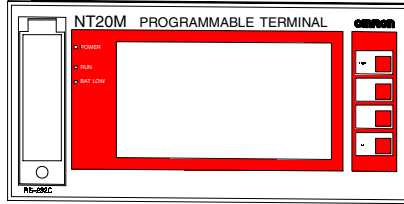
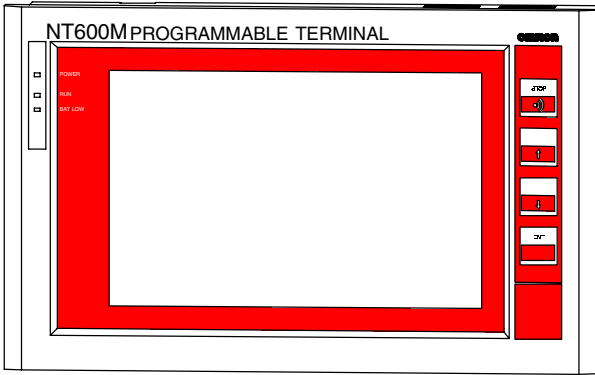


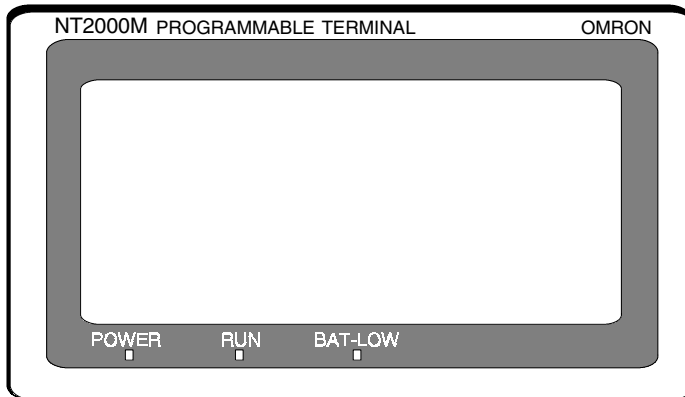
NT20S



NT20M-DT



NT600M-DT



NT2000M

## General Information

Omron's NT-series Programmable Terminals combine the latest in flat panel technology and software innovation to meet the most demanding man-machine interface requirements. Flexible configuration, multi-function software capability, and advanced hardware design make the NT-series the best choice for the widest variety of industrial applications. The NT-series Programmable Terminals provide the combined functionality of several devices, including programmable message display, alarm annunciator, operator control station, and graphics display station. These functions are all centralized in a single flexible device that offers immediate access to machinery status or production line information. The NT-series can also eliminate the need for hundreds of pushbuttons, warning lights, thumbwheel switches, message displays and digital readouts and save the cost of installing, maintaining and replacing those devices. The simplicity and accessibility of our NT-series allows you to perform data collection, process monitoring, operator control and alarm verification with certainty.

## Features

- ◆ Programming software required to configure, edit, upload, and download screens
- ◆ Plug-in communications modules allow several interface options
- ◆ Installed and wired, requires only 3.5 inches of depth to help reduce panel size
- ◆ Touch screen or function key types allow for the best application fit

### Specifications: NT20M and NT20S

<b>Display Screen</b>	Dot matrix STN LCD panel with 4.4 x 2.2 inches display area
<b>Resolution</b>	256 x 128 resolution
<b>Backlight</b>	Cold cathode tube
<b>Dimensions</b>	
NT20M-DT	164H x 220W x 82D mm (6.5 x 8.7 x 3.3 in.)
NT20M-DN NT20-FK201	110H x 220W x 82D mm (4.33 x 8.7 x 3.3 in.)
NT20S	110H x 190W x 53.3D mm (4.33 x 7.48 x 2.11 in.)
<b>Display capabilities</b>	250 screens maximum, overlapping and continuous functions (chain)

### Specifications: NT600M

<b>Display Screen</b>	Dot matrix STN LCD Panel with 8.1 x 5.1 inches display area
<b>Resolution</b>	640 x 400 resolution
<b>Backlight</b>	Cold cathode tube
<b>Dimensions</b>	
NT600M-DT	198H x 325W x 105D mm (7.8 x 12.8 x 4.1 in.)
NT600M-DF	238H x 325W x 105D mm (7.8 x 12.8 x 4.1 in.)
<b>Display capabilities</b>	1000 screens maximum, overlapping and continuous functions (chain)

### Specifications: NT2000M

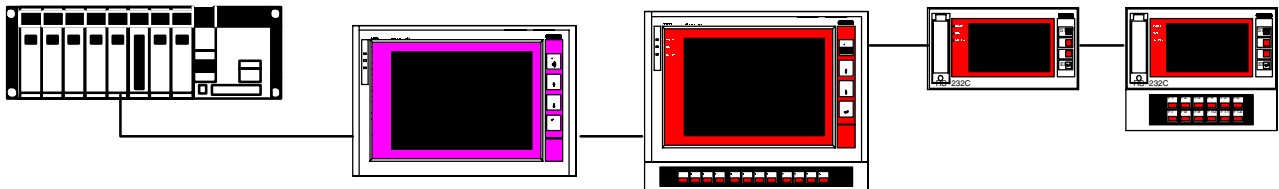
<b>Display Screen</b>	Dot matrix STN LCD Panel with bi-color red or white display, 275 x 138 mm (10.83 x 5.43 in.)
<b>Resolution</b>	256 x 128 resolution
<b>Backlight</b>	Cold cathode tube
<b>Dimensions</b>	
NT2000MT-DT131	232.5H x 365W x 77D mm (9.15 x 14.37 x 3.03 in.)
NT2000M-DN131	232.5H x 365W x 77D mm (9.15 x 14.37 x 3.03 in.)
<b>Display capabilities</b>	250 screens maximum, overlapping and continuous functions (chain)

## Communications

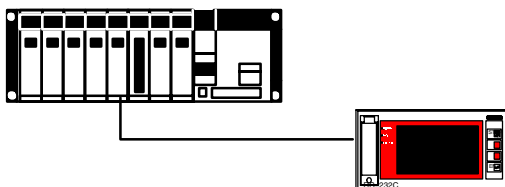
### Connecting to SYSMAC WAY Host Link (NT20S)



### Connecting to SYSMAC BUS Wired Remote I/O (NT20M, NT600M, and NT2000M)



### Connecting to C200H Backplane (NT20M, NT600M, and NT2000M)



**Programmable Terminals**

Description	Part number
<b>NT20S</b>	
Touch panel LCD – color beige	NT20S-ST121
Touch panel LCD – color black	NT20S-ST121B
<b>NT20M</b>	
Touch screen terminal, no memory	NT20M-DT121-V2
Touch screen terminal, no memory, bi-color backlight	NT20M-DT131
Non-touch screen, no memory, bi-color backlight	NT20M-DN131
Non-touch screen, no memory	NT20M-DN121-V2
12 Function key unit	NT20M-FK210
<b>NT600M</b>	
Touch screen terminal, no memory, LCD display	NT600M-DT122
Touch screen terminal, no memory, Electroluminescent display	NT600M-DT211
Function key terminal, no memory, LCD display	NT600M-DF122
Non-touch screen terminal, no memory, Electroluminescent display	NT600M-DN211
12 Function key unit for NT600M-DN211	NT600M-FK210
Card with empty socket	NT600M-MP251
Card with 64K RAM	NT600M-MR641
Card with 128K RAM	NT600M-MR151
Card with 128K RAM	NT600M-MR151
Card with 256K RAM	NT600M-MR251
System ROM for NT600M	NT600M-SMR01-E
System ROM for NT600M	NT600M-SMR02-E
<b>NT2000M</b>	
Touch screen terminal, no memory, bi-color backlight	NT2000M-DT131
Non-touch screen, no memory, bi-color backlight	NT2000M-DN131
System key unit for remote operation	NT-FK200

**Interface Modules and Accessories**

Description	Part number	Required System ROM
<b>NT20M and NT2000M</b>		
RS-232C interface module	NT600M-LK201	NT20M-SMR01-E
RS-422 interface module	NT600M-LK202	NT20M-SMR01-E
Host Link interface module	NT600M-LK201	NT20M-SMR01-E
SYSMAC BUS interface (wired)	NT600M-RT121	NT20M-SMR01-E
C200H Expansion I/O Interface	NT600M-LB121	NT20M-SMR02-E
Host Link Interface Definable Addressing	NT600M-LK201	NT20M-SMR31-E
C200H Expansion I/O Interface Definable Addressing	NT600M-LB122	NT20M-SMR32-E
Backlight unit for NT20M-DT131 and NT20M-DN131	NT20M-CFL01	
Backlight unit for NT2000M-DT131 and NT2000M-DN131	NT2000M-CFL01	
Cable for programming the terminal	CV500-CN228	
Cover for NT20M-DT	NT20M-KBA01	
Cover for NT20M-DN	NT20M-KBA02	
Non-glare sheets	NT20M-KBA03	
Oil and waterproof covers	NT20M-KBA04	
Key Sheet replacement for NT20M-DN	NT20M-CKF01	

## Interface Modules and Accessories continued

Description	Part number	Required System ROM
<b>NT600M</b>		
RS-232C/Host Link interface module	NT600M-LK201	NT-600M-SMR01-EV1
RS-422 interface module	NT600M-LK202	NT-600M-SMR01-EV1
SYSMAC BUS interface (wired)	NT600M-RT121	NT-600M-SMR01-EV1
C200H BUS interface	NT600M-LB121	NT-600M-SMR02-EV1
Host Link direct addressing	NT600M-LK201	NT-600M-SMR31-E
C200H BUS direct addressing	NT600M-LB122	NT-600M-SMR32-E
Cover for NT600M-DT	NT600M-KBA01	
Cover for NT600M-DF	NT600M-KBA02	
Non-glare sheet	NT600M-KNA03	
Oil and water proof cover	NT600M-KBA04	
Key Sheet replacement for NT600M-DF	NT600M-CKF01	
<b>Common Accessories</b>		
Expansion I/O Connecting Cable; 30 cm	C200H-CN311	
Expansion I/O Connecting Cable; 70 cm	C200H-CN711	
Expansion I/O Connecting Cable; 2 m	C200H-CN221	
Expansion I/O Connecting Cable; 5 m	C200H-CN521	
Expansion I/O Connecting Cable; 10 m	C200H-CN131	
NT Series Host Interface Unit Direct Connection Manual	V015-E1-1	
NT Series RS-232C/RS-422 Interface Unit Operation Manual	V016-E1-1	
NT20M and NT2000M Operation Manual	V001-E1-2	
NT600M Operation Manual	V002-E1-2	
Host Interface Units Operation Manual	V003-E1-3	
Support Software, 3.5 and 5.25 inch disks	NT20M-ZASAT-EV4	
Programming Cable, PT to computer (9-pin RS-232)	C200H-CN229-EU	
Programming Cable, PT to computer (25-pin RS-232)	C200H-CN220-EU	

## Memory Chips for NT20M and NT200M

Type	Memory chips	Part number
SRAM	32K 128K	RAM-22-15 RAM-13-10
EPROM	64K 128K	ROM-KD-B ROM-13-12B
EEPROM	32K	EE22-20

## Screen Data Memory Boards (required for NT600M)

Memory capacity	Type	Part number
Depends on memory chip	IC socket type	NT600M-MP251
64K	SRAM	NT600M-MR641
128K	SRAM	NT600M-MR151
256K	SRAM	NT600M-MR251