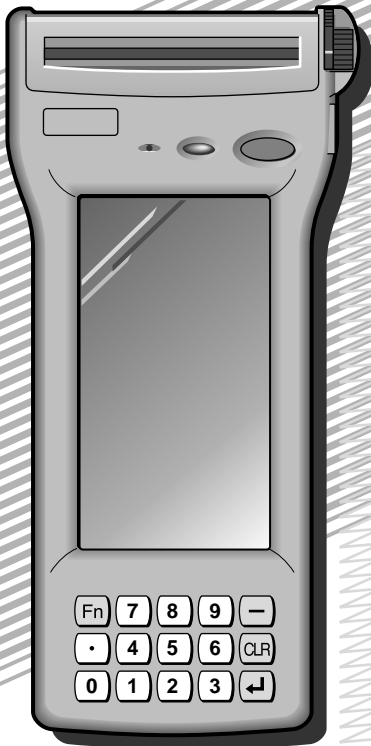


Data Collector
Colector de Datos
Datenerfassungsgerät
Collecteur de Données

IT-2000

User's Guide
Guía del usuario
Bedienungsanleitung
Mode d'emploi



- Congratulations upon your selection of the CASIO IT-2000 Data Collector.
- Be sure to familiarize yourself with the basic operations described in this manual before actually trying to operate the Data Collector.
- Enhorabuena por la selección del colector de datos IT-2000 CASIO.
- Antes de intentar utilizar este colector de datos, familiarícese con las operaciones básicas descritas en este manual.
- Mit dem Datenerfassungsgerät CASIO IT-2000 haben Sie eine gute Wahl getroffen.
- Bitte machen Sie sich mit den in diesem Handbuch beschriebenen Grundfunktionen vertraut, bevor Sie beginnen, mit dem Datenerfassungsgerät zu arbeiten.
- Nous vous remercions d'avoir choisi le Collecteur de Données Casio IT-2000.
- Veuillez vous familiariser avec les démarches de base, décrites dans ce manuel, avant d'essayer d'utiliser le Collecteur de Données.

Safety Precautions

Congratulations upon your selection of this CASIO Product. Be sure to read the following Safety Precautions before trying to use it for the first time. Keep this manual in a handy place for future reference.

Markings and Symbols

The following are the meanings of the markings and symbols used in these Safety Precautions to warn you against the possibility of personal injury and/or material damage or loss to you and others. Take a few moments to become familiar with these markings and symbols so you can avoid future problems.



Danger!

This symbol indicates information that, if ignored or applied incorrectly, creates the danger of death or serious personal injury.



Warning!

This symbol indicates information that, if ignored or applied incorrectly, can create the possibility of death or serious personal injury.



Caution!

This symbol indicates information that, if ignored or applied incorrectly, can create the possibility of personal injury or material damage.

Marking examples



A triangular shape indicates you should exercise caution. The symbol shown here indicates you should take care to avoid breakage.



A circle indicates something you should not do. This symbol indicates you should not try to take something apart.



A black circle indicates something you must do. This symbol indicates you should unplug something.

Danger!

■ **Supplied Lithium-ion Battery Pack**



- Never allow the battery pack to become wet with either fresh water or salt water. Water can create the danger of battery pack heat emission, explosion, and fire.
- Never use or leave the battery pack next to open flame, near a stove, or any other area exposed to high heat. Doing so creates the danger of battery pack heat emission, explosion, and fire.
- Never use the battery pack with any device other than the Data Collector. Doing so can create the danger of battery pack heat emission, explosion, and fire.
- Note that the battery pack's positive (+) and negative (-) terminals must be oriented correctly when it is loaded into the charger unit or the Data Collector. Connecting the battery pack with its terminals reversed creates the danger of battery pack fluid leakage, heat emission, explosion, and fire.
- Never dispose of the battery pack by incinerating it or otherwise expose it to heat. Doing so creates the danger of battery pack heat emission, explosion, and fire.
- Never allow the positive (+) and negative (-) terminals of the battery pack to become connected (shorted) by metal. Doing so creates the danger of battery pack heat emission, explosion, and fire.
- Never transport or store the battery pack together with a necklace, hair pins or other metal objects. Doing so can short battery pack terminals, creating the danger of battery pack heat emission, explosion, and fire. Be sure to place the battery pack in its case whenever transporting or storing it.
- Never throw the battery pack or otherwise subject it to strong impact. Doing so creates the danger of battery pack heat emission, explosion, and fire.
- Never pierce the battery pack with nails, hit it with a hammer, or step on it. Doing so can create the danger of battery pack heat emission, explosion, and fire.
- Never try to take apart the battery pack or modify it in any way. Doing so creates the danger of battery pack heat emission, explosion, and fire.



- Use only the specified charger unit to charge the battery pack. Use of another type of charger unit creates the danger of battery pack heat emission, explosion, and fire.

Warning!

■ **Disassembly and Modification**



- Never try to disassemble or modify the Data Collector in any way. High voltage inside creates the danger of electric shock. There are hot parts inside the printer. Do not touch these parts with your hands. Doing so can cause burns.

■ **Interior Parts and Components**



- Never touch interior high-voltage parts or components. Doing so creates the danger of electric shock.
- The printer motor and the area around the head become hot. Do not touch these parts with your hands. Doing so can cause burns.

■ **Abnormal Conditions**



- Should the Data Collector become hot or start to emit smoke or a strange odor, immediately turn off the power and contact your original dealer or an authorized a CASIO service provider. Continued use creates the danger of fire and electric shock.

■ **Foreign Objects**



- Should any foreign matter get into the Data Collector, immediately turn off the power and contact your original dealer or an authorized a CASIO service provider. Continued use creates the danger of fire and electric shock.

■ **Dropping and Damage**



- Should you drop the Data Collector and damage it, immediately turn off the power and contact your original dealer or an authorized a CASIO service provider. Continued use creates the danger of fire and electric shock.

■ **Moisture**



- Keep the Data Collector away from vases, planters, cups, glasses and other containers of liquid. Also keep it away from metal. Water and metal getting into the Data Collector creates the danger of fire and electric shock.

Warning!

■ Battery Handling



- Never try to take batteries apart, modify them, or allow their positive and negative poles to be connected (become shorted). Do not expose batteries to heat, and never throw batteries into fire.
 - When you remove the lithium-ion battery from the Data Collector, take care to keep it in a place where there is no danger of it being accidentally swallowed. Be especially careful around small children.



- Keep batteries out of the reach of small children. If a battery is accidentally swallowed, consult a physician immediately.

■ Supplied Lithium-ion Battery Pack



- Never place the battery pack in a microwave oven or any other high-voltage device. Doing so creates the danger of battery pack heat emission, explosion, and fire.
- Should the battery pack emit a strange odor or heat, change color or shape, or exhibit any other abnormal behavior, immediately stop using it. Continued use creates the danger of battery pack heat emission, explosion, and fire.



- If the battery pack does not achieve full charge after the normal charging time has passed, stop charging. Continued charging creates the danger of battery pack heat emission, explosion, and fire.
- Should the battery pack start to leak or emit a strange odor, immediately move it away from any nearby flame. Leaking battery fluid is combustible, and exposure to flame creates the danger of explosion and fire.
- Should fluid from the battery pack accidentally get into your eyes, do not rub them. Immediately rinse your eyes with clean tap water and then consult a physician immediately.

■ AC Power Supply



- Do not use the Data Collector at a voltage other than the specified voltage of 100V AC. Also, do not connect the Data Collector to a multi-plug power strip. Doing so creates the danger of fire and electric shock.
- Avoid conditions that can cause damage or breaks in the power cord. Do not place heavy objects on the power cord and keep it away from sources of heat. Any of these conditions can damage the power cord, creating the danger of fire and electric shock.
- Never modify, sharply bend, twist, or pull on the power cord. Doing so creates the danger of fire and electric shock.



- Use only the specified charger unit DT-9020ADP (sold separately). When using the I/O box, be sure to use the AC adapter DT-825ADP (sold separately). Use of another AC adapter model or charger creates the danger of fire and electric shock.
- Should the power cord become severely damaged (to the point that wires are exposed or broken), contact your original dealer or a CASIO service provider about repair or replacement. Use of a damaged electrical cord creates the danger of fire and electric shock.

Caution!

■ **Foreign Objects**



- Take care to ensure that metal or combustible objects are not inserted into the openings of the Data Collector. Such objects create the danger of fire and electric shock.

■ **Location**



- Do not locate the Data Collector on a surface that is unstable or uneven. Doing so creates the danger of the Data Collector falling, which can cause personal injury.
- Do not locate the Data Collector in an area subject to large amounts of humidity or dust. Doing so creates the danger of fire and electric shock.
- Do not leave the Data Collector for long periods in a car parked in direct sunlight.

■ **Heavy Objects**



- Never place heavy objects on top of the Data Collector. Doing so creates the danger of loss of balance and the object falling, which can cause personal injury.

■ **LCD Screen**



- Never apply strong pressure to the screen or subject it to strong impact. Doing so can crack the screen or LCD panel glass, which can cause the danger of personal injury.
- Should the LCD panel glass break, never touch the liquid inside. Doing so can cause skin inflammation.
 - Should liquid from the LCD panel accidentally get into your mouth, immediately wash your mouth with water and then consult a physician.
 - Should liquid from the LCD panel accidentally get into your eyes or onto your skin, immediately rinse for at least 15 minutes with clean tap water and then consult a physician.

■ **Printer**



- Do not touch the gears while they are turning. Doing so can cause injury.

■ **Battery Handling**



- Misuse of batteries can cause them to leak, which damages and corrodes the area around the battery, and creates the danger of fire and personal injury. Be sure to observe the following precautions.
 - When loading batteries, make sure that their positive (+) and negative (-) poles are facing the correct directions.
 - Use only battery types that are specified for the Data Collector.
- If you do not plan to use the Data Collector for a long time, protect against rundown of the lithium backup battery by loading a fully charged lithium-ion battery pack into the Data Collector. You should also load a fully charged lithium-ion battery pack into the Data Collector before using it for the first time following a long period of non-use.

Caution!

■ **Lithium-ion Battery Pack**



- Never use or leave the battery pack in an area exposed to direct sunlight, in a car parked in direct sunlight, or any other very hot area. Doing so creates the danger of heat emission and fire, as well as deterioration of battery pack performance and shortening of its service life.
- Do not use the battery pack in areas where static electricity is being generated. Doing so creates the danger of battery pack heat emission, explosion, and fire.



- Should fluid from the battery pack accidentally get onto clothing or your skin, immediately rinse it off with clean tap water. Prolonged contact with battery pack fluid can cause skin irritation.
- Keep the battery pack out of the reach of small children. Do not let small children remove the battery pack from the charger unit or the Data Collector while it is powered on.

■ **Backup Copies of All Important Data**



- Note that CASIO Computer Co., Ltd. shall not be held liable to you or any third party for any damages or loss caused by deletion or corruption of data due to use of the Data Collector, malfunction or repair of the Data Collector or its peripherals, or due to batteries going dead.
- The Data Collector employs electronic memory to store data, which means that memory contents can be corrupted or deleted if power is interrupted due to batteries going dead or incorrect battery replacement procedures. Data cannot be recovered once it is lost or corrupted. Be sure to make backup copies of all important data. One way to do this is to use the separately sold I/O box to transfer data to a computer.

■ **AC Power Supply**



- Keep the power cord away from stoves and other sources of extreme heat. Heat can melt the covering of the power cord and create the danger of fire and electric shock.
- Never pull on the power cord when unplugging it. Doing so can damage the cord and create the danger of fire and electric shock. (Always hold onto the plug when unplugging it from the wall outlet.)
- Never touch the plug while your hands are wet. Doing so can create the danger of electric shock.



- Be sure to unplug the power cord from the wall outlet before moving the Data Collector. Failure to do so can result in damage to the power cord caused by pulling it, which creates the danger of fire and electric shock.
- Be sure to unplug the power cord from the wall outlet before cleaning the Data Collector.
- Be sure to turn the power OFF and unplug the power cord after use.
- Unplug the power cord from the wall outlet whenever leaving the Data Collector unattended for long periods.

GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THIS UNIT IN THE U.S.A. (not applicable to other areas).

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.

FCC WARNING

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

Proper connectors must be used for connection to host computer and/or peripherals in order to meet FCC emission limits.

Peripherals and Connectors

Desktop computer	
Optical Communication Unit	(IT-2060IOE)
Lithium ion Battery Pack	(DT-9023LI)
Charger	(DT-9020ADP-U)
AC adapter for Optical Communication Unit	(DT-825ADP-U)
PC Card	(DT-9031BFMC, DT-9033BFMC, DT-9034BFMC)
Bar-code reader	(DT-9650BCR)
Connectors	(DT-883RSC, DT-882RSC, DT-887AX, DT-881RSC, DT-888RSC)

Declaration of Conformity

Model Number:	IT-2000D33E, IT-2000D53E, IT-2060IOE and DT-825ADP-U
Trade name:	CASIO COMPUTER CO., LTD.
Responsible party:	CASIO MANUFACTURING CORPORATION
Address:	181 Metro Drive, Suite 400. San Jose, California 95110
Telephone number:	1-888-93-CASIO

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

- Information in this manual is subject to change without notice.
- CASIO shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book.
- This manual does not provide information about programming and downloading. See other manuals coming with IT-2000 for information about these subjects.
- All efforts were made to create this manual as complete and as accurate as possible but in case our in user find unclear explanation or errors, we would appreciate remarks and suggestions communicated by users.



CONTENTS

Safety Precautions	E-3
Introduction	E-12
Precautions	E-12
IT-2000 Series System Configuration	E-14
General Guide	E-17
Installing and Removing Batteries	E-19
Main power supply	E-19
Backup batteries	E-21
Position of the Keys	E-23
Position of stroke keys	E-23
Touch key panel	E-24
System Initialization Routine	E-25
Charging the Battery Pack	E-26
To charge the battery pack	E-26
To charge battery packs using the Charger	E-27
Attaching the Neck Strap	E-28
Data Communication	E-29
Exchanging Data Between Two Data Collectors	E-29
Exchanging Data with a Personal Computer	E-29
Handling the Printer	E-30
Using Roll Paper	E-30
Using Paper Tape	E-34



CASIO ELECTRONICS CO., LTD.
Unit 6, 1000 North Circular Road
London NW2 7JD, U.K.

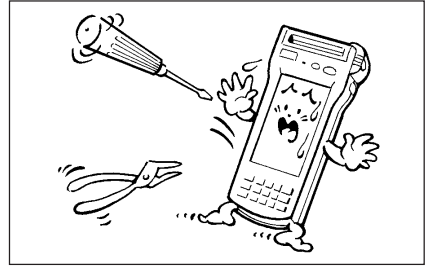
IT-2000's Specifications	E-37
IT-2060IOE Optional Optical Communication Unit	E-38
General Guide	E-38
Connecting the Optical Communication Unit to a Power Source	E-40
Daisy Chaining Optical Communication Units	E-42
DIP Switch Settings	E-43
IT-2060IOE Optical Communication Unit Specifications	E-44
Handling Bar-Code Reader	E-45
Connecting the bar-code reader	E-45
Detaching bar-code reader	E-45
Using a bar-code reader	E-45
Bar-Code Reader Specifications	E-49
Using PC Cards	E-50
To load a memory card into the Data Collector	E-50
To remove a card from the Data Collector	E-51
Attaching the Screen Protective Cover	E-52
Drip-Proof Cover	E-53
Operating Precautions	E-54
Notice	E-55

Introduction

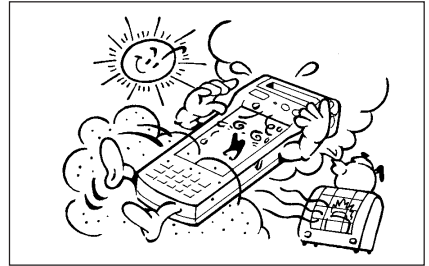
In order to maintain and use the Data Collector, keep in mind these precautions.

Precautions

- This product is made of precision parts so do not try to disassemble by yourself.



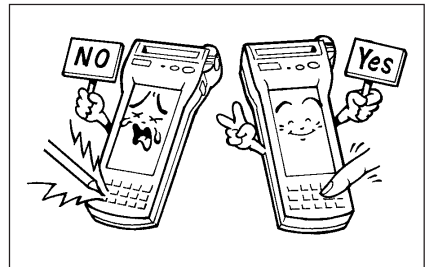
- Do not expose the Data Collector to excessive heat or cold. Do not place it direct sunlight, dusty or extremely humid areas. The utilization of the power supply in moisture places is forbidden. Do not leave the Data Collector on hot places, such as car trunk or seats.



- Do not expose it to mechanical shocks, especially during running programs, recording or booting up because it can cause permanent loss of data and damage to the LCD.



- Stroke keys must be pressed with care. Use only the special touch panel pen for working with the touch panel. Do not apply excessive force or use sharp objects for this purpose because in that way you can damage the touch panel or internal circuitry.



- Blow off dust with a blower brush or a soft cloth.
No utilization of liquid- or spray-cleansing agents is allowed. It may deform the keys or the body of the Data Collector. The Data Collector must not come in contact with chemicals and gasoline.

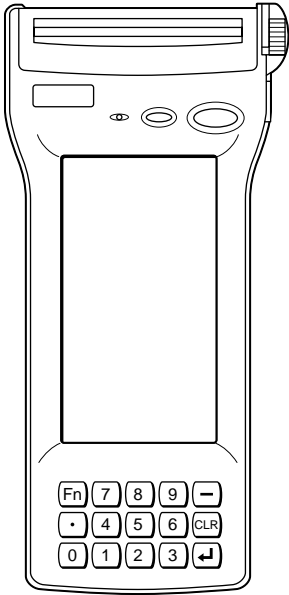


- Do not place heavy objects on the Data Collector.



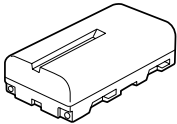
Important! CASIO does not accept any responsibility for possible data loss caused during, or connected with, usage of the Data Collector.

IT-2000 Series System Configuration



Accessories

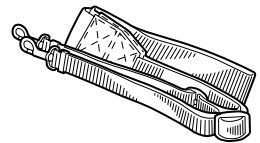
- Lithium ion Battery Pack



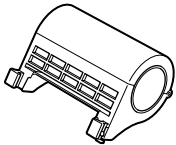
- Backup Lithium Battery



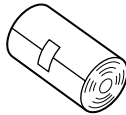
- Neck Strap



- Paper holder

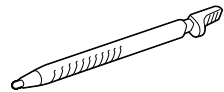


- Paper roll



- Stylus

Placed to the right side of the Data Collector

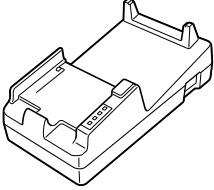


- Manual

Options

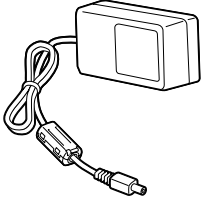
Optical Communication Unit

IT-2060IOE



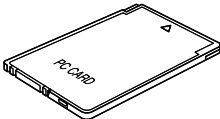
AC adaptor for Optical Communication Unit

**DT-825ADP-G
DT-825ADP-U**



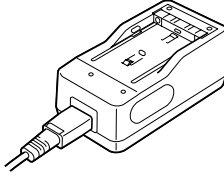
PC Cards

DT-9031BFMC
(FROM 4MB)
DT-9033BFMC
(FROM 10MB)
DT-9034BFMC
(FROM 20MB)

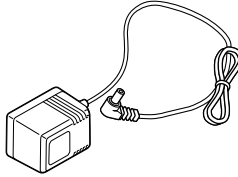


Charger

DT-9021CHGEU

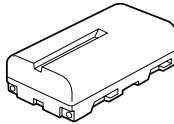


**DT-9020ADP-G
DT-9020ADP-U**



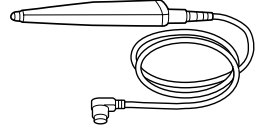
Lithium ion Battery Pack

DT-9023LI

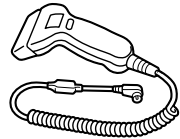


Bar-code reader

DT-9650BCR



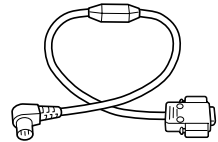
DT-9656BCR



Cable

DT-9689AX

(between Data Collector and personal computer)



DT-881RSC
(modem-used)

DT-882RSC

(cross connection, male)

DT-883RSC

(cross connection, female)

DT-887AX

(AX-used, cross connection)

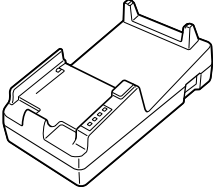
DT-888RSC

(Optical Communication Unit-used)

Available Options for the IT-2000 Series American Market Models

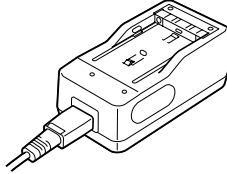
**Optical
Communication Unit**

IT-2060IOE



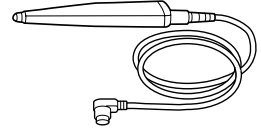
Charger

DT-9021CHGEU



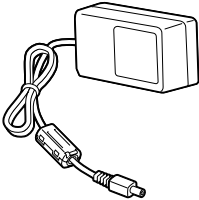
Bar-code reader

DT-9650BCR

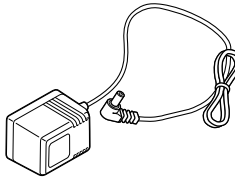


**AC adaptor for Optical
Communication Unit**

DT-825ADP-U



DT-9020ADP-U



Cable

DT-881RSC
(modem-used)

DT-882RSC

(cross connection, male)

DT-883RSC

(cross connection, female)

DT-887AX

(AX-used, cross connection)

DT-888RSC

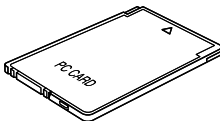
(Optical Communication
Unit-used)

PC Cards

DT-9031BFMC
(FROM 4MB)

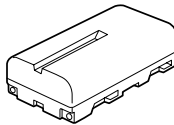
DT-9033BFMC
(FROM 10MB)

DT-9034BFMC
(FROM 20MB)

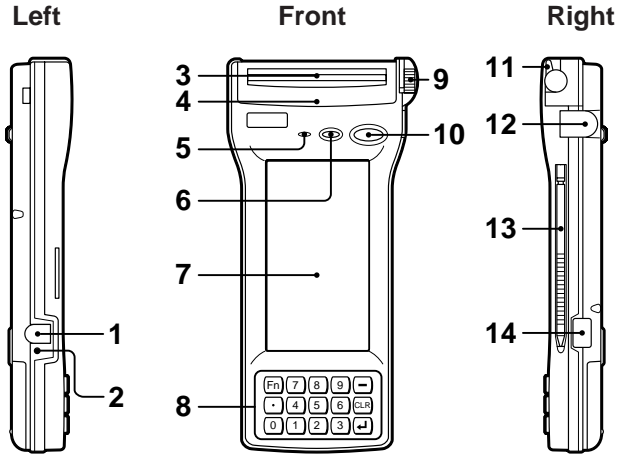


Lithium ion Battery Pack

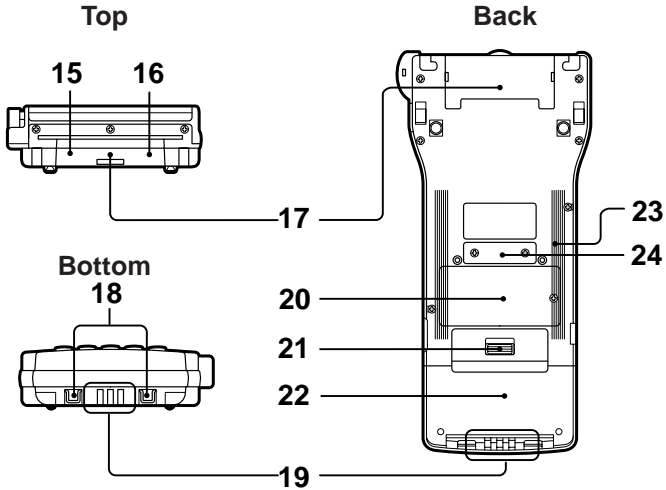
DT-9023LI



General Guide



1	Lithium ion battery pack charger connector	For connection of the charger to charge the lithium ion battery pack. Protected by a cover that must be opened for connection.
2	Charge indicator	Stays lit while the lithium-ion battery pack is being charged, and goes out after charging is complete. Lights momentarily when the charger is connected even when the battery pack is charged.
3	Paper cutter	Cuts the printed paper roll.
4	Printer cover	Remove this cover to remove paper when a paper jam occurs.
5	Buzzer	Emits audible signals to confirm certain operations. Make sure that buzzer holes are not blocked so that signals can be heard.
6	Light sensor	Detects available light. This sensor switches the backlight on (when dark) and off (when bright). For proper operation, make sure that this sensor is not blocked.
7	LCD/Touch panel	Display data during program execution or debugging. Also provides touch panel keys for input by touching the screen with a finger or the stylus pen that comes with the Data Collector.
8	Key pad	15 keys including 10-key pad and execute key.
9	Feeding dial	Used when installing roll paper or feeding paper manually.
10	Power switch	Press to turn power on and off, or to restore power after auto power off operation.
11	Head-up lever	Lift this lever up when installing or replacing a paper roll.
12	RS-232C interface connector	For connection of a bar code reader or other external device. Protected by a cover that must be opened for connection.
13	Stylus pen	For touch panel operations.
14	Infrared interface	Communication port for data exchange between two Data Collectors or with the I/O box.



15	PC card lock button (inside PC card slot cover)	Locks optional PC card in place. Make sure that this button is in the LOCK position when using a PC card.
16	PC card eject button (inside PC card slot cover)	Press this button (after opening the PC card slot cover and setting the PC card lock button to FREE) to eject a PC card installed in the Data Collector.
17	PC card slot cover	Insert the optional PC card here when installing. Open when inserting a PC card.
18	Neck strap bars	For connection of the neck strap.
19	Charger terminals	These terminals mate with the I/O box to receive electrical power for charging the lithium-ion battery pack.
20	Backup battery compartment	Houses the lithium-ion battery used for memory backup.
21	Open button	Slide to open the battery pack cover.
22	Lithium-ion battery pack compartment connector	Houses the lithium-ion battery pack that is the Data Collector's main power supply.
23	Initialize button	Use a paper clip or other thin, pointed object to press this button to launch the Data Collector's system initialization routine.
24	14-pin serial interface connector	For connection of future expansion options.

Note! Pressing the Initialize button clears all data and programs from memory. Never press the Initialize switch unless absolutely necessary.

■ Installing and Removing Batteries

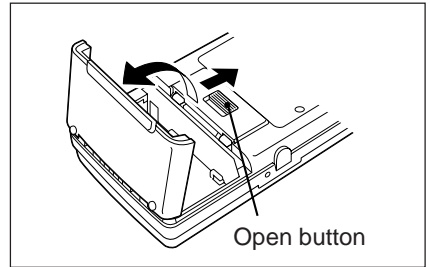
Your Data Collector is powered by a rechargeable lithium ion battery pack and a lithium backup battery.

Main power supply

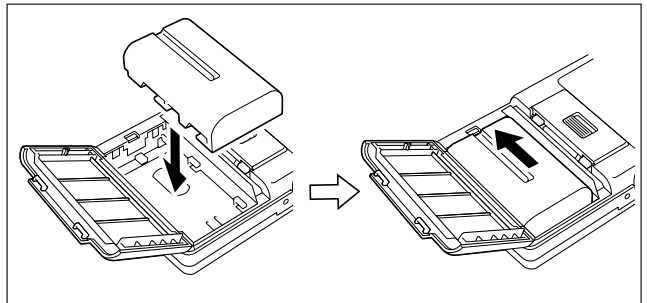
See page E-26 for details on how to recharge the battery pack.

To install the battery pack

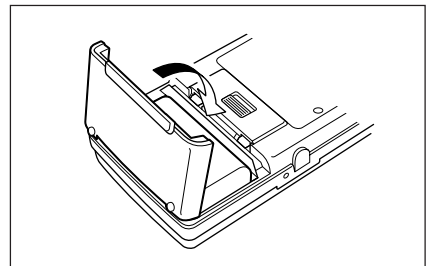
- 1 Slide the battery pack compartment open button in the direction indicated by the arrow in the illustration, and open the cover.



- 2 With the indentation of the battery pack facing up (so you can see it), install the battery pack into the compartment as shown in the illustration. Make sure that the battery pack's terminals are facing in the correct direction. Next, slide the battery pack in the direction shown in the illustration so that it locks into place.



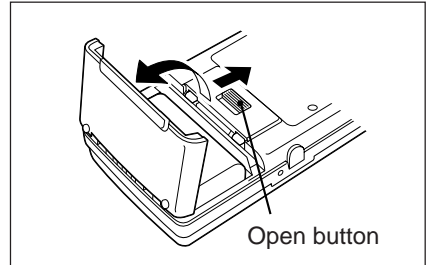
- 3 Close the battery pack compartment cover. Close the cover and then slide the open button in the direction indicated by the arrow to secure the cover in place. Note that the battery pack will not supply power correctly unless the battery pack compartment cover is closed securely. Double check to make sure that the cover of your unit is closed correctly.



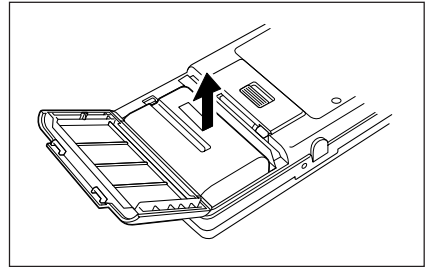
To remove the battery pack

Always make sure that Data Collector power is turned off before removing the battery pack. Also, never remove the backup batteries while the battery pack is removed. Doing so will cause all memory contents to be deleted.

- 1 Slide the battery pack compartment open button in the direction indicated by the arrow in the illustration, and open the cover.



- 2 Slide the battery pack in the direction shown in the illustration and then remove it.



- Important!**
- The power of the battery pack is depleted by testing prior to shipment and by natural discharging during shipping and storage. Be sure to use the procedures on page E-26 to charge the battery pack before using the unit for the first time.
 - Charge the battery pack as soon as possible when the buzzer sounds intermittently to notify you that battery power has dropped.
 - Always make sure that the Data Collector is turned off before opening the lithium ion battery pack compartment cover. When the battery pack compartment cover is opened, an alarm tone sounds. This is to prevent the battery pack from being removed while the power is ON. This can cause loss of memory data and system malfunction when power is turned back on.
 - Make sure that the battery pack never becomes shorted. A short can cause damage to the battery pack.
 - Repeated charges cause deterioration of the battery pack. If you find that your battery pack does not provide enough operation even after you bring it to a full charge, it probably means it is time to replace it.
 - If you do not plan to use the Data Collector for a long time, protect against running down the power of the backup batteries by fully charging the battery pack.

Backup batteries

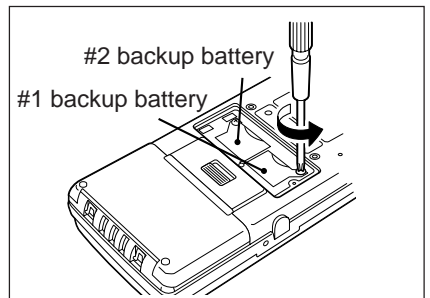
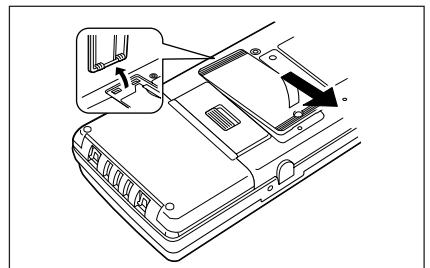
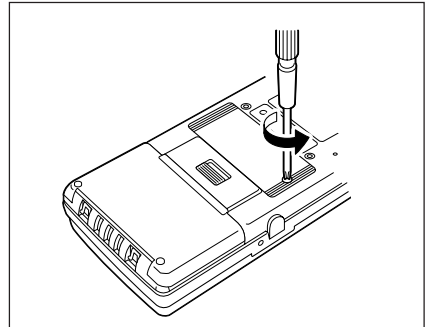
The backup batteries protect the units memory contents whenever power from the main battery pack is interrupted due to replacement of the battery pack, when the battery pack is dead, etc.

Two lithium batteries are used for backup. The #2 backup battery is installed in the Data Collector prior to shipment, but you must install the #1 backup battery that comes with the Data Collector before using it for the first time.

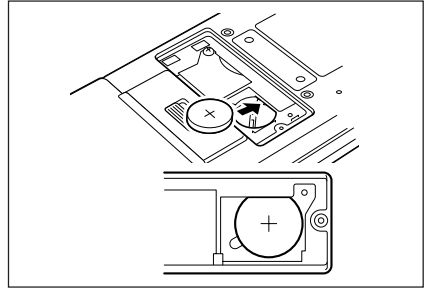
Important! Dual backup batteries are employed in order to protect the #1 backup battery from going dead. Note that memory contents cannot be protected by the #2 backup battery alone.

To install the #1 backup battery

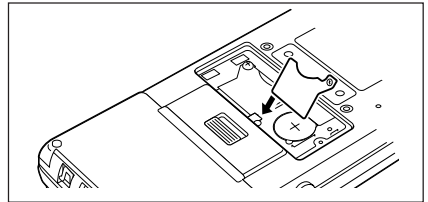
- 1** Loosen the screw that secures the backup battery compartment cover in place. The cover is designed so the screws cannot be removed from the holes in order to protect against particles falling out of the screw threads into the battery compartment.
- 2** Lift up the side of the cover indicated in the illustration, and then slide the cover in the direction indicated by the arrow. Make sure you do not damage the tab on end of the cover.
- 3** Loosen the screw that holds the #1 backup battery holder in place, and remove the holder. The cover is designed so the screws cannot be removed from the holes in order to protect against particles falling out of the screw threads into the battery compartment.



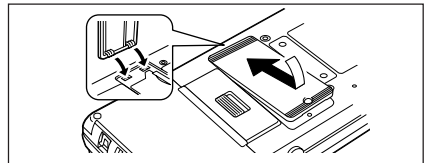
- 4** Wipe the surface of the lithium battery you will install with a soft, dry cloth. Load the battery into the Data Collector so that its positive (+) side faces up (so you can see it).



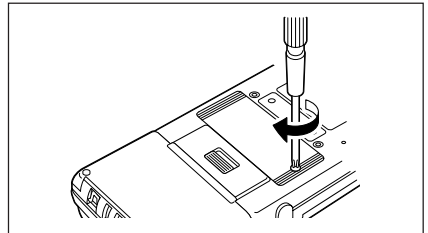
- 5** Insert the tabs of the backup battery holder into the slots provided, and secure it in place with its screw.



- 6** Carefully replace the backup battery compartment cover. Insert the tab of the cover into the slot provided.



- 7** Secure the cover in place with its screw.

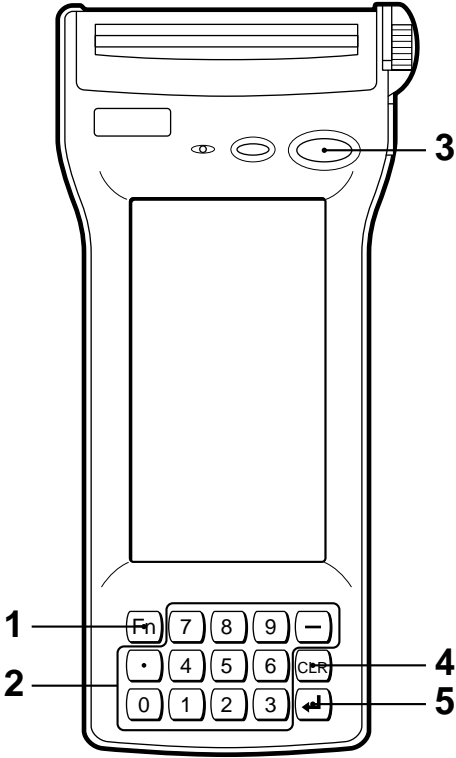


- Important!**
- Whenever you remove the #1 backup battery and the main power supply's battery pack at the same time, memory contents are lost, regardless of whether or not the #2 backup battery is installed. The #2 back-up battery alone does not protect memory contents.
 - Never remove the #2 backup battery from the Data Collector.
 - Always make sure that the + side of the lithium batteries are facing up (so you can see them) when installing them into the Data Collector.
 - Before replacing the #1 backup battery, always check to make sure that the lithium ion battery pack's power is not low first. Replacing the #1 backup battery while the lithium ion battery pack's power is low can result in loss of all data stored in Data Collector memory.

Position of the Keys

IT-2000 key part consist of 16 keys, including the power key.

Position of stroke keys



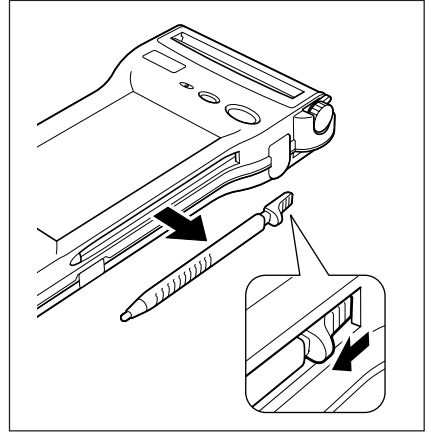
1	Function key	Used for setting various program functions. Combined with one or two of the ten keys (0 to 9).
2	Number keys, decimal key, minus (-) key	Used for input of numbers. Press decimal point key to mark the position of the decimal point.
3	Power key	Used for switching the power on/off. Also, it is used for power on during the auto power off condition.
4	Clear key	Clears' previous input.
5	Execution key	Confirms input and leads to the next step.

Touch key panel

The touch panel appears on the Data Collector's LCD. Be sure to use only your finger or the stylus that comes with the Data Collector to operate the touch panel.

Using the touch panel stylus

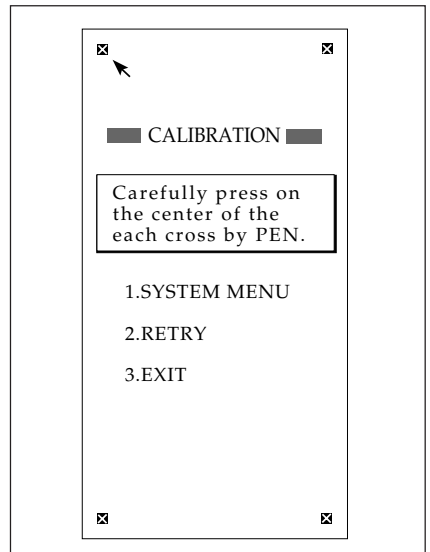
The touch panel stylus is attached to the right side of the Data Collector.



Important! Use the procedure below to calibrate the touch panel whenever it appears that it is misaligned on the LCD.

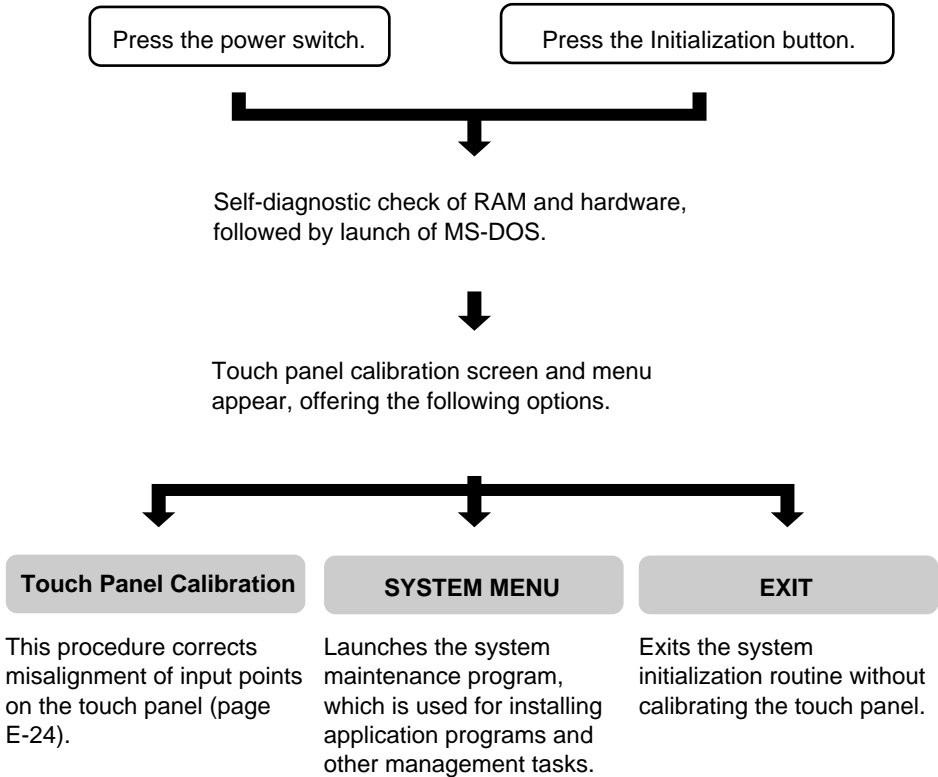
To calibrate the touch panel

- 1** Use a paper clip or some other thin, pointed object to press the Initialize button on the back of the Data Collector. This launches the system initialization routine, which causes the touch panel calibration screen nearby to appear on the LCD.
- 2** Touch the center of each cross with the stylus in the sequence indicated by the arrow.
- 3** The touch panel calibration screen will be cleared automatically after you touch all four crosses.



System Initialization Routine

The system initialization routine is performed when you turn on the Data Collector for the first time after purchasing it and whenever you press the Initialize button. The following is the operational flow for the system initialization routine.



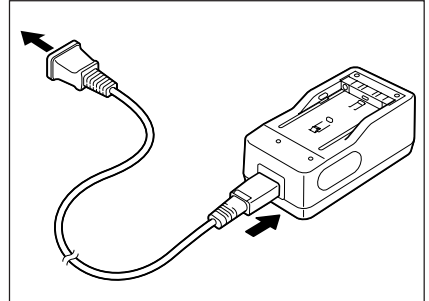
Important! Every time you turn on power, the system normally searches for an application program in the following sequences: memory card, RAM disk, F-ROM disk. The system initialization routine is launched only if memory contents have been lost (due to both the lithium ion battery pack and backup battery going dead) or if an application program cannot be found.

■ Charging the Battery Pack

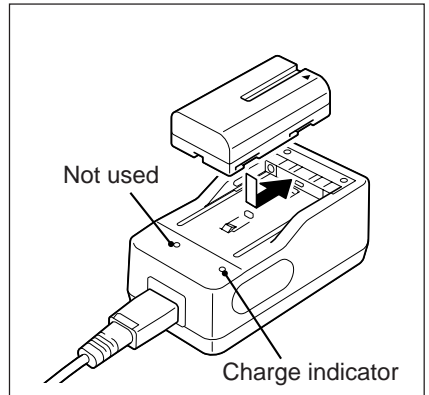
The lithium ion battery pack is the Data Collector's main power supply that provides power for normal operations and memory backup. This means it is important to recharge or replace the battery pack as soon as possible after the low battery message appears on the LCD. Battery pack charging can be performed using any of the following options: DT-9021CHGEU Single Charger, DT-9020ADP-G/DT-9020ADP-U Charger.

To charge the battery pack

- 1** Insert the power cord into the battery pack as far as it can go.
Plug the charger unit's power cord into a power outlet.



- 2** Slide the battery pack in the direction indicated by the arrow in the illustration to install it onto the charger unit. The charge indicator (orange) lights at this time to indicate that the battery pack is being charged.



- 3** After the charge indicator goes out (indicating that charging is complete), slide the battery pack in the opposite direction and remove it from the charger unit.

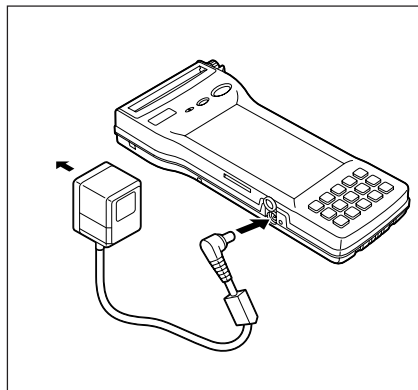
Charging time

Charging time: approximately 2 hours and 30 minutes

Note! The above times may differ depending on the temperature in your area.

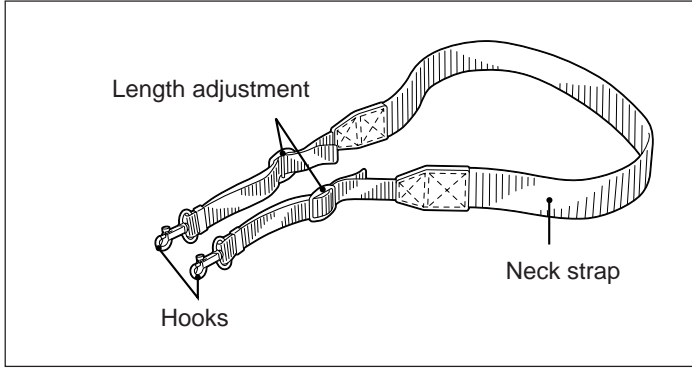
To charge battery packs using the Charger

- 1** Press the Data Collector's Power switch to turn off power.
- 2** Plug the charger into an electrical outlet, and then attach the charger to charger connector on the side of the Data Collector.
- 3** The Data Collector's charge indicator lights to indicate that the charge operation is being performed. Charging is complete when the charge indicator is no longer lit. It takes about ten hours to achieve a full charge.



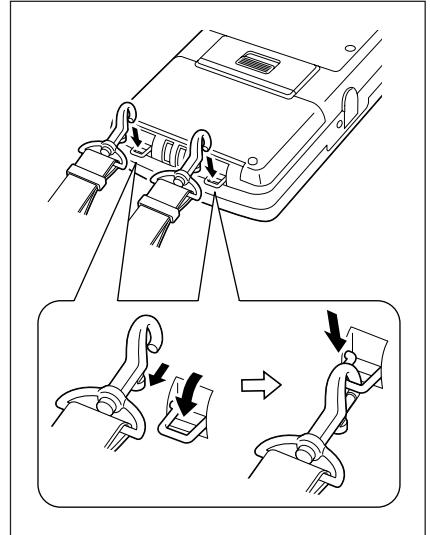
- Important!**
- **Removing the lithium ion battery pack from the Data Collector consumes backup lithium battery power, which is used to retain data in memory. This is no problem for short periods, but leaving the Data Collector without a charged lithium ion battery pack for long periods can cause the backup battery to go dead, resulting in loss of all programs and data stored in Data Collector memory. Because of this, we recommend that you keep charged battery packs on hand for use while other battery packs are being charged.**
 - **Long use of a lithium ion battery pack gradually shortens the amount of operating time it provides after each charge. This is normal for the lithium ion battery pack and does not indicate malfunction. If you find that the amount of time provided by your battery pack is too short, it is probably time to replace it with a new one.**
 - **Never try to use the DT-9021CHGEU or DT-9020ADP-G/DT-9020ADP-U charger to charge any other type of battery pack.**
 - **Avoid locations subject to vibration when performing the charge operation.**
 - **The battery pack discharges even when it is not loaded in the Data Collector. Make sure you load the battery pack into the Data Collector within at least one or two days after it is charged.**
 - **It is recommended that a battery pack be removed from the DT-9021CHGEU or DT-9020ADP-G/DT-9020ADP-U charger within about 24 hours after full charge is attained.**

■ Attaching the Neck Strap



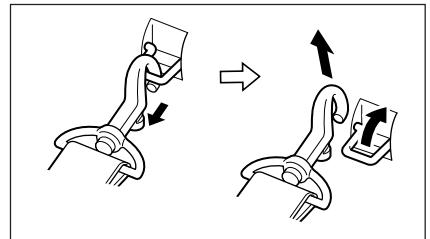
To attach the neck strap

Pulling back on the spring latches on the neck strap hooks, attach the neck strap to the Data Collector's neck strap bars. Next, release the latches to secure the neck strap in place.



To detach the neck strap

Pulling back on the spring latches on the neck strap hooks, remove the neck strap to the Data Collector's neck strap bars.



Important! Never allow the Data Collector to swing around by the neck strap.

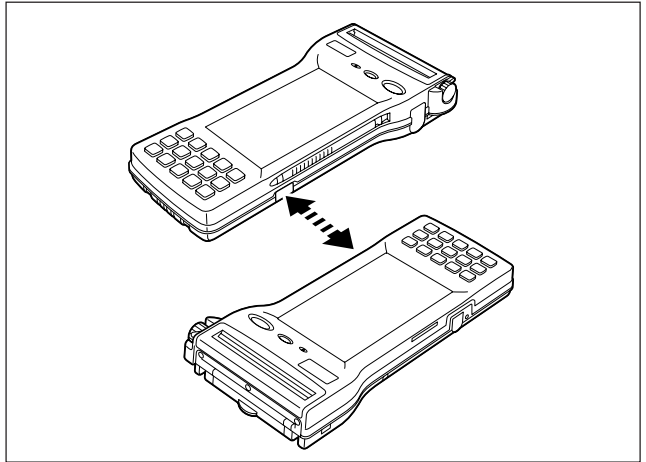
Data Communication

You can exchange data between two Data Collectors or between a Data Collector and a personal computer.

Exchanging Data Between Two Data Collectors

You can transfer applications and data to another Data Collector using the infrared interface. The illustration below shows how two Data Collectors must be oriented for data communication.

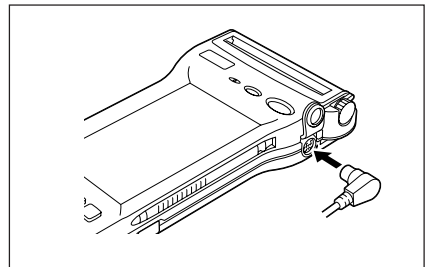
- Make sure that the infrared interfaces of both Data Collectors are not blocked.
- Communication is possible between two Data Collectors that are spaced from 0 (direct contact) to 1 meter apart.



Exchanging Data with a Personal Computer

You can exchange data between a Data Collector and personal computer by connecting them with an RS-232C cable.

Be sure to turn the power off before connecting the cable.



CAUTION! For IrDA transmission function, high sensitivity element is used in this unit. Avoid the proximity of a unit or equipment such as a cellular phone emitting electrical current during data communication. To get a smooth transfer using this unit, keep some distance from the equipment (at least 30 centimeters from a cellular phone).

■ Handling the Printer

The IT-2000D33E/53E printer uses roll paper and paper tape for printing.

Using Roll Paper

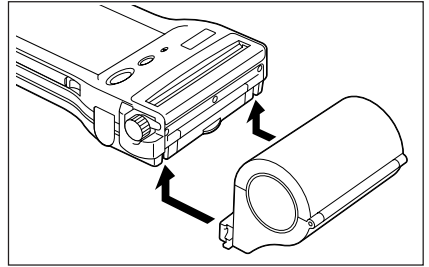
If you wish to use roll paper, you must first install the paper holder and then load the paper.

Installing and Removing the Paper Holder

Installing

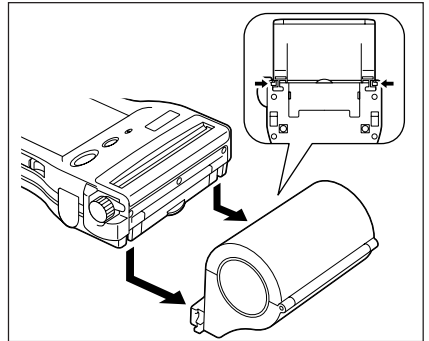
Insert the jagged part of the paper holder into the paper holder fixing.

If the paper holder is not inserted properly, this may result in a roll paper jam or paper feed trouble. Make sure that both sides of the paper holder are inserted into the paper holder fixing as far as they can go.



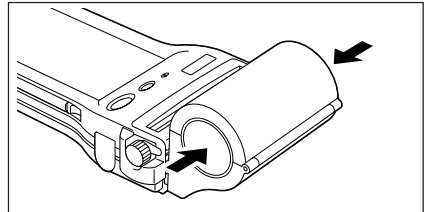
Removing

Holding the body, unhook the claws on both sides under the paper holder, and slide the paper holder downwards to remove.



Opening the Paper Holder

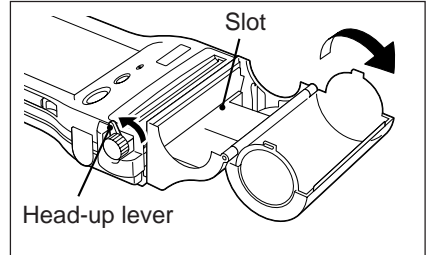
Press both sides of the holder to open it.



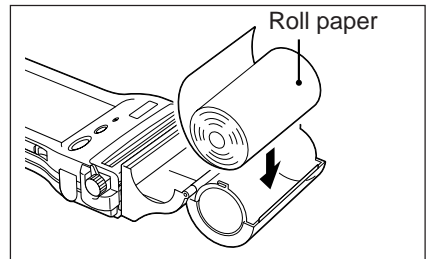
Loading Roll Paper

To use the printer, you must first load paper.
If you print without paper, it may damage the printer.

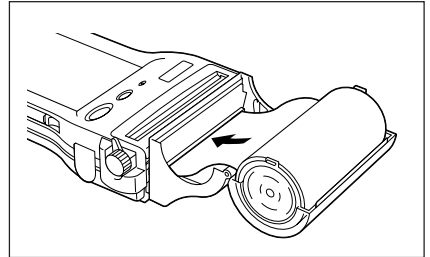
- 1** Lift the head-up lever.
Next, open the paper holder.



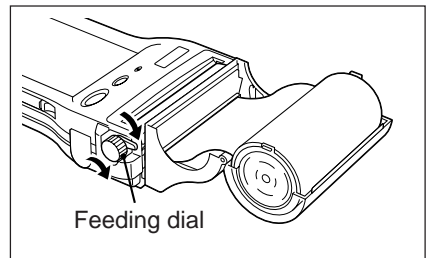
- 2** Put roll paper in the lid of the paper holder.



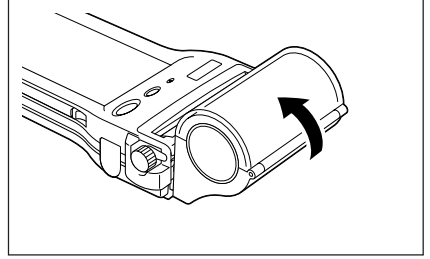
- 3** Feed paper until it stops.



- 4** Turn the feeding dial in the direction of the arrow until the paper appears on the paper cutter side.
Release the head-up lever by returning it to its original position.

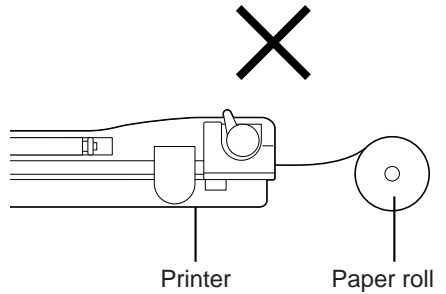
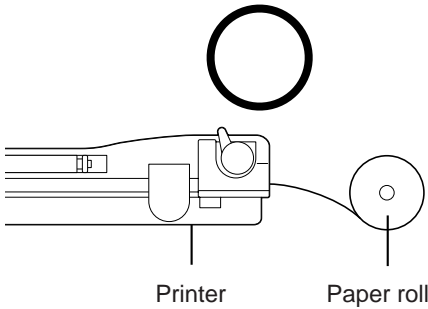
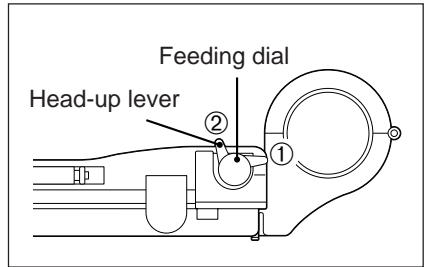


5 Close the paper holder.



Note!

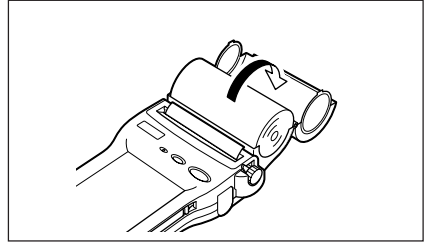
- When you insert or change roll paper, move the head-up lever to position ②. When you print out, return it to position ①.
- When you turn the feeding dial, be sure to move the head-up lever to position ② (whether or not paper is loaded).
- Always load the paper as shown in the figure below.



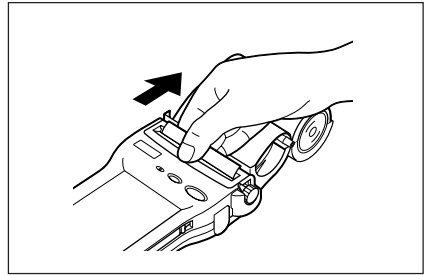
Removing the Printer Cover

When a paper jam occurs, open the printer cover and remove the cause of the paper jam. Be careful because the inside of the printer may be hot.

- 1** Turn the power off and open the paper holder cover.



- 2** Place the roll paper on the paper holder cover. Slide the printer cover as shown in the figure, and gently lift up the edge of the printer cover to remove.



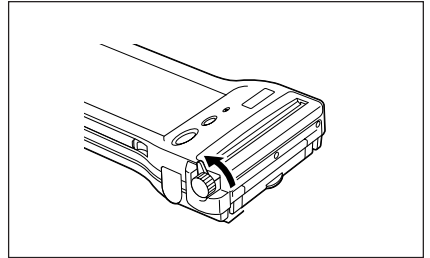
Using Paper Tape

There are two ways of feeding paper tape into the IT-2000D33E/53E with the paper tape. You can either use the auto-loading function or you can load paper tape manually (set this in the software).

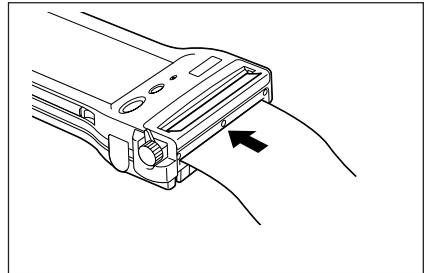
Keep the paper holder cover open when using the paper tape with the paper holder.

Setting Automatic Feed (auto-loading)

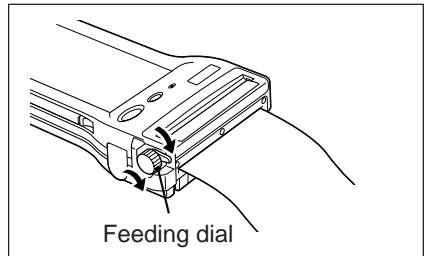
- 1 Lift the head-up lever to the head-up position.



- 2 Feed paper with the printing surface facing down until it stops. The paper will be automatically set into printing position.



- 3 Be sure that the paper is loaded properly and return the head-up lever to its initial position.



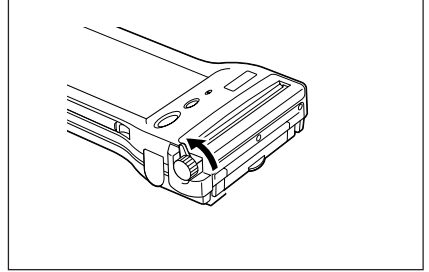
Note! If a Paper Jam Occurs During Auto-loading

- Make sure that the printer is stopped by bringing the head-up lever to the head-up position. Turn the feeding dial to the opposite direction to remove jammed paper and then load the paper by repeating usual procedure.

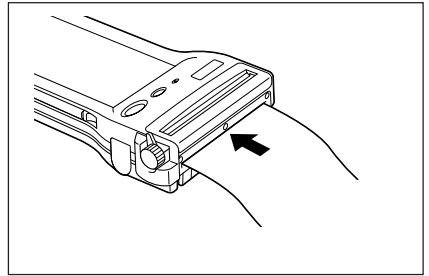
Loading Paper by Hand

Follow the procedure below when Auto Loading is disabled (set this in the software).

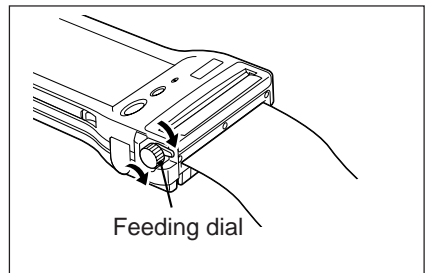
- 1** Lift the head-up lever to the head-up position.



- 2** Insert single-ply paper with the printing surface facing down into the paper slot as far as it will go.



- 3** Turn the paper feeding dial in the direction of the arrow to feed the paper to the printing position. Then return the head-up lever to its original position.



Things to Remember When Using the Printer

1. Printing Intensity

- 1 Printing speed may be slow and a one-dot difference between two lines may occur during high-duty printing, such as printing charts, etc. This is to prevent excessive current.
- 2 The LF error may occur if there is more than a one-second interrupt between printing individual lines. When paper tape is used, set a larger printing area or continuous printing.
- 3 If battery low (low battery pack voltage) is detected, the print job will be stopped. However, after you resume printing, a one-dot difference between two lines or reduced character spacing may occur.
- 4 After you feed paper by turning the feeding dial, the characters may be printed with reduced character spacing. You can avoid this by using the program to load paper before printing.
- 5 If some problem occurs on the printer, immediately turn the power off, and remove the cause of the problem before starting to the Data Collector again. If you cannot remove the cause of the problem, contact a CASIO service provider.
- 6 Print without printer paper loaded can impair the head or damage drive system components. Be sure to load printer paper before you start printing.
- 7 Use only recommended printer paper.
Use of other printer paper can adversely affect printing quality and the service life of the printer, and can result in loss of performance.
- 8 Pay attention to the following points when storing printer paper:
 - Temperatures above 60°C may cause the paper to discolor naturally. Do not store printer paper in high temperature or humid locations.
 - Store printer paper in a cool, dark location. Also, do not leave printer paper in the direct sunlight for long periods.
 - Plastic film containing plasticizer, ester-based rubber erasers, or tape glue or adhesive can cause fading, and contact with organic solvents and diazzo copy paper, and fingernail scratches can cause coloration.

2. Other

- 1 The operating temperature is 5 to 35°C is during printing on 2-ply and label paper.
- 2 Insert new paper when the red end mark starts to appear on the paper you use.
- 3 Recommended paper: Use only CASIO-specified printer paper.
- 4 Store the IT-2000D33E/53E with the head-up lever down when it is not to be used for a long time.
- 5 Do not turn the feeding dial just after printing is finished. Doing so might damage the feeding dial.
- 6 If the printer is used for a long period, paper scraps can accumulate and impair printing quality. If this happens, the thermal head must be cleaned. Contact a CASIO service provider.

Warning! Do not touch the thermal head during and just after printing is finished.

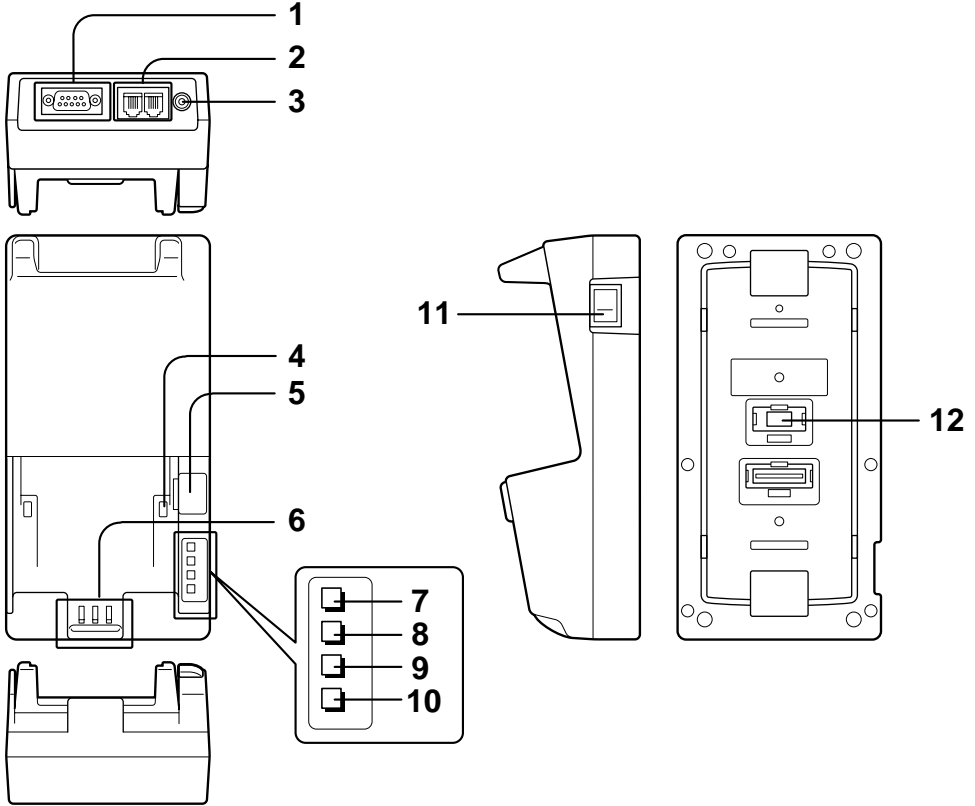
IT-2000's Specifications

CPU:	32 bit CPU	
RAM:	IT-2000D33E:	RAM 4 MB + Flash ROM 8 MB
	IT-2000D53E:	RAM 4 MB + Flash ROM 16 MB
Display:	VGA interface, 16 grayscale (only 4 grayscale visible) monochrome, 384 (V) x 192 (H) dots	
	Display contrast adjusting: auto modifying	
	EL backlight (auto-off function, 20 - 300 sec. in 20-second units), auto ON/OFF	
Input:	Touch key/touch panel method	
	16 stroke keys (including the power key)	
Infrared:	Interface:	Conformed IrDA1.0 or IrDA1.1 Standard
	Synchronization:	Asynchronous (IrDA1.0)
		Frame synchronization (IrDA1.1)
	Transfer rate:	Conformed IrDA Ver. 1.0: ~ 115.2 Kbps
		Conformed IrDA Ver. 1.1: ~ 4 Mbps
Serial communication:	Interface:	RS-232C level interface
	Synchronous mode:	Asynchronous
	Transfer rate:	1,200 bps - 115.2 Kbps
14-pin serial communication:	Interface:	RS-232C level interface
	Synchronous mode:	Asynchronous
	Transfer rate:	1,200 bps - 115.2 Kbps
Other:	Clock functions:	second, minute, hour, day of the week, day, month, year
	Full auto-calendar	
	Buzzer sound:	3-level volume + OFF possible (depending on the software)
Power supply:	Main power source:	Lithium ion battery pack
	Memory back-up battery:	Lithium batteries CR2032 (#1) and IVR2430 (#2)
	Battery life:	Lithium ion battery pack: 8 hours (stand-by)
	Memory back-up battery:	1 week
	Battery checker:	Both for the main power battery and for the back-up battery (CR2032)
	Auto power-off function	(1 - 15 minutes, setting in minutes of one)
Operating temperature:	-5°C - 50°C (23°F - 122°F)	
Dimensions (Approximate):	85<100> (W) x 225 (L) x 29<34.4> (H) mm (3 11/32 x 7 11/16 x 1 3/16 inch)	
	Figures in <> brackets indicate dimensions with printer attached.	
Weight (Approximate):	540 g	

IT-2060IOE Optional Optical Communication Unit

The IT-2060IOE Optional Optical Communication Unit makes it possible to quickly and easily exchange system data and file data with a personal computer. The Optical Communication Unit can also be used to charge the Data Collector's lithium ion battery pack. RS-232C cables (DT-881RSC, DT-882RSC, DT-883RSC, DT-887AX) are available to connect the Optical Communication Unit to a personal computer.

General Guide



1	RS-232C interface connector	For connection of an RS-232C cable to exchange system data and file data with a personal computer.
2	RS-422 interface connector	For connection of a cable to daisy chain with another Optical Communication Unit.
3	AC adaptor jack	For connection of the AC adaptor, which supplies power.
4	Connection detector	Detects whether the Data Collector is correctly mounted onto the Optical Communication Unit.
5	Infrared interface	Non-contact communication port for data exchange with the Data Collector.
6	Charge connectors	These connectors mate with Data Collector connectors to provide electrical power to the Data Collector.
7	System status indicator	Indicates the operational status of the system. Off: System problem or failure to establish communication with all Data Collectors mounted on daisy chained Optical Communication Units. On (green): Normal operation, communication established with all Data Collectors.
8	Communication status indicator	Indicates the status of communications. Off: No communication being performed. Flashing (green): Communication being performed. On (red): Optical Communication Unit connection problem
9	Charge indicator	Indicates the charge status of the Data Collector's lithium ion battery pack. Off: No charging being performed. On (red): Charging
10	Power indicator	Indicates the on/off status of the Optical Communication Unit and the status of the connection between the Optical Communication Unit and the Data Collector. Off: Power off On (red): Power on, no Data Collector mounted On (green): Power on, Data Collector mounted
11	Power switch	Turns power on and off.
12	DIP switches	Switches for configuring the Optical Communication Unit.

Connecting the Optical Communication Unit to a Power Source

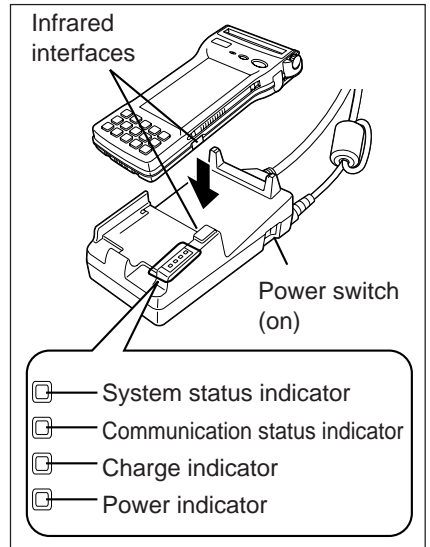
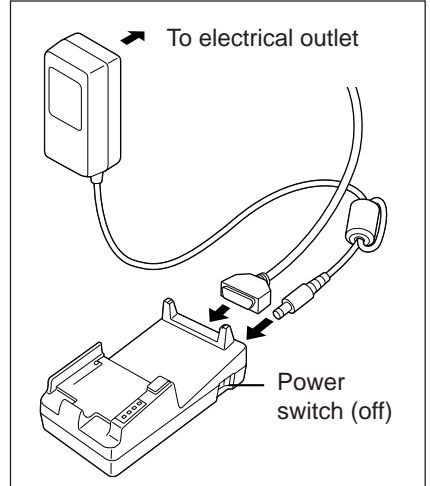
Use only the specified AC adaptor to connect the Optical Communication Unit to an electrical outlet. Be sure to connect the AC adaptor and turn on Optical Communication Unit power before attempting to perform any data communication operation with the Data Collector. The Optical Communication Unit supplies power to a Data Collector mounted on it.

To connect to a power source

- 1** Plug the AC adaptor into an electrical outlet.
- 2** After making sure that the power switch of the Optical Communication Unit is turned off, connect the AC adaptor to the AC adaptor jack at the top of the Optical Communication Unit.
- 3** After checking to make sure that the power of the Optical Communication Unit and the computer you are connecting to is turned off, connect the RS-232C interface connector at the top of the Optical Communication Unit to the serial port of the computer using the cable (DT-881RSC, DT-882RSC, DT-883RSC, DT-887AX).
Keep the Optical Communication Unit's RS-232C interface connector cover whenever it is not in use.

- 4** Turn on the Optical Communication Unit, and its power indicator should light up red.

- 5** Mount the Data Collector onto the Optical Communication Unit making sure that their infrared interfaces align correctly with each other. The power indicator of the Optical Communication Unit should change to green at this time.
 - The system status indicator lights up green when the system is operating correctly, both during communication and communication standby (when two or more Optical Communication Units are daisy chained).
 - The communication status indicator flashes green while communication is being performed.



CAUTION! For IrDA transmission function, high sensitivity element is used in this unit.
Avoid the proximity of a unit or equipment such as a cellular phone emitting electrical current during data communication.
To get a smooth transfer using this unit, keep some distance from the equipment (at least 30 centimeters from a cellular phone).

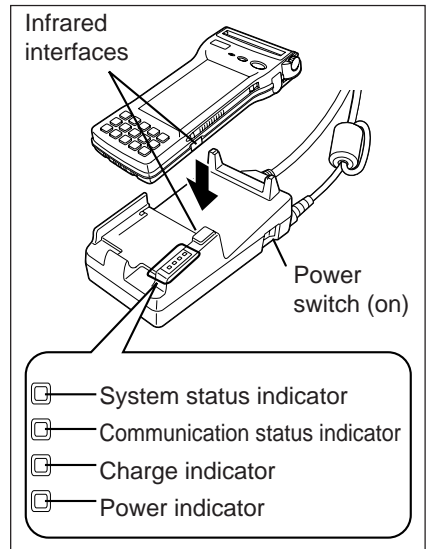
Using the Optical Communication Unit to Charge the Data Collector Battery Pack

1 Turn on the Optical Communication Unit, and its power indicator should light up red.

2 Mount the Data Collector onto the Optical Communication Unit making sure that their charger connectors join securely with each other.

If the Data Collector is turned off, it will turn on automatically once a power connection is established (this feature can be disabled by software).

The power indicator of the Optical Communication Unit should change to green at this time, and the charge indicator should light up red to indicate that the battery pack is being charged.



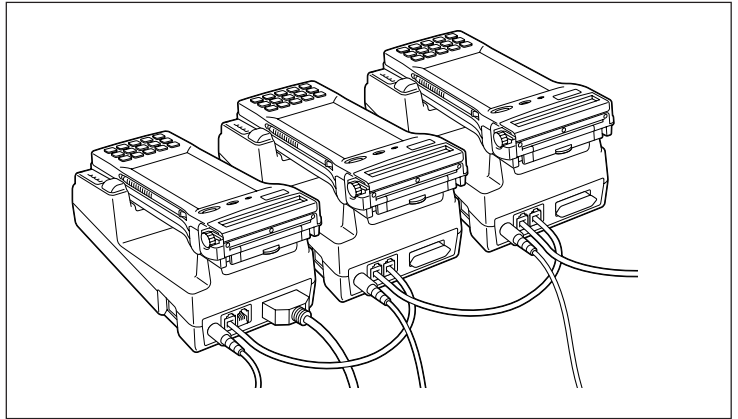
- Important!**
- Use the charger units designed for this product to charge the specified battery packs only. Never try to charge another type of battery pack.
 - The battery pack discharges even when it is not loaded in the Data Collector. Make sure you load the battery pack into the Data Collector as soon as possible after it is charged.
 - Recharge the battery pack at a temperature between 0°C (32°F) and 40°C (104°F). Charging outside this range can cause leaking of battery fluid and generation of heat by the battery. It can also reduce battery performance and shorten battery life.
 - To ensure proper battery pack charging, periodically wipe off the charge connectors of the Optical Communication Unit and Data Collector with a cotton swab or soft, dry cloth.

Daisy Chaining Optical Communication Units

An optional DT-888RSC 6-6 Pin Modular Cable can be used to daisy chain up to seven Optical Communication Units. In this configuration, a personal computer can exchange data with multiple Data Collectors simultaneously.

Daisy Chain Configuration

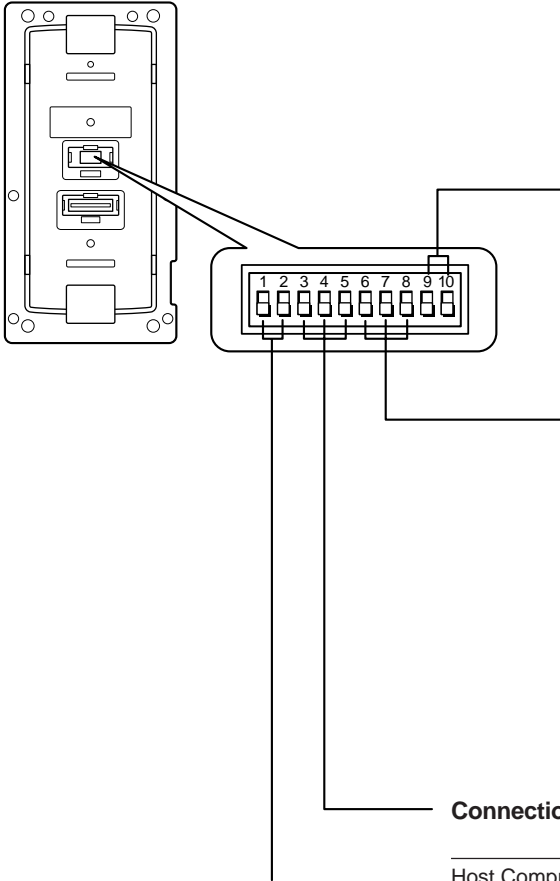
Connect the C-OUT terminal of the Optical Communication Unit that is closer to the host computer to the C-IN terminal of the next Optical Communication Unit.



The following are the required DIP switch settings for Optical Communication Units in a daisy chain configuration. See page E-43 for details on actually making DIP switch settings.

- The Optical Communication Unit furthest from the computer must be defined as the "Terminator Unit in Linked Chain."
- The Optical Communication Unit connected to the computer must be defined as the "Host Computer Connection."
- All other Optical Communication Units must be defined as "Intermediate Unite in Linked Chain."

DIP Switch Settings



Flow Control

	9	10
Off	OFF	OFF
X ON/X OFF	ON	OFF
RS/CS	OFF	ON
Use Special Software	ON	ON

Optical Communication Unit - Host Computer Communication speed

	6	7	8
2,400bps	OFF	OFF	OFF
4,800bps	ON	OFF	OFF
9,600bps	OFF	ON	OFF
19,200bps	ON	ON	OFF
38,400bps	OFF	OFF	ON
57,600bps	ON	OFF	ON
115,200bps	OFF	ON	ON

* Communication speed can be set by Data Collector overrides this setting.

Data Collector - Optical Communication Unit Communication Speed

	1	2
38,400bps	OFF	OFF
115,200bps	ON	OFF

Connection Type

	3	4	5
Host Computer Connection	OFF	OFF	ON (No linking) OFF (Linking)
Intermediate Unit in Linked Chain	ON	OFF	OFF
Terminator Unit in Linked Chain	ON	OFF	ON

Important! Other settings not shown here are used for special-purpose modes, and should not be used.

IT-2060IOE Optical Communication Unit Specifications

Infrared Communication

Interface: Infrared
Conformed IrDA Ver. 1.0
Synchronization: Asynchronous
Baud Rate: 9,600/38,400/115,200 bps

RS-232C

Synchronization: Asynchronous
Baud Rate: 2,400 to 115,200 bps
Transmission Protocol: Full-duplex

RS-422

Synchronization: Asynchronous
Baud Rate: 9,600/38,400/115,200 bps

Output Power

Output: 12 V DC/500 mA

Charging specifications

Charging time: Approximately 10 hours (with Data Collector power off)
Charging time increases with Data Collector power on

Power Supply

Source: Specified AC adaptor
Consumption Current: Approximately 600 mA (maximum during output of power for charging)

AC Adaptor

Model:	DT-825ADP-G	Input:	230 V AC 50/60 Hz
		Output:	12 V DC 1,400 mA
	DT-825ADP-U	Input:	120 V AC 50/60 Hz
		Output:	12 V DC 1,400 mA

Functions

Infrared interface
RS-232C interface
RS-422 interface

Operating temperature

0°C - 40°C (32°F -104°F)

Dimensions

Approximately 110 (W) x 220 (D) x 80 (H) mm
(4 5/16 x 8 5/8 x 3 1/8 inch)

Weight

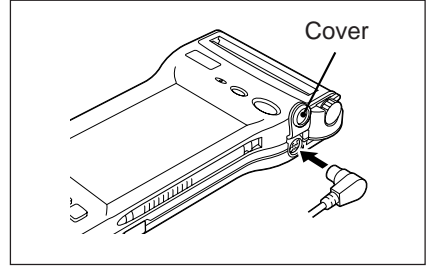
Approximately 370 g (13.0 oz)

■ Handling Bar-Code Reader

Connect the bar-code reader to the Data Collector's bar-code reader connector.
There are two models of bar-code reader: pen scanner DT-9650BCR, touch scanner DT-9656BCR.

Connecting the bar-code reader

- 1 Turn the power on the Data Collector off.
Open the cover of the bar-code reader connector.
- 2 Insert the plug of the bar-code reader into connector as shown on the picture.



Detaching bar-code reader

Turn the power on the Data Collector off. Unplug the bar-code reader connector.

Using a bar-code reader

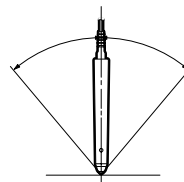
<Pen scanner>

- 1 **Bar code scanning angle**
Reading power: 0.19 mm (for PCS value of 0.85)



Wand position

Angle (up to 45 degrees)



Effective angle

2 Bar code scanning position



Correct



Correct



Correct



Correct



Wrong



Wrong



Wrong



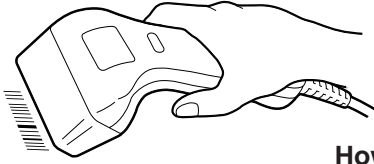
Wrong



Wrong

<Touch scanner>

1 Bar-code touching angle (at read resolution 0.33mm, PCS 0.45)



How to hold the wand

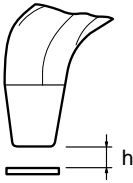
non-contact distance (h)

$h = 0 \sim 10 \text{ mm}$

$\alpha = 0$

$\beta = 0$

$R = \infty$



Angle between the bar-code and forward/backward inclined reading window (α)

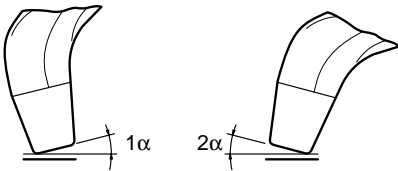
$1\alpha = 0 \sim 10^\circ$ (front part is inclined forward)

$2\alpha = 0 \sim 30^\circ$ (back part is inclined backward)

$h = 0$

$\beta = 0$

$R = \infty$



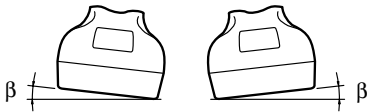
The angle of inclination to the right/left (β)

$\beta = 0 \sim 10^\circ$

$h = 0$

$\alpha = 0$

$R = \infty$



Curve (R)

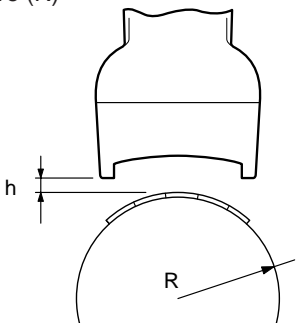
$R = 25 \text{ mm}$ and above

(at read resolution 0.33, PCS value 0.45)

$h = 5 \text{ mm}$

$\alpha = 0$

$\beta = 0$



h, α, β, R are commonly defined.

Position of bar-code must be in the center of the reading window.

2 Bar-code touching angle



Margin

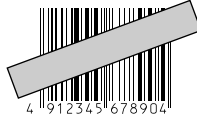
Margin



Correct



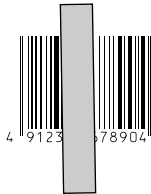
Correct



Correct



Wrong



Wrong

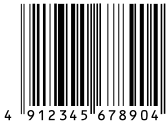


Wrong



Wrong

<Sample bar-codes>



EAN
(Standard version)



CODE39



EAN
(Shorten version)



UPC



NW-7

- These bar-codes are samples.

Bar Code Reader Specifications

DT-9650BCR Pen Scanner

Readable Codes:	WPC (JAN, EAN, UPC), NW-7, CODE-39/93/128, ITF
Readable PCS Value:	0.45 min.
Cable Length:	Approximately 100 cm
Read Resolution:	0.125 mm min. (PCS value 0.85 min.)
Read Angle:	90 to 45 degrees
Scan Speed:	76 to 760 mm/second
Operating Temperature/Humidity:	-10 to 50°C (14 to 122°F)/15 to 90% RH
Dimensions:	Approximately 147 (W) x 20.6 (D) x 12.5 (H) mm (5 3/4 x 13/16 x 1/2 inch)
Weight:	Approximately 85 g (3.0 oz)(including cable)

DT-9656BCR Touch Scanner

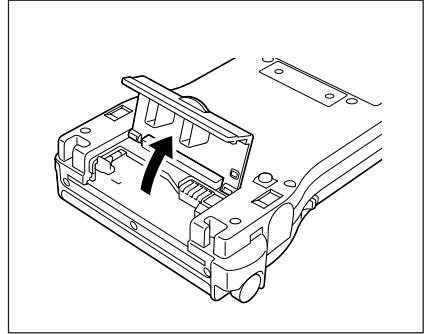
Readable Codes:	WPC (JAN, EAN, UPC), NW-7, CODE-39/93/128, ITF
Readable PCS Value:	0.45 min.
Cable Length:	Approximately 60 cm (extended)
Read Resolution:	0.127 mm min. (PCS value 0.9 min.)
Non-contact Distance:	0 to 20 mm
Read Angle:	Forward: 10 degrees Back: 30 degrees Left/Right: ±10 degrees Rotating: ±10 degrees Curved: R = 25 mm min. (with resolution of 0.33 mm)
Read Width:	60 mm
Operating Temperature/Humidity:	0 to 40°C (14 to 122°F)/20 to 80% RH
Dimensions:	Approximately 161 (W) x 64.4 (D) x 59 (H) mm (6 11/16 x 3 x 2 inch)
Weight:	Approximately 250 g (8.8 oz)(including cable)

Using PC Cards

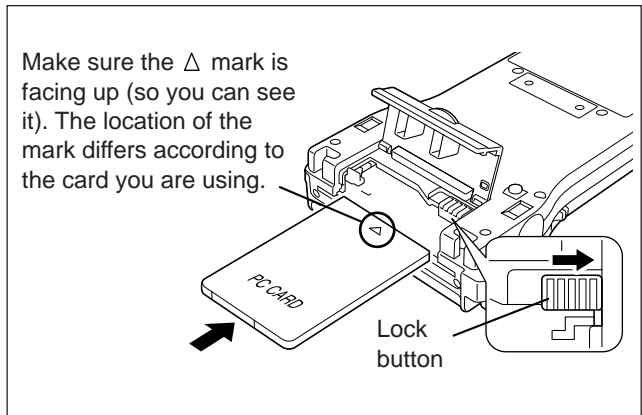
Your Data Collector supports use of a variety of PC cards (FROM), which are available as options. FROM cards are available in different capacities, so you can select the one that best suits your needs.

To load a memory card into the Data Collector

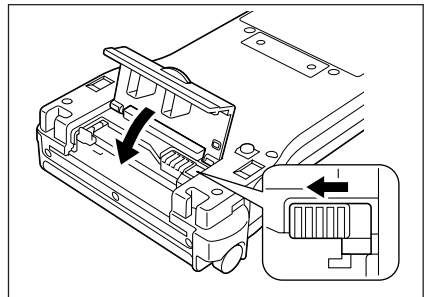
- 1 Turn off the Data Collector, turn it over, and lift up the PC card slot cover while pressing the projection as shown in the illustration.



- 2 Slide the PC card lock button in the direction of the arrow to release LOCK and then slide the end of the PC card marked with Δ into the Data Collector. The arrow should be facing up (so you can see it).



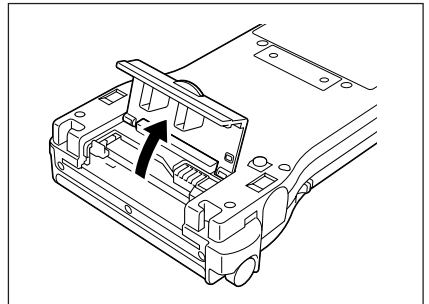
- 3 Slide the PC card lock button to the LOCK position.



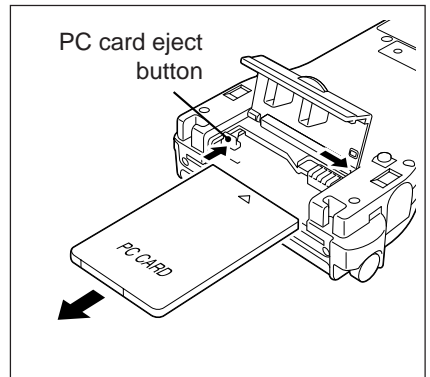
- Important!**
- The PC card is not detected by the Data Collector when the PC card lock button is in the LOCK release position. Sliding the PC card lock button to the LOCK release position while the Data Collector is turned on causes power to turn off automatically. Interrupted operations can result in system malfunction when the Data Collector is turned back on.
 - Improper installation of a PC card can result in system malfunction and inability to read the card.

To remove a card from the Data Collector

- 1** Turn off the Data Collector, turn it over, and lift up the PC card slot cover while pressing the projection.



- 2** Slide the PC card lock button in the direction of the arrow to release LOCK and then press the PC card eject button to eject the PC card. Remove the PC card from the Data Collector.

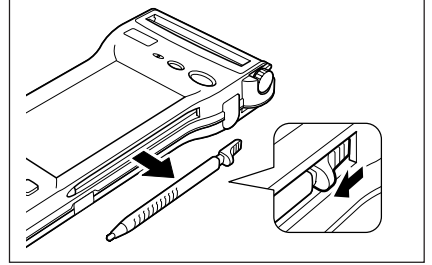


- Important!** Forcing the PC card eject button without first sliding the PC card lock button to the LOCK release position can damage the internal mechanism of the Data Collector. Make sure you carefully follow the steps of the procedures described above whenever inserting or removing a PC card.

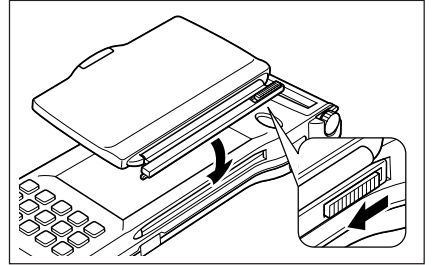
■ Attaching the Screen Protective Cover

Attaching the screen protective cover to the IT-2000D33E/53E prevents the screen from becoming scratched and split, for example, during transportation.

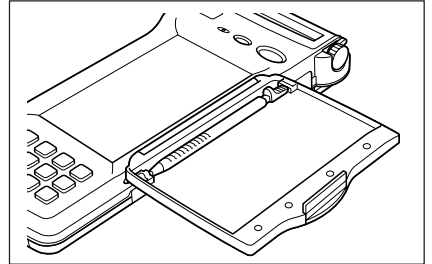
- 1** Remove the touch panel pen that is contained on the right side of the body.



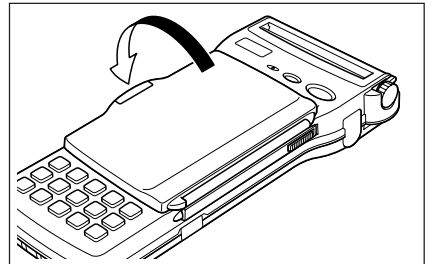
- 2** Attach the movable attachment fixture on the side of the screen protective cover at the location where the touch panel pen was attached. (Fit the movable attachment fixture in the same way as the touch panel pen.)



- 3** Attach the touch panel pen that you removed in step 1 to the rear of the screen protective cover.



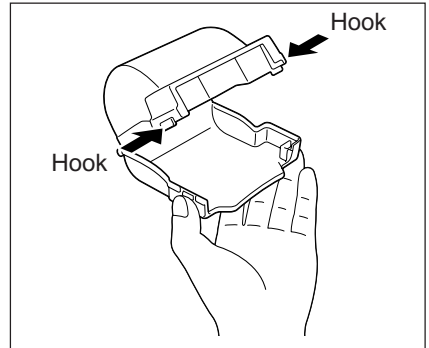
- 4** Close the screen protective cover.



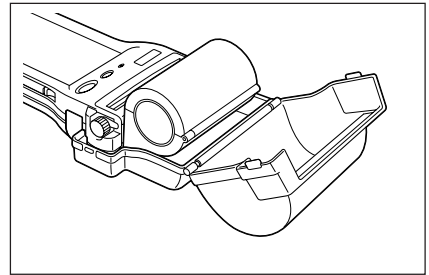
Drip-Proof Cover

The drip-proof cover protects the IT-2000D33E/53E from rain.

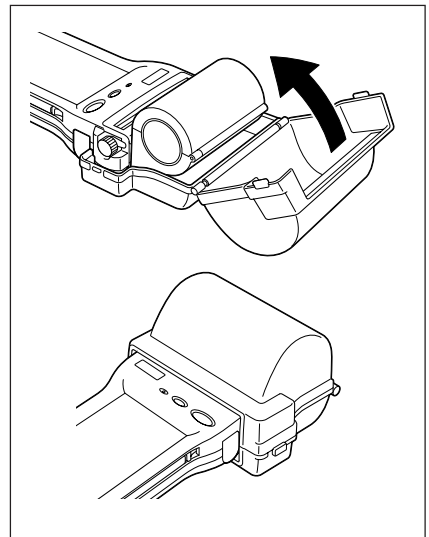
- 1** Unhook the hooks of the upper cover on both sides of the drip-proof cover with your fingers one at a time to open the upper cover.



- 2** Attach the lower cover to the IT-2000D33E/53E.
Fit the hooks on the inside of both sides of the lower cover into the notches on the sides of the IT-2000D33E/53E.



- 3** Close the upper cover.



■ Operating Precautions

Data Collector

- Never try to remove the lithium ion battery pack while the Data Collector is turned on. Doing so can cause data stored in memory to be deleted.
- Sudden temperature changes can cause condensation to form on the exterior of the Data Collector's case. Condensation can cause malfunction of the Data Collector, so wait until the moisture dries completely before using it.

Bar Code Readers

- Handle bar code readers carefully to avoid damage to lenses. Should the lens of a bar code reader become dirty or dusty, carefully remove it using a blower or a soft cloth.
- Grasp the connector plug whenever connecting or disconnecting a bar code reader. Make sure you slide the plug straight into and straight out of the socket, and do not apply excessive force left or right. Incorrect connection or disconnection of a bar code reader plug can bend pins and cause other serious damage.
- Some bar codes may not be readable with a single pass because they are improperly printed, soiled, etc. When this happens, repeat the read operation until a successful read can be obtained.

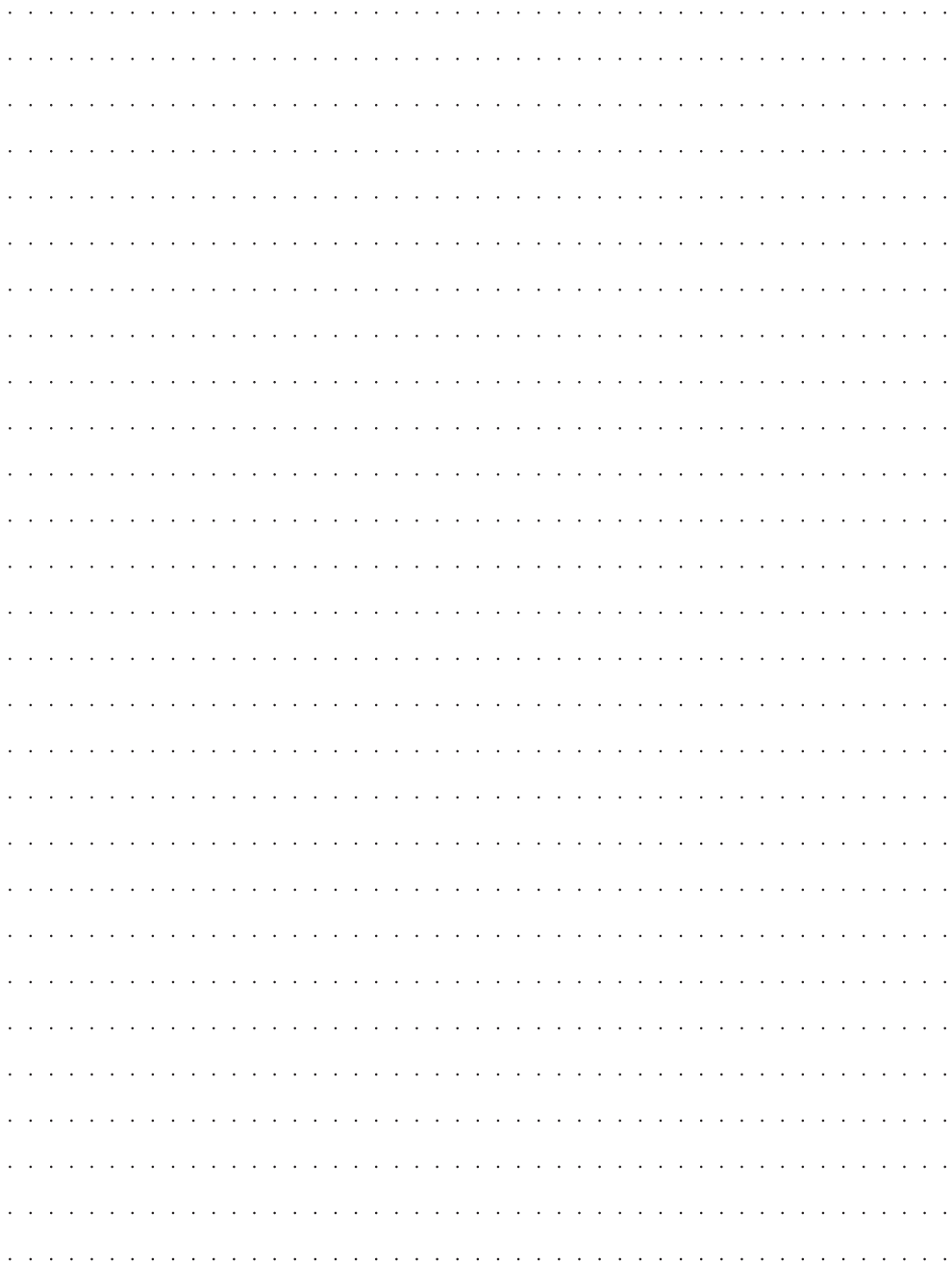
PC Cards

- Do not drop or bend PC cards or otherwise subject them to strong impact or rough handling.
- Take care to avoid letting dirt or dust get onto PC card connectors.
- Always replace a PC card into its soft case when storing it.
- Avoid exposing PC cards to direct sunlight for long periods.
- Never try to take PC cards apart.

Notice

Congratulations upon your selection of the CASIO IT-2000 Data Collector. Before using the IT-2000, note the following copyright restrictions that apply.

- 1 The operating system of this product includes proprietary intellectual property (Microsoft[®] MS-DOS Operating System and Windows), which is subject to the following terms and conditions.
- 2 The Operating System is licensed, not sold, to the user.
- 3 The user may NOT copy or decompile, reverse engineer, translate, disassembly, or otherwise reduce the Operating System to a human understandable format.
- 4 The Operating System is licensed to the user "AS IS" with no warranty or representation, either expressed or implied, regarding its merchantability, quality, functionality, performance or fitness. It is the solely the responsibility of the user to determine the software's suitability for a particular purpose or use.
The user assumes all responsibility arising from the use of this Operating System.
- 5 CASIO COMPUTER CO., LTD. will in no event be liable for direct, indirect, special consequential, or incidental damages resulting from any defect, error, or omission in the Operating System, or for any other events including, but not limited to, any interruption of service, loss of business, loss of profits or good will, legal action or any other consequential damages.



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