Thank you for purchasing the TOPCON Data Collector FC-2000. For superior product performance, please read this instruction manual carefully and keep it in a convenient place for future reference.

GENERAL HANDLING PRECAUTIONS

- Before starting work or operation, be sure to check that the instrument is functioning correctly with normal performance.
- Always make sure instrument is dry before putting it in the soft case. Never store a damp instrument.
- Do not leave the instrument under strong sunlight for a long time. It may cause the instrument to malfunction.
- When waterproofness is necessary, close all the caps securely. However, the serial connector COM1 has a waterproof structure, so it will remain waterproof even if its cap is not closed.

DISPLAY FOR SAFE USE

In order to ensure the safe use of this product, prevent any danger to the operator or others, or damage to property, important warnings are placed on the product and inserted in the instruction manual. We recommend that you become familiar with the meaning of these Warnings and Cautions before continuing.

SAFETY CAUTIONS

- Injury refers to hurt, burn, electric shock, etc.
- Physical damage refers to extensive damage to equipment and structures or furnishings.

Exceptions from Responsibility

1. The user of this product is expected to follow all operating instructions and make periodic checks of the product's performance.
2. The manufacturer, or its representatives, assumes no responsibility for results of a faulty or intentional usage or misuse including any direct, indirect, consequential damage, and loss of profits.
3. The manufacturer, or its representatives, assumes no responsibility for any damage, and loss of profits due to a change of data, loss of data, an interruption of business etc., caused by using the product or an unsuitable product.
4. The manufacturer, or its representatives, assumes no responsibility for any damage caused by wrong movement, or action due to connecting with other products.

NOMENCLATURE AND FUNCTIONS

FC-2000

- Display
- Function key
- TAB key
- Cursor keys
- Display and Touch screen
- Stylus pen
- Escape key
- Hook for tripod
- Hook for hand strap
- Speaker
- Battery cover
- Hard reset switch
- Hand strap
- CF Card Slot
- Serial COM2 (Total Station)
- CF Card eject button
- Serial COM1 (Mini-B)
- USB Connector
- AC adapter, external battery
- Cap

CONNECTORS

- Serial COM1
- Serial COM2 (Total Station)
- USB Connector (Type Mini-B)

SHORTCUT KEYS

- Backlight ON/OFF
- Cfg
- Soft Reset
- Windows Start Menu
- Shortcut Commands
- Windows CE Task Manager

STANDARD PACKAGE COMPONENTS

- Upon opening, make sure that all the following are included.
- FC-2000 Instrument ............................................ 1set
- BT-62Q Battery .............................................. 2pcs.
- Battery charger BC-30...................................... 1pc.
- AC-DC converter AD-9B or AD-7C*1).................... 1pc.
- Instruction manual ........................................... 1vol.
- Handstrap ....................................................... 1pc.
- Neckstrap ...................................................... 1pc.
- Soft case ....................................................... 1pc.
- Stylus pen ..................................................... 1pc.
- Display protection sheet ................................... 5pcs.
- Interface cable F-25........................................ 1pc.

*1) AD-9B is for AC 120V use, AD-7C is for AC 230V use.
2) Components are different by the markets.

* Insert direction of stylus pen
Insert the stylus pen so that the clip is facing outwards.
**PREPARATION FOR USE**

Battery

There are two ways to charge the battery as follows.

Battery Charging (Using BC-30)
1. Install the battery on the BC-30.
2. Plug the power cord in an outlet (AC-120V or 230V). Charging is completed after approximately 3 hours.

The Power LED of BC-30:
- Red ON: Charging.
- Green ON: Charging completed.
- Red Flashing: Charging error.

Battery Charging (Using AD-9B/7C)
1. After installing the battery, plug the connector of AD-9B/7C in the FC-2000.
2. Plug the AD-9B/7C in an outlet. Then the run charge LED will light. Charging is completed after approximately 5 hours. The display can be turned on or off by the power key.

The Charge LED of FC-2000 will indicate charging status:
- Red ON: Charging.
- Green ON: Charging completed.
- Red Flashing: Charging error.

**Touch Screen**

Adjusting Touch Screen

1. Tap [Start], [Setting], [Control Panel], [Stylus], [Calibration], [Recalibrate] or turn on the instrument after hard-reset.
2. After touching all targets (5 points), press [ENT] key, or tap the display.
3. (Use an accessory stylus pen to touch a screen. Do not use neither a ball-point pen nor pencil.)

**TRANSMISSION DATA TO THE PC**

Interface Cable

1. Install ActiveSync in your PC (if it is not already installed).
2. Connect the FC-2000 to your PC with an interface cable F-25 as shown below.

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**SPECIFICATIONS**

- Microprocessor: XScale PXA 255
- Processor speed: 400MHz
- Operating system: Microsoft® Windows® CE.NET 4.2
- Memory: 64MB RAM
- Display: 320x240 (256 colors)
- Interface(USB) cable F-25
- Battery BT-62Q
- Battery charger BC-30
- Operating time: 45 hours (With no display light, no touch)
- Dimensions: 255x130x61 (mm)
- Weight: 0.8kg (with battery)

**BATTERY**

- Weight: 64 MB RAM
- Approx. 3 hours with BC-30
- XScale PXA 255

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**RAM DATA BACKUP**

If your device had not recharged during several days, the battery will be running down, and you would lose all of data on the device other than that in the “CF Card” (internal CF card).

In addition, you might perform hardware-reset by the hardware problem or software problem. In this case, you would lose all of data same as the above.

You can use Backup function of FC-2000 in order to evade such kind of uneasiness. Your data will be restored to latest condition automatically when rebooting by using the Backup function.

The Backup function saves all data files of RAM (except for OS files), registry file and additionally installed programs into named “Backup” folder in the “CF Card”.

**STORAGE PRECAUTIONS**

- Always clean the instrument after use.
- Use a clean cloth moistened with neutral detergent or water.
- Never use an abrasive cleaner, either, thinner benzene, or other solvents.
- Always make sure the instrument is completely dry before storing. Dry any moisture with a soft, clean cloth.

**Note:** The instrument may develop heat while charging, there is no problem of it.

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**Touch Screen**

Adjusting Touch Screen

1. Tap [Start], [Setting], [Control Panel], [Stylus], [Calibration], [Recalibrate] or turn on the instrument after hard-reset.
2. Using a stylus pen, touch the center of the targets.
3. After touching all targets (5 points), press [ENT] key, or tap the display.

(Use an accessory stylus pen to touch a screen. Do not use neither a ball-point pen nor pencil.)

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**Preparation for Use**

Battery

There are two ways to charge the battery as follows.

Battery Charging (Using BC-30)
1. Install the battery on the BC-30.
2. Plug the power cord in an outlet (AC-120V or 230V). Charging is completed after approximately 3 hours.

The Power LED of BC-30:
- Red ON: Power is on.
- Green ON: Charging.
- Red Flashing: Charging completed.
- Red Flashing: Charging error.

Battery Charging (Using AD-9B/7C)
1. After installing the battery, plug the connector of AD-9B/7C in the FC-2000.
2. Plug the AD-9B/7C in an outlet. Then the run charge LED will light. Charging is completed after approximately 5 hours. The display can be turned on or off by the power key.

The Charge LED of FC-2000 will indicate charging status:
- Red ON: Charging.
- Green ON: Charging completed.
- Red Flashing: Charging error.

Touch Screen

Adjusting Touch Screen

1. Tap [Start], [Setting], [Control Panel], [Stylus], [Calibration], [Recalibrate] or turn on the instrument after hard-reset.
2. Using a stylus pen, touch the center of the targets.
3. After touching all targets (5 points), press [ENT] key, or tap the display.

(Use an accessory stylus pen to touch a screen. Do not use neither a ball-point pen nor pencil.)

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**Battery Installation**

1. Remove the handstrap from the FC-2000.
2. Using a coin, loosen the screw on the battery cover.
3. Remove the battery cover.
4. Install the battery pack.
5. Using a coin, install the battery cover. Tighten the screw firmly.

**Replacement of Battery**

- When the battery is replaced, the data recorded in memory will be lost.

To protect the data, first execute “RAM Data Backup”, then replace the battery.

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**Touch Screen**

Adjusting Touch Screen

1. Tap [Start], [Setting], [Control Panel], [Stylus], [Calibration], [Recalibrate] or turn on the instrument after hard-reset.
2. Using a stylus pen, touch the center of the targets.
3. After touching all targets (5 points), press [ENT] key, or tap the display.

(Use an accessory stylus pen to touch a screen. Do not use neither a ball-point pen nor pencil.)