WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.
About This Document

Abstract
This document provides descriptions and procedures for the installation and operation of Process Instrument Explorer software.

Revision Information

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Document ID</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Instrument Explorer Configuration Software</td>
<td>Revision 9</td>
<td>September 2012</td>
</tr>
<tr>
<td>User Manual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Support and Contacts Info

United States and Canada:

- Contact: Honeywell Process Solution
  - Global Technical Support - Phone: 001-800-423-9883
  - Customer Service (HFS) - Phone: 001-800-343-0228
  - Outside United States - Phone: 001-215-641-3610

Calls are answered by dispatcher between 6:00 am and 4:00 pm Mountain Standard Time. Emergency calls outside normal working hours are received by an answering service and returned within one hour.

- Email support: ask-ssc@honeywell.com
- Mail: Honeywell Process Solutions
  1860 West Rose Garden Lane,
  Phoenix, Arizona 85027

World Wide Web:

- Honeywell Process Solution Support Online:
  www.honeywellprocess.com/

Elsewhere in the World:

- Call your nearest Honeywell office. See back page for details.

Training Classes:

- Honeywell Automation College:
  http://www.automationcollege.com
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Figure 1-1 Screen capture of Process Instrument Explorer running on a Pocket PC 1
1 Introduction

1.1 Overview

Process Instrument Explorer (P.I.E.) lets you configure Honeywell process instruments such as controllers and analyzers using a PC (desktop/laptop) or Pocket PC.

![Screen capture of Process Instrument Explorer running on a Pocket PC](image)

**Figure 1-1 Screen capture of Process Instrument Explorer running on a Pocket PC**

1.1.1 Features

- Create/edit configurations live, just connect software to controller comm port.
- Create/edit configurations offline and download later to controller comm port.
- Communication types available on process instruments:
  - Infrared
  - RS 485
  - Ethernet
- Common look and feel between PC and Pocket PC versions.
- Same communications types on process instruments allow interconnectivity.
- Available in English, Spanish, Italian, German and French (UDC).
- Available in English, Spanish, Italian, German, French, Russian, Turkish, Polish and Czech (UDA).
• The infrared connection provides a non-intrusive wireless connection with the instrument and maintains NEMA4X AND IP66 integrity.

• No need to get access to the back of the instrument to communicate with the instrument, no need to take your screw driver to wire the communication cable, no wiring mistake possible. You can now duplicate an instrument’s configuration, upload or download a new configuration in a matter of seconds, just by pointing your Pocket PC in the direction of the instrument.

It takes just a few seconds to upload a configuration from an instrument. You can then save the configuration file onto your PC or pocket PC for review, modification or archiving. Furthermore, this software also gives you important maintenance information on the instrument: instantly get information on the current operating parameters, digital inputs and alarm status, identify internal or analog input problems.
## 2 Installation

### 2.1 System Requirements

<table>
<thead>
<tr>
<th>Hardware</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PC</strong></td>
<td>CPU: Intel x86 processor</td>
</tr>
<tr>
<td></td>
<td>RAM: 32MB</td>
</tr>
<tr>
<td></td>
<td>Disk space: 4.2MB</td>
</tr>
<tr>
<td></td>
<td>For IR Communications: Actisys ACT-IR220L+</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.actisys.com">http://www.actisys.com</a></td>
</tr>
<tr>
<td></td>
<td>For RS-485 Communications: Technman PC5001 or equivalent RS-232/485 Converter</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.technman.com">http://www.technman.com</a></td>
</tr>
<tr>
<td></td>
<td>For Ethernet Communications: 10 BaseT or 10/100 BaseT Port</td>
</tr>
<tr>
<td><strong>Pocket PC</strong></td>
<td>CPU: Intel PXA250/ PXA255 or later</td>
</tr>
<tr>
<td></td>
<td>RAM: 32MB</td>
</tr>
<tr>
<td></td>
<td>Pocket PC must have an Infrared Port or an RS485 converter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Software</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PC</strong></td>
<td>Windows XP SP1, Windows Vista SP1, Windows 7</td>
</tr>
<tr>
<td><strong>Pocket PC</strong></td>
<td>Pocket PC 2002 or later</td>
</tr>
<tr>
<td></td>
<td>Microsoft Active Sync (XP) or Windows Mobile Device Center (Vista) application must be installed for the PC to communicate with the Pocket PC through the Active Sync cable.</td>
</tr>
</tbody>
</table>
### 2.2 Install/Upgrade Procedure

Follow this procedure to install, reinstall, or upgrade P.I.E.

**ATTENTION:** If upgrading, any P.I.E. databases (that is, saved instrument configurations) can be copied to the new P.I.E. application directory. Older databases are compatible with newer versions of P.I.E.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
</table>
| 1    | If upgrading PocketPC, perform section 2.3 Uninstall Procedure before continuing.  
*Insert P.I.E. CD into your PC. Click “Install/Uninstall” from the opening menu.* |
| 2    | **Welcome Screen** starts off the installation. |
| 3    | **License agreement** details the agreement on which you purchased this software. Continue only after reading and agreeing to these terms. |
| 4    | **Select Platform**  
Select the platform on which to install P.I.E.: PC, Pocket PC, or Both. |
| 5    | **Select Version**  
This screen appears only if P.I.E. is already installed. Use this screen to reinstall or upgrade your software. *If no version is already installed then this screen does not appear; go to Step 6.*  
To reinstall:  
The upper frame shows the version of the software that **can** be installed; click Install to reinstall the version specified.  
To upgrade:  
The lower frame shows the versions and their languages that **are** installed. Select a version/languages to be upgraded with the version in the upper frame, then select Upgrade.  
*Attention:* Any P.I.E. databases (that is, saved instrument configurations) can be copied. Older databases are compatible with newer versions of P.I.E. |
| 6    | **PC installation:**  
*Enter User Name, Serial Number, and License Key*  
Enter user name. Enter serial number and license key from the CD cover. Note: numbers are case-sensitive.  
**Pocket PC installation:**  
Microsoft Active Sync (XP) or Windows Mobile Device Center (Vista) application must be installed on the PC and Pocket PC.  
Connect the Pocket PC to the PC with an Active Sync Cable.  
Power up Pocket PC.  
On PC select the Active Sync “Guest Partnership” type connection.  
*Enter User Name, Serial Number, and License Key*  
Enter user name. Enter serial number and license key from the CD cover. Note: characters are case-sensitive. |
<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
</table>
| 7 | **Select Language(s)**  
Select one or more languages to install. If installing to both the PC and the Pocket PC then the software will be first installed in the Pocket PC and then in the PC. |
| 8 | **Choose Destination**  
Select a path in which to install the software. Use the default path shown or browse to a different path. *This screen does not appear if reinstalling over existing version.*  
Note: Pocket PC devices do not have drives, so the destination folder should not contain drive information. Pocket PC destination folder must start with a `\`.
| 9 | **Select Databases to Copy**  
This screen appears only if you previously uninstalled a version and retained the database. *(A *P.I.E.* database contains saved instrument configurations.)* *If no databases were retained this screen does not appear, go to Step 10.*  
You are shown a list of versions that are currently installed, as well as previously retained databases that have been found. You are asked to select the database version you want to copy into the newly installed/upgraded version of *P.I.E.* |
| 10 | **Finalize installation**  
**PC:**  
Shortcut(s) can be installed in the Start Menu of the PC. Shortcuts are named “PIE(language)(version)”. For example, “PIEEng1_00” is PIE English 1.00.  
**Pocket PC:**  
A popup announces that files are being transferred to the Pocket PC. A second popup announces that setup is accessing the mobile device.  
The Files will be copied to the directory selected in step 8. When the installation finishes, a message box reminds you to check your Pocket PC screen to see if additional steps are necessary to complete the installation. If all is ok the Pocket PC tells you the installation is complete.  
If your PocketPC has Windows Mobile 5.0 operating system, a popup will indicate that the software is from an unknown source. Click yes to proceed with the installation.  
Shortcut(s) will be installed in the Start Menu or Program Group of the Pocket PC. Shortcuts are named “PIE(language)(version)”. For example, “PIEEng1_00” is PIE English 1.00. |
| 11 | **Installation/upgrade is finished.** |
2.3 Uninstall Procedure

Follow this procedure to uninstall P.I.E. from your PC or Pocket PC.

ATTENTION: You must uninstall older versions from your PocketPC before doing an upgrade.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Insert P.I.E. CD into your PC. Click “Install/Uninstall” from the opening menu.</td>
</tr>
<tr>
<td>2</td>
<td>Welcome Screen starts off the procedure.</td>
</tr>
<tr>
<td>3</td>
<td>License agreement details the agreement on which you purchased this software. Continue only after reading and agreeing to these terms.</td>
</tr>
<tr>
<td>4</td>
<td>Select Platform Select the platform from which to uninstall P.I.E.: PC, Pocket PC, or Both.</td>
</tr>
<tr>
<td>5</td>
<td>Select Version The upper frame shows the version of the software that can be installed or upgraded to; leave as is and go to lower frame. The lower frame shows the versions and their languages that are installed. Select a version/languages to uninstall, then select Uninstall. <strong>Retain Database?</strong> If any instrument configurations (that is, a P.I.E. database) exist on your PC or Pocket PC then a popup appears asking if you want to retain the database. When given the option to retain database: Select Yes to save the database for future use if: you will install P.I.E. later, or you are upgrading your PocketPC with a newer version, or you want to archive the database. The database location is then shown. Or Select “No” to delete the database.</td>
</tr>
<tr>
<td>6</td>
<td>Uninstallation is finished.</td>
</tr>
</tbody>
</table>
3 Operations

3.1 Overview

The PC and Pocket PC Operations are virtually identical. Any differences will be indicated. Operations choices are:

**Communications Setup**—Before uploading or downloading instrument configurations you must set up communications.

**Upload Database**—Uploads instrument configuration to PC/Pocket PC.

**Offline Configuration**—Edits an instrument configuration for later downloading.

**Download**—Downloads an instrument configuration to an instrument.

**Online Configuration**—Edits and downloads one instrument setting at a time.

**Maintenance Data**—Displays key operating parameters and status parameters of the instrument without switching between the instrument screens. Some of the information presented here is not visible through the instrument display panel. Used primarily for diagnostics.

The Operations features are accessed using icons (Table 3-1) or the Menu (Table 3-2).
### Table 3-1 Operations Icons

<table>
<thead>
<tr>
<th>PC</th>
<th>Pocket PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>Communication Setup</td>
</tr>
<tr>
<td>Services</td>
<td>Upload</td>
</tr>
<tr>
<td>Help</td>
<td>Offline Configuration</td>
</tr>
<tr>
<td>PC Comm Setup</td>
<td>Download</td>
</tr>
<tr>
<td>Upload</td>
<td>Online Configuration</td>
</tr>
<tr>
<td>Offline Configuration</td>
<td>Maintenance Data</td>
</tr>
<tr>
<td>Download</td>
<td></td>
</tr>
<tr>
<td>Online Configuration</td>
<td></td>
</tr>
<tr>
<td>Maintenance Data</td>
<td></td>
</tr>
</tbody>
</table>
### Table 3-2 Operations Menu

<table>
<thead>
<tr>
<th>PC</th>
<th>Pocket PC</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(click Operations)</em></td>
<td><em>(tap Menu/Operations)</em></td>
</tr>
</tbody>
</table>

#### PC
- Process Instrument Explorer
  - Operations
  - Services
  - Help
  - Communication Setup...
  - Upload Database...
  - Offline Configuration...
  - Download Database...
  - Online Configuration...
  - Maintenance Data...
  - Exit

#### Pocket PC
- Process Instrument Explorer
  - Communication Setup...
  - Upload Database...
  - Offline Configuration...
  - Download Database...
  - Online Configuration...
  - Maintenance Data...

- Upload
- Download
- Offline Configuration
### 3.1.1 Communications Setup

Before transferring data between P.I.E. and instrument you must set up your PC or Pocket PC communication parameters using this procedure.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select “Communication Setup” or “PC Comm Setup” icon or menu item.</td>
</tr>
</tbody>
</table>
| 2    | Select “Communication type” to be used with the process instrument: Infrared, RS485, or Ethernet. The status bar at the bottom of the screen indicates your choice.  
  
  Note 1: Ethernet feature is not supported in Pocket PC.  
  Note 2: IPAQ Pocket PCs do not support serial communication. |
| 3    | “Select Type to set up”  
  
  **Infrared:**  
  
  Device address: Enter address of the process instrument. Default 3.  
  Serial Port *(PC only): Your PC requires an Infrared cable to communicate with the instrument. This cable must be plugged into the PC’s Serial Port. Enter that port number here.*  
  IR Port *(Pocket PC only): Your Pocket PC will attempt to automatically determine the IR port address during the installation process. If successful, the IR port will be automatically set and cannot be changed. If unsuccessful, you must specify the IR port address using the drop down menu. Contact Honeywell Technical Support for assistance.*  
  
  **RS485**  
  
  Device address: Enter address of the process instrument. Default 3.  
  Serial Port *(PC only): Your PC requires a RS232/RS485 converter to communicate with the instrument. This cable must be plugged into the PC’s Serial Port. Enter that port number here.*  
  Serial Port *(Pocket PC only): Your Pocket PC will attempt to automatically determine the serial port address during the installation process. If successful, the serial IR port will be automatically set and cannot be changed. If unsuccessful, you must specify the IR port address using the drop down menu. Contact Honeywell Technical Support for assistance.*  
  
  Your Pocket PC requires a RS232/RS485 converter to communicate with the instrument. This cable must be plugged into the Pocket PC’s Serial Port.  
  See your instrument’s manual for wiring details.  
  
  **Ethernet**  
  
  IP address: Enter instrument’s IP address. Default 10.0.0.2 (UDC). Default 192.168.1.254 (UDA)  
  Timeout (1 – 20 sec): Enter number of seconds of non-response before timeout. As network traffic increases this will need to be increased.  
  Retries (2 to 60): Enter number of attempts to connect. As network traffic increases this will need to be increased.  
  See your instrument’s manual for wiring details. |
| 4    | *Pocket PC only: For Infrared communication, verify that the beam settings checkbox in the Pocket PC system software is UNCHECKED. This checkbox is located at: Start\Settings\Connections\Beam. Infrared communications will not work with if this box is* |
### 3.1.2 Upload

Upload copies your instrument’s configuration into P.I.E. where it can be saved, edited, and downloaded back to the instrument or other instruments.

**Attention Infrared users:** Before transferring data between your instrument and PC/Pocket PC, see Infrared checklist on page 16.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select Upload icon or menu item. Upload Configuration box appears.</td>
</tr>
<tr>
<td>2</td>
<td>Click Start. If using Infrared, first press any instrument button to activate infrared, then aim the beam at the instrument, then click Start.</td>
</tr>
</tbody>
</table>
| 3 | Status of upload (% complete) is shown. Also, at bottom of display a green Transmission Status icon flashes during transmission.  
To terminate upload, select Abort. If upload is successful you are given option to save the configuration or cancel.  
If infrared upload failed see Infrared checklist on page 16. |
### 3.1.3 Offline Configuration

Offline Configuration lets you edit an instrument’s configuration file for later downloading to an instrument. This operation is mostly used during initial configuration where the configuration from one instrument is copied, duplicated, or modified and then downloaded to other instruments.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select “Offline Configuration” icon or menu item.</td>
</tr>
<tr>
<td>2</td>
<td>Available Device Types (process instruments) are shown. Select Device Type whose configuration you want to edit, for example, UDC2500.</td>
</tr>
<tr>
<td>3</td>
<td>Previously saved configurations are shown in the File List. Double-click/double-tap a configuration to edit. The prompts are organized exactly as on the instrument itself. For details on functions and their settings, refer to that instrument’s manual. If an analog configuration is highlighted with red text or a digital configuration is shown blank, it means that the stored value is now out of range, either because of previous changes to the instrument’s configuration or because of incompatibilities with the configuration set. Change the configuration to an in-range setting to correct the error.</td>
</tr>
</tbody>
</table>
| 4    | UDC Ethernet users have an additional Group: Ethernet & Email. You can set up an email to be sent when a rising edge (off-to-on) alarm is detected. Alarm status is checked every 30 seconds, so only one rising edge will be detected per 30 seconds.  
**Attention:**  
-In controllers, updates to Ethernet parameters may take up to 60 seconds to take effect.  
After you change the instrument’s IP address, to make it recognized you must execute the “arp-d” command at a DOS prompt.  
For more info see Ethernet Q&A on page 17.  
Ethernet Setup  
- IP Address: IP address of the instrument.  
- Subnet Mask: Subnet mask of the instrument  
- Default Gateway: Default gateway of the instrument  
Email Setup—use the following parameters to configure an email notification during an alarm.  
- Select Email: Select which email to configure.  
- To Email: Enter email address of person to be emailed  
- SMTP Address (for outgoing): Enter exchange server address  
- From Email: This is the e-mail ID that appears in the “From” field when the recipient receives an e-mail from the instrument. It can be any e-mail ID of the user’s choice, basically to help identify the device. (e.g: udc01@furnaceroom.com)  
- Select Alarm: Select an alarm whose activation will send the email. To select none, click on the highlighted alarm.  
- Email Subject: Enter email subject text. |
| 5    | To view or edit a configuration’s Properties, in the File List right-click on the File name (PC) or select “Properties” (Pocket PC).  
- File name  
- Device type  
- Uploaded date and time  
- Last modified date and time  
- Author name  
- Description |
### 3.1.4 Download

Download sends your P.I.E. instrument configuration to the instrument.

**Attention Infrared users**: Before transferring data between your instrument and PC/Pocket PC, see Infrared checklist on page 16.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select Download icon or menu item.</td>
</tr>
<tr>
<td>2</td>
<td>Available Device Types (process instruments) are shown. Select Device Type whose configuration you want to download, for example, UDC2500.</td>
</tr>
<tr>
<td>3</td>
<td>Previously saved configurations are shown in the File List. Double-click/double-tap a configuration to be downloaded.</td>
</tr>
<tr>
<td>4</td>
<td>Click Start. If using Infrared, first press any instrument button to activate infrared, then aim the beam at the instrument, then click Start.</td>
</tr>
<tr>
<td>5</td>
<td>If the configuration being downloaded includes a change to the instrument's address (that is, Infrared/RS4585 device address and/or Ethernet IP address) then a popup asks you if you want to overwrite the address(s). This helps protect against mismatched addresses between instrument and the configuration in P.I.E.</td>
</tr>
<tr>
<td></td>
<td><strong>Attention:</strong></td>
</tr>
<tr>
<td></td>
<td>-In controllers, updates to Ethernet parameters may take up to 60 seconds to take effect.</td>
</tr>
<tr>
<td></td>
<td>After you change the instrument's IP address, to make it recognized you must execute the “arp-d” command at a DOS prompt.</td>
</tr>
<tr>
<td>6</td>
<td>Status of download (% complete) is shown. Also, at bottom of display a green Transmission Status icon flashes if transmission is normal. To terminate download, select Abort. If download is successful you are given option to Close the dialog box. If infrared download failed, see Infrared checklist on page 16.</td>
</tr>
</tbody>
</table>
3.1.5 Online Configuration

Online Configuration lets you upload an instrument configuration and write one change at a time back to the instrument. This is useful for tuning your instrument and is faster than downloading the entire configuration. For multiple changes consider doing offline configuration.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select “Online Configuration” icon or menu item.</td>
</tr>
<tr>
<td>2</td>
<td>Click/tap Start to begin upload. If using Infrared, first press any instrument button to activate infrared, then aim the beam at the instrument, then click Start.</td>
</tr>
<tr>
<td>3</td>
<td>Status of upload (% complete) is shown. Also, at bottom of display a green Transmission Status icon flashes during transmission. To terminate upload, select Abort. If upload is successful you are given option to save the configuration or cancel. If infrared upload failed see Infrared checklist on page 16.</td>
</tr>
<tr>
<td>4</td>
<td>If upload was successful the configuration will appear.</td>
</tr>
<tr>
<td>5</td>
<td>Select a Group and edit a Function. For details on functions and their settings, refer to that instrument’s manual. If an analog configuration is highlighted with red text or a digital configuration is shown blank, it means that the value read up from the instrument is now out of range, either because of previous changes to the instrument’s configuration or because of incompatibilities with a downloaded configuration set. Change the configuration to an in-range setting to correct the error.</td>
</tr>
</tbody>
</table>
| 6    | UDC Ethernet users have an additional Group: Ethernet & Email. You can set up an email to be sent when a rising edge (off-to-on) alarm is detected. Alarm status is checked every 30 seconds, so only one rising edge will be detected per 30 seconds. **Attention:**
- In controllers, updates to Ethernet parameters may take up to 60 seconds to take effect.
- After you change the instrument’s IP address, to make it recognized you must execute the “arp-d” command at a DOS prompt.
For more info see Ethernet Q&A on page 17. Ethernet Setup
  - IP Address: IP address of the instrument.
  - Subnet Mask: Subnet mask of the instrument.
  - Default Gateway: Default gateway of the instrument.
Email Setup—use the following parameters to configure an email notification during an alarm.
  - Select Email: Select which email to configure.
  - To Email: Enter email address of person to be emailed.
  - SMTP Address (for outgoing): Enter exchange server address.
  - From Email: This is the e-mail ID that appears in the “From” field when the recipient receives an e-mail from the instrument. It can be any e-mail ID of the user’s choice, basically to help identify the device. (e.g: udc01@furnaceroom.com)
  - Select Alarms: Select an alarm whose activation will send the email.
  - Email Subject: Enter email subject text. |
| 7    | Select Write to download the edit to the instrument. Display indicates if write was successful or failed. If write failed see Infrared checklist on page 16. If successful you can edit/write another function. **ATTENTION! No warning is given if you overwrite address info (IP, Subnet Mask, Gateway) so be aware of what you are doing!** |
| 8    | Close window. You are given the option to save the changed configuration for later use in P.I.E. |
3.1.6 Maintenance Data

Maintenance Data displays key operating parameters and status parameters of the instrument without switching between the instrument screens. Some of the information presented here is not visible through the instrument display panel. Used primarily for diagnostics.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select “Maintenance Data” icon or menu item to. If using Infrared, first press any instrument button to activate infrared, then aim the beam at the instrument, then select Maintenance Data.</td>
</tr>
<tr>
<td>2</td>
<td>A window appears with maintenance data such as loops, alarms, events. If using RS485 or Ethernet the data is refreshed automatically. If using infrared you must refresh manually.</td>
</tr>
</tbody>
</table>
3.1.7 Infrared checklist

Check the following before using infrared communications.

**Infrared transmitter (Cable or Pocket PC)**

- The Infrared transmitter is pointed directly at the process instrument’s Infrared port.
- The Infrared transmitter is located no more than 0.3 meters (1 foot) away from the process instrument.

**Process instrument:**

- The process instrument is configured with an Infrared port (Infrared on the UDC2500 is optional; Non Infrared units can be configured using the test jack port, RS485 or Ethernet).
- The process instrument’s device address must match the device address in the P.I.E. Communications Setup.
- The process instrument’s Infrared port must be enabled through its communications menu.
- Any button must be pressed on the process instrument to enable the Infrared port for 4 minutes.
- There are no obstructions between the Infrared transmitter and the process instrument.

**P.I.E.:**

- There is only one process instrument with the device address selected in the P.I.E. Communication Setup.
- The communications mode in the P.I.E. application must be set to Infrared. (Verify by looking at mode displayed in lower left corner of P.I.E. display.)

**Pocket PC:**

- **IMPORTANT:** The beam checkbox in the Pocket PC must be unchecked. See Start\Settings\Connection\Beam. Infrared communications will not work if box is checked.
- A valid IR port address has been assigned through the Infrared Communications Setup screen.
- Dell X5 Pocket PCs require a patch from the Dell website.
- Dell X3 Pocket PCs may require a patch from the Dell website.
3.1.8 Ethernet Q&A

Q: How can I find the address of my UDC?
A: The Ethernet address information that has been set in the instrument can be retrieved by using P.I.E. to upload a product configuration upload using IR communication. After the upload you can view the Ethernet group and see the Ethernet information. An alternate way is to use P.I.E. and initiate an online configuration through IR communication. This function does an initial upload of the current configuration from the instrument and displays the groups. The Ethernet information can be viewed from the Ethernet group.

The above cannot be done through RS485 communication because when the Ethernet board is plugged in, the RS485 option is not available.

The default Ethernet information for a UDC as shipped from the factory is IP 10.0.0.2, Mask 255.255.255.0, Gateway 0.0.0.0.

Q: How can I find the address of my UDA?
A: The Ethernet address information that has been set in the instrument can be retrieved by using the UDA front panel. The address is visible in the communication status menu. The address can also be retrieved by using P.I.E. to upload a product configuration upload using IR or RS485 communication. After the upload you can view the Ethernet communication setup group and see the Ethernet information.

An Alternate way is to use the P.I.E. and initiate an online configuration through IR or RS485 communication. This function does an initial upload of the current configuration from the instrument and displays the groups. The Ethernet information can be viewed from the Ethernet communication setup group.

If the Ethernet port is configured for DHCP, then you must use the UDA front panel communication status menu to view the address.

The default Ethernet information for a factory UDA2182 is:
  IP 192.168.1.254
  Mask 255.255.255.0
  Gateway 1.0.0.0

Q: How do I know what IP Address to use?
A: The default IP address provided from the factory is 10.0.0.2 on the UDC and 192.168.1.254 on the UDA2182. Since IP addresses must be unique, you will need to reset the IP address for multiple instruments or if the instrument is going to be placed on a LAN. Multiple instruments on a local net could be set at 10.0.0.2, 10.0.0.3, 10.0.0.4, etc. If you want to put the instrument on a LAN, you need to obtain available IP addresses from your IT group.

Q: How do I know what Mask to use?
A: The mask on the UDC and UDA is normally set to 255.255.255.0 since the first (3) numbers in the IP address are typically the same for instruments on the same subnet.
**Q: How do I know what Gateway to use?**

A: The gateway information is the IP address of the router which would route the TCP/IP traffic to the appropriate destination IP address. Every network has a gateway routing device that holds the routing table for that network which specifies how to route TCP/IP packets between network devices.

In the P.I.E. and UDC/UDA case, if the PC on which the P.I.E. is running and UDC/UDA are connected to a LAN, then the gateway should have the IP Address of the router that manages the LAN subnetwork. In the case of the PC on which the P.I.E. is running being connected directly to the UDC with a crossed Ethernet cable, then the gateway IP address can be set to "0.0.0.0". In the case of the PC, on which the P.I.E. is running, being connected directly to the UDA2182 with a crossed or straight through Ethernet cable then the Gateway IP Address can be set to 1.0.0.0. The normal procedure is to copy the first three bytes of the IP address from the PC and set the last byte to 1. For example, if the IP address of the PC is set to 10.2.3.4 then set the gateway IP address to be 10.2.3.1.

**Q: How do I know what SMTP address to use?**

A: The SMTP address is used for outgoing emails. This address is specific to your LAN configuration and can be obtained from your IT group.

**Q: Why can’t I communicate with my controller after I changed the controller’s IP address?**

A: The arp table in your desktop PC needs to be reset by typing “arp-d” in the DOS command window. Also, changes to Ethernet parameters may take up to 60 seconds to take effect.
4 Services

4.1 Overview

Services lets you manage your files through the following menus.

4.1.1 Pocket PC Services Menu

Transfer Configuration - Lets you copy device configurations saved in the Pocket PC to the PC. Transferred files may then be opened, edited, saved and downloaded from the PC.

Manage Configuration Files - Lets you copy, delete, rename and view the properties of saved configuration files.

Transfer Healthwatch Data – For future release. This feature transfers Healthwatch data to the desktop PC. Available only for the UDC3500 controller.

Enable Descriptive Name Support - When enabled, Descriptive Name uses 16 characters to describe your configuration groups, functions and parameters in more detail than the instrument’s 8-character display. The descriptive names come from the descriptive file).

Import Database – Lets you add all or part of another database to your current configuration database. You may import configurations created on other PCs and Pocket PCs.

Export Database – Lets you save all or part of the current database so that it may later be imported.

4.1.2 PC Services Menu

Export Configuration - Lets you write a configuration file to a .csv formatted file which can be read into spreadsheet software.

Transfer Configuration - Lets you copy device configurations saved in the PC to the Pocket PC application. Transferred files may then be opened, edited, saved and downloaded from the Pocket PC.

Manage Configuration Files - Lets you copy, delete, rename and view the properties of saved configuration files.

Install Descriptive File - Lets you attach a new 16-character descriptive file to the desktop/laptop tool. Descriptive files are specific to instrument version and type. See Enable Descriptive Name Support.

Transfer Descriptive File - Lets you transfer a new 16-character descriptive file from the desktop/laptop to the Pocket PC. (Descriptive files are provided by Honeywell.) See Enable Descriptive Name Support.
Enable Descriptive Name Support – When enabled, Descriptive Name uses 16 characters to describe your configuration groups, functions and parameters in more detail than the instrument’s 8-character display. The descriptive names come from the descriptive file.

Import Database – Lets you add all or part of another database to your current configuration database. You may import configurations created on other PCs and Pocket PCs.

Export Database – Lets you save all or part of the current database so that it may later be imported.

Table 4-1 Service menu

<table>
<thead>
<tr>
<th>PC Services menu</th>
<th>Pocket PC Services menu</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(click “Services”)</em></td>
<td><em>(tap “Menu/Services”)</em></td>
</tr>
</tbody>
</table>

![Table Image]
4.2 Export Configuration (PC only)

Export Configuration lets you write a configuration file to a .CSV formatted file which can be read into spreadsheet software.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select Export Configuration from the Services menu.</td>
</tr>
<tr>
<td>2</td>
<td>Select device (instrument) type.</td>
</tr>
<tr>
<td>3</td>
<td>Select configuration to be exported.</td>
</tr>
<tr>
<td>4</td>
<td>Enter destination and name of exported file.</td>
</tr>
<tr>
<td>5</td>
<td>Click Export. A popup confirms whether the export was successful.</td>
</tr>
</tbody>
</table>

4.3 Transfer Configuration

Transfer Configuration lets you copy configurations between the Pocket PC and the PC. Transferred files may then be opened, edited, saved and downloaded.

Before proceeding:

- Microsoft Active Sync must be installed on the Pocket PC.
- Connect the Pocket PC to the PC with an Active Sync Cable.
- Power up Pocket PC.
- On PC, if Active Sync (XP) or Windows Mobile device Center (Vista) dialog box appears select “Guest Partnership” type connection.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select Transfer Configuration from the Services menu.</td>
</tr>
<tr>
<td>2</td>
<td>Select device (instrument) type.</td>
</tr>
<tr>
<td>3</td>
<td>Select configuration(s) to be transferred. Click Next.</td>
</tr>
<tr>
<td>4</td>
<td>Click Transfer. A popup confirms whether the transfer was successful.</td>
</tr>
</tbody>
</table>
4.4 Manage Configuration Files

Lets you copy, delete, rename and view the properties of saved configuration files.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select Manage Configuration Files/Manage Files from the Services menu.</td>
</tr>
<tr>
<td>2</td>
<td>Select device (instrument) type.</td>
</tr>
<tr>
<td>3</td>
<td>Select configuration. Click on headings to sort.</td>
</tr>
</tbody>
</table>
| 4    | Pocket PC users must first select File to access the following items.  
|      | Copy: Select to make a copy of the file. Enter new file name.  
|      | Delete: Select to delete the file.  
|      | Rename: Select to rename the file.  
|      | Properties: Select to view or edit the following:  
|      |   - File name  
|      |   - Device type  
|      |   - Uploaded date and time  
|      |   - Last modified date and time  
|      |   - Author name  
|      |   - Description |

4.5 Install Descriptive File (PC only)

Lets you attach a new 16-character descriptive file to the desktop/laptop tool.  
(Descriptive files are provided by Honeywell.) See Enable Descriptive Name Support.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select Install Descriptive File from the Services menu.</td>
</tr>
</tbody>
</table>
| 2    | Browse to the new file. These files will be sent by factory or through the internet or email.  
|      | Select the file from the location it was saved after downloading it from the internet or email;  
|      | there is no specific extension for descriptive files.  P.I.E. will verify whether the selected file is  
|      | valid. |
### 4.6 Transfer Descriptive File (PC only)

Lets you transfer a new 16-character descriptive file from the desktop/laptop to the Pocket PC. (Descriptive files are provided by Honeywell.) See [Enable Descriptive Name Support](#).

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select Transfer Descriptive File from the Services menu.</td>
</tr>
<tr>
<td>2</td>
<td>Browse to the new file. These files will be sent by factory or through the internet or email. Select the file from the location it was saved after downloading it from the internet or email; there is no specific extension for descriptive files. P.I.E. will verify whether the selected file is valid.</td>
</tr>
</tbody>
</table>

### 4.7 Transfer Healthwatch Data (Pocket PC only, UDC3500 only)

*For future release.* Lets you transfer an instrument’s previously saved Healthwatch data from the Pocket PC to the desktop/laptop. This data is saved with .CSV (Comma Separated Values) extension. Since the Pocket PC does not have a .CSV file viewer and it cannot be opened in Pocket Excel, the saved .CSV file can be transferred to the Desktop PC and viewed through any of the standard viewers that support .CSV format.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select Transfer Healthwatch Data from the Services menu.</td>
</tr>
</tbody>
</table>
| 2    | Browse to the Healthwatch file you want to transfer.  
Default file is "UDCXXXXvNN_HWm.csv" where:  
XXXX is device model (2500)  
NN is firmware version (01,02,...)  
m is m'th instance of the healthwatch saved.  
You will have the choice to modify this name.  
Example: UDC2500v01_HW2.csv would be the default name for the second instance of the Healthwatch file when saved for a 2500 unit with firmware version '01'. |

### 4.8 Enable Descriptive Name Support

When enabled, Descriptive Name uses 16 characters to describe your configuration groups, functions and parameters in more detail than the instrument’s 8-character display. The descriptive names come from the descriptive file.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To enable, check Enable Descriptive Name Support from the Services menu. Groups, functions and parameters will be displayed in detail.</td>
</tr>
<tr>
<td>2</td>
<td>To disable, uncheck. Groups, functions and parameters will be displayed in abbreviated form.</td>
</tr>
</tbody>
</table>
### 4.9 Import Database

Lets you add all or part of another database to your current configuration database. You may import configurations created on other PCs and Pocket PCs.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enter the name of the database you wish to import using the Browse function. (The file format for Process Instrument Explorer databases is *.Nge)</td>
</tr>
<tr>
<td>2</td>
<td>If you wish to import the entire database, select the “Import Entire Database” checkbox, then skip to Step 5.</td>
</tr>
<tr>
<td>3</td>
<td>If you wish to import part of the database, select the Device Type representing the configurations you wish to import (for example, UDC2500).</td>
</tr>
<tr>
<td>4</td>
<td>To add the files you wish to import to the Selected Configurations to Import list, highlight the desired configurations in the left column and press the “Add &gt;&gt;” button. You may also use the “Add All &gt;&gt;” button to transfer all of the configuration(s) for the current device type into the Selected Configuration List. To remove configurations from the Selected Configurations to Import list, highlight a configuration in the right column and press the “&lt; Remove” button. You may also use the &lt;&lt; Remove All” button to remove all of the configurations from the Selected Configurations to Import list.</td>
</tr>
<tr>
<td>5</td>
<td>Press the Import button to add the configurations appearing in the Selected Configurations to Import list to your current database. (Note that if the “Import Entire Database” checkbox is selected, no files will be shown in the Selected Configurations to Import list)</td>
</tr>
</tbody>
</table>
4.10 Export Database

Lets you save all or part of the current database so that it may later be imported.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select the Device Type for configuration(s) you wish to Export (for example, UDC2500).</td>
</tr>
<tr>
<td>2</td>
<td>If you wish to export the entire database, select the “Export Entire Database” checkbox, then skip to Step 5.</td>
</tr>
<tr>
<td>3</td>
<td>If you wish to export part of the database, select the Device Type representing the configurations you wish to export.</td>
</tr>
<tr>
<td>4</td>
<td>To add the files you wish to export to the Selected Configurations to Export list, highlight the configuration in the left column and press the “Add &gt;” button. You may also use the “Add All &gt;&gt;” button to transfer all of the configuration(s) for the current device type into the Selected Configurations to Export list. To remove configurations from the Selected Configurations to Export list, highlight a configuration in the right column and press the “&lt; Remove” button. You may also use the “&lt;&lt; Remove All” button to remove all of the configurations from the Selected Configurations to Export list.</td>
</tr>
<tr>
<td>5</td>
<td>Enter the name of the database file you wish to create by typing the path\filename or using the Browse function. Once a path is selected a default filename of ExportNgcDB.nge appears. You may change the filename by overwriting the default.</td>
</tr>
<tr>
<td>6</td>
<td>Press the Export button to create a new database file containing the configurations listed on the Selected Configurations to Export list.</td>
</tr>
</tbody>
</table>
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