IXP120 Software

QUICK START GUIDE

Scope of Document

This document provides a brief overview of the IXP120 Software.

Document Conventions

We use the following conventions in this document:

Note – points out extra information

Tip – points out alternative methods to perform a task

Important – points out important information

Warning – points out potential danger to you or the product

Before You Begin

Have the following available:

- The IXP120 Software CD
- Serial number and fixed address of each IXP121 Controller

Where to Find Information

Additional information is available in the following resource:

- **IXP120 Software Help**—part of the IXP120 Software. Help provides detailed information on all aspects of the IXP120 System.
- **IXP121 Controller Hardware Installation Manual**—bundled with the IXP121 Controller.
- **IXP120 Product Specification Catalogue**—available at www.impro.net.
- **How to Set Up the IXP120 Database on a Dedicated Server** document—for advanced Users only.

Sequence of Operations

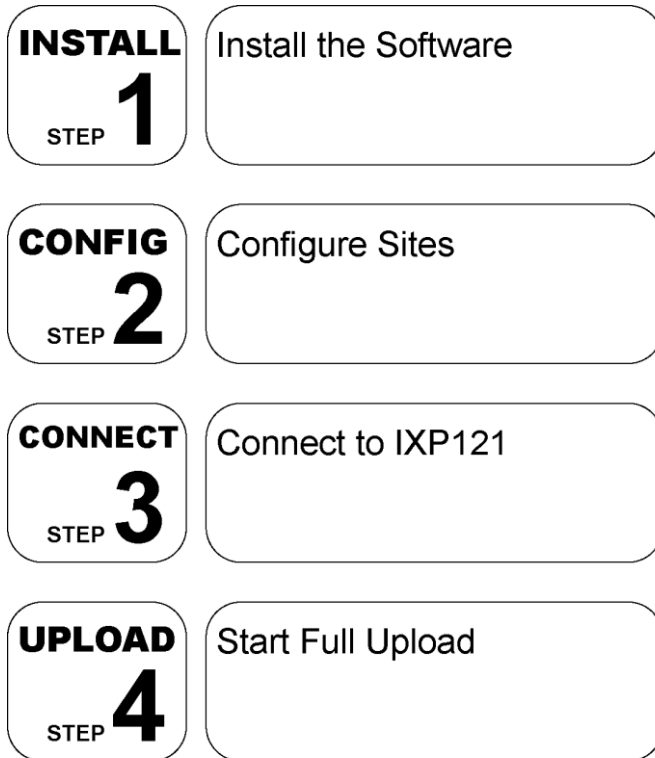Follow this sequence of steps to set up and configure the IXP120 Software:

INSTALL STEP 1 — Install the Software

CONFIG STEP 2 — Configure Sites

CONNECT STEP 3 — Connect to IXP121

UPLOAD STEP 4 — Start Full Upload

Figure 1: Setup Flowchart

Once the Software is installed, repeat steps 2 to 4 only, to configure a Site.

Installation

PC Requirements

Make sure your PC meets the following minimum requirements:

Component	Minimum Requirement
Processor	Pentium II, 600 MHz
RAM	256 Mb
Hard Disk	2 Gb available space
Graphics	1 024 x 768
Modem	56 K, USB or Serial
Ports	USB and RS232
Removable Storage	CD-ROM Drive
Operating System	Microsoft Windows NT, 2000, or XP Professional

Table 1: Minimum PC Requirements

Software Installation

Firebird Server
Install the Firebird Server as follows:

1. Insert the **IXP120 CD** into your PC's CD-ROM drive.
2. Wait for the CD to **auto-run**.
3. Select the **Browse CD** option.
4. From the Firebird folder, select **Setup Firebird Project**.
5. At the **Select Startup Language** dialog, from the drop-down list select a language.
6. Click the **OK** button.

Installation Wizard

1. At the Welcome screen, click the **Next** button.
2. At the Licence Agreement screen, select the **I Accept the Agreement** radio button.
3. Click the **Next** button.
4. Review the Information screen and then click the **Next** button.
5. At the Select Destination Location screen, click the **Next** button.
6. From the Select Components Screen, select the components for installation.
7. Click the **Next** button.
8. At the Select Start Menu Folder screen, click the **Next** button.
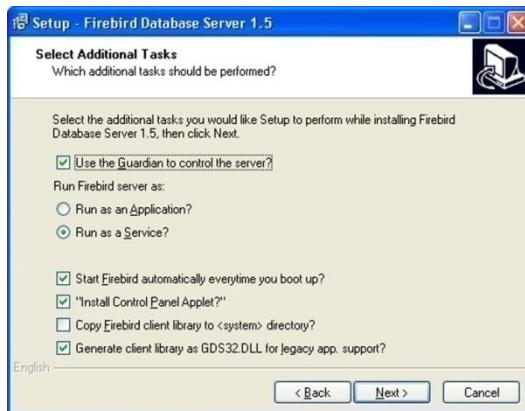
Figure 2: Select Additional Tasks Screen

9. At the Select Additional Tasks screen, select that the following tasks run:
    - Use the Guardian to Control the Server
    - Run as a Service
    - Start Firebird Automatically Every time you Boot up
    - Install Control Panel Applet
    - Generate client Library as GDS32.DLL for Legacy Application Support
10. Click the **Next** button.
11. At the Ready to Install screen, click the **Install** button.
12. Review the Information screen, then click the **Next** button.

13. At the final screen, select the **Start Firebird Service Now** checkbox.
14. Click on the **Finish** button.

IXP120 Software

Install the IXP120 Software as follows:

1. Insert the **IXP120 CD** into your PC's CD-ROM drive.
2. Wait for the CD to **auto-run**.
3. Click on the **Install IXP120** option.
4. Follow the on-screen instructions.
5. Click on the **Exit** option.

Initialise the Software

Before starting the IXP120 Software, ensure that the Registration Reader or the IXP121 Controller is connected to the Host PC.

1. In Windows®, select **Start**>**Programs**>**IXP120**>**IXP120**.
2. Enter your **Username** and **Password**.

*The default Username is **SYSDBA** and the default Password **masterkey**.*

Configure COM Ports

You need to specify the locations of serial devices before they will work with the IXP120 Software.

Windows treats USB devices in a similar manner to serial devices.

The default setting is that NO Registration Reader is present. Therefore, the Software does not try to detect one. The default COM port is COM1.

Registration Reader Present
To configure the COM port manually, proceed as follows:

1. On the menu, select **File**>**System**.
2. Select the **Enable Registration Reader** checkbox.
3. Select the **COM port** used for the **Registration Reader**.
4. Click the ✓ button.

If the Registration Reader is unlocked, the IXP120 Software has access to multiple Sites. However, if the Registration Reader is locked, the IXP120 Software is restricted to a single Site.

Registration Reader Not Present
If a Registration Reader is not present, proceed as follows:

1. On the menu, select **File**>**System**.
2. De-select the **Enable Registration Reader** checkbox.
3. From the **Select Tag Reader on Site 1** drop-down list choose a Reader to use for Tag registration.

4. Select the **COM port** used for the **IXP121 Controller**, or select an empty COM port if the Controller uses an Ethernet or modem connection.

5. Click the ✅ button.

> 📄 *If a Registration Reader is not present, register Tags at the selected Tag Reader of the Controller. Note that doing this results in a Denied Unknown transaction in the Database.*

If your IXP121 uses a Modem, proceed as follows:

1. On the menu, select File > System.
2. Select the COM port used for the Modem.
3. Click the ✅ button.

> 📄 *If a Modem is not used, select an empty COM port option.*

> 📄 *Ensure the Registration Reader and Modem are connected to the Host PC before starting the IXP120 Software.*

> 💡 *Use Windows' Device Manager to find out the COM port used by the IXP121 Controller or Registration Reader. The following figure illustrates an ImproX hardware device connected to the Host PC.*
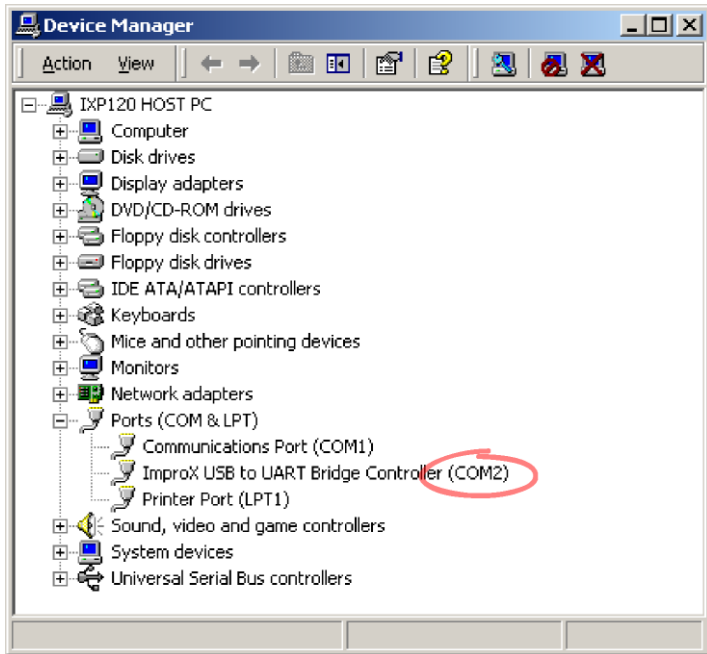
Figure 3: Device Manager Dialog

Do not select COM ports with conflicting IRQs for the Registration Reader and Modem. For example, do not select COM1 and COM3, or COM2 and COM4 together.
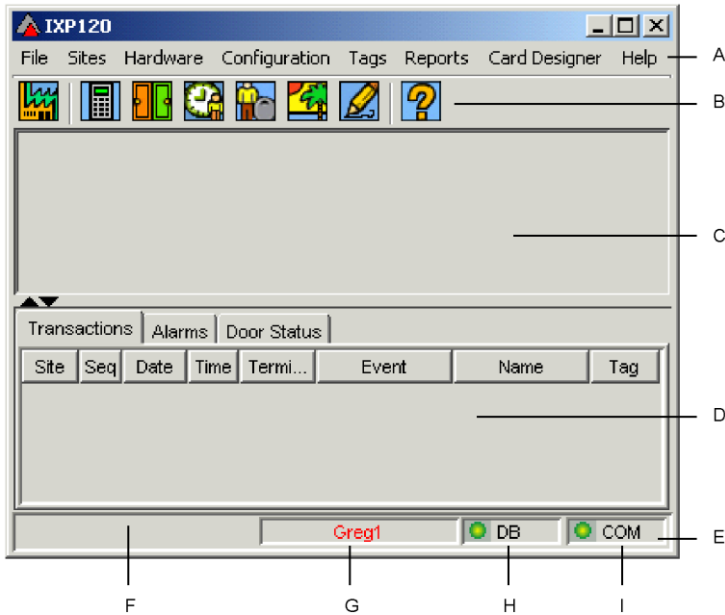
Understand the Interface

Figure 4: Work Area

A – Menu bar
Includes drop-down menus

B – Toolbar
Includes icon shortcuts

C – Task pane
Displays the selected task

D – Monitor pane
Provides real-time
monitoring for:
- Transactions
- Alarms
- Door Statuses

E – Status bar

F – Message Display

G – Name of Active Site

**H – Active connection to
site Database**
- Green light is active
- Red light is inactive

**I – Active connection to
site Controller**
- Green light is active
- Red light is inactive

Toolbar Shortcuts

In addition to the Menu bar, use the Toolbar to access important tasks.
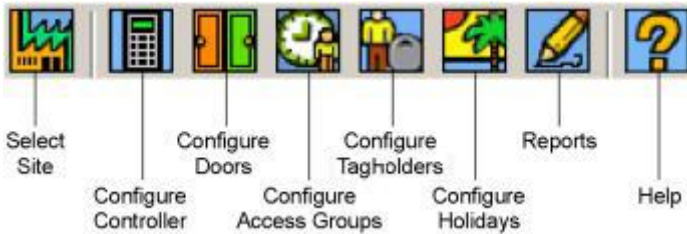
Figure 5: Toolbar

Using Help

The IXP120 Software has an integrated context-sensitive **Help** system. Information not covered in the guide is covered in Help. Do one of the following to activate Help:

- On the Toolbar, click the button.
- On the Menu, select **Help** > **Help Topics**.

Using IXP120 Software

Configure Sites

Do the following to configure a Site:

Figure 6: Configuration Flowchart

Create a New Site

1

You must create a new Site by creating a new Site Directory Entry before you can configure your System. You may organize Sites in groups for convenience.

To create a new Site, proceed as follows:

1. On the menu, select **Sites**>**Site Directory**.
2. Leave the **Select Site Group** option as **Default Group**.
3. Click the ➕ button.
4. Enter a name for the Site.
5. Select a **Communication Port**.
6. If the Site uses a Modem, enter a **Telephone** number for the Modem.
7. Click the 💾 button to save.

> 📄 *The Controller's Fixed Address is required for the **Local Controller Port** option.*

> 📄 *The **Local Controller Port** option is suitable for RS232 and USB.*

> ⚠️ *For the **Ethernet** option, press **F1** on your keyboard to launch Help. Refer to the **Create a New Site** topic by browsing **Quick Start**>**Configuration** in the Help navigation pane.*

Edit an Existing Site

To edit an existing Site's setup, proceed as follows:

1. On the menu, select **Sites**>**Site Directory**.
2. Select a Site from the **Site Directory** panel.
3. Edit the Site's setup options.
4. Click the 💾 button to save.

Select a Site

To configure a Site, proceed as follows:

1. On the menu, select **Sites**>**Select Site**.
2. Select a **Site Group** from the drop-down menu.
3. Select a Site from the **Select Site** window.
4. Click the ☑ button.

Set-up the IXP121 Controller

To initiate communication with the Controller for the first time, proceed as follows:

1. On the menu select **Sites**>**Connect Site**.
2. When prompted, select **Yes** to perform AutoID.

Alternatively, after connecting, proceed as follows:

1. On the menu, select **Hardware**>**Auto ID Units**.
2. When prompted, select **Yes** to perform AutoID.

To configure the Controller, proceed as follows:

1. On the menu, select **Configuration**>**Controller**.
2. Select a **Mode**.
3. Select the **Daylight Savings** checkbox if applicable.

Add Doors

2

A Door is a single physical point of entry or exit. A Door supports one or two Reader Terminals. To add a Door, proceed as follows:

1. On the menu, select **Configuration**>**Doors**.
2. Click the ➕ button.
3. Enter a name for the Door in the **Name** textbox. For example: *FrontDoor*.
4. Select the **Entry Terminal**.
5. Select the **Exit Terminal** if required.
6. Click the 💾 button to save.
7. Repeat steps 1 to 6 for additional Doors.

> 📄 *Default Tag Mode is automatically assigned as the daily **Day Mode** for the Door.*

Create Access Groups

3

Access Groups use Access Patterns to define times of access for one or more Doors. Tagholders with similar access requirements are assigned to a common Access Group. To configure Access Groups, proceed as follows:

1. On the menu, select **Tags**>**Access Groups**.
2. Click the ➕ button in the upper pane.
3. Enter a name for the Access Group in the **Name** textbox.
4. Click the 💾 button to save the Access Group.

> 📄 *You assign Tagholders to their Access Groups in **Step 4 - Add Tagholders**.*

Create Access Patterns

Access Groups use Access Patterns to determine times of access for each day of the week. To add an Access Pattern to an existing Access Group, proceed as follows:

1. Click the ⊞ button in the lower pane.
2. Select the relevant days and times.
3. Click the **Doors** tab.
4. Select the relevant **Doors** from the right-hand panel.
5. Click the ◁ button to make the selected Door accessible.
6. Click the 🖫 button to Save the Access Pattern.

Configure Holidays

Holidays are periods when access to Sites is restricted or customized. To configure Holidays, proceed as follows:

1. On the menu, select **Configuration**>**Holidays**.
2. Enter a name for the Holiday in the **Name** textbox.
3. Define the **Start Date**.
4. Define the **End Date**.
5. Click the 🖫 button to save.

Add Taxholders

4

To Add Tagholders individually, proceed as follows:

1. On the menu, select **Tags**>**Tagholders**.
2. Click the ➕ button.
3. Enter a Tagholder's general information.
4. Click the **Tag** tab.
    Click the ➕ button.
    Present a Tag to the Registration Reader.
    Click the **Read Tag** button.
    Select a Tag **Level**.
    Select an **Access Group**.
5. If the Tagholder is an Operator, Click the **Operator** tab.
    Select the **This Tagholder is an Operator** option.
    Enter the Operator **UserID**.
6. Click the 💾 button to Save.

*The Tagholder's **Last Name** field is the only required field.*

Double-click an existing Tagholder's entry to edit it.

Connect to Site

When you save configuration changes, they are saved to the Site database only – unless there is an active connection with the IXP121 Controller.

*The **COM indicator** on the status bar shows a green light if the Controller is connected. Otherwise, the light is red.*

To connect to the Site Controller, proceed as follows:

- On the menu, Select Sites>Connect Site.

To disconnect from the Site Controller *and* database, proceed as follows:

- On the menu, Select Sites>Disconnect Site.

Start Full Upload

A Full Upload writes data from the Site database to the IXP121 Controller. When you have completed configuring the Site, start a Full Upload as follows:

On the menu, select **Configuration**>**Start Full Upload**.

> *The IXP121 Controller is temporarily off-line during a Full Upload and all data in the Controller buffer is erased. Therefore, the Controller canno process transactions.*

> *Always perform a Full Upload after the IXP121 Controller has had a Firmware upgrade.*

Advanced Features

Door Mode Patterns

Door Mode Patterns define operational times and parameters for a door. They are configurable for each day of the week. To define a new Door Mode Pattern, proceed as follows:

1. On the menu, select **Configuration**>**Doors**.
2. Click the **Door Mode Patterns** tab.
3. Click the ➕ button.
4. Enter a name in the **Pattern Name** textbox.

Add Pattern Time Slots

Each Door Mode Pattern has up to eight Pattern Time Slots. The first Pattern Time Slot has a default access period of 24 hours. To add a Pattern Time Slot, proceed as follows:

1. Change the **End Time** value of the first Pattern Time Slot and press [Enter] on your keyboard.
2. A new Pattern Time Slot is created. It has a **Start Time** value equal to the **End Time** value of the first Pattern Time Slot.
3. Click on the other options of the Pattern Time Slot, and select values from a drop down menu.
4. Click the 💾 button to Save.

> *The **Default Tag Mode** pattern is not configurable. Therefore, you cannot create Pattern Time Slots for it. It is automatically assigned to new Doors.*

Assign Door Mode Patterns to Doors

To assign a Door Mode Pattern to a Door, proceed as follows:

1. On the menu, select **Configuration**>**Doors**.
2. Click the **Door** tab.
3. Select a Door.
4. Click the **Day Mode** button.
5. Select an appropriate **Door Mode Pattern** from the drop-down menu.

Each day can have its own Day Mode.

Add Tagholders in Bulk

To Add Tagholders in bulk, proceed as follows:

1. On the menu, Select **Tags**>**Batch Add Tags**.
2. Select an **Access Group**.
3. Select a **Tag Level**.
4. Enter a **Starting Tag Reference Number**.
5. Ensure the **Batch Mode Auto Read** option is selected.
6. Click **Start**.
7. Present your Tags to the Reader.
8. Click **Stop**.
9. Click the 🖫 button to Save.

*The **Starting Tag Reference Number** is a number you write on a Tag to identify it.*

Reports

Use the IXP120 Reports to view the following types of data:

- Tagholders' location and access patterns
- Zone occupancy and zone access patterns
- In and out times, and duration of occupancy

To view the IXP120 Reports, do one of the following:

1. On the Toolbar, click the ![button] button.
2. On the Menu, select **Reports** > **Web Reports**.

Reports are web-based. Therefore, they are accessible from any workstation connected to the IXP120 Host PC's network. To access Reports in this manner, type the following URL into your Internet browser software:

http://localhost/webreports/servlet/net.impro.ipx1.web.webreports.SiteSelReport

> *Replace **localhost** with the name of the Host PC.*

Web Reports Password

Use a password to restrict access to Web Reports. To do so, proceed as follows:

3. On the menu, select **File**>**Web Reports Password**.
4. Enter a password in the **New Password** textbox.
5. Enter the same password in the **Confirm Password** textbox.
6. Select the **Enable Passwords For Web Reports** checkbox.
7. Click the ![accept] button to accept, or click the ![cancel] button to cancel the operation.

Anti-passback (APB)

An APB access control system does not accept a Tag more than once in the same direction until that Tag is processed in the opposite direction, and vice-versa. This ensures the Tag is not passed back to another person to gain entry. To enable APB, proceed as follows:

1. On the menu, select **Configuration**>**Doors**.
2. Select a Door.
3. Select one of the following **APB Mode** options:
   - Strict
   - Relax

> *In **Strict** mode, Tagholders **must** tag-in before they can tag-out, and vice-versa. In **Relax** mode, Tagholders can tag-out more than once, but can only tag-in if they have tagged out.*

APB Lockout Delay

To set the amount of time that a Tagholder is locked out after exiting an APB zone, proceed as follows:

1. On the menu, select **Configuration** > **Controller**.
2. Enter the **APB Lockout Delay** in minutes.

Reset Anti-passback

Activating this function resets Anti-passback for all Tags in all zones, to neutral. The IXP121 system accepts any Tag in any direction, but only for one transaction per Tag. To reset Anti-passback for the connected Site, proceed as follows:

On the menu, select **Hardware**>**Reset Anti-Passback**.

Replace Units

Replacing Controllers and Terminals is a complex process. Details are provided in the IXP120 Help. To access these details, open Help from the IXP120 Software and navigate to **Advanced Features**>**Replace Units**.

Database Backup

The IXP120 Software does **not** have an automated backup feature. Therefore, the IXP120 databases must be manually backed-up at regular intervals.

> *We recommend backing up the IXP120 database on a monthly basis, or each time that there are changes made to the System.*

> *Ensure that the IXP120 Software is closed and inactive when you perform the backup procedure.*

To manually perform a backup, proceed as follows:

3. In Windows, browse to the **C:\IXP120**folder.
4. Select and copy the **Database** folder.
5. Paste the **Database** folder to a secure location on your network, or archive it to CD, DVD, or tape, as per your company's backup policy.

USER NOTES

This manual applies to V5 and upwards of the IXP120 Software. (The last two digits of the Impro stock code indicate the issue status of the product).			
IXP321-0-0-GB-02	Issue 03	Oct 2007	IXP120\Software\English Manuals \Latest Issue\IXP120QS-swm-en-03 Draft 01.docx