



Panel-i™ 6 Pro User Guide

To operate the Panel-i 6 Pro correctly, read this *document* carefully before using the Panel-i 6 Pro. Keep this document at hand for reference.
Please recycle the lithium-ion and nickel hydride batteries.

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Introduction

Congratulations on your purchase of the NEC Panel-i 6 Pro.¹

This Panel-i 6 Pro User's Guide describes how to prepare and use the Panel-i 6 Pro. It describes how to prepare, install, use, and remove the battery pack. It provides product specifications and important information about using the product safely. Read this manual thoroughly before using the Panel-i 6 Pro.



Follow the relevant regulations of the local government for disposal of the Panel-i 6 Pro. Contact your local government for details.

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Safety Precautions

The following precautions provide information related to the safe operation of this device. Failure to read, understand, and make use of this information could lead to physical danger and loss of data. Read the safety precautions thoroughly for safe and correct use of the Panel-i 6 Pro. Be sure that you understand these safety precautions before proceeding to the text that follows it.

The following symbols indicate the significance of a specified potential hazard.

 WARNING	WARNING indicates an imminently hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	CAUTION indicates an imminently hazardous situation which, if not avoided, may result in minor or moderate injury and property damage.

The following symbols indicate potential hazards, prohibitions, and safety precautions.

	Indicates cautions, warnings, or possible dangers.		Indicates a general prohibition.
	Misuse creates a potential fire or smoke hazard.		The device may not be used in an area of high moisture, such as in a bathroom or near a pool or spa. Corrosion and short-circuit could result.
	Misuse creates a potential explosion hazard.		Do not disassemble the device.
	Misuse creates a potential electrical shock hazard.		Pull the plug of the AC adapter from the outlet.
	Misuse creates a potential injury hazard.		Indicates information that must be remembered and used appropriately

⚠ CAUTION

Use the product within the following conditions. Using the product outside of these temperature and humidity ranges may cause the product to fail.

Item	Specification	
Temperature	Operating:	5°C - 35°C
	Non operating:	-20°C - 60°C
	Charging:	5°C - 35°C
Humidity	Operating:	35% - 85%*
	Non operating:	35% - 85%*
	Charging:	35% - 85%*
		* Non-condensing

Do not use or leave the product in an area where the temperature changes radically, such as in-car in summer, or near equipment that produces significant heat. Doing so could cause the product to become deformed or defective.



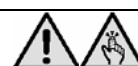
Do not place or use the product near equipment that uses wireless communication, such as cellular phones, or near equipment generating a strong magnetic field. Doing so could cause that equipment and this product to operate improperly.



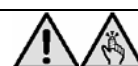
Do not allow the liquid in the LCD to come into contact with anyone or put the liquid in anyone's mouth. Physical contact with the liquid in the LCD could have severe negative effects, such as blindness. If you get the liquid in your mouth, gargle immediately. If the liquid adheres to your skin or gets into your eyes, clean the skin or eyes immediately with running water for 15 minutes or longer and contact a doctor.



Do not cause or allow physical impact to the product, such as hitting it against the wall or dropping it. Doing so could cause the product to be damaged. It could also cause injury to a person if hit by the product. In particular, use a hand belt or a shoulder belt (sold separately) for the Panel-i 6 Pro to prevent it from being dropped.



Do not use or store the product on an unstable or uneven surface. Doing so could incline the product to fall, which would damage the product and/or cause injury to people.



Do not put the product in an environment that would cause strong vibrations, such as those caused by a bicycle or other vehicle moving on a non-smooth surface. Doing so could cause the product to be damaged.






























Do not put foreign substances, including water or metals into the product during storage. Doing so could cause device failure, electric shock, or fire to occur.



Do not wipe the product with any volatile organic solvent (including thinner and benzoin), medical cloth, or chemical cloth. Do not squirt the product with insecticide. This could cause the case of the product to become deformed and discolored.



<p>Clean the screen lightly with a soft, dry, and clean cloth. Other cloth surfaces could scratch the screen. Using water, cleaner, or chemicals to clean the screen may cause the product to become defective.</p>	
<p>Wipe the outside of the infrared light communication port with a dry and clean cloth once a month. Dirt and/or dust may cause the infrared light communication port to become defective.</p>	
<p>Do not operate the product with wet hands. Doing so could cause the product to become defective.</p>	
<p>Do not put objects on the touch panel. Doing so could cause the touch panel to become defective.</p>	
<p>Do not use any instrument other than your fingers on the touch panel or the keyboard. Using a hard and sharp object such as a ballpoint pen may cause the touch panel or keyboard to become defective.</p>	
<p>If liquid leaks from the BATTERY PACK, wipe off the liquid adhering to the battery mounting part of the product. Then insert a new BATTERY PACK. Failure to do so may cause device fault, electric shock, or fire to occur.</p>	
<p>If liquid leaks from the BATTERY PACK and adheres to your skin or clothes, wash away the liquid with clean water such as running water immediately. The liquid may cause your skin to be irritated.</p>	
<p>When the product is not used for a long period, remove the BATTERY PACK for safety.</p>	
<p>Be careful not to nip your fingers when the BATTERY PACK is placed or removed.</p>	
<p>Do not replace any battery if the power is on or if the power lamp is on. Doing so could cause the product to become defective or data saved in the product to be corrupted.</p>	
<p>Do not use the BATTERY PACK if rust, foreign odor, heat generation, or other trouble occurs from the BATTERY PACK. Contact your nearest maintenance representation office.</p>	
<p>Clean connection terminals about once per month. For the cleaning, wipe them with cloth containing a drop of anti-static electronics cleaner after the power is turned off. Dirt and/or dust may cause the device to become defective.</p>	
<p>Do not install Single Docking Station EX in an area where vibrations and/or shocks are generated. Failure to follow it may cause Single Docking Station EX to become defective.</p>	
<p>Do not place the Single Docking Station EX on an unstable surface (such as a shelf). Doing so could incline the Single Docking Station EX to fall, which could damage it and/or injure people.</p>	
<p>Insert the power plug securely into an outlet. If there is some gap between the plug and the outlet, the gap may get dusty. This could then cause a fire to occur.</p>	
<p>Make sure that the power cable is not taugth to prevent the plugs and cables from being stressed or damaged.</p>	
<p>Neither pull the power and connection cables nor add excess forces to them when the Single Docking Station EX is moved to another place to be installed. Doing so could cause connected devices to operate improperly and/or some data or programs to be corrupted.</p>	

<p>Do not bend, twist or pull the power and connection cables. Doing so could cause the cables to be uncovered or disconnected, which could cause electric shock or fire. Hold the plug of a power cable when you insert or remove the plug from the outlet.</p>	
<p>Do not put heavy objects on the power or connection cables and the AC adapter nor enclose them with flammable material, such as clothing. Doing so could cause electric shock or fire to occur.</p>	
<p>Do not connect or disconnect the power cable with wet hands. Doing so could cause device fault or electric shock to occur.</p>	
<p>Do not connect the product to a non-specified voltage. Supplying power of another voltage or frequency to the power cable may cause electric shock, smoke, or fire to occur. See <i>AC Adapter Specifications</i> in this document.</p>	
<p>Do not connect the power cable to a power strip to which many power plugs are connected. This could heat power cords and the outlet and cause fire Or trip the electrical breaker.</p>	
<p>Always hold the plug to pull out the power cable from the outlet. Pulling the cord may cause it to be damaged, which could cause fire to occur.</p>	
<p>Be careful not to nip your fingers when you raise the stand at the bottom of Single Docking Station EX. Doing so could cause pain and damage to your body.</p>	
<p>To connect or disconnect the AC adapter from the product, pull out the power cable from the outlet. Failure to do so could cause electric shock to occur.</p>	
<p>The surface of the AC adapter may get hot during its use. However, this does not indicate that the AC adapter is defective.</p>	
<p>Use the authorized AC adapter (S1596-04). Using an unauthorized AC adapter may cause the product to become defective.</p>	



Notes on the BATTERY PACK, sub-battery, and calendar battery.


The BATTERY PACK contains Lithium-ion battery.

Specification of the BATTERY PACK

Product name and part number: BATTERY PACK (S1613-05 / BATI013A)

Lithium-ion battery: 7.4V, 4800mAh

Characteristics of BATTERY PACK

- While the BATTERY PACK is charged or supplies power to the Panel-i 6 Pro, the BATTERY PACK may become warm. This is due to the chemical reaction for generating electric energy in the BATTERY PACK but does not indicate that the BATTERY PACK is defective. If the BATTERY PACK seems excessively hot, contact your nearest maintenance representation office. 
- The useful duration of the BATTERY PACK varies depending on the usage environment temperature. In particular, the BATTERY PACK charge duration is shorter at a lower temperature.

Notes on use of BATTERY PACK

- The life of the BATTERY PACK is determined by the usage count and period. It is recommended to replace the BATTERY PACK about one year after its use is started. In regular use, the capacity begins to decrease after about 400 uses. Using a deteriorated BATTERY PACK continuously may cause valuable data to be lost and/or the battery to become excessively hot.
- If not using the BATTERY PACK for a month or more, remove the BATTERY PACK from either the Panel-i 6 Pro or the charger when the remaining battery charge is between 30% - 50%. Store BATTERY PACK in a cold, dark place. Because the BATTERY PACK discharges over time, if you store it for more than two or three months, charge it to 30% - 50% every two to three months². When you are ready to use it again, charge before use.
- Before using the BATTERY PACK, read this guide carefully. Contact your nearest maintenance representation office if you have any questions.

² When two of the three battery-remaining LEDs are ON, the battery charge remaining is 40% - 69%.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

In accordance with 47 CFR Part 15.407 (e) U-NII devices operating in 5.15-5.25GHz frequency bands are restricted to indoor operations only.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. S1613-01A has been tested and found to comply with FCC/IC radiation exposure limits set forth for an uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules.

The device complies with Part 15 of FCC Rules and RSS-Gen of IC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

Panel-i 6 Pro

Preparation

1. Check the items contained in the package you received. Make sure that each of the items listed in the following table is contained in the package. If one or more item are missing or damaged, contact your sales agent.

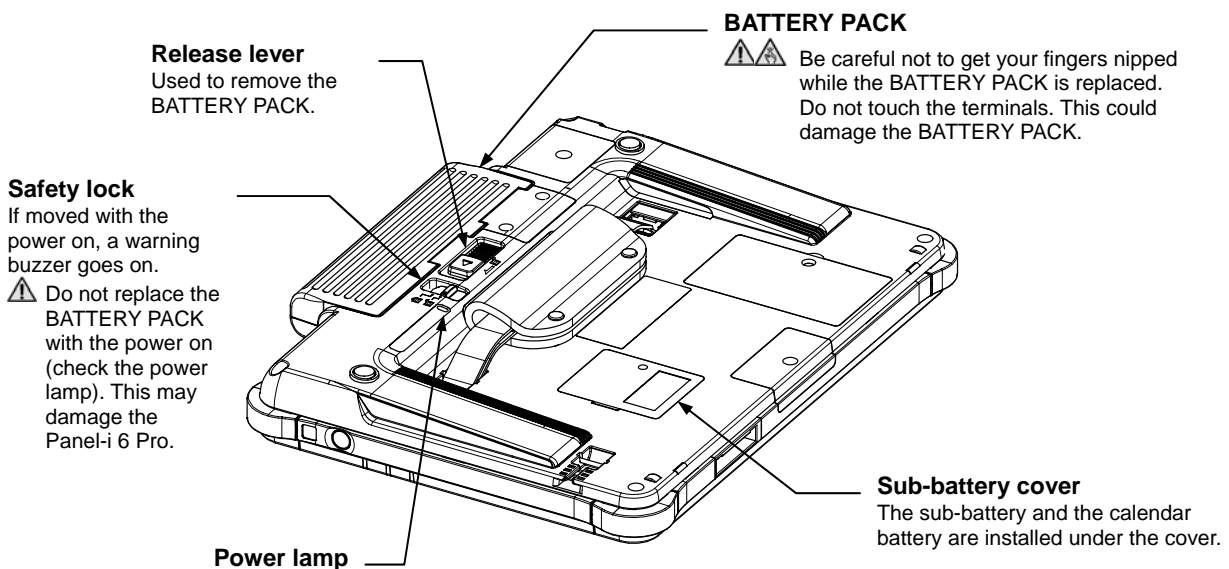
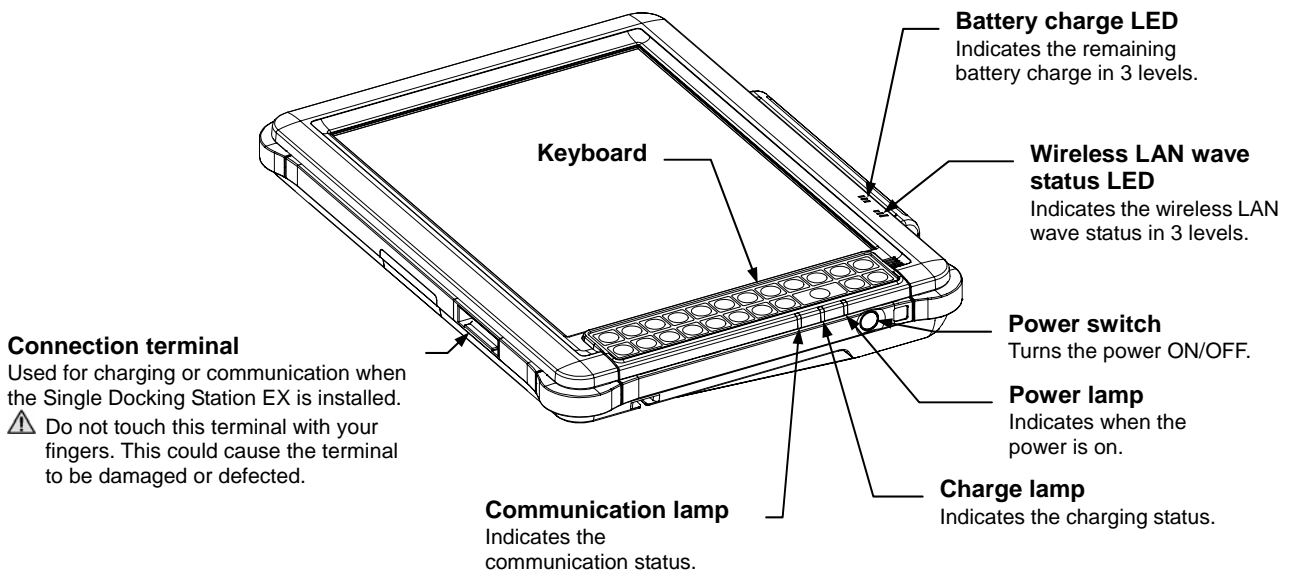
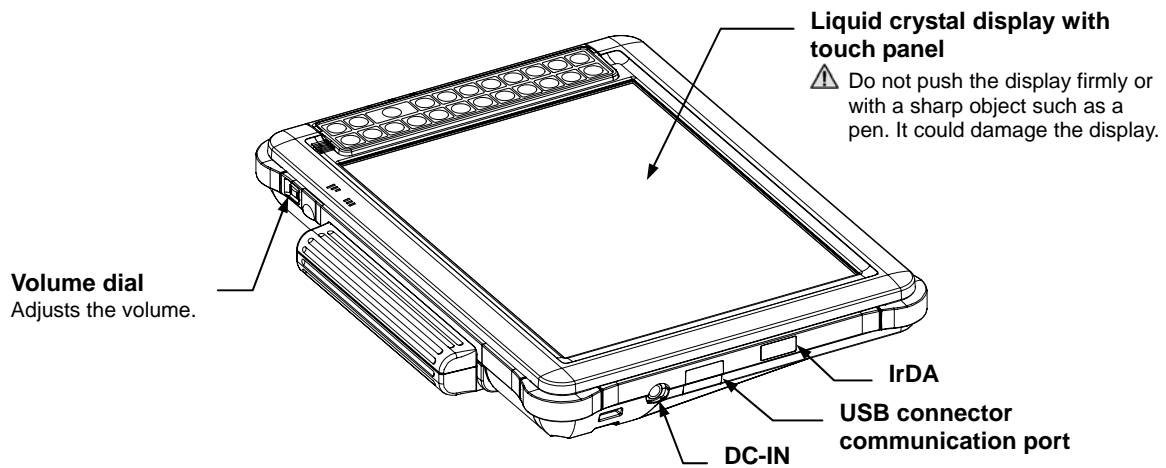
Product name	Qty	Remarks
Panel-i 6 Pro	1	
BATTERY PACK (S1613-05 / BATI013A)	1	
Sub-battery	1	
Calendar battery	1	
SHOULDER BELT	1	
User's Guide	1	This document
END USER LICENCE AGREEMENT OF MICROSOFT SOFTWARE	1	
END USER LICENCE AGREEMENT	1	

2. Before the Panel-i 6 Pro can be used, the sub-battery and the calendar battery must be installed.
See [Installing the Battery Pack](#) in this document for how to install them in the Panel-i 6 Pro.
3. Charge the BATTERY PACK, sub-battery, and calendar battery before using the Panel-i 6 Pro.

Note:

When the Panel-i 6 Pro is delivered to you, these batteries are not charged. Accordingly, you should first charge them. Without charging, the Panel-i 6 Pro may operate only for a short period or may not keep memory data if the BATTERY PACK is removed.

Panel-i 6 Pro Part Names



Panel-i 6 Pro Technical Specifications

The table below shows the specifications of the Panel-i 6 Pro.




CPU		Intel® ULV-CPU 1GHz
Memory	RAM	512MB
	Flash memory	2GB SD card (OS installation area)
Display	Display device	10.4-inch TFT LCD display
Input	Touch panel	Analog resistive film
	Operation button	Keyboard
Sound		Monaural speaker
Communication		Wireless LAN: IEEE 802.11a/b/g Cable LAN: Use of LAN in Single Docking Station EX
External interface	Interface	USB2.0 x1 IrDA1.1 x1
	Sound	Headphone outputs (stereo and mini jacks)
OS		Microsoft® Windows® XP Embedded SP2 ³
Main battery	Type, capacity and voltage	Rechargeable lithium-ion battery 4,800 mAh, 7.4V
	Drive time	About 4 hours
	Recharge time	5.0 hours
	Battery life	400 discharges/charges or 1 year from purchase, whichever is earlier
Sub-battery (backup battery)	Type, capacity and voltage	Ni-MH rechargeable battery, 40mAh, 4.8V
	Backup time	About 30 minutes (in full charge)
	Recharge time	About 40 hours
Calendar battery	Type, capacity and voltage	Mn-Li battery, 30mAh, 3.0V
	Backup time	6 months
	Recharge time	About 48 hours
Operating environment	Operating temperature/humidity	5 - 35°C (41 - 95°F) 35 - 85% (no condensation or frosting)
	Storage temperature/humidity	-20 - 60°C (4 - 140°F) 35 - 85% (no condensation or frosting)

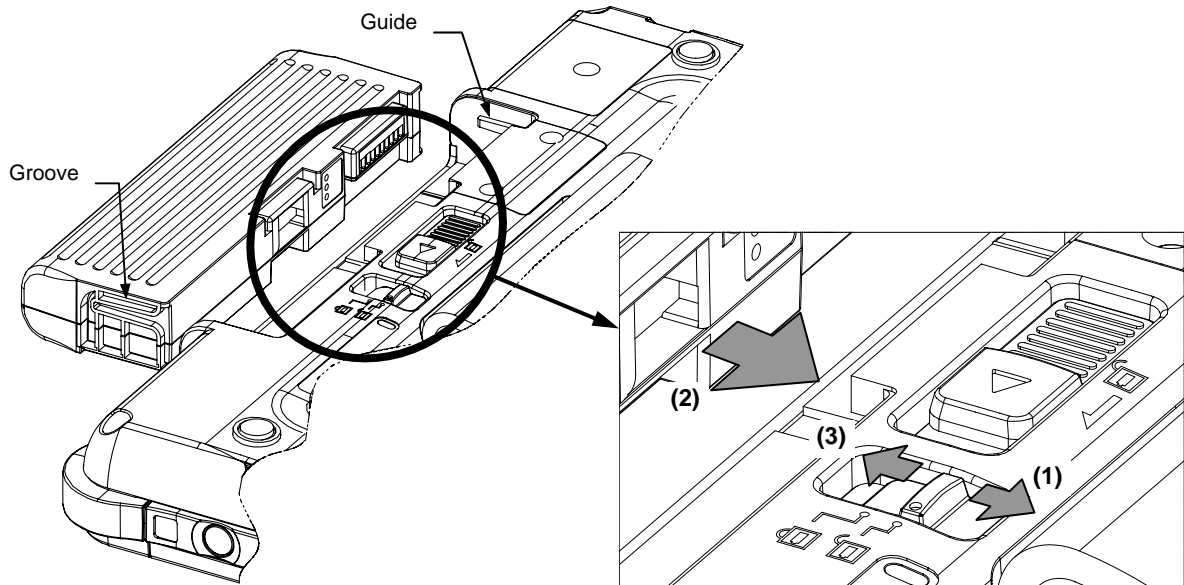
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Indicators


Item		Specification
Power lamp	OFF	Power OFF (suspend state)
	ON in green	Power ON (Remaining capacity of main battery enough)
	ON in orange	Power ON (Remaining capacity of main battery: 7% or less)
	ON in red	Power ON (Remaining capacity of main battery: 3% or less)
Charge lamp	OFF	Not charging
	ON in orange	Charging
	ON in green	Charge completed
	Blinking in orange	Charge error
Battery charge LEDs	3 LEDs ON	Remaining battery quantity: 70% - 100%
	2 LEDs ON	Remaining battery quantity: 40% - 69%
	1 LED ON	Remaining battery quantity: 8% - 39%
	No LEDs ON	Remaining battery quantity: 7% or less (power lamp being ON in orange) or 3% or less (power lamp being ON in red). The battery must be replaced.
Wireless LAN wave status LEDs	Indicates the Wireless LAN wave status with three LEDs.	
	3 LEDs ON	High wave status
	2 LEDs ON	Middle wave status
	1 LED ON	Low wave status
	No LEDs ON	Wave undetectable or no connection
Power lamp (on rear face)	OFF	Power OFF (Main battery removable)
	ON in green	Power ON (Main battery unremovable)
Communication lamp	The communication lamp status is controlled by the installed application. Contact the system administrator for details.	

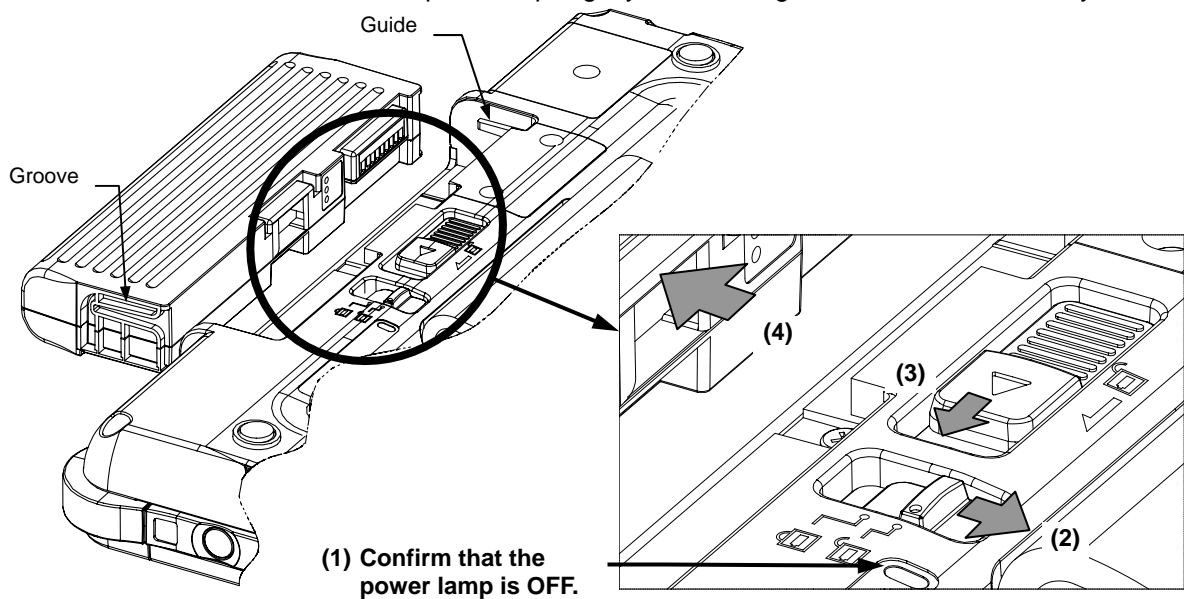
Installing the BATTERY PACK

1. Move the safety lock to the open position "  ."
 2. Align the grooves at both sides of the BATTERY PACK to the guides on the device body and push the BATTERY PACK.
 3. Put the BATTERY PACK in place and move the safety lock to the closed position "  ."
- Note: The power cannot be turned on if the safety lock is not closed "  ."



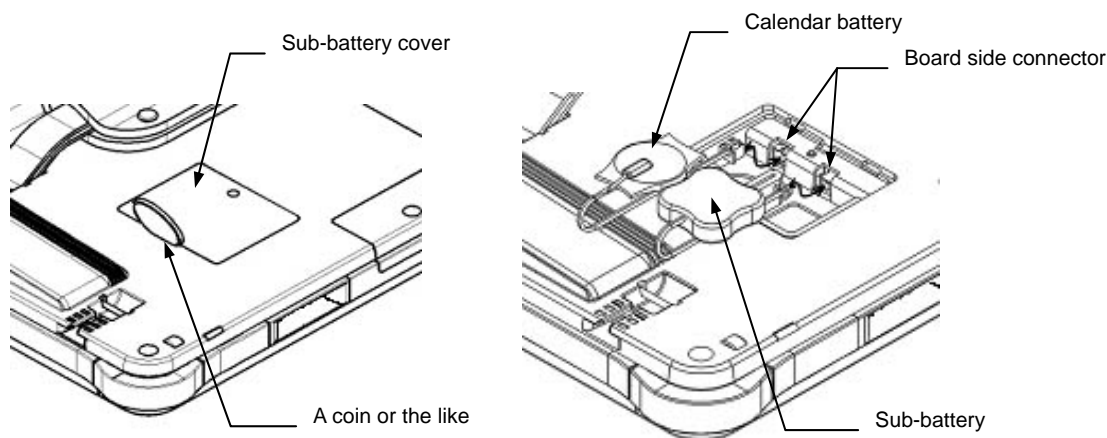
Removing the BATTERY PACK

1. Confirm that the power is turned off (the power lamp is OFF).
2. Move the safety lock to the open position "  ."
3. Slide the release lever to the left (see the arrow direction in the figure below).
4. The BATTERY PACK will be pushed up slightly. Pull it straight and remove the battery.



Placing or Removing the Sub-battery and the Calendar Battery

1. Confirm that the power is turned off (the power lamp is OFF).
2. Open the sub-battery cover on the rear side of the device by using a coin or the something of a similar size.
3. Now place or remove the sub-battery and/or the calendar battery.



⚠ CAUTION The sub-battery and the calendar battery are located side-by-side. Be careful to remove the appropriate battery.

4. Use tweezers or the like for cable disconnection. Nip the connection part and pull out the cable horizontally.

⚠ CAUTION Trying to pull out the battery cable only by holding the cable may cause the cable to be broken or the connector to be damaged. Always use tweezers or the like for cable disconnection.

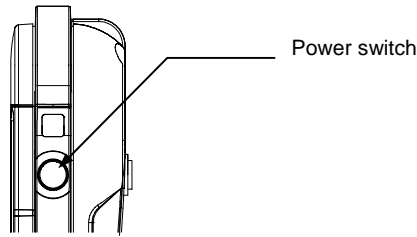
5. Connect the cable, taking note of the connector orientation. Fit in the sub-battery cover.

⚠ CAUTION Be careful not to have the battery cable nipped by the sub-battery cover.

6. If the calendar battery is replaced, reset the clock.

Using the Power Switch

- Use the power switch to turn the power on or off. A push-type switch is located at the position shown in the figure below.
- The power switch returns to the original position if you press the power switch and then release it.
- Pressing the power switch once causes the power to be turned off (suspend) if the power is ON or to be turned on if the power is OFF (resume).



- The power is forcibly turned off if you press the power switch continuously for 25 seconds or longer. In the next start, the system boots from Windows.

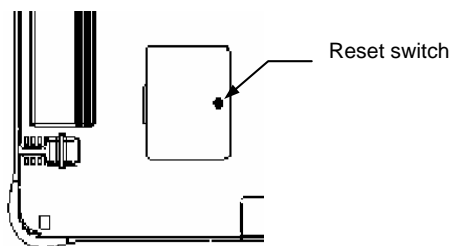
⚠ CAUTION Do not type keys on the keyboard repeatedly without reason in the period between the depression of the power switch and the operating system (OS) starting. Repeated key depressions may sometimes cause the OS to be started unsuccessfully. If the OS is started unsuccessfully, press the reset switch to restart the OS.

⚠ CAUTION It takes some time to exit from applications correctly and turn off the power (suspend) after the power switch is pressed in the power-on status. While the power lamp on the rear side of the Panel-i 6 Pro is lit, some processing is done even if the screen display disappears. Do not remove the BATTERY PACK until the power lamp goes off. Doing so could cause some data to be corrupted.

⚠ CAUTION Do not remove the BATTERY PACK if the power is ON.

Using the Reset Switch

- Use the reset switch if you need to restart the device.
- The reset switch may be pressed according to the direction of the system administrator.
- The reset switch returns to the original position if you press the reset switch and then release it. Preferably, use a bar with a round tip to press the reset switch.



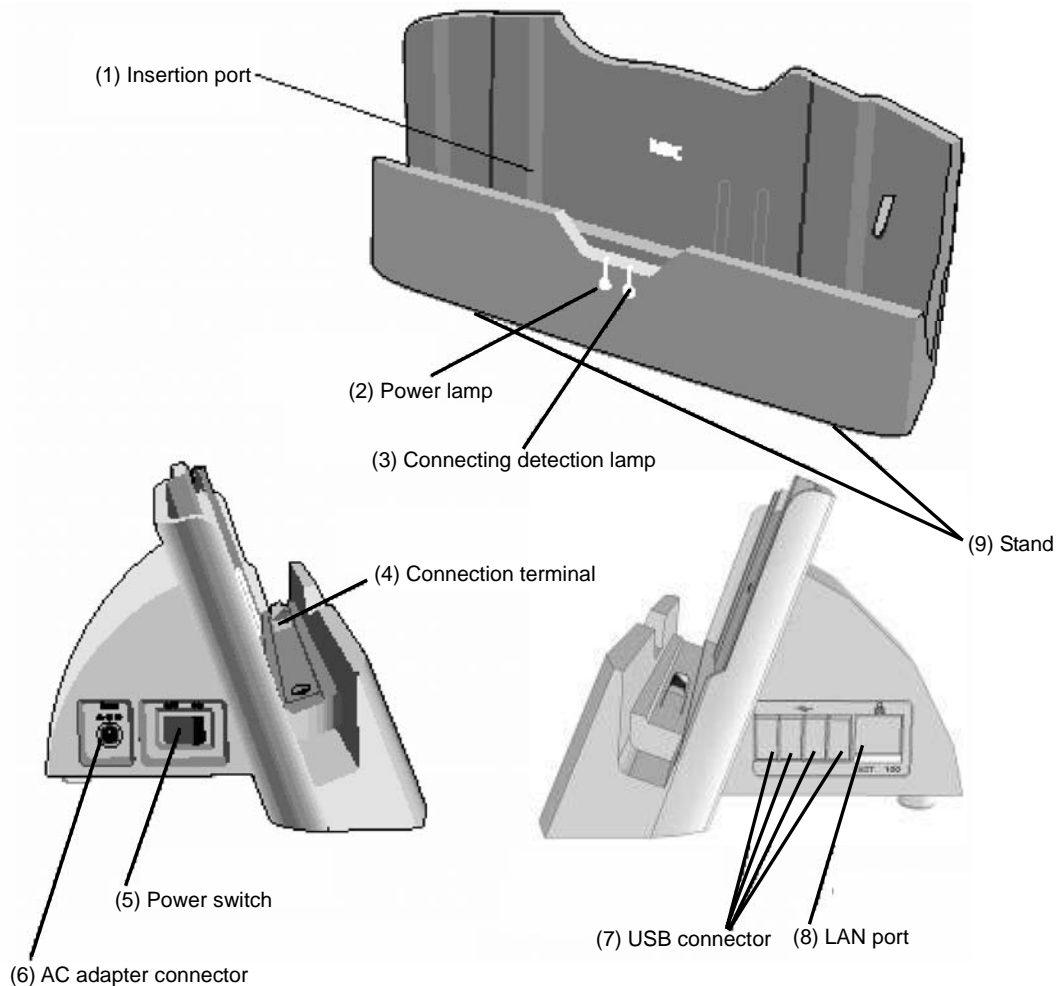
Other Notes

- If you press two points on the touch panel at a time, the value of the center of the two points is entered.

Single Docking Station EX

Single Docking Station EX Part Names

The names and functions of Single Docking Station EX parts are described below.



(1) Insertion port	Insert the Panel-i 6 Pro into the port. ⚠ CAUTION Do not insert any device other than the Panel-i 6 Pro into the port. Doing so could cause electric shock, fire, or fault to occur.
(2) Power lamp	Goes on if the power is turned on.
(3) Connecting detection lamp	Lights while the Panel-i 6 Pro is inserted in the insertion port.
(4) Connection terminal	Used for charging of or communication with the Panel-i 6 Pro.
(5) Power switch	Used to turn on or off the power of the Panel-i 6 Pro.
(6) AC adapter connector	Used to connect the Panel-i 6 Pro with the AC adapter.
(7) USB connector	Used to connect the Panel-i 6 Pro with a USB device. Put the USB connector cap on the USB connector if not used.
(8) LAN port	Used to connect the Panel-i 6 Pro with the LAN. Put the LAN port cap on the LAN port if not used.
(9) Stand	Allows the tilt of the station to be adjusted.

Single Docking Station EX Specifications

The specification of Single Docking Station EX is described below. This can be a reference for device installation.

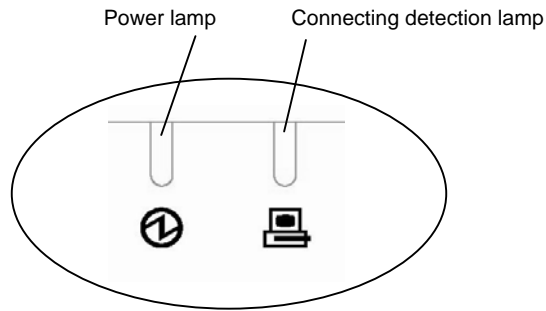
Outer dimension	288×157×130 mm in normal use (288×157×250 mm connected to the Panel-i 6 Pro)
	288×157×138 mm if used with stand (288×160×255 mm in connected to the Panel-i 6 Pro)
Weight	About 1.4 kg, excluding the AC adapter
LAN port	10BASE-T/100BASE-TX ×1
USB port	USB 2.0 ×4
Miscellaneous	The bottom stand allows the station to be tilted at two angles.

AC Adapter Specifications

The specification of the AC adapter is described below. This can be a reference for device installation.

Power supply	100 - 240VAC, 50/60Hz
Rating output	12 VDC, 3A
External dimension	99.5×49.5×25.5 mm
Weight	AC Adapter: 200g or less Power cord: 100g or less
Cord length	Power cord: About 1.8m DC cord: About 1.2m
Acquired safety standards	UL, C-UL, and CE

Lamp Indication



Power lamp status	Color	Status
ON	Green	The power of Single Docking Station EX is ON. Connecting the Panel-i 6 Pro to Single Docking Station EX allows the USB and LAN ports on Single Docking Station EX to be used. In addition, the BATTERY PACK installed in the Panel-i 6 Pro can be charged.
Blinking	Red	Any of the following states occurs: - Excess voltage is applied to the AC adapter. - Excess current is supplied to the Panel-i 6 Pro. - The power supply in Single Docking Station EX generates excess voltage or excess current.
OFF	OFF	The power of Single Docking Station EX is off.

Connecting detection lamp status	Color	Status
ON	Green	The Panel-i 6 Pro is normally connected to Single Docking Station EX.
OFF	OFF	The Panel-i 6 Pro is not connected to Single Docking Station EX or the power of Single Docking Station EX is OFF.

Charging the BATTERY PACK with Single Docking Station EX

The following describes the procedure for charging the BATTERY PACK installed in the Panel-i 6 Pro using Single Docking Station EX.

1. Connect the DC plug to the AC adapter connector.
2. Connect the power cable to the inlet of the AC adapter.
3. Ensure that the AC adapter is disconnected from the Panel-i 6 Pro.
4. Insert the power plug of the power cable to an outlet.
5. Set the power switch to ON. The power lamp on Single Docking Station EX goes on.
6. Insert the Panel-i 6 Pro in Single Docking Station EX.

The connecting detection lamp goes on to indicate that the Panel-i 6 Pro is connected to Single Docking Station EX securely. Charging is started.

The charge lamp on the Panel-i 6 Pro allows you to know the charge status.

If the connecting detection lamp does not go on, ensure that the Panel-i 6 Pro is inserted in Single Docking Station EX properly.

Before the Panel-i 6 Pro can be inserted in Single Docking Station EX, ensure that the AC adapter is disconnected from the Panel-i 6 Pro.

The Panel-i 6 Pro is available if it is charged. The Panel-i 6 Pro can be charged in the ambient temperature range between 5°C and 35°C. However, to enable the battery to bring out its performance sufficiently, it is recommended that you charge the Panel-i 6 Pro in the ambient temperature range between 18°C and 28°C.

Other Notes

- To turn on the power again after power-off, press the power switch after five seconds or longer has passed from the power-off.
- If the Panel-i 6 Pro is removed from Single Docking Station EX and then inserted again, wait for five seconds or longer from the removal to the insertion.

Notes

- (1) No part of this manual may be reproduced in any form without prior permission.
- (2) The contents of this manual are subject to change without prior notice.
- (3) We make every effort to ensure the accuracy of this manual; however, if you feel that any corrections or clarifications should be made to the contents of this manual, please contact your nearest sales representation office.
- (4) We are not responsible for any claims for losses, lost earnings, or lost or corrupted data caused by the use of the product.

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For inquiries, contact:

**NEC Corporation of America
Retail Solutions
6535 N. State Highway 161
Irving, TX 75039-2402**

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