

<p>OMRON</p>
<p>NB 系列 可编程终端</p>
<p>安全上的注意事项</p>
<p>承蒙您惠购可编程终端 NB 系列，谨致谢意。</p> <p>该系列是指在 FA 生产现场表示各种信息的可编程终端（PT）。</p> <p>请在充分理解可编程终端的功能和性能等的基础上正确使用。</p> <p>有关参考手册，可以与最近的代理商联系并索取最新版的资料。</p> <p>请妥善保管说明书与参考手册，同时请向最终用户寄送此资料。</p> <p>欧姆龙株式会社</p> <p>© OMRON Corporation 2012 All Rights Reserved. 2209855-6D</p>

<p>安全上的注意事项</p>				
<p>● 警告 / 注意表示的意义</p>				
<table> <tbody><tr> <td>警告</td> <td>如果使用不正确，可能会引起人的轻伤或中度伤害，特殊情况还会引起重伤或死亡。也有可能引起物质方面重大损失。</td></tr> </tbody></table>	警告	如果使用不正确，可能会引起人的轻伤或中度伤害，特殊情况还会引起重伤或死亡。也有可能引起物质方面重大损失。		
警告	如果使用不正确，可能会引起人的轻伤或中度伤害，特殊情况还会引起重伤或死亡。也有可能引起物质方面重大损失。			
<p>● 图形符号的说明</p>				
<table> <tbody><tr> <td></td> <td> <ul style="list-style-type: none">禁止 <p>表示一般的禁止事项。</p></td></tr> <tr> <td></td> <td> <ul style="list-style-type: none">注意 <p>表示一般的注意、警告、危险事项。</p></td></tr> </tbody></table>		<ul style="list-style-type: none">禁止 <p>表示一般的禁止事项。</p>		<ul style="list-style-type: none">注意 <p>表示一般的注意、警告、危险事项。</p>
	<ul style="list-style-type: none">禁止 <p>表示一般的禁止事项。</p>			
	<ul style="list-style-type: none">注意 <p>表示一般的注意、警告、危险事项。</p>			

<p>● 警告表示</p>	
<p>警告</p>	
<p>通电时请不要拆解产品，接触产品内部。否则有触电的危险。</p>	
<p>“负责人”务必确认 NB 主体的安装、检查、维护是否正确。“负责人”是指在机械设计、安装、应用、维护、废弃各个阶段，具有可确保安全的资格、权限及责任的人员。</p>	
<p>请由充分理解所安装机械的“责任人”进行 NB 主体的安装和安装后的确认。</p>	
<p>请勿在可能危及人身安全或导致重大损失的情况下使用 NB 主体的触摸式开关等的输入功能，或将这些功能作为紧急停止开关功能使用。</p>	
<p>请勿对 NB 主体进行拆卸、修理及改造。否则可能会失去其应有的安全功能。</p>	
<p>请勿同时在 2 处以上按压 NB 主体的触摸屏。否则其中心附近的开关可能会动作。</p>	

<p>安全要点</p>

- 打开 NB 主体和外围设备的包装时，请检查产品的外观，确认没有损伤。此外，请轻轻摇动产品，确认没有异常声响。
- 请务必将 NB 主体安装在控制柜内。
- 可安装的面板厚度为 1.6～4.8mm。为确保产品的防水、防尘能力，请使用 0.5～0.6N·m 的力矩均匀紧固安装金属件。若紧固力矩超过规定值，或紧固不均匀，可能会导致前面板变形。此外，请使用没有污垢和变形、能完全确保安装强度的面板。
- 加工面板时，请注意防止金属碎屑进入装置内部。
- 请勿在 DC 电源端子上连接 AC 电源。
- 请使用电压波动小，即输入时发生 10ms 瞬间停电也能供给输出 DC 电源。
- 额定电源电压：DC24V（容许范围 DC20.4～27.6V）
- 请勿实施耐压试验。
- 使用压线范围在 12～26AWG 的双绞线，采用端子螺丝压接电缆的方式进行连接，电缆只需去除绝缘皮 6.5mm 即可。以 0.3～0.5N·m 力矩紧固端子螺丝。确保螺丝正确紧固。
- 为了防止噪声引起的误动作，请正确接地。
- 请勿赤手触摸电路板的封装部分。此外，请事先对人体的静电进行放电。

- 使用串行端口 COM1 连接器 6 号针的 DC+5V 电压时，请在确认供给设备的电流容量低于 250mA 后再使用。NB 主体的 DC+5V 电压输出为+5V±5%，最大电流 250mA。（NB3Q-TW00B 和 NB3Q-TW01B 的 COM1 无法输出电流。）
- 在剧烈震动的环境下请不要使用 USB memory。
- 使用设备连接 USB Host 连接器时，请在确认供给设备的电流容量低于 150mA 后再使用。NB 主体的 DC+5V 电压输出为+5V±5%，最大电流 150mA。
- 请在 NB 主体的电源为 OFF 状态时拆装电缆。
- 在连接通信电缆之后须始终紧固连接器螺丝。
- 连接器的拉伸负载为 30N 以下。请勿施加 30N 以上的负载。
- 在接通或关闭电源或按下复位按钮之前，先确认系统安全性。
- 根据接通/关闭电源的方法，有时整个系统会停止运行。请按照规定的步骤接通/关闭电源。

- DIP 开关设定一经变更，必须按复位按钮或重启电源。
- 为确保系统安全，请务必编入能够确认 NB 主体正常动作的程序，然后再运行系统。
- 请在充分确认画面数据、宏以及主机侧程序的动作后再开始实际使用。
- 不要用超过 30N 的力按压触摸屏。
- 请勿使用坚硬或尖锐的物体来操作或擦拭屏幕，否则会导致屏幕表面损坏。
- 若快速、连续按压触摸屏，可能会导致无法读取输入的内容。请在确认一个输入完毕后，再进行下一个输入操作。
- 背光灯熄灭或无显示时，请避免无意按压触摸屏。必须确认系统安全后，方可按压触摸屏。
- 为安全地使用数值输入功能，请务必使用上下限设定的功能。
- 初始化画面数据时，请先确认建立的画面数据已在 NB-Designer 上进行了备份。
- 变更系统菜单的密码时，在密码没有写完之前请不要按复位按钮或切断电源。密码保存失败可能会导致画面不动作。
- 当使用设备监视器时，在进行以下操作之前对系统安全情况进行确认：
 - 更改监视器数据；
 - 更改运行方式；
 - 强制设置或复位；
 - 更改当前值或设定值；
- 请勿在不适用的设备上连接 USB 连接器。
- 连接 USB memory 时请不要做以下的操作：
 - 切断 NB 本体电源；
 - 按 NB 本体的 reset 按钮；
 - 拔出 USB memory；
- 在设备上连接 USB 连接器之前，请务必检查设备的外观，确认没有损伤。市售及推荐的 USB Hub 与 NB 主体的普通规格不同。在产生噪声、静电的环境下可能无法正常工作。因此在使用 USB Hub 时，请采取充分的噪声、静电隔离措施，或者将其安装在没有噪声、静电的场所。
- 在上传/下载画面数据、系统程序时，请不要进行以下损坏画面数据、系统程序的操作：
 - 关闭 NB 主体电源；
 - 按下 NB 主体复位开关；
- 关于主机及废旧电池的处理，请遵守当地相关废弃法律法规。



- 所有含有高氯酸盐成分在 6ppb 以上的锂原电池组的产品,当出口到或运输途经美国加利福尼亚州时,下面的预防措施必须被公示。高氯酸盐材料 - 特殊处理可适用。参见 http://www.dtsc.ca.gov/hazardouswaste/perchlorate NB 系列产品内含锂原电池。当安装有该类型电池的产品出口到或运输途经美国加利福尼亚州时,请在所有的产品包装和适当的货运包装上贴上标签。
- 切勿使用汽油、稀释剂等挥发性溶剂及化学抹布等。
- 请勿将主体和在垃圾废弃物处理的一般垃圾一起废弃。废弃时，请遵照各地方的相关条例或法规。
- 客户不能自行更换 NB 主体内的背光灯。请与本公司客服中心联系。
- 由于老化，将导致触摸点的偏移。请定期进行校准。
- 前面板剥离/破损，会使防水功能丧失。当前面板有剥离/破损时，请勿继续使用。
- 密封圈因使用环境的不同会产生老化/收缩/硬化情况，需要定期进行检查、更换。
- COM1 连接器和 COM2 连接器的通信电缆不能进行互换，请对端口引脚进行确认，再实施通讯。（NB3Q-TW00B 和 NB3Q-TW01B 只有 COM1 端口。）
- 在接触到有油或者水的安装环境下，请周期性的检查 NB 主体的安装状况。

<p>使用注意</p>

- 请勿将本产品安装在以下环境中：
 - 温度变化剧烈的场所
 - 温度或湿度超出规格指定范围的场所
 - 高湿度、可能会导致结露的场所

- 具有腐蚀性或可燃性气体的场所
- 具有过度冲击性或振动性的场所
- 直接暴露于风雨环境下的场所
- 受强紫外线影响的场所
- 多粉尘的场所
- 日光直射的场所
- 油、药品等飞散的场所
- 在下列场所中安装系统时，请采取适当和充分的防范措施：
 - 具有静电或具有来自其他设备的噪声干扰的场所
 - 具有强电场、磁场的场所
 - 靠近电源的场所
 - 可能受到辐射影响的场所

<p>参考手册/支持软件</p>																																																																		
<table> <tbody><tr> <th>装置、软件</th> <th>手册名称</th> <th>手册 No.</th></tr> <tr> <td rowspan="4">NB 系列</td> <td>NB Designer 用户手册</td> <td>V106</td></tr> <tr> <td>NB 系列安装手册</td> <td>V107</td></tr> <tr> <td>NB 系列通信连接手册</td> <td>V108</td></tr> <tr> <td>NB Designer 入门手册</td> <td>V109</td></tr> <tr> <td rowspan="20">PLC</td> <td>SYSMAC CP 系列 CP1L CPU 单元操作手册</td> <td>W462</td></tr> <tr> <td>SYSMAC CP 系列 CP1H/CP1L CPU 单元编程手册</td> <td>W451</td></tr> <tr> <td>SYSMAC CP 系列 CP1H CPU 单元操作手册</td> <td>W450</td></tr> <tr> <td>SYSMAC CP 系列 CP1E CPU 单元用户手册硬件篇</td> <td>W479</td></tr> <tr> <td>SYSMAC CP 系列 CP1E CPU 单元用户手册软件篇</td> <td>W480</td></tr> <tr> <td>SYSMAC C200HX/HG/HE（-E/-ZE）安装手册</td> <td>W302</td></tr> <tr> <td>SYSMAC C200HX/HG/HE 操作手册</td> <td>W303</td></tr> <tr> <td>SYSMAC C200HX/HG/HE（-ZE）操作手册</td> <td>W322</td></tr> <tr> <td>SYSMAC CPM1A 操作手册</td> <td>W317</td></tr> <tr> <td>SYSMAC CPM2A 操作手册</td> <td>W352</td></tr> <tr> <td>SYSMAC CPM1/CPM1A/CPM2A/CPM2C/SRM1（-V2）指令参照</td> <td>W353</td></tr> <tr> <td>SYSMAC CPM2C 操作手册</td> <td>W356</td></tr> <tr> <td>SYSMAC CS 系列 CS1G/H-CPU□□操作手册</td> <td>W339</td></tr> <tr> <td>SYSMAC CS/CJ 系列 串行通信板/单元用户手册</td> <td>W336</td></tr> <tr> <td>SYSMAC CJ 系列安装手册</td> <td>W393</td></tr> <tr> <td>SYSMAC CS/CJ 系列编程手册</td> <td>W394</td></tr> <tr> <td>SYSMAC CS/CJ 系列指令参照手册</td> <td>W340</td></tr> <tr> <td>SYSMAC CS/CJ 系列编程器操作手册</td> <td>W341</td></tr> <tr> <td>SYSMAC CS/CJ 系列通信指令参照手册</td> <td>W342</td></tr> <tr> <td>SYSMAC CJ 系列 CJ2H-CPU6□（-EIP）CJ2M-CPU□□用户手册硬件篇</td> <td>W472</td></tr> <tr> <td>SYSMAC CJ 系列 CJ2H-CPU6□（-EIP）CJ2M-CPU□□用户手册软件篇</td> <td>W473</td></tr> <tr> <td>SYSMAC CS/CJ 系列 CS1W/CJ1W-ETN21（100Base-TX）以太网单元操作手册</td> <td>W420</td></tr> <tr> <td>SYSMAC CS/CJ 系列 CS1W/CJ1W-ETN21（100Base-TX）以太网单元应用手册</td> <td>W421</td></tr> <tr> <td>SYSMAC CS/CJ 系列 CS1W/CJ1W-EIP21（100Base-TX）EtherNet/IP 单元操作手册</td> <td>W465</td></tr> <tr> <td>SYSMAC CP 系列 CP1L-EL20D□-□ CP1L-EM30D□-□CP1L-EM40D□-□ CP1L-EL/EM CPU 单元操作手册</td> <td>W516</td></tr> <tr> <td>外围工具</td> <td>CX-Programmer 操作手册</td> <td>W446</td></tr> </tbody></table>	装置、软件	手册名称	手册 No.	NB 系列	NB Designer 用户手册	V106	NB 系列安装手册	V107	NB 系列通信连接手册	V108	NB Designer 入门手册	V109	PLC	SYSMAC CP 系列 CP1L CPU 单元操作手册	W462	SYSMAC CP 系列 CP1H/CP1L CPU 单元编程手册	W451	SYSMAC CP 系列 CP1H CPU 单元操作手册	W450	SYSMAC CP 系列 CP1E CPU 单元用户手册硬件篇	W479	SYSMAC CP 系列 CP1E CPU 单元用户手册软件篇	W480	SYSMAC C200HX/HG/HE（-E/-ZE）安装手册	W302	SYSMAC C200HX/HG/HE 操作手册	W303	SYSMAC C200HX/HG/HE（-ZE）操作手册	W322	SYSMAC CPM1A 操作手册	W317	SYSMAC CPM2A 操作手册	W352	SYSMAC CPM1/CPM1A/CPM2A/CPM2C/SRM1（-V2）指令参照	W353	SYSMAC CPM2C 操作手册	W356	SYSMAC CS 系列 CS1G/H-CPU□□操作手册	W339	SYSMAC CS/CJ 系列 串行通信板/单元用户手册	W336	SYSMAC CJ 系列安装手册	W393	SYSMAC CS/CJ 系列编程手册	W394	SYSMAC CS/CJ 系列指令参照手册	W340	SYSMAC CS/CJ 系列编程器操作手册	W341	SYSMAC CS/CJ 系列通信指令参照手册	W342	SYSMAC CJ 系列 CJ2H-CPU6□（-EIP）CJ2M-CPU□□用户手册硬件篇	W472	SYSMAC CJ 系列 CJ2H-CPU6□（-EIP）CJ2M-CPU□□用户手册软件篇	W473	SYSMAC CS/CJ 系列 CS1W/CJ1W-ETN21（100Base-TX）以太网单元操作手册	W420	SYSMAC CS/CJ 系列 CS1W/CJ1W-ETN21（100Base-TX）以太网单元应用手册	W421	SYSMAC CS/CJ 系列 CS1W/CJ1W-EIP21（100Base-TX）EtherNet/IP 单元操作手册	W465	SYSMAC CP 系列 CP1L-EL20D□-□ CP1L-EM30D□-□CP1L-EM40D□-□ CP1L-EL/EM CPU 单元操作手册	W516	外围工具	CX-Programmer 操作手册	W446
装置、软件	手册名称	手册 No.																																																																
NB 系列	NB Designer 用户手册	V106																																																																
	NB 系列安装手册	V107																																																																
	NB 系列通信连接手册	V108																																																																
	NB Designer 入门手册	V109																																																																
PLC	SYSMAC CP 系列 CP1L CPU 单元操作手册	W462																																																																
	SYSMAC CP 系列 CP1H/CP1L CPU 单元编程手册	W451																																																																
	SYSMAC CP 系列 CP1H CPU 单元操作手册	W450																																																																
	SYSMAC CP 系列 CP1E CPU 单元用户手册硬件篇	W479																																																																
	SYSMAC CP 系列 CP1E CPU 单元用户手册软件篇	W480																																																																
	SYSMAC C200HX/HG/HE（-E/-ZE）安装手册	W302																																																																
	SYSMAC C200HX/HG/HE 操作手册	W303																																																																
	SYSMAC C200HX/HG/HE（-ZE）操作手册	W322																																																																
	SYSMAC CPM1A 操作手册	W317																																																																
	SYSMAC CPM2A 操作手册	W352																																																																
	SYSMAC CPM1/CPM1A/CPM2A/CPM2C/SRM1（-V2）指令参照	W353																																																																
	SYSMAC CPM2C 操作手册	W356																																																																
	SYSMAC CS 系列 CS1G/H-CPU□□操作手册	W339																																																																
	SYSMAC CS/CJ 系列 串行通信板/单元用户手册	W336																																																																
	SYSMAC CJ 系列安装手册	W393																																																																
	SYSMAC CS/CJ 系列编程手册	W394																																																																
	SYSMAC CS/CJ 系列指令参照手册	W340																																																																
	SYSMAC CS/CJ 系列编程器操作手册	W341																																																																
	SYSMAC CS/CJ 系列通信指令参照手册	W342																																																																
	SYSMAC CJ 系列 CJ2H-CPU6□（-EIP）CJ2M-CPU□□用户手册硬件篇	W472																																																																
SYSMAC CJ 系列 CJ2H-CPU6□（-EIP）CJ2M-CPU□□用户手册软件篇	W473																																																																	
SYSMAC CS/CJ 系列 CS1W/CJ1W-ETN21（100Base-TX）以太网单元操作手册	W420																																																																	
SYSMAC CS/CJ 系列 CS1W/CJ1W-ETN21（100Base-TX）以太网单元应用手册	W421																																																																	
SYSMAC CS/CJ 系列 CS1W/CJ1W-EIP21（100Base-TX）EtherNet/IP 单元操作手册	W465																																																																	
SYSMAC CP 系列 CP1L-EL20D□-□ CP1L-EM30D□-□CP1L-EM40D□-□ CP1L-EL/EM CPU 单元操作手册	W516																																																																	
外围工具	CX-Programmer 操作手册	W446																																																																

<p>EC 指令的适用事项</p>

- 本产品被组装在可编程控制器系统中运行时，是符合 EMC 指令的。安装时为符合 EMC 指令，接地、线缆的选择以及其他条件，请参考本产品的使用手册。
 - 本产品为“class A”产品（工业用产品）。在民用环境下，可能产生电磁干扰。请采用恰当的方法以减少干扰。

<p>使用时的承诺事项</p>

在以下条件和环境中使用时，希望向本公司营业部人员咨询并确认规格书，同时对额定功能等要留有余地地使用以及考虑到安全措施，同时寻求即使发生故障，也能将危险控制在最小程度的安全对策。

- 用于室外、有潜在的化学污染、电气辐射以及产品样本或随机说明书中所没有记载的条件和环境中的场合时
 - 用于原子能控制、铁路、航空、车辆设备、燃烧装置、医疗器械、娱乐机械、安全机械、行政机关和特殊行业等

- 预计会对人身、财产产生很大影响的系统、机械、装置
 - 用于煤气、水管、电力等提供系统和 24 小时不间断运行系统等高信赖性的设备
 - 按照上述 a）～d）的标准，用于对安全性能要求高的场所
- * 上述内容只是适合用途条件的一部分。其它请仔细阅读本公司最新版本、综合目录、数据表等资料。

<p>如有规格变更，恕不另行通知。</p>
<p>欧姆龙自动化(中国)有限公司 技术咨询热线：4008204535</p>

欧姆龙自动化(中国)有限公司
上海市浦东新区银城中路 200 号
中银大厦 2211 室（200120）
电话：021-5037-2222
传真：021-5037-2388

欧姆龙自动化(中国)有限公司 北京分公司
北京市朝阳区光华东里 8 号院中海广场 2 号楼(中楼)1106 室（100022）
电话：010-6595-1906
传真：010-6595-1926

欧姆龙自动化(中国)有限公司 广州分公司
广州市天河北路 189 号
中国市长大厦 21 层（510075）
电话：020-8755-7798
传真：020-8755-3058



NB Series Programmable Terminals

Safety Precautions

Thank you for purchasing an OMRON Programmable Terminal (PT). To ensure safe operation, please be sure to read the safety precautions provided in this document along with all of the user manuals. Please be sure you are using the most recent versions of the user manuals. Contact your nearest OMRON representative to obtain manuals. Keep these safety precautions and all user manuals in a safe location and be sure that they are readily available to the final user of the products.

OMRON Corporation

© OMRON Corporation 2012 All Rights Reserved. 2209855-6D

Safety Precautions

Definition of Precautionary Information

Indicates a potentially hazardous situation which, if not avoided, will result in minor or moderate injury, or may result in serious injury or death. Additionally there may be significant property damage.

Symbols

	<ul style="list-style-type: none"> Prohibit <p>Indicates a general prohibition.</p>
	<ul style="list-style-type: none"> Caution <p>Indicates general cautionary, warning, or danger level information.</p>

Warning

WARNING	
Do not attempt to take the product apart and do not touch the product inside while the power is being supplied. Otherwise it may result in electric shock.	
Always ensure that the personnel in charge confirm that installation, inspection, and maintenance were properly performed for the NB Unit. "Personnel in charge" refers to individuals qualified and responsible for ensuring safety during machine design, installation, operation, maintenance, and disposal.	
Ensure that installation and post-installation checks are performed by personnel in charge who possess a thorough understanding of the machinery to be installed.	
Do not use the input functions of the touch switch, etc. of the NB Unit, in applications that involve human life, in applications that may result in serious injury, or for emergency stop switches.	
Do not attempt to disassemble, repair, or modify the NB Unit. Otherwise it may cause NB Unit to lose its safety function.	
Never press more than two points on the touch panel of the NB Unit at a time. Otherwise, it may activate a switch somewhere between the two points.	

Application Precautions

- When unpacking the NB Unit, check carefully for any external scratches or other damages. Also, shake the Unit gently and check for any abnormal sound.
- The NB Unit must be installed in a control panel.
- The mounting panel must be between 1.6 and 4.8 mm thick. Tighten the Mounting Brackets evenly to a torque of between 0.5 and 0.6 N·m to maintain water and dust resistance. If the tightening torque exceeds the specified value, or the tightening is not even, deformation of the front panel may occur. What is more, make sure the panel is not dirty or warped and that it is strong enough to hold the Units.
- Do not let metal particles enter the Units when preparing the panel.
- Do not connect an AC power supply to the DC power terminals.
- Use a DC power with a slight voltage fluctuation and that will provide a stable output even if the input is momentarily interrupted for 10 ms.
- Rated Power Supply Voltage: DC 24V (Allowable range DC 20.4~27.6V)
- Do not perform a dielectric strength test.

- Make the connection by using terminal screws crimping on a twisted-pair cable with a crimping range of 12~26AWG, and only 6.5 mm of insulation peel of the cable needs to be peeled off. Tighten the terminal screws to a torque of between 0.3 and 0.5 N·m. Make sure the screws are properly tightened.
- To prevent malfunctions caused by noise, ground the Unit correctly.
- Do not touch the packaging part of the circuit board with your bare hands. Discharge any static electricity from your body before handling the board.
- When using the No. 6 pin of the serial communication port COM1 connector for a voltage of DC+5V, make sure the supply equipment's current capacity is below 250mA before using it. The DC+5V voltage output of the NB main unit is +5V±5%, and the maximum current is 250mA. (The serial communication port COM1 of NB3Q-TW00B and NB3Q-TW01B is unable to output the current.)
- Do not use the USB memory in the environment subject to strong vibration.
- When connecting the equipment with the USB HOST connector, make sure the supply equipment's current capacity is below 150mA before using it. The DC+5V voltage output the USB HOST is +5V±5%, and the maximum current is 150mA.
- Turn OFF the power supply before connecting or disconnecting cables.
- Always keep the connector screws firmly tightened after the communication cable is connected.
- The maximum tensile load for connectors is 30 N. Do not apply loads greater than this.
- Confirm the safety of the system before turning ON or OFF the power supply, or pressing the reset button.
- The whole system may stop depending on how the power supply is turned ON or OFF. Turn ON/OFF the power supply according to the specified procedure.
- Once the DIP switch settings are changed, reset by pressing the reset button, or restart the power supply.
- To ensure the system's safety, make sure to incorporate a program that can confirm the normal functionality of the NB Unit before running the system.
- Start actual system application only after sufficiently checking screen data, macros and the operation of the program at the host side.
- Don't press a touch panel with a force greater than 30 N.
- Do not use hard or pointed objects to operate or scrub the screen, otherwise the surface of the screen may be damaged.
- Confirm the safety of the system before pressing the touch panel.
- Signals from the touch switches may not be input if the switches are pressed consecutively at high speed. Confirm that the PT has detected the input of a touch switch before pressing any other touch switch.
- Do not accidentally press the touch panel when the backlight is not lit or when the display does not appear. Make sure of the safety of the system before pressing the touch panel.
- To use numeric input functions safely, always make maximum and minimum limit settings.
- Before initializing screen data, confirm that existing data is backed up at the NB-Designer.
- When changing the password with the system menu, do not reset or turn OFF the power supply until writing is finished. Failure to save the password may cause the screen to fail to function.
- When using an equipment monitor, confirm the safety of the system before carrying out the following operations:
 - Changing monitor data
 - Changing operation mode
 - Forced setup/reset
 - Changing the current value or the set value
- Do not connect a USB connector to any device that is not applicable.
- Do not carry out the following operations when connect USB memory:
 - Turning OFF the power supply of the NB Unit
 - Press the Reset button of the NB Unit
 - Pull out the USB memory
- Before connecting a USB connector to a device, make sure that the device is out of damage.
- Commercially available and the recommended USB Hub are different from the general specifications of the NB Unit. The Unit may not function well in an environment subject to noise, static electricity. Therefore, when using a USB Hub, employ sufficient noise and static electricity insulation measures, or install it at a site free of noise or static electricity.
- While uploading or downloading screen data or system programs, do not perform the following operations may corrupt the screen data or the system program:
 - Turning OFF the power supply of the NB Unit
 - Pressing the PT's reset switch
- Dispose of the Units and batteries according to local ordinances as they apply.



- The following precaution must be displayed on all products containing lithium primary batteries with a perchlorate content of 6 ppb or higher when exporting them to or shipping them through California, USA.
- Perchlorate Material-special handling may apply. See <http://www.dtsc.ca.gov/hazardouswaste/perchlorate>
- The NB Series contains a lithium primary battery with a perchlorate content of 6 ppb or higher. When exporting a product containing the NB Series to or shipping such a product through California, USA, label all packing and shipping containers appropriately.
- Do not use benzene, paint thinner, or other volatile solvents, and do not use

- chemically treated cloths.
- Do not dispose the Units together with general waste at waste yards. When disposing them, follow the related local ordinances or rules.
- Customers may not replace the backlight lamp inside the NB Unit. Please contact OMRON's customer service center.
- Deterioration over time can cause the touch points to move. Calibrate the touch panel periodically.
- Water and oil resistance will be lost if the front sheet is torn or is peeling off. Do not use the Unit, if the front sheet is torn or is peeling off.
- The rubber packing will deteriorate, shrink, or harden depending on the operating environment. Inspect and replace the rubber packing periodically.
- The communication cables of the COM1 and COM2 connectors are not interchangeable. Confirm the pins of the ports before carrying out communications. (NB3Q-TW00B and NB3Q-TW01B only have COM1.)
- Periodically check the installation conditions in applications where the PT is subject to contact with oil or water.

Operating Environment Precautions

- Do not install the Unit in any of the following locations:
 - Locations subject to severe changes in temperature
 - Locations subject to temperatures or humidity outside the range specified in the specifications
 - Locations subject to condensation as the result of high humidity
 - 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
 - Locations subject to dust
 - Locations subject to direct sunlight
 - Locations subject to splashing oil or chemicals
- Take appropriate and sufficient countermeasures when installing systems in the following locations:
 - Locations subject to static electricity or other forms of noise
 - Locations subject to strong electric field or magnetic field
 - Locations close to power supply lines
 - Locations subject to possible exposure to radioactivity

Reference Manual /Support Software

Devices and Software	Manual	Manual No.
NB series	NB series NB Designer Operation Manual	V106
	NB series Setup Manual	V107
	NB series Host Connection Manual	V108
	NB series Startup Guide	V109
PLC	SYSMAC CP series CP1L CPU Unit Operation Manual	W462
	SYSMAC CP series CP1H/L CPU Unit Programming Manual	W451
	SYSMAC CP series CP1H CPU Unit Operation Manual	W450
	SYSMAC CP Series CP1E CPU Unit Hardware USER'S Manual	W479
	SYSMAC CP Series CP1E CPU Unit Software USER'S Manual	W480
	SYSMAC C200HX/HG/HE(-E/-ZE) Installation Guide	W302
	SYSMAC C200HX/HG/HE Operation Manual	W303
	SYSMAC C200HX/HG/HE(-ZE) Operation Manual	W322
	SYSMAC CPM1A Operation Manual	W317
	SYSMAC CPM2A Operation Manual	W352
	SYSMAC CPM1/CPM1A/CPM2A/CPM2C/SRM1 (-V2) Programming Manual	W353
	SYSMAC CPM2C Operation Manual	W356
	SYSMAC CS1 Series CS1G/H Operation Manual	W339
	SYSMAC CS/CJ Series Serial Communications Boards and Serial Communications Units Operation Manual	W336
	SYSMAC CJ Series CJ1G/H(-H) CJ1M CJ1G Operation Manual	W393
	SYSMAC CS/CJ Series Programming Manual	W394
SYSMAC CS/CJ Series INSTRUCTIONS Reference Manual	W340	
SYSMAC CS/CJ Series Programming Consoles Operation Manual	W341	
SYSMAC CS/CJ Series Communications Commands Reference Manual	W342	
SYSMAC CJ Series CJ2 CPU Unit Hardware USER'S Manual	W472	

	SYSMAC CJ Series CJ2 CPU Unit Software USER'S Manual	W473
	SYSMAC CS/CJ Series CS1W/CJ1W-ETN21 (100Base-TX) Ethernet Units Operation Manual Construction of Networks	W420
	SYSMAC CS/CJ Series CS1W/CJ1W-ETN21 (100Base-TX) Ethernet Units Operation Manual Construction of Applications	W421
	SYSMAC CS/CJ Series CS1W/CJ1W-EIP21 (100Base-TX) Ethernet/IP Units Operation Manual	W465
	SYSMAC CP Series CP1L-EL/EM CPU Unit Operation Manual	W516
External Tool	CX-Programmer Ver.9.□ Operation Manual	W446

Conformance to EC Directives

This product is EMC-compliant when assembled in complete PLC system of the PLC series which type-name shows. For earthing, selection of cable and any other conditions for EMC-compliance, please refer to the manual for installation. This is a class A product. In residential areas it may cause radio interference, in which case the user may be required to take adequate measures to reduce interference.

Conformance to KC

A 급 기기 (업무용 방송통신기자재)
이 기기는 업무용(A 급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products. Take all necessary steps to determine the suitability of the product for the systems, machines, and equipment with which it will be used. Please know and observe all prohibitions of use applicable to the products. NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM. See also Product catalog for Warranty and Limitation of Liability.

OMRON

OMRON Corporation
Industrial Automation Company
Tokyo, JAPAN
Contact: www.ia.omron.com

Regional Headquarters

OMRON EUROPE B.V. Wegalaan 67-69-2132 JD Hoofddorp The Netherlands Tel: (31)2356-81-300 Fax: (31)2356-81-388	OMRON ELECTRONICS LLC One Commerce Drive Schaumburg, IL 60173-5302 U.S.A. Tel: (1)847-843-7900 Fax: (1)847-843-7787
OMRON ASIA PACIFIC PTE. LTD. No. 438A Alexandra Road #05-05/08 (Lobby 2), Alexandra Technopark, Singapore 119967 Tel: (65)6835-3011 Fax: (65)6835-2711	OMRON (CHINA) CO.,LTD. Room 2211, Bank of China Tower, 200 Yin Cheng Zhong Road, PuDong New Area, Shanghai, 200120, China Tel: (86)21-5037-2222 Fax: (86)21-5037-2200

Note: Specifications subject to change without notice.
Printed in China