Quick Start Guide:

DataBand ISU

NET2EDGE

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Revision History

Rev	Date	Description
2	2nd September 2016	Rebranded & Minor Amendments

Contents

1. Introduction

This document is a basic guide for configuring a new Net2Edge DataBand ISU. A full User Manual for configuring all settings on the unit is supplied on the DbManager Installation Disk.

2. Applications

Net2Edge DataBand CSI and ISU devices are central-site and remote-site ISDN inverse multiplexers, I-MUXes, Terminal Adaptors or ISDN aggregators. Used in a wide variety of applications, but commonly for videoconferencing and with encryptors such as KIVs or for backup purposes.

3. Getting Started

This section will describe how to make the physical connections between DataBand ISU and the other system devices, and install the Net2Edge management application, DbManager.

3.1 Rack Mounting Instructions

The Rack Mounting Kit comprises the following:

Picture	Description	Quantity
	L-Bracket	2
	Long Net2Edge case screw	4
	Cage nut	4
	Washer	4
	Rack Mount screw	4

All Net2Edge products can be mounted in a standard 19" rack housing. To allow products to be installed into a 19" rack, a Rack Mounting Kit must be purchased for the product (s). There are a number of rack mounting options depending on the size of the product ordered. The following guide will explain how to use the Rack Mounting Kit with Net2Edge products:

1. Remove the four short screws near the front or rear panel on the left and right hand sides of the DataBand ISU. The unit can be mounted with the front panel facing forward or with the ports facing forward as required.

2. Fit one of the **L-Brackets** to the side of the unit. The four small fixing holes allow the unit to protrude forward or sit further back depending on the desired position

of the unit. The bracket may also face forwards or backwards depending on the desired position of the unit.

3. Fix the **L-Bracket** in place using the **Long Net2Edge case screws**.

4. Fix the second **L-Bracket** to the other side of the case in the same way.

5. Put the **Rack Mount screws** through the **Rack Mount washers**.

6. Offer the unit up to the rack and fix it in place using the **Rack Mount Screws** and **Rack Mount cage nuts**.

3.2 Standard Accessories

The following accessories are supplied with the DataBand ISU:

Item	Description	Cable Spec		
DbManager CD	Installable DbManager application, technical documents and manuals			
Controller Cable	Management cable. Connects to the DataBand ISU's Terminal port	RJ12		DB9S
		Pin	**Function**	**Pin**
		1	Rx	3
		2	Tx	2
		3	Gnd	5
IEC Mains Cable	Connects DataBand ISU to the mains supply			

3.3 Optional Accessories

The following items can be ordered separately:

ISDN Cables   Cables to connect the DataBand ISU to a CPE or network. Please see the full manual for specifications of all Net2Edge cables

Rack Mounting Kit   Enables the DataBand ISU to be mounted in a standard 19" rack

3.4 Making Connections

First, connect the ISDN cables to DataBand ISU followed by the Terminal Port management cable (if required).

If the unit has a DC power supply connection, use the screw terminals to connect the DC power source.

Warning: The -48VDC power terminals are marked **0V**, **-48V**, and **GND**. Net2Edge -48VDC products are designed for use with negative voltage DC supplies, and therefore expect the positive voltage to be connected to the **0V** terminal, and the negative connected to **-48V**. Please be sure about the polarity of this connection before connecting power to the terminals. Units which have a positive +24VDC power source will be marked **+24VDC**, **0V** and **GND** respectively. Please ensure that the positive connection is made on the **+24VDC** terminal.

3.5   Installing DbManager

DbManager is required in order to monitor and manage the DataBand ISU. Management can be made using the Terminal (serial) port, or using TCP/IP over a LAN or WAN. DbManager is installed using the CD provided with product or can be downloaded from the Net2Edge Website: www.net2edge.com

1. Insert the DbManager Installation Disk into the drive of the PC which will be used for management of DataBand ISU.
2. InstallShield Wizard will start up. Follow the steps to install DbManager.
3. Serial Number – Enter the Serial Number on the case of the DbManager Disk.

N.B.: DbManager is supplied as a 'Lite' version by default. This allows configuration and monitoring of devices, but only allows configuration of a single device node and a single user account. To use DbManager in 'Lite' mode, do not enter a serial number during installation. Please see the full DbManager User Manual for more information on configuring and using DbManager.

Warning: If an older version of DbManager is already installed on the management PC, it is necessary to update to the version supplied on the new DbManager CD. This can be done by consulting the 'Upgrade' folder on the DbManager CD. The 'readme.txt' file explains how to upgrade to the new DbManager without reinstalling the program.

4.   Initial Configuration / Setup

Follow these steps to connect to DataBand ISU with DbManager and configure the unit for use.

Configuration of DataBand ISU is carried out by setting up DbManager to make a management connection, and then setting up the elements of DataBand ISU in this order:
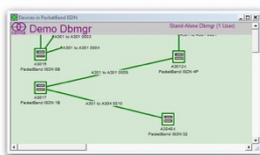
Terminal / LAN Port	The unit-specific settings of the DataBand ISU such as the **IP Address** and **Identifier**
ISDN Ports	Each ISDN port can be individually configured with the correct settings to interface with another device or network. Here the bonding number for conferences can also be stored
IMUX Ports	The Serial ports can be used to configure and initiate calls. The Control Lead status of ports can also be checked from here

4.1   Connecting to DataBand ISU

1.   Start up the DbManager Application
2.   Login as **Super User** (no password required)
3.   Four windows will be displayed:
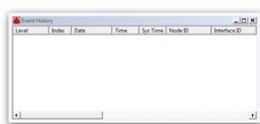
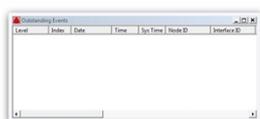|		
	Map	A network map showing Nodes and Links between Net2Edge devices
	Terminal	A view of the communications between DbManager and DataBand ISU
	Event History	All events which occur while connected to DataBand ISU
	Outstanding Events	Current Events

4.   Select **View Properties Terminal** from the DbManager toolbar.

5. 192.168.0.1 should already be configured. If using another IP address, add it to the list using the **Add** button.

6. Click **OK OK**

7. Select the **Devices in World** window and double click the Device node

8. The **Connected to Device** window should appear, showing the front and rear panels of DataBand ISU.

> **Info:** TCP/IP management requires TCP port 3001 (dec) to be open between the management PC and DataBand ISU. Any switches, hubs or routers must be configured to allow communication on this port in order to manage DataBand ISU via TCP/ IP

A successful management connection will open up the **Connected to Device** window:

4.2 Notes on configuring DataBand ISU

Uploading

Changes to the configuration can be made on each window and saved using the **OK** key when exiting each window. When happy with the configuration, it must be uploaded to the DataBand ISU for the new settings to come into effect.

To upload, go to **File Upload** and wait until the progress bar completes.

Saving Files

Configuration files can be saved in order to backup settings or copy settings across to another unit. Once the configuration has been uploaded, go to **File Save File** and choose a location where you wish to save the file. The file extension of any saved config files is **.dbc**

Loading Files

Once connected to a unit, an existing configuration file can be loaded to the device. Go to **File Open File** and navigate to the saved file. Click **Open**. Now the file must be uploaded to DataBand ISU: Go to **File Upload** and wait until the progress bar completes.

> **Warning:** When loading existing configuration files to a unit, please ensure that the correct configuration files are used for the unit type in use. DataBand ISU configuration files are not compatible with other Net2Edge products.

4.3   Device Settings

This menu controls unit-specific features of the DataBand ISU such as the IP Address, Identifier, Serial Number, Configuration Number, Time & Date and Event Reporting. These features are all fully explained in the DataBand ISU User Manual on the DbManager Installation Disk.

4.4   PRI Ports

There are two LEDs for each PRI port, and the LED states are as follows:

Top LED on:	Layer 1 and 2 established
Top LED flashing:	Layer 1 established, trying to synchronize with Layer 2
Bottom LED on:	Calls active on interface

1. Click on an enabled PRI port.
2. The configuration settings for the port are displayed.
3. Configure the settings as required for the port.
4. Click **OK** to save the settings.

Note: The PRI port can be switched to NT mode (if the switchable PRI option is taken). The setting must then be uploaded, DataBand ISU must be rebooted and a crossover cable must be used in order to use the port in NT mode.

4.5   ISDN Numbers

The ISDN Numbers window can be used to define the Bonding Numbers which DataBand ISU sends back to calling devices in order to set up conferences at speeds of up to 1024kbps. The Bonding Numbers should be the DDI or MSN numbers of the local ISDN line supplied by the carrier.

1. Click on the ISDN Numbers button on any ISDN port to access the number list.
2. Right-click in the empty window and select New to add a list of ISDN Numbers
3. Enter a number up to 24 digits long and click Save + Exit.
4. Extra options such as editing and deleting can be accessed by right-clicking existing entries.

Note: If calls are to be received from international callers, please add the country prefix e.g. 001 for USA. Numbers should be entered in digit form without any special characters (*#+)

4.6   BRI Ports

There are two LEDs for each BRI port, and the LED states are as follows:

Top LED on:	Calls active on B channel number 1
Bottom LED on:	Calls active on B channel number 2
LEDs off:	No calls active on interface

1. Click on an enabled BRI port.
2. The configuration settings for the port are displayed.
3. Configure the settings as required for the port
4. Click **OK** to save the settings.

> **Note:** Each BRI port can be switched to NT mode (if the switchable BRI option is taken). The setting must then be uploaded, DataBand ISU must be rebooted and a crossover cable must be used in order to use the port in NT mode.

Numbers

The Numbers fields can be used to define the Bonding Numbers which DataBand ISU sends back to calling devices in order to set up conferences at speeds of up to 1024kbps. The Bonding Numbers should be the DDI or MSN numbers of the local ISDN line supplied by the carrier. Two numbers are configurable for each BRI port.

Enter two numbers, each up to 24 digits long in the **Number** fields.

> **Note:** If calls are to be received from international callers, please add the country prefix e.g. 001 for USA. Numbers should be entered in digit form without any special characters (*#+)

4.7   Imux Ports

DataBand ISU can be fitted with single or dual Imux Ports. Each Imux port can have numbers and ISDN ports assigned to it, so that incoming conferences are directed to specific ports as they arrive. Click on an Imux Port to access the configuration options.

Incoming Number

Use the Drop-down menus to assign a specific ISDN number to the Imux port, or use the default setting of **All Ports and Numbers** to allow any ISDN port and number access. Any numbers configured on the BRI ports or PRI port will be shown in the list.

Data Rate

Required and **Minimum** rates can be set for the Imux port. The Required rate is the maximum data speed which can be accepted on the port, while the Minimum is the lowest speed which will be accepted.
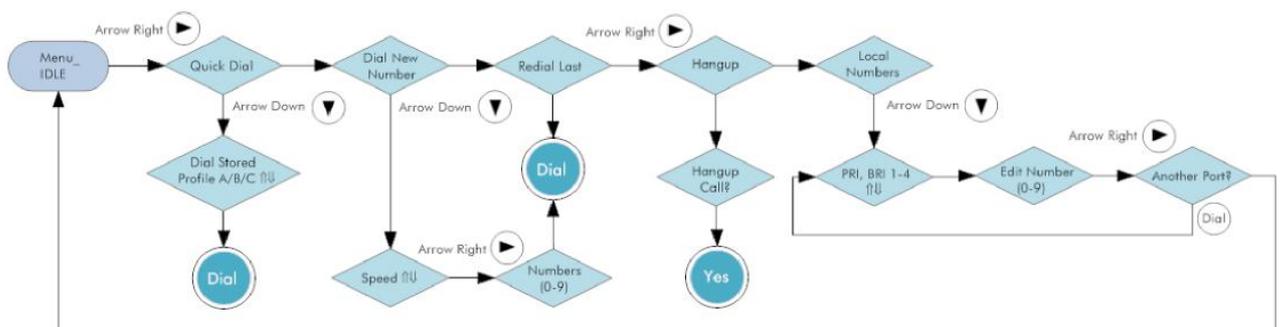
Stored Conferences

Please see the full DataBand ISU User Manual in order to configure stored conference settings using the **Phone Book** option.

4.8 Front Panel

The front panel of DataBand ISU can be used to initiate a conference with a remote site whose number and data rate settings have been pre-configured in the **Phone Book**, or to instantly start a conference with another site using a new number and target data rate.

> **Note:** Dial and Hangup functions can also be carried out using a third party serial device via the RS.366 port. Please contact Net2Edge for information.

0-9	Use to enter DDI number of a remote site
Menu	Return to main menu at any time
▲Del	Delete an existing number entry, or scroll up through a list
▶	Scroll menu items
▼	Enter Sub-menu and scroll down through menu items
Dial	Initiate a conference with a remote site
Yes	Confirm selection

4.9 Finishing Configuration

> **Note:** Please remember to **Upload** when configuration of DataBand ISU is complete. To upload, go to **File Upload** and wait until the progress bar completes.

4.10 Additional Resources

All Net2Edge products and the DbManager application have their own User Manuals which can be found in the 'Documents & Manuals' folder on the DbManager installation disk or by registering at the Net2Edge website: www.net2edge.com

For help with a specific problem, please click on the On-Line Help icon on the website, or email a request to support@net2edge.com

5. Safety Warnings

⚠	⚡	**Caution:** Danger of electric shock. The device may be connected to mains voltages. Switch to power-off state before working on the device.
⚠	⚡	**Caution:** Danger of electrostatic discharge. Electronic components are sensitive to electrostatic discharges that might damage the device. Protect the device from electrostatic discharges by wearing an electrostatic wristband.
⚠	⚡	**Caution:** Interruption of data transmission. Data transmission will be interrupted during any work on the transmission line and/or deactivation of the power supply. Make sure that that any work will only be carried out on inactive lines (without data transmission) or during quiet times to reduce interference to live systems.
⚠		**Caution:** Danger of damage to devices or service interruption. Access by unauthorized third persons may cause damage to devices and/or interrupt services. Make sure that sub-racks are only installed in lockable locations.
⚠	⚡	**Caution:** Danger of overvoltage. During faults, dangerous unprotected voltages may be present. Ensure sufficient grounding of the housings, i.e. by connecting the grounding contact.

- Safety requirements are not fulfilled unless this equipment is connected to a wall socket outlet with a protective earth (PE) contact.
- The power cord used to connect this equipment must be HAR marked and fitted with an IEC320 connector and an ASTA approved moulded plug.
- There are no user serviceable parts in this equipment. All servicing and repair tasks must be undertaken by qualified service personnel.
- Isolation from mains power is achieved by the removal of the main power cord

6.   Contacts

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