as Screen Triggering Register (STR) in the PLC. To display screen number "XXX", simply put the number "XXX" in this STR. Valid screen numbers are 1 to 65528.

Normal screen are used to monitor status or alarms. A screen can have register values or bit controlled text embedded in it which is dynamically updated. RTC related data can also be embedded.

Special screen are used to change data in the PLC or to turn a coil ON or OFF.

Link screen defines a list of screens that can be viewed consecutively by pressing the NEXT or PREV keys.

What are screen attributes?

A normal screen can flash or scroll on the display. Any screen can be assigned to be sent to a serial printer. A screen can be assigned to the top line, bottom line or both lines. A minimum time can be assigned to ensure that the operator has enough time to view the screen. If the PLC calls other screen in this time, they will be stored on a queue inside the unit. The maximum queue size is 3 screens.

Note: The queue can be cleared by putting the number 65535 in STR. You can likewise call a screen on priority by putting the number 65535 in STR first and then calling the desired screen number.

What do the keys do?

The keys on the *NT2S-SF121B-E/NT2S-SF122B-E* can perform user defined functions. The same keys can be used to change data or to scroll through a list of screens. The operation of keys depends on the type of screen being displayed as follows:

Type of screen	Key operations
Normal	All keys perform user defined functions as configured by the software
Special (with data entry)	Arrow keys, CLR and ENT keys are used to change data. NEXT and PREV keys act as function keys.
Link	NEXT and PREV keys are used to scroll through the list of screens. Other keys act as function keys.

For all both line screens, the keys can be redefined to perform user defined task which can be different from global key task.

How are LEDs controlled?

The *NT2S-SF121B-E/NT2S-SF122B-E* scans a user definable register called the LED register. The least significant 2 bits in this register are mapped to the LEDs. If a bit is ON, the corresponding LED is turned ON.

How can data be entered?

There are two ways to edit data using the *NT2S-SF121B-E/NT2S-SF122B-E*. One way is to use function keys. The function keys can download a constant or can increment / decrement assigned register value or can change a coil status.

NOTES

Notice :

1. When unpacking the units, check carefully for any external scratches or other damage. Also, shake the units gently and check for any abnormal sound.
2. Turn OFF the power supply to the PT before mounting or dismounting I/F Units. Correctly mount the I/F Units according to the User's Manual of the PT.
3. Do not touch the PCBs with bare hands. Discharge static electricity accumulated in your body in advance.
4. Tighten the mounting brackets evenly. Make sure the panel is not dirty or warped and that it is strong enough to hold the units.
5. Do not let metal particles enter the units when preparing the panel.
6. Double check all the connections before turning ON the power supply.
7. Do not perform a dielectric voltage test.
8. Make sure that the connector screws are properly tightened.
9. Always tighten the connector screws after connecting communication cables.
10. The max. pull load for cables is 30N. Do not apply loads greater than this.

NOTES

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NT2S-SF123B-E

Programmable Terminal

INSTRUCTION SHEET

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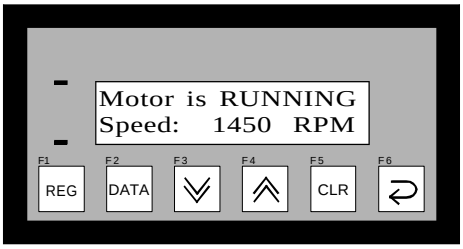

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11. Confirm the safety of the system before turning ON or OFF the supply to the unit.

12. Start actual application only after sufficiently checking screen data and the operation of the program in the PLC.

13. When using the Programming Console functions, confirm system safety and then perform the following operations :

- Changing monitor data
- Changing operation modes
- Forced setting or resetting
- Changing preset values or set values.

14. Do not press the key switch with a force greater than 30N.

15. Do not accidently press key switches when the backlight is not lit or when the display does not appear. Confirm the safety of the system before pressing key switches.

16. Do not attempt to disassemble, repair or modify the units in any way.

17. Do not use benzene, paint thinner or other volatile solvents and do not use chemically treated cloths.

18. Signals from the key switches may not be input if the switches are pressed consecutively at high speed. Confirm each input before proceeding to the next one.

19. To ensure greater safety for numeric inputs, first check for proper limits in the PLC.

NOTES

Triggering screens

As can be seen from the above examples, there are two ways to display screens with the *NT2S-SF123B-E*:

1. Keep all the message characters in the data memory (the Omron PLCs have lot of data registers which in most applications involving simple digital controls are not used anyway) and simply change the offset register to display different screens.

The user can fill the data memory using the "data display editor" menu of the PLC programming software.

2. Note that the data memory as well as the program memory can be used for embedding of data.
   Of course, a combination of the two methods can be used to optimize the memory usage.

Pin Connections

Following are the PLC port pin designations for *NT2S-SF123B-E*:

PLC port pin #	**Designation**
2, 3, 5	GND
4	VCC (+5V)
6	TXD (Transmit CMOS)
7	RXD (Receive CMOS)
1, 8, 9	NC

Standard cable that is available to connect to Omron PLC peripheral port is : NT2S-CN222 (2 meter)

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20. Do not install the units in any of the following locations :
- Locations subject to rapid changes in temperature
- Locations subject to temperatures or humidities outside the range specified in the specification
- Locations subject to condensation as the result of high humidity
- Locations subject splashing chemicals or solvents
- Locations subject to oil splashes
- Locations subject to corrosive or flammable gases
- Locations subject to strong shock or vibration
- Locations outdoors subject to direct wind and rain
- Locations subject to strong ultraviolet light

21. Take appropriate and sufficient countermeasures when installing systems in the following locations :
- Locations subject to static elctricity or other forms of noise
- Locations subject to strong electromagnetic or magnetic fields
- Locations subject to possible exposure to radioactivity

22. The whole system may stop, depending on how the power supply is turned ON or OFF. Turn ONor OFF the power supply according to the specified procedure.

General:

The *NT2S-S123B-E* is intended to be used as a low cost Operator interface for PLCs which are rich in program memory or data memory areas such as the Omron C Series PLCs.

The *NT2S-S123B-E* has the following features:

Feature	***NT2S-SF123B-E***
Display	Backlit 2X16 LCD
LEDs	2
Keys	6
ASCII screens	32 characters
Embedded variables	16

Key definitions:

Each key is mapped from work bits 201.00 to 201.05. Every time a key is pressed, the corresponding bit as shown in the table below is held on while the key is pressed. The keys also have alternate functions.

Key	***Work Bit***	***Register mode function***
F1/REG	201.00	Changes register prefix
F2/DATA	201.01	Enters data entry mode
F3/DOWN	201.02	Increments register number or data depending on mode
F4/UP	201.03	Decrements register number or data depending on mode
F5/CLR	201.04	Clears data field to 0 / Register field to first register value
F6/ENT	201.05	Accepts new data and sends to the PLC

How is the unit panel mounted?

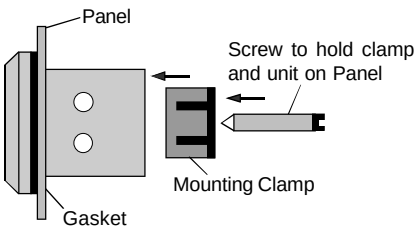


Fig. A

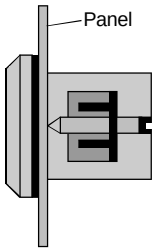
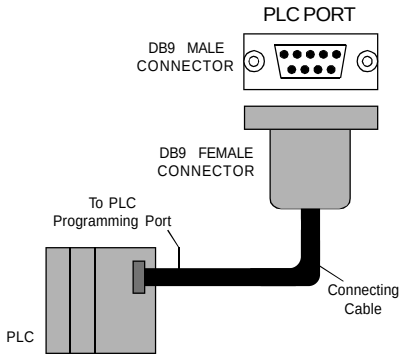


Fig. B

Power Supply

The power supply to the NT2S-SF123B-E is from the PLC. The figure below shows the connection between the PLC and the unit through a cable.



g.
Put 03032E03H in words DM0213 and DM0214. The *NT2S-SF123B-E* will read data in DM0003 and embed in xx.x format.

h.
Move "s " into DM0215. This command completes the screen by appending the "s " to bake time.

This will put the following data in the data words below:
("ø" is used for a space, i.e. 20H)

Word	ASCII	Hex	Word	ASCII	Hex
DM0200	Do	#446F	DM0208	BA	#4241
DM0201	or	#6F72	DM0209	KE	#4B45
DM0202	:ø	#3A20	DM0210	Tl	#5449
DM0203	CL	#434C	DM0211	ME	#4D45
DM0204	OS	#4F53	DM0212	:ø	#3A20
DM0205	ED	#4544	DM0213		#0303
DM0206	øø	#2020	DM0214		#2E03
DM0207	øø	#2020	DM0215	sø	#7320

Register mode:

In the register mode, the operator can access all the registers and bits in the PLC.

By pressing the REG key, the operator can scroll through the register prefixes. By using the UP / DOWN keys, the register numbers can be accessed. Data can be changed in the registers by pressing the DATA key. The data field will blink to indicate that the unit is ready to accept new data. At this time, the UP / DOWN keys can be used to edit data followed by the ENT key.

It is advisable to create a "password" screen which can block the usage of the register mode.

Bar Graph:

NT2S-SF123B-E uses DM0012 to DM0015 registers to hold bar graph values to be displayed. If Offset register points to DM0200 then put Hex value 0C0C into DM0200 onwards to display bar graph with the value in DM0012.

Example:
Put 0C0C into DM0200, DM0201, DM0202, DM0203 and 200 into DM0020. This will display bar graph 8 characters wide. Maximum length is 16 characters. Each character on display can display five vertical lines. To display full bar graph put # 80 into DM0012 and 0C0C from DM0200 to DM0207.
To display Bar Graph with value in DM0013, put 0D0D in DM0200 onwards.

Example 2: Embed a variable in the screen

Suppose the following screen needs to be displayed on the *NT2S-SF123B-E*:

```
Door:  CLOSED
BAKETIME:  13.6s
```

Suppose the bake time is available in data word DM0100 and the oven status is given by bit 001.00.

To display this screen, do the following:

a.
Move number 200 in DM0020 since the screen will be stored in DM0200 onwards.
b.
Move character string "Door:" into 2 words, i.e. DM0200 and DM0201.
c.
Move characters "OPEN" if bit 001.00 is ON or characters "CLOSED" if 001.00 is OFF.
This is a way to implement bit sensitive screens.
e.
In a similar manner, embed the characters "BAKETIME: " into 5 words from DM0208.
f.
NT2S-SF123B-E uses DM0000 to DM0011 registers for embedding data. Here we select DM0003 to be used for embedding. So, move the data of DM0100 into DM0003 so that embedding can be done.

Unit Operations:

The work bits 200.00 to 200.15 control the mode of operation of the unit.

Work Bit	***Function***
200.00	Controls LED0
200.01	Controls LED1
200.02 & 200.03	Not used
200.04 to 200.07	Reserved for future use
200.08 & 200.09	00: Screen mode 01: Register mode 10: Operator mode 11: Invalid
200.10 & 200.11	Timeout to screen mode from Operator mode 00: 10 seconds 01: 20 seconds 10: 30 seconds 11: 40 seconds
200.12 to 200.14	Reserved for future use
200.15	To disable data entry in Screen mode (ON : Disable)

From the above table, it is clear that the unit will display ASCII text (see section on **Screens** for more details on this) if 200.08 and 200.09 are OFF. To allow operators to view and edit the registers, 200.08 is to be kept ON. If 200.08 is OFF, the unit will not display any registers and the function keys will only act as push buttons mapped to the corresponding bits from 201.00. Refer to "Register Mode" for details. If 200.09 is ON, REG key press will allow an operator to view the registers. The REG key will scroll through the available register types whereas the UP and DOWN arrow keys will scroll through the register/bit numbers. After timeout specified by bits 10 and 11 and if no key is pressed, the unit will switch back to the Screen mode and display screens. Thus Operator mode is a combination of Register as well as Screen modes.

Screens

The unit displays 32 characters from the PLC memory. These characters are taken from the PLC data registers.

The unit tracks register DM0020 (the Offset register) in the PLC. The number in DM0020 gives the start address of the data register block which contains the characters to be displayed. For example, if DM0020 has number 124 in it, the unit will read 16 registers from DM0124, i.e. from DM0124 to DM0139 and display the corresponding characters.

Each register contains two bytes. Each ASCII character to be displayed is one byte. So, each word contains two characters that can be displayed. All the PLC ladder logic has to do is to put the correct words in the registers being read by the unit so that a proper screen can be displayed.

As mentioned above, the starting address of the screen data block is controlled by the Offset register, i.e DM0020. Hence, there can be two methods of changing the screen to be displayed. One is to keep the value in DM0020 constant and change the data in the screen registers by the ladder logic. Second is to keep the screen text in the data memory (by editing DM registers) and change the value in DM0020 so as to point to the correct memory address to display the desired screen.

It is possible to embed registers in the screens. The unit reads 16 registers from DM0000 to DM0015 (in which DM0012 to DM0015 are used for Bar Graph) in every scan. The data in these registers can be embedded in the screens. To do so, use hex bytes 0 to B (C to F used for Bar Graph) corresponding to register DM0000 to DM0011 respectively in the screen. Refer to the example given which explains the embedding of registers. It is possible to embed one data entry field in screens. It is similar to embedding register, only instead of 0 to F use 10 to 1F hex bytes to address DM0000 to DM0015. The registers DM0000 to DM0015 can be edited with this feature one at a time in a screen.

Example 1: Display a static screen

Suppose the following screen needs to be displayed on the *NT2S-SF123B-E*:

```
Last Rinse Cycle
Water pump is on
```

To display this screen, do the following:

a.

Move number 200 in DM0020 since the screen text will be stored in DM0200 onwards.

b.

Move character string “Last Rinse Cycle” into 8 words from DM0200.

c.

In a similar manner, the characters “Water pump is on” can be embeded into 8 words from DM0208. (i.e. from DM0208 to DM0215).

This will put the following data in data words below: ("Ø" is used for a space)

Word	ASCII	Hex	Word	ASCII	Hex
DM0200	La	#4C61	DM0208	Wa	#5761
DM0201	st	#7374	DM0209	te	#7465
DM0202	ØR	#2052	DM0210	rØ	#7220
DM0203	in	#696E	DM0211	pu	#7075
DM0204	se	#7365	DM0212	mp	#6D70
DM0205	ØC	#2043	DM0213	Øi	#2069
DM0206	yc	#7963	DM0214	sØ	#7320
DM0207	le	#6C65	DM0215	on	#6F6E