



Electrical Inspector

Introduction and Installation instructions

Issue 4: November 2004

NOTE

This software is intended to run on a single PC and will support one or more handhelds, as licenced. Any attempt to operate the software on two or more PCs will result in data corruption.

NOTE

The term *Palm OS handheld* refers to handheld devices, from any manufacturer, which operate under the PALM OS operating system: this operating system has been developed by and is owned by Palm, Inc. Throughout this document the word *handheld* refers only to hardware which uses this operating system. Please refer to the **Trademarks** chapter for details of the terms and phrases which are registered trademarks

NOTE

For the convenience of Users, this software contains a list of over-current protection devices and a table of maximum permitted earth fault loop impedances. *tap-it software* do not take responsibility for the completeness or accuracy of this information.

BATTERY CHARGE: NOTE WELL

A flat battery in your handheld means the loss of the programs AND THE DATA held by the handheld. There are several ways of recharging the unit in the field and some of these are discussed under the heading *Battery Management*.

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OVERVIEW

FEATURES

Electrical Inspector is used to record the results of the inspection and test of electrical installations and to print test certificates and periodic reports complying with national standards such as BS7671 and the NICEIC formats.

The operation of *Electrical Inspector* is a 4-step process:

1. Record all inspection and test results on a handheld
2. Download the data to the PC
3. Print the test certificate
4. Optionally, delete the certificate from the handheld

The software consists of two modules: one is used on a Palm OS handheld and other runs on a PC under Windows.

Specific features include ...

- Support for 1 or more handhelds
- All data required by a certificate is entered on the handheld. The PC may be used to create a certificate and to enter descriptive information such as Client and Installation details, and the names and addresses required by the Declarations
- 'Return visit' certificates can be created. These hold installation details, boards and circuits
- Data can be exchanged between handheld and PC by direct connection, by SD memory card or by email
- User aids include on-screen calendars, drop-down selections, tick boxes and other aids to speed data input
- With a suitable printer, certificates to BS7671 standards can be printed on plain paper directly from the handheld
- An SD memory card inserted in the handheld can be used for routine backup or for long-term data storage
- Certificates are created as pdf files and can be emailed to clients.

GENERAL DESCRIPTION

Certificates

Versions of *Electrical Inspector* prior to Issue 4, print certificates which have the general format of BS7671's model certificates but which carry additional entries on the pages covering the Schedules of Circuit Details and Test Results. This enhancement was implemented to match the NICEIC certificates.

These certificates, which are printed on plain paper, are retained in Issue 4 for compatibility with those produced by existing users of the software.

In addition to these certificates, the NICEIC Edition of the software also supports the Installation, Minor Works and Periodic certificates dated September 2001. Other certificates will be added from time to time and updates made available. Details of these enhancements will be found on the *tap-it software* web site.

A parallel edition, called the BS Edition, supports the existing three certificate types and, in addition, three new certificates which match the models in BS7671 in all respects.

Handhelds and PCs

This software is written for handhelds and smartphones running the Palm OS operating system. It does not run under Pocket PC© or other variants of Windows©

The software is licenced for one PC and one handheld. Further handhelds can be added on payment of a small fee.

Data collection and certificate printing

All data required by a certificate can be entered into the handheld. However, to minimise the volume of text which has to be entered by the field engineer, facilities exist on the PC to create certificates and, where appropriate, to enter into them the Client and Installation details and the information required for the Declarations. The certificates may then be sent to the handheld.

This is the only information which the PC module can enter and amend. There are no facilities for editing other information received from a handheld. (See the paragraph entitled *Editing certificate details* for more information on this topic)

When a BS7671 certificate's data is complete, it may be printed directly from the handheld and the data sent to the PC for long-term storage. Alternatively, the data may be sent to the PC and the certificate printed from there.

NICEIC certificates must be printed from the PC.

When it is known that the data has been successfully copied to the PC, the copy of the certificate held by the handheld may be deleted, retained on the handheld or copied to an SD card.

BS7671 certificates may be printed or reprinted from the PC at any time. To avoid the waste of pre-printed NICEIC forms, a preview facility is provided on the PC: the preview may then be printed on to blank paper for checking.

Where a number of similar properties are to be tested, on a new housing estate for example, once the first installation's details have been entered in the handheld, they may be copied to create additional certificates with the same *fixed* information – Supply Characteristics, Particulars, distribution boards and circuits.

This can save a great deal of time.

Test results are not copied from one certificate to the next.

Partial testing

Where a BS7671 certificate is issued for part of an installation only - an addition, alteration or restricted Periodic for example - the test certificate need only contain details of those parts of the installation which were tested. The following rules have been implemented for optional use in these circumstances ...

- a board for which test results have not been entered will only be included in the certificate if one or more of its circuits has test results
- a circuit will only be printed if it has test results

The option for restricted printing is chosen at the time of printing the certificate.

Distribution boards and circuits

One of the items of information which is entered for each board is the *Number of Ways*. The system will automatically create that number of circuits, each having the description SPARE.

Circuits are numbered from 1 to the figure entered for the number of ways. This numbering gives the *position* of each circuit on the board. Fuse charts and Schedules of Circuit Details list the circuits in this sequence.

In addition, each circuit has a 10-character *identity* which can be entered in any format whatsoever. For example – 4 RYB, Red 8, M2607 or L1L2L3. This gives the test engineer total flexibility in the identification of the circuits.

The *description* of each circuit may be up to 60 characters long, allowing entries such as *Lights, Floor 4, east and west corridors*.

On entering a circuit's test results into a BS7671 certificate, the screen allows the entry of a *Comment* of up to 30 characters to describe any aspect of that circuit's condition. This is in addition to the ability to enter *Observations and Recommendations*. The *Comment* is printed on the *Schedule of Test Results*, as part of the test certificate. Although it is unlikely that the *Comment* would be used for an Installation certificate, there may be times when

the facility would be useful and it has been decided to include it for these as well.

Once a circuit has been created it may not be deleted: it may only revert to SPARE. The only way of deleting circuits is to reduce the parent board's *Number of Ways* and this will invariably remove those with the highest circuit numbers. For example, if a board was set up with 12 as the *Number of Ways* when the correct number was 8, reducing the number from 12 to 8 will cause circuits 12, 11, 10 and 9 to be removed from the system.

A very useful feature is the ability to set, for each board, a series of defaults for the board's circuits. Default values may be set for Wiring Type, Reference Method, live and cpc csa, BSEN, rating, short circuit capacity and maximum disconnection time.

On setting up one of the board's circuits, tapping the *Default* button causes the screen to fill with the default values. Another time saver!

HotSync

The HotSync operation, described in the handheld manual, is used to exchange information between *Electrical Inspector* PC and handheld databases.

NOTE It is **essential** that *Electrical Inspector* HotSync screen is displayed on the PC if a HotSync operation has been initiated to transfer *Electrical Inspector* data.

In addition, HotSync automatically creates a backup of a handheld's data in PC folders *Backup*, one folder being created for each handheld user. If it is necessary to reinitialise the handheld for any reason, the Palm operating system will automatically restore the data which has been archived. The exact locations of these folders are described in the handheld's User Manual. The Backup includes *Electrical Inspector* data held on the handheld.

HotSync is initiated very simply by pressing a button on the handheld's cradle, or cable, or by tapping an option on the handheld screen.

CREATING A NEW CERTIFICATE

A certificate may be created in three ways ...

- on the handheld, using the Certificate Details option
- on the handheld, using the Copy Certificate menu option
- on the PC, using the Certificate Details menu option

Handheld: Certificate Details option

This method creates a blank certificate with a number entered by the user and a certificate type selected from a drop-down. When this information is saved, the certificate's Main Menu is displayed.

Handheld: Copy Certificate option

There are two occasions when this method can be used. The first is a repeat visit to a site when details of the previous certificate are still held on the handheld. The earlier certificate is selected from a list and the number of the new certificate entered. When the *Copy* button is tapped all *fixed* information – supply characteristics, particulars at the origin, boards and circuits – is copied to the new certificate. Test results and other measurements are not copied.

If the previous certificate has been transferred to an SD card, it can be Imported to the handheld database, the operation described above carried out, and the old certificate deleted from the handheld. Its copy on the SD card is not affected by this procedure.

PC: Certificate Details option

This is similar to the handheld's *Certificate Details* but, for Installation and Periodic certificates, also offers facilities to enter Client and Installation details and the Declarations. The certificate can then be sent to the handheld by one of the methods described below.

It is also possible to load the site's *fixed* information into the new certificate if an Installation or a Periodic certificate has previously been issued for the site and if the details of the installation had included an Installation name. (For more information see *The Installation Name* in the *Things You Ought to Know* chapter)

Certificate numbers

Where all certificates are issued from the handheld or by the PC, checks are made to prevent the same number being issued to two certificates. However, if some are issued from the handheld and some from the PC, a check is not possible. It is important to organise a method of controlling certificate numbers.

Under some circumstances it might be suitable to create a number of certificates of different types on the PC and to send these to the handheld. The engineer is not then required to create his own certificates.

SENDING A CERTIFICATE TO A HANDHELD

There are three ways of sending a certificate from the PC to the handheld. These are ...

- by means of a HotSync
- by the use of an SD card
- by email

The HotSync method

This is a two stage operation, the first selecting the certificate to be sent and the second transmitting the data.

From the PC's Main Menu choose the *Export/Import* option and, from that menu, select *Export certificate by HotSync*. This screen allows one or more certificates to be selected for despatch to a specified handheld. Once selected, they are held in a parking area until the next HotSync when they will be delivered to the handheld.

The SD card method

This method requires that the PC has an SD card drive, a low cost accessory. The data which forms the certificate is placed in a text file by this operation.

The *Export certificate by file* option on the *Export/Import* menu allows the user to ...

- select the certificate which is to be sent
- identify the handheld which is to receive it
- enter the name of the file into which it is to be exported
- specify the folder into which the file is to be placed.

An SD card is placed in the drive and the certificate sent to it.

There is space for many certificates to be held on an SD card.

The card can then be given to the engineer, posted to him or – see next section – sent by email.

When the SD card has been received, it is placed in the handheld and the data imported into the database using *Import data from SD card* option on the *Export/Import* menu.

The email method

This method, which is an extension of the previous method, uses emails as the means of delivering the data. It requires that the Office computer can send emails and that the handheld has email facilities – as a smartphone or with an infrared or bluetooth link to a mobile phone.

The PC's email program is used to create a message with the certificate text files included as attachments.

An email program on the handheld is used to receive the message and to save the attachments on an SD card. The data is then imported into the handheld database using the *Import data from SD card* option on the *Export/Import* menu.

A suitable email program is included in the software bundle delivered with the handheld.

SENDING A CERTIFICATE TO THE PC

This procedure is similar to that described in the previous paragraph. Data can be sent by HotSync, SD card or by email.

EDITING CERTIFICATE DETAILS

There are only limited facilities for editing certificate data on the PC. The sections which may be amended are the Client and Installation details and the Declarations.

To amend any other items, it is necessary either to instruct the engineer to make the alterations and to send the certificate again or to have a Manager's handheld in the Office.

THE CERTIFICATE TRANSFER FILES

When information is sent by SD card or email, the certificate data is written to a text file in a format called CSV – Comma Separated Values. This is an international standard and can be read by programs such as Excel and by all major programming languages.

As an example of its structure, consider Distribution Boards. For each of these there are 37 separate items of information. In the CSV file these are written on a single line, thus:

```
"PER6445", "DB1", "In the Hall cupboard", 12, ... etc etc
```

Each text item is surrounded by double quotes and the items are separated by commas. Numeric items are not surrounded by quotes, nor are True/False values. The latter appear as #TRUE# and #FALSE#.

A detailed description of the file's structure can be viewed and printed using the *Export file format* option on the PC's System Management menu.

The declaration of this structure will assist those who wish to use the handheld to record certificate data but who wish to produce their own certificates.

PRINTING DOCUMENTS

Printing of BS7671 certificates and fuse charts may be carried out directly from the handheld so long as the printer is supported by the software and has an infrared port or an infrared adaptor.

The printers currently supported are the Hewlett Packard DeskJet and LaserJet models.

BATTERY MANAGEMENT

It is essential that the handheld battery is not allowed to discharge fully. If that happens, programs such as *Electrical Inspector* and their data, **ALL** their data, will be lost.

When the handheld is subsequently charged it will be found that the handheld has reverted to its status on first delivery.

There is a battery charge indicator at the top of the handheld's main screen. This gives a clear indication of the state of charge. In addition, the handheld will also give an audible warning.

In addition, *Electrical Inspector* will give a warning when the charge falls to 75%, to 50% and to 25%. The charge is checked every time a menu screen is displayed.

There are several ways of recharging the battery ...

- take a spare charger unit on site
- obtain a travel kit which contains a mains charger, a PP9 adaptor and a cigar lighter adaptor.
- use a charging *sledge*. This is illustrated here and shows how the handheld is connected and is then laid flat. Palm claim that this unit holds the equivalent of two full charges and say that, when the handheld is latched in place, it is possible to continue recording data in the usual manner



BACKUP

The System Management menu on the PC module has an *Archiving* option which allows the *Electrical Inspector* database to be archived on to removable media or on to the PC's hard disc.

The HotSync operation, whether transferring *Electrical Inspector* data or not, will create an image of the handheld's memory on the PC's hard disc. Should the handheld be lost or damaged, a replacement can be connected to the PC and the memory image copied down by a HotSync.

It is recommended that, where possible, a HotSync should be carried out at the end of each working day.

The contents of a specific certificate may be backed up – on the handheld or PC - to an SD card by using the *Export file to SD card* option. If necessary, that data can be restored by the *Import certificate from SD card* operation.

Using this method, all certificates resident on the handheld can be backed up whenever significant changes have been made.

THINGS YOU OUGHT TO KNOW

Buttons

Buttons placed on the handheld screen allow commands to be issued by the user, in the same manner as with Windows® software. The standard buttons are these ...

- Accept** Hold the information on the current screen for the Save operation on another screen.
- Save** Update the database with new or amended information
- Cancel** Discard any changes made to the information on the screen
- Done** The current operation is complete. Usually, the Main Menu will be displayed when a **Done** button has been tapped.
- OK** The information currently displayed – HELP for example – need no longer be displayed.
- More** Typically shown at the bottom of a HELP screen, this indicates that there is at least one further page to be seen. Tapping the button shows the next page.
- Next** This is shown on data entry screens when there is more information than will fit on a single page. *Next* moves to the next page in the sequence.
- Back** This button matches **More**, moving backwards through the HELP pages.

The functions of buttons not included in this list will be found in the descriptions of the screens' operations and in their Help! Displays.

Data entry

Where possible, data entry is achieved by selection from drop-down lists and tick-boxes..

Where this is not possible, the entry of data values may be carried out using the screen-based keyboards which are provided as part of the Palm OS operating system or by means of *graffiti* characters. Both are described in detail in the handheld manual. It is **strongly recommended** that time is taken to learn the *graffiti* script as this is fast and effective.

In addition, Palm OS provides a *short cut* facility which converts two *graffiti* characters into a word or phrase. This feature, which is fully described in the handheld manual, is particularly useful where a word or phrase is repeatedly used.

Dates

To avoid potential confusion when viewing dates in the format 5/4/01, this software invariable shows dates in the format **5 Apr 2001**.

The user is never required to enter a date directly because it is simpler to make a selection from a calendar.

The arrows on either side of the year are used to choose a year. A month is selected by tapping its name and the day is similarly selected.



Tap **Today** for today's date, whatever the setting of the calendar, and tap **Cancel** to return a blank date.

On tapping a day number, **Today** or **Cancel**, the calendar is closed and the original screen is displayed.

Drop-down lists

Where a selection has to be made from a list of items, a drop-down may be used.

Select location

▼ <Add location>

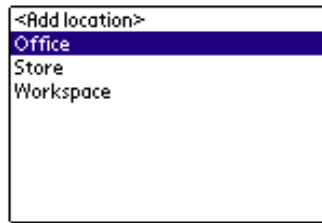
The drop-down is shown on the data entry form as a down arrow head with a brief phrase to indicate the nature of the information to be selected.

Tapping the arrow displays the list of items. If there are more items than fit into the window, scroll arrows appear.

Tap the required item to make a selection. The window then closes and the item, in this case a location, appears alongside the drop-down arrow.

There are two type of drop-down. The type illustrated here allows the addition of new entries in the list. The other type – conductor sizes for example – displays a fixed list, to which additions may not be made.

Select location




In all cases it is permitted to ignore the list and to make a manual entry.

Closing the program

There are two ways of closing the program.

One is to tap the screens' **Done** buttons until the main menu is displayed and then to tap its **Done** button.

The other is to tap the  icon to the left of the handheld's *graffiti* area. This closes the program and *remembers* the screen and data which were displayed at that time. When the program is next run it goes directly to that screen.

HotSync

HotSync will not run on the handheld whilst *Electrical Inspector* is running because the database will still be open.

Post codes

Addresses in *Electrical Inspector* invariably consist of four lines of 30 characters. Where required, the post code must be included on these lines.

Overcurrent protective devices

Electrical Inspector treats a device's BSEN and Type as a single identifier in order to reduce input, thus BSEN 60898 B.

The installation name

The screens used to enter the installation details for Installation and Periodic certificates include space for an Installation Name. This is an optional item which should be used if it is required to create a Site Profile for the installation on the PC. A profile, which holds details of all *fixed* information, can be inserted into a new certificate before it is issued to a handheld user from the PC.

Profiles are selected from a list of Installation Names. If it is not required to create a profile for a site, the certificate should not include an Installation Name.

Given the presence of a Name, a site's profile is updated whenever a certificate with that name is received by the PC.

The term *fixed information* refers to the Supply Characteristics, the Particulars of the Installation, distribution boards and circuits. It does not cover measured values.

HELP!

The *Electrical Inspector* user is given several sources of guidance. These are ...

- PC: an on-screen manual describing the whole product
- PC: Help displays for every screen
- Handheld: an on-screen manual describing just the handheld module
- Handheld: Help displays for every screen

Both on-screen manuals are delivered as PDF documents which are displayed and printed using the Adobe Acrobat Reader™ program. PDF, *portable document format*, is an international standard used for documents of all types. The programs required to read PDF documents, one for the PC and one for the handheld, are provided by Adobe Inc at no cost to the user. The CD from which this software was installed carries copies of each program and they are installed in accordance with the procedures described in the Installation

Chapter. Screen Help

displays are called up by clicking this icon at the top right of the screen.



A PC, running Windows, can rapidly switch between programs, allowing both *Electrical Inspector* and its manual to be available.

A handheld, running Palm OS, can only support one program at a time. Normally, this would make it difficult to switch between a **tap-it software** product and its manual. However, because **tap-it software** programs always return to the screen from which they were last closed down, it is a simple task to get up-to-the-minute assistance.

INSTALLATION

PRE-REQUISITES

System Requirements

The PC must ...

- run Windows 95/98/ME/2000/XP
- have 50 Mbytes free hard disc space
- have one spare serial or USB port for the handheld connection – as specified by the handheld manufacturer
- optionally have an SD card reader

A handheld or smartphone must ...

- run Palm OS version 3.5 or later
- have an 8Mbyte memory

If printing is to be carried out directly from the handheld, it will be necessary to have a compatible printer with an infrared adapter. For full details, please refer to the *Handheld Printer Setup* section later in this Chapter.

PC INSTALLATION

General remarks

Two products must be installed on the PC - the software supplied with the handheld, called Palm Desktop, and *Electrical Inspector* PC module. Instructions for installing Palm Desktop are provided by the handheld manufacturer.

PLEASE NOTE that the handheld's Address Book, Date Book, Memo Pad and To Do List can either be linked to (synchronised with) MicroSoft's Outlook or with Palm's PalmDesktop. The choice is made when installing the Palm software.

The Palm Desktop installation requires the name to be given to the (first) handheld. The names of additional handheld users are set up from within *Electrical Inspector* PC module.

It is normal to assign a person's name to the handheld rather than the name of the organisation because the handheld name is used to identify the person carrying out the work.

When entering the name during the Palm Desktop installation operation it is important to ensure that it is entered with capital letters where appropriate. When setting up *Electrical Inspector* it will be required to enter the handheld name in **EXACTLY** the same format.


Installation

Follow this sequence ...

1. Install the Palm Desktop software which accompanied the handheld, following the instructions in their booklet.
2. Load the **tap-it software** CD.
3. The installation should run automatically but if it does not do so, select *Start/Run/Browse* and locate the file named *setup.exe* on the CD.
4. Click OK to start the installation.
5. Follow the instructions which are displayed, entering the user's Company Name and the Serial Number when prompted to do so. A Serial Number will be found inside the front cover of this manual.

NOTE THAT the Company name will be printed on test certificates and can only be changed with assistance from *tap-it software* support staff

NOTE ALSO THAT, for a 30-day evaluation copy of the software, the Serial Number EVALUATION must be used.

6. On completion of the installation process, remove the CD and reboot the computer.
7. The *Electrical Inspector* icon will be displayed on the desktop and a program group will have been created containing these options:

 - *Electrical Inspector*
 - *Electrical Inspector Manual* (this links to the full Manual)
 - Uninstall *Electrical Inspector*
8. In addition, the software to be downloaded to the handheld(s) will have been stored on the computer's hard disc.

9. If Acrobat Reader has not already been installed on the PC, the program **must** be installed because it is used for the creation of printed documents such as certificates. Follow these steps ...
 - Click Start
 - Click Programs
 - Select tap-it software
 - Click the option entitled *PC Acrobat Reader Installer*
 - Follow the screen instructions
10. Click the *Electrical Inspector* icon to run the program. If the software has been loaded as an evaluation, an *Evaluation Reminder* screen will be displayed, showing the number of days to the end of the evaluation period. Click OK to move to the Main Menu.

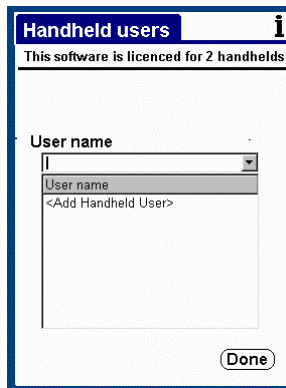
If a valid serial number was entered during installation the *Evaluation Reminder* will not be displayed.
11. From the Main Menu select System Management and then Licencee Details. This screen is used to insert the Company's information and should be done before following the instructions for installing the software on the handheld.
12. From the Main Menu select System Management and then Printer Alignment. Follow the instructions displayed on that screen for setting the offsets the program will use when printing on the NICEIC forms. This step is not necessary if only the BS7671 certificates are to be used.
13. Set the *Rule of Thumb* percentage used to determine the 'testing' value of maximum permitted earth fault loop impedance. This value is set using the Rule of Thumb screen called from the System Management menu. The recommended percentages are available from the IEE and the NICEIC.


HANDHELD INSTALLATION

These instructions cover the installation of the handheld **Electrical Inspector** module, the Palm OS version of Acrobat Reader and the handheld version of the *Electrical Inspector* PDF manual

The software is loaded on a handheld by the PC *Electrical Inspector* program, using this sequence ...

1. Run *Electrical Inspector* on the PC
2. If the *Evaluation Reminder* screen is displayed, click the *OK* button.
3. The Main Menu is displayed.
4. Select the *Handheld Management* option
5. From that menu select the *Handheld User details* option to register the name given to the handheld when the *Palm Desktop* software was installed.
6. Click the dropdown. If no users have been registered, as will be the case after first installation, the drop-down will have only one entry which is *<Add Handheld User>*
7. Click this entry and enter the handheld name. If this is the first name, take care to enter it exactly as entered on installing the *Palm Desktop* software - with upper and lower case letters as in the original. If this is a second or subsequent handheld, it will be registered with *Electrical Inspector* and EI will also register it with the *Palm Desktop* software.
8. Click the *Save* button which will have been displayed.



9. **NOTE THAT** the *Electrical Inspector* is initially licenced for only one handheld. If additional handhelds are to be used, the software must be configured for these. (See *Software Options*, below, for an explanation of this process.) The *Handheld Users* screen shows the number of licenced users at the top.
10. Select *Done* to return to the *Handheld Management* menu.
11. From this menu select the *Load software on handheld* option
12. A warning message is displayed stating that several windows will be displayed during the preparation of the data to be sent to the handheld and warning that these should be ignored.
13. When the data has been prepared, a window is displayed requesting the selection of the handheld user name. Make that selection from the drop-down list.
14. Place the handheld in its cradle, or connect it to its computer cable, and initiate the transfer of the program by tapping the HotSync button
15. The transfer will take several minutes, during which the handheld screen will list the program elements as they are copied across. On completion the handheld will display *HotSync operation completed*
16. The handheld now contains the *Electrical Inspector* software and the *Electrical Inspector* handheld icon  will be seen on its screen in the *All* and *Unfiled* menu selections. It is recommended that *Electrical Inspector* be moved to the *Applications* menu: the handheld's manual explains how to perform this task.
17. To complete the software installation the PC must be closed down and restarted.

18. The final step is to carry out a HotSync so that the company details and other reference information is copied from the PC to the *Electrical Inspector* module on the handheld. Follow this sequence ...

- Run the PC *Electrical Inspector* module
- Select the HotSync option from the Export/Import menu. This puts *Electrical Inspector* in *listening* mode so that it can intercept the data stream between PC and handheld, inserting data to go out and reading data coming back
- Connect the handheld to the computer and ensure that it is displaying its main screen, with all the icons displayed.
- Initiate a HotSync and watch the PC screen to ensure that it displays an *exchanging data* message.
- On completion of the HotSync, close EI on the PC
- Run EI on the handheld to merge the downloaded data with EI's database.

The system is now ready for use.

INSTALLING THE HANDHELD PDF MANUAL

Adobe provide a special program for loading documents in PDF format on to a Palm OS handheld. This program is installed on the PC's desktop and has this icon.



Tapping the icon brings up this window. Although the window has a number of controls, only two are used.

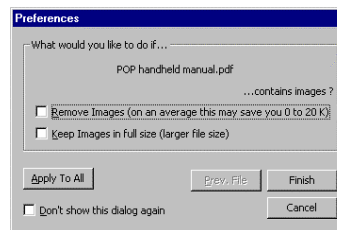
On the right, below the heading, is a User Name drop-down. Select the User name for the handheld which is to receive the manual.



Click the button with the caption *Add PDF to transfer list*.

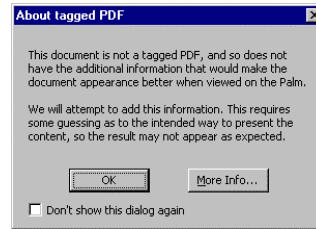
This brings up the familiar file selection window. Select the file called *Electrical Inspector handheld manual* which will be found in the folder holding the *Electrical Inspector* software.

This window is then displayed. Clear the option which removes images from the manual sent to the handheld and click *Finish*.



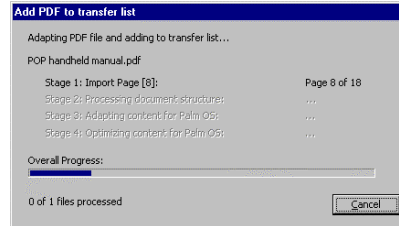
This is the final window in the selection sequence. Ignore its message.

Click the **OK** button to start the operation which converts the PDF format manual into the format required by the Palm OS.



This window shows the progress through the conversion operation, which takes no more than a minute or so.

When the conversion is complete the manual will be seen to have been added to the list of files to be sent to the handheld.



To do this, connect the handheld to the PC by cradle or cable and start a HotSync. On completion, this list of documents will be empty.

Handheld Printer setup

If handheld printing has been enabled, following the instructions described later in this Chapter under *Software options*, it is necessary to select the handheld's default printer. *Electrical Inspector* CD includes drivers for all supported printers.

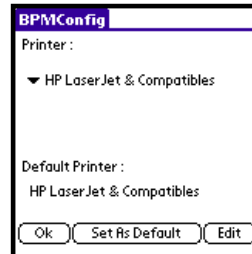
Tap the *PrintSetup* icon. This brings up the screen used to select the printer.



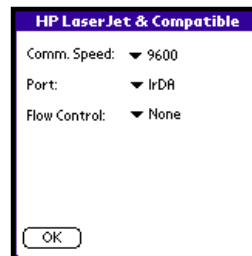
Tap the *Printer* drop-down and choose the printer to which the infrared adaptor is to be connected.

PrintSetup

Then tap the *Set default printer* button to set that printer as the default.



Tap the **Edit** button to set the characteristics of the link between handheld and printer. Select each of the drop-downs in turns to set the values shown in this screen shot. As it is possible that the settings may vary between handheld models and/or printers, up to date information will be made available on web site custom.co.uk. Tap **OK** to close this screen and **OK** again to close the printer configuration program..



SOFTWARE OPTIONS

General remarks

Some features of the software are optional.

There are three options: these are ...

- support for additional handhelds – on delivery the software supports only one handheld
- the ability to print directly from a handheld.
- Change of company name

For full details of the optional features and their cost, please visit *tap-it software's* web site – www.custom.co.uk

Enabling the options

1. Run *Electrical Inspector* on the PC
2. From the Main Menu select the *System Management* option.
3. From that menu select *Option Management*: this screen will be displayed.
4. Note the two *System Codes* and pass these to Support together with details of the optional features required and payment for these.
5. Having noted the codes, click the *Cancel* button to close down the software. **NOTE THAT** the software may continue to be used whilst awaiting the *Unlock codes* from Support
6. When the *Unlock Codes* are received, select the *Option Management* option, as described above, and enter the *Unlock codes*. In some cases, only code 1 will be received: in others codes 1 and 2 will be supplied. This is a characteristic of the encryption used to protect the option configuration system.

The screenshot shows a dialog box titled "Option Management" with an information icon in the top right corner. The dialog contains the "tap-it SOFTWARE" logo. Below the logo, there are two sections: "System codes" and "Unlock codes". The "System codes" section includes the text "Note these codes and pass them to CUSTOM" and lists "A: 296923995" and "B: 1". The "Unlock codes" section includes the text "Enter here the unlock codes received from CUSTOM" and two input fields labeled "1:" and "2:". At the bottom of the dialog are "Cancel" and "OK" buttons.

7. After entering the codes click the *OK* button. The system will be updated and will then close down. On next running the software the requested features will have been enabled.
8. An enabling code will be sent to the handheld at the next HotSync so long as the *Electrical Inspector* PC module's HotSync screen is displayed.

As it is not possible to change the name of the Licencee of the software – the Company name which is printed on Declarations and certificates – a facility has been added to the Options which allows the name to be modified.

The entry of the unlock code which is received from Support will automatically change the company name to ...

****** ENTER NEW NAME *****

When this name is displayed on the Licencee screen it may be changed as required. However, once that screen has been saved, the program will again lock the information.

After making the change it will be necessary to carry out a HotSync operation with *Electrical Inspector* HotSync screen displayed to transfer the new name to each handheld.

THE *ELECTRICAL INSPECTOR* MANUAL

The full *Electrical Inspector* manual is supplied as a pdf file.

It may be displayed on the PC by clicking the *On-screen Manual* option on the PC module's Main Menu or by clicking Start, Programs, tap-it software and *Electrical Inspector* Manual.

CONTACTING TAP-IT SOFTWARE

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