Multitone i-Page

User and

Installation Guide

ISSUE CONTROL

Issue	Date	Remarks
01	01.08.11	First Issue
02	25.10.11	Grammatical changes, removal of some pager images and addition of waterproof pager

i-Page USER AND INSTALLATION GUIDE

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Important User Information

IMPORTANT USER INFORMATION

CAUTION
THIS PRODUCT HAS NO REPLACEABLE COMPONENTS. ALL FAULTY UNITS SHOULD BE RETURNED TO MULTITONE OR THEIR AGENT, FOR REPAIR. FOR AVAILABLE SPARE PARTS, SEE APPENDIX 6.

STATIC SENSITIVE DEVICES ARE USED WITHIN THIS EQUIPMENT. OBSERVE STATIC SAFETY PRECAUTIONS IF CHANGING COMPONENTS.

ENSURE THE UNIT IS MOUNTED IN A DRY ENVIRONMENT, BUT NOT OVER A HEAT SOURCE OR IN DIRECT SUNLIGHT.
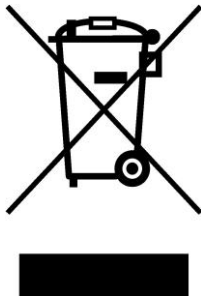
WEEE DIRECTIVE & PRODUCT DISPOSAL

At the end of its serviceable life, this product should not be treated as household or general waste. It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment, or returned to Multitone or their agent, for disposal.

Company Liability

The information in this manual has been carefully compiled and checked for technical accuracy. Multitone Electronics plc accepts no liability for inaccuracies or errors. In line with the company policy of technical advancement, the information within this document may be changed. The user should ensure that the correct issue of the document is used. Comments or correspondence regarding this manual should be addressed to:

> Multitone Electronics plc
> Technical Publications
> Hansa Road
> Hardwick Industrial Estate
> Kings Lynn
> Norfolk
> PE30 4HX

Safety Summary

Important Safety Information

The Multitone i-Page IP133 Radio Paging Transcoder equipment, contains a low power (5 Watts) radio transmitter and is intended for use with either an externally mounted dipole antenna, or a "local" unity gain (or less) "desk-top" whip antenna.

The equipment's performance may be characterized in accordance with the recommended MPE requirements of the European Council Directive 1999/519/EC on the limitation of exposure of the general public to electromagnetic fields (0Hz - 300GHz), as given in Annex III, Table 2; the requirements of FCC 47CFR and Industry Canada Standard RSS102.

Where an installation is to be fitted with a "local" whip style antenna, the following criteria must be adhered to, in order to reduce and comply with the Electro-magnetic radiation absorption regulations.

NOTE: Any equipment and antenna that is installed within an area normally populated whilst it is in use, must be located in a position where people may not approach, or be located within 1m of the radiating antenna, for periods in excess of 5 mins. in any 1 hour. This distance is calculated to include an additional safety margin for the product.

Compliance Information

EU Territories - This product complies with the requirements of the EU Radio & Telecommunications Terminal Equipment Directive 99/5/EC. A complete copy of the associated Declaration of Conformity for this and other Multitone products may be found at the Multitone Internet address www.multitone.com.

This is Class 2 type equipment under the terms of the R & TTE Directive and is therefore subject to restrictions in its use. Before installation and use, consult your local radio communications spectrum authority, for licensing and frequency regulations.

US & Canada - This product has been tested and certified for use in both the US and Canada. Any modifications to this equipment not expressly authorised by Multitone, could void the user's authority to operate the equipment.

(The term "IC:" before the certification/registration number, only signifies that the Industry Canada technical specifications were met.)

Installation Notes

WARNING
Do not install / use this equipment near sources of water, moisture, or in areas where explosive gases may be present! Do not expose to strong magnetic fields, extreme temperatures or strong sunlight.

The equipment should be positioned so that there is no interference to the flow of air around the unit and away from sources of heat. It should only be mounted to a wall, as recommended in the installation instructions.

Care must be taken during installation to keep the power supply away from excessive RF fields.

Where the transmitter power is to be greater than 2.5W, the antenna must be sited a **minimum** of 1.5 metres away from the IP133 housing and power supply.

In cases where a close-coupled antenna must be used, the transmitter power must be reduced to a **maximum** of 2.5W and care must be taken to position the antenna at least 0.5m from the power supply unit.

All installation wiring should be carried out in accordance with recognised Codes of Wiring Practice, applicable to the equipment and circuits involved, e.g. Mains power, telephone and/or radio. Power supply cords and other leads should be routed so that they are not likely to be walked on, or pinched by items placed upon or against them.

Particular attention should be paid to cord entrance and exit points.

Where installation involves an external radio aerial/antenna, the antenna should be located away from power lines. Ensure that where applicable the antenna system is grounded, to provide some protection against voltage surges and the build-up of static charges.

This equipment has been designed to conform to the relevant Radio and EMC performance standards, but it may be necessary to take additional precautions during installation, to ensure continued compliance.

Use only cables supplied, or suitably rated power cables and screened signaling cable. Where quoted, do not exceed specified cable lengths and keep cable runs to a minimum, especially on the outside of buildings.

Do not unnecessarily route wiring alongside cables from or through areas that are a source of interference e.g. heavy plant and switch rooms, RF transmitter housings, without taking suitable precautions to reduce EM interference coupling.

Where necessary, use additional protection e.g. armoured trunking, surge arrestors, especially on the outside of buildings.

Where any interference problems are observed, it may be required to fit additional filtering components such as ferrite absorbers, or in-line filters. If such action proves to be necessary, contact either Multitone or their authorised agents.

Connection of Power Supplies

Use only power sources specified, or supplied by Multitone. The use of another device will invalidate any declared conformity for this equipment, if as a result it ceases to conform to those standards on which conformity is based.

The equipment should only be connected to a power supply as described in the operating instructions, as marked on the equipment, or supplied by Multitone. Do not overload outlets and extension cords, as this can result in fire, or electrical shock.

Where equipment has been provided with a three-wire grounding type plug, this plug will only fit a grounding type power outlet. This is a safety feature and should not be defeated. If you are unable to use a grounding outlet, contact your electrician.

Where equipment has been has been provided with a polarised line plug (one blade wider than the other - US/Canada), this plug will only fit a power outlet one way. This is a safety feature and should not be defeated. If you are unable to insert the plug fully, try reversing the plug. If the plug still does not fit, contact your electrician to replace the obsolete outlet.

Servicing

This equipment contains non user-serviceable parts. All repairs to be undertaken by qualified service personnel. In the case of a problem, please contact your service representative/agent.

All the safety and operating instructions should be read before the equipment is connected and operated and retained for future reference. All warnings marked on the equipment should be strictly adhered to. No attempt should be made to remove any designated safety covers, as these areas contain voltages of a sufficient magnitude to constitute a risk of electric shock to personnel.

Acknowledgement

i-Page wishes to acknowledge that the TCP/IP stack used in this product is Copyright (c) 2001, 2002 Swedish Institute of Computer Science. All rights reserved.
This file is part of the lwIP TCP/IP stack. Author: Adam Dunkels adam@sics.se.

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OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

i-Page User & Installation Guide

Product Overview

Multitone i-Page is a small to medium business transcoder and supports a range of Multitone and OEM pagers. With a synthesised transmitter that can operate at up to 5watts, i-Page has good radio coverage in the majority of environments.

Multitone i-Page can also be integrated with other Multitone messaging products to provide messaging management from building and property management systems, fire alarms, security alarms and other safety, property or security devices.

Output of messaging alarms can also be directed to other mobile DECT, PMR, GSM, WiFi or personal security devices.

Contact Multitone for further information, or visit our website on www.multitonei-page.com.

1.0 Checking supplied equipment

Unpack and examine the contents against the list given below:

- i-Page Transcoder Unit Qty 1 (Fitted with wall mounting plates).
- Power supply unit, 3-pin plug (UK), 2-pin (Europe) or 2 pin (US/Canada) Qty 1
- Desk top antenna assembly * Qty 1 Part no 5501-0024
  - Supplied only when requested on SSF
  - Note that any alternative aerial must be an approved product supplied by Multitone
- Set up and assembly guide 9261-8880
- 2 metre ethernet cable. Item 7718-0022
- Your i-Page may have been supplied with either Multitone or OEM pagers
- Your pagers are pre-programmed to work with Multitone i-Page on the same radio frequency, but will not have the pager addresses pre-programmed unless requested

1.1 Pager bundles

- Pager bundles may consist of 4, 8 or 12 pagers, pre-programmed on to the radio frequency you have provided.
  - Pagers will be pre-programmed onto the correct paging frequency
  - The pager address required must be manually configured

1.2 Multitone pagers

- A Multitone pager is pre-programmed and the pager address(RIC) may be viewed when the pager is turned on. The programmed frequency is noted on the back of the pager.

2.0 Tools

The following tools may be required:-

- Screwdrivers - flat and cross-point
- 2.5mm Allen key – for removing the wall mount plate
- IDC Insertion Tool. Only required when DLC alarm contacts are equipped
  - Installation of DLC alarm contact connections should only be carried out by a qualified service engineer
- Drill and bits
  - Required if i-Page is to be wall mounted

3.0 Equipment Required

The following equipment may be required:-

- PC or laptop, with cable part number 7761-8251 for adjustments to transmitter
  - This work should only be carried out by trained personnel
  - Damage to transmitters due to incorrect procedures or hardware being used, will be charged at replacement costs
- Multitone i-Page includes a browser and administration programme and is designed for use with any PC or laptop equipped with an internet browser programme such as Internet explorer, Firefox etc. connected to the customer network

4.0 Assembly requirements

4.1 Assembly
The installation of alarms and servicing of this product must only be carried out by qualified personnel.

i-Page must be assembled with the following points in mind:-
- Transcoder must not be installed next to the power supply or aerial – place these items as far away from the transcoder as possible, to ensure there is no interference
- i-Page requires an IP network connection within 2 metres
- A 120/230 volt mains socket must be within 3 metres of i-Page
  - Computer with a browser such as Internet Explorer, Firefox or other browser for programming i-Page
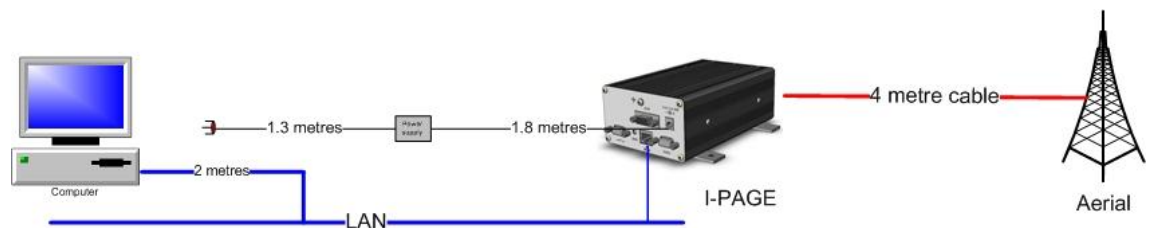
The IP133 i-Page can be wall or shelf mounted. i-Page is supplied for wall mounting and has wall mount plates attached. For desktop mounting remove the wall plates and fix the enclosed rubber feet.

An earth wire **MUST** be fitted to the 4mm earth screw terminal on the back of the transmitter using the earthing lead supplied, or suitable equivalent.

4.2 Mounting

The unit may be wall-mounted using the procedure below.

If i-Page is to be fitted on a wall use the mounting plates as a template and mark the drilling points, (note: plugs and screws are not provided.).
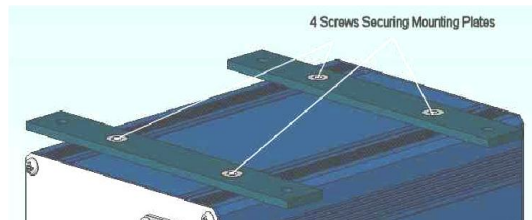
Attach the unit to the wall through the four mounting holes provided, using suitable fixings.

For desk or shelf mounting, remove the four screws using a 2.5mm Allen key and substitute the four rubber feet supplied. Where this method of installation is used, ensure that the unit is physically stable once all the leads have been connected.

Desk mounting
The unit must be on a stable surface and the correct distance away from power supply, aerial or any other radio device.

4.3 Power supply
The power supply can be wall mounted using an optional mounting bracket. This item is an accessory and may be purchased under part number 1061-8185-1.

Once the bracket is attached to the wall, fit the power supply to the bracket by feeding the DC output lead through the square hole in the bracket, from the inside. With the power supply sitting centrally between the two lugs of the bracket, insert the mains connector into the power supply through the oval hole, ensuring that it is fully pushed in.

This locks the power supply into the bracket.

Connect the power supply plug into the i-Page power socket.

4.4 Network cable
Plug the network cable into a free network point and the other end into the RJ45 network cable connector.

4.5 Aerial fitting

i-Page is supplied with a desktop aerial, with 4 metres of cable and connector. If an alternative aerial is fitted, the impedance of the aerial should be 50 ohms.

Care must be taken during installation to keep the power supply away from excessive RF fields.

Where the transmitter power is to be greater than 2.5W, the antenna must be sited a **minimum** of 1.5 metres away from the i-Page housing and power supply.

In cases where a close-coupled antenna must be used, the transmitter power must be reduced to a **maximum** of 2.5W and care must be taken to position the antenna at least 0.5 metres from the power supply unit.

Any equipment and antenna that is installed within an area normally populated whilst it is in use, must be located in a position where people may not approach, or be located within 1 metre of the radiating antenna, for periods in excess of 5 mins in any 1 hour. This distance is calculated to include an additional safety margin for the product.

Note: You, (the user), are responsible for obtaining a license to operate your paging system from Ofcom (UK), or your local radio/spectrum licensing agency.
http://licensing.ofcom.org.uk/binaries/spectrum/business-radio/forms/OfW432.pdf

5. i-Page setup
When i-Page has been assembled according to points 4.1 to 4.5 and the ethernet cable from i-Page is connected to a network point, you are ready to programme your system from your computer.
- **Note:** Default IP address is 192.168.1.11 and network mask of 255.255.0.0
- i-Page only supports a static / fixed IP address
- A network address will need to be allocated by your MIS or IT manager

5.1 i-Page network setup

- Changing computer IP address
  - (Example using Microsoft XP)
- START - MY NETWORK PLACES – VIEW NETWORK CONNECTIONS – LOCAL AREA CONNECTION
- Select PROPERTIES
- Select "Use the following IP address". Enter, 192.168.1.11 and Netmask 255.255.0.0
- Select "OK" and "OK" and the new IP address will be saved
- Open your default browser and type;
  - http://192.168.1.11/ into the top bar
  - You will see the main screen of Multitone i-Page displayed and can commence programming

- There is no default password
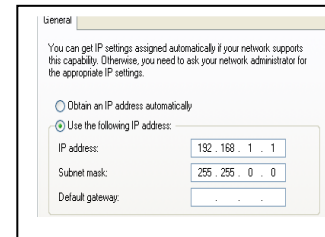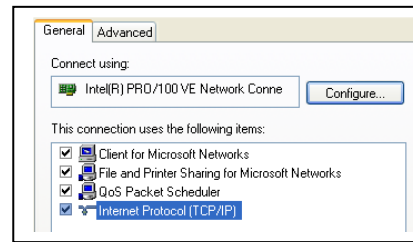
- Login to i-Page and the menu option below will be displayed

The menu items presented on the left hand side of the screen are used to programme i-Page and to send messages to users and groups.

Logout	- Used to log out of Multitone i-Page
Paging	- User and administration interface for programming and paging
Users	- Add, amend or delete users
DIC	- Programme DLC alarm details
Groups	- Add and remove groups
Messages	- Add or remove stored messages up to 80 characters
Clock	- Set time and date
Password	- Set one administrator or five user passwords
Paging setup	- Set system address, paging format, time on/off, message length and coverage test
Language	- Select browser and pager languages
IP settings	- Set static IP address, Netmask, gateway and Syslog for i-Page
Serial port	- Select serial port protocol
Backup/restore	- Backup and restore i-Page data
Factory reset	- Reset i-Page to factory setting. **Note that all previous system data will be erased!**

5.2 Browser IP settings

The majority of businesses have a network managed by an IT or MIS manager and they will be able to assist with the following instructions and will also need to provide an IP address for i-Page, unless the default IP address is used.

These settings allow any user or administrator to use i-Page from their internet browser software (Internet Explorer, Google, Firefox etc.).

Log in to i-Page, **PASSWORD** - no password required.

Select **IP settings** from the list. Your i-Page unit may require a new IP address in order that it may be accessed from your local network. **Contact your IT / MIS network manager for details or assistance.**

You must make these changes, in order for you to use you i-Page on your local network. (Refer to section 5.1.)

Enter the new IP address and Netmask plus gateway and Syslog IP address.

Example: Obtain the IP address Netmask, gateway and Syslog details from your IT network manager.

IP settings				
IP address	10	1	192	75
Netmask	255	255	0	0
Gateway	10	1	1	254
Syslog address	0	0	0	0
Submit				

- IP address for your network
- Netmask for your network
- Gateway address **
- Syslog computer address **

** Syslog and gateway are not essential.

A **gateway address** is only required if i-Page will be accessed from a different LAN network e.g. any computer not on the main network. So any computer in this example with an IP address of 10.1.192.xxx, will not require a gateway address.

Syslog is a standard for logging program messages. It allows separation of the software that generates messages from the system that stores them and the software that reports and analyses them. Leave on 0.0.0.0 if not used.

It also provides devices which would otherwise be unable to communicate, a means to notify administrators of problems or performance.

There are a number of free Syslog programmes available on the internet.

- SUBMIT the changes to i-Page. Your i-Page IP address has now changed
- Change the IP address of your computer back to its previous static or DHCP address (Refer to section 5.1.)
- Log on to i-Page using the programmed static IP address, You are now ready to complete programming of i-Page

5.3 Language settings
i-Page supports seven languages which may be enabled for the browser and / or pager.
All common browser programmes are supported. Languages supported include:-
- English   German   French   Italian
- Spanish   Danish   Norwegian

Note:- not all pagers will support the languages available on i-Page.

5.4 Clock setting
Select the CLOCK menu and input time, month and day. SUBMIT to save.
This is the time and date used by the pager. Not all pagers support the time of date clock function.

Setting the clock does not work with the OEM POCSAG pagers.

5.5 Paging setup

The PAGING SETUP menu is used for setting basic message type details and an engineering test for transmitter range.

The PAGER ADDRESS is a 7-digit number consisting of a 3-digit SYSTEM ADDRESS and a 4-digit USER NUMBER.

The pager address is also known as a RIC or CAP CODE

Paging Setup

System Address	001
Code Format	POCSAG1200
Time Of day	On
Message Length	120

Coverage Test

User number	0000
Time interval	Off
Submit	

- System address – These are the left-most 3 digits of the pager address Code format – Select one of the options provided. This must be the same as your pager type
- Time of day – On or off
- Message length – Default is120 characters
- Coverage test – Is for service use and may be used to identify locations where pagers may not work. The test call is repeated to the designated user number until disabled

5.6 Passwords

The web interface supports one administration password and one user password.

Only one administrator may be active at any one time and if a second administrator logs on then the first will be logged off.

Login only prompts for password, (not user ID); the Password used determines the access security level e.g. 2 very insecure passwords could be "paging" and "admin".

Paging access can have an empty password, just hit submit, but an admin password must be set. Up to five operators at Paging level can be simultaneously logged in to i-Page using the same user password.

The web interface can be set to display in English, German, French, Spanish, Italian, Danish and Norwegian.

5.7 Adding users

Your i-Page has been supplied with a number of pagers. Each pager must be programmed to operate on the same frequency as your paging system.

You may add up to 256 users to i-Page.

Depending on your order requirements your pagers may have been pre-configured with a pager address,(RIC/CAP CODE). The pager address, (RIC/CAP CODES) may be displayed on the pager at start-up, depending on the pager type.

The pager address is a 7-digit number consisting of a 3-digit SYSTEM ADDRESS and a -digit USER NUMBER. For example a pager address of **0011234**, the user number would be 1234 and a pager address of **001**0011, the user number would be 0011.
The pager user number is also known as a RIC code or CAP CODE.

A user number may be up to 4 digits long and is the four right-most numbers.

Fewer than 4 digits will be packed with leading zeros. For example*, if the user number entered is 1 then the saved user number will be 0001.*

- Add user number
- Add name / description (maximum of 50 characters)
- Submit to saveTo REMOVE a uyser, select "Remove". There is no prompt to check the action is correct.

Details

Remove

User number 1234

Name   Peter 1234

Submit

5.8 Adding groups

You may create up to 40 groups of pagers, each with up to 96 members.
The permitted number of characters for the user and group name is 50.

- Select GROUPS
- Enter 4-digit group number
- Enter name / description for group
- Select all pagers to be included within the group
- Submit to save

Details

Group number 0001

Name   A new group

Group Call 7900	☐
iPage 7900	☐
iPage 7901	☐
iPage 7902	☐
iPage 7903	☐
iPage 7904	☐
iPage 7905	☐
Mk7	☐

Submit

5.9 Stored messages

A maximum of 32 stored messages of 120 characters may be configured.

- Select MESSAGES
- Enter NEW
- Enter message
- SUBMIT to save the message

Messages

New

Alert Clear the building	Details
Call Doctor	Details
Call reception	Details
Delivery in Stores	Details
First stored message -	Details
Maximum message length is 120 characters	Details
This is an I-Page test message	Details
Your visitor is in reception	Details

5.10 Adding DLC alarm contacts

i-Page provides 14 active closed alarm contacts. DLC's are dry contacts and do not support any drivers for load current.

The remote device contact must provide a Lo (Ground) volts point, or a logic value not exceeding 3.3 volts on the alarm wire, to activate i-Page.

When a DLC is activated a message will then be sent to a user or group.

Refer to technical specification in Appendix 1 for DLC operational details and wiring.

- Select DETAILS for DLC
- Input message (maximum of 120 characters).
- Select beep code 1 to 8
- Select user or group
- Submit to save

A DLC cable part number 7761-8831 may be ordered as an accessory. This is a special cable.

5.11 Serial port

The serial port is designed to receive serial data from an external source such as a building management or property management systems, serial alarms, fire alarms or other serial alarm data.

i-Page supports a number of common serial alarm data protocols.

In the event that the protocol is not supported contact Multitone for advice and support.

- Select SERIAL PORT
- Use drop down menu to select protocol
  - TAP, TAP CR, ESPA, MEP, AUSTCO, MSP/Morley
  - Baud rate
  - Data bits
  - Stop bits
  - Flow control
- Note that these settings must be the same as the external data source

Connection of a serial data input requires a standard 2 metre null-modem cable. Multitone part number 7718-0030 is available for this purpose.

5.12 Backup and restore

The backup and restore options allow you to save system data and restore if and when required. Always backup your system data when first setting up i-Page or when any changes are made to the settings.

Backup/Restore		
Backup configuration		Download
Load configuration	[ ] Browse...	Upload

To backup system data;
- DOWNLOAD
    - When the "file download" screen opens select SAVE
    - Give the file a name / date and save to the i-Page folder
        - You will need to create this folder., this should be on the local network for safety
- To restore backup system data
    - BROWSE for the file to be restored and select

Select UPLOAD. **Do not interrupt the upload!**

5.13 Factory reset

Factory reset will clear all system data and restore all settings to default.

-Page will need to be reprogrammed, either by the re-entry of new data, or by restoring the most recent backup file. If you select the factory reset option, you will be presented with the following message:-

Factory Reset
Proceeding with this action will delete all devices from the database and return all settings to factory values.

Take a backup first if there is any possibility that the existing data is required.
After the reset the i-Page unit will be available on 192.168.1.11.

Use Admin password after a factory reset and your computer will need to have the static IP address changed to 192.168.11.1 (see section 5.1).

6.0 Engineering button

The unit has an inset small blue button which has two different functions as follows:

A) Field software upgrades (see section 10.0)

B) Identification of the unit's IP address

The Engineering button accessible from the front of i-Page toggles between normal operation and engineering mode when power to the unit is maintained
To activate, do not remove power, press the button in and release the button after a few seconds.

i-Page may now be accessed from its default IP address of 192.168.1.11,allowing access when you don't know the unit's IP address.
The Administration password is also temporarily set to "Admin".

Activating the button again will return the unit to its original IP address.

When activating the button, ensure that it is depressed squarely, and released fully.

7.0 Paging users and groups
The **PAGING** interface allows you to:-

- Send free format messages to a pager
- Send free format messages to a group
- Send preset messages to a user or group
- Select a beep code for the message

Select **PAGING** from the menu.

- Select one of the optional 8 beep codes
- Select a user or group
- Input your message or select a PRESET message
- **SEND** the message

If no message is entered or selected, you will see a message "Error: No message entered – call not sent."

7.1 Logout
When administration or messaging has been completed select LOGOUT.

In the event that an administrator or user has not logged out, any other user logging in will override the person already logged in.

This ensures that access to the paging systems is always available.

8.0 SYSLOG message tracking
If you require confirmation that the message has been sent, then you can use any one of the freeware Syslog software packages available on the internet.

The software must be installed on a computer, preferably one that has a static IP address. Programme the IP address of the Syslog server in the IP SETTINGS menu.

9.0 Transmitter alignment
The i-Page transmitter is factory set, according to the frequency requested when ordered. It may be necessary to re-align the transmitter in the event of any problems or to change the frequency.

This work **must not** be carried out by the user.
Please contact your supplier or maintainer, for advice or support.
Refer to Multitone document 9261-8252.

10.0 Software upgrades
Upgrading software can only be carried out by your supplier or maintainer.

Programming software may be obtained from the support section of the Multitone website:-
http://www.Multitonei-Page.com.

Download the zip file and save to the computer from which programming will take place.

Run the program:-
 "C:\Program Files\Texas Instruments\Stellaris\LM Flash Programmer\" and configure the
following options:-
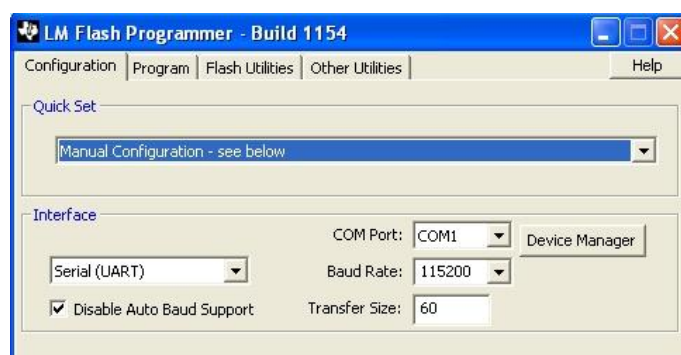
- Quick set   - Manual configuration
- Interface   - Serial UART
- Check   - Disable baud rate
- COM port   - The COM port to be used for programming
- Baud rate   - 115200
- Transfer size   - 60

Select the PROGRAM menu and check the box for "Reset MCU" after program.
This ensures that i-Page will restart after the programme has been loaded.
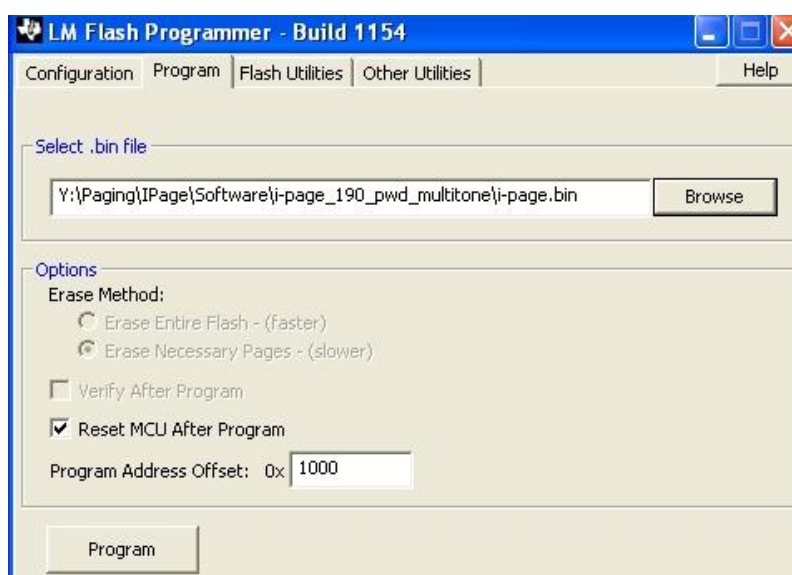
Do not change any other menu options!
Backup i-Page data before re-programming.

Field software update

The software involves a boot loader which can accept new software.

Turn the power off, wait for 10 seconds whilst the green power lamp extinguishes, depress the button then repower the unit maintaining the button press for a few seconds. Release the button. The green power lamp will come on, but if the ethernet cable is connected, the ethernet LEDs will remain off. The serial port will now be available for input of a new i-Page software issue.

Use the LM programme software to upload a new image. Connect a null modem cable between i-Page and the computer, browse to the i-Page binary firmware file, select and press PROGRAM.

Do not interrupt whilst the programme is being loaded and has reset i-Page, as this may cause an irrecoverable error.

To resume normal operation after the upload, the ethernet LEDs must be flashing. If the ethernet is not in use, then it may be advisable to repower the unit.

Check that i-Page is operating correctly and that a paging message may be sent.

Appendix 1

DLC Alarm and Serial Port Technical Requirements

PIN NO.	Wire Colour	Description	Function
1	Red	DLC1	DLC1
2	Blue	DLC2	DLC2
3	Yellow	DLC3	DLC3
4	White	DLC4	DLC4
5	Black	DLC5	DLC5
6	Brown	DLC6	DLC6
7	Violet	DLC7	DLC7
8	Orange	DLC8	DLC8
9	Purple	DLC9	DLC9
10	Turquoise	DLC10	DLC10
11	Grey	DLC11	DLC11
12	Red/Blue	DLC12	DLC12
13	Green/Red	DLC13	DLC13
14	Yellow/Red	DLC14	DLC14
15	Green	GND	Ground

DLC alarm contacts

i-Page provides up to 14 alarm contacts. The cable is not supplied with i-Page and may be ordered separately under part number 7761-8831.

The cable must be terminated in accordance with this guide.

Any damage to i-Page or customer equipment resulting from connection to high voltages is not the responsibility of Multitone Electronics.

DLC's are inputs only and intended for "dry" switch contacts, (no current), or simple logic signal ports. Ideally any logic signal inputs should not exceed 3.3V.

Serial port data input

The following protocols are supported on i-Page:-

TAP MEP (Multitone protocol), ESPA 4.4.4, AUSTCO Nursecall protocol, and MSP / Morley fires protocol.

If any other protocols are used, contact Multitone for advice and support.

We can offer a field configurable protocol converter for the majority of applications, to convert any serial data stream into TAP or MEP protocols.

Use a standard serial Null modem cable with 9-way female connectors at each end; Multitone part number 7718-0030.

Appendix 2 – Frequently Asked Questions

- I cannot log in to my i-Page:-

  - Have you set the static IP address on your computer?
    - No – Refer to section 5.1 of installation or starter guide
  - Is the static address in the same range as i-Page 192.168.1.11?
    - To check go to START – MY NETWORK PLACES – VIEW NETWORK CONNECTIONS – Select Local area connection
- Bottom left hand corner box DETAILS will show the IP address of your computerHow do I know what my IP address is for Windows XP?

  - **Start-connect to – show all connections**
  - **Click on "local area connection"** and the details of the connection will be shown in a box at the lower left of the screen
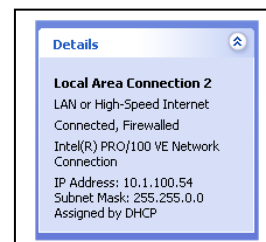
- I have a new pager, but it does not work.
- What type of pager is it?
  - If it is a Multitone pager, check the back of the pager for the frequency and compare with the i-Page menu. What frequency is it on? Multitone pagers - Check the back of the pager.
  - Have you programmed the CAP CODE user details?
    - No. Use the programming guide, or go to the website and download the video file

For more information go to http://www.multitonei-Page.com

Appendix 3- i-Page Specifications

Transmitter performance - i-Page

* Frequency range: 438 to 470MHz
* Frequency stability: +/-2ppm
* Output power: 2.5W / 5W
* Duty cycle: ≤100%
* Normal load impedance: 50 ohms
* VSWR protection against short term removal of the antenna (maximum of5 calls
  with antenna disconnected)
* Channel spacing factory set to: 10, 12.5, 20 or 25kHz.
* Antenna stand-alone base rear mounted loaded UHF whip, with 4metre cable UHF stub

Standard features
* Paging formats: Multitone Mk6, Mk7 and POCSAG (only one is selectable for use)
* Beep codes: 8 selectable beep codes
* Numeric messages: Up to 12 digits (Mk6)
* Alphanumeric messages: Up to 240 long text messages
* Speech transmission: Up to 256 seconds total transmission time
* Team call: Any format teams; 40 teams with up to 96 team members
* 14 DLC alarm contacts (unpowered circuits, max loop resistance 150 ohms)
* Up to 256 users (Pagers)

Protocols
Computer interface serial data, proprietary protocol, TAP, MEP, MSP, Morley, ESPA 4.4.4
and AUSTCO using RS232C. Full protocol details available upon request.

Power input
* Switch mode power supply. 110V to 240V and 1.5A

Physical
Dimensions: 105mm (w) x 175mm (d) x 65mm (h)
Weight: 700g

Environment
Operating temperature: -10°C to +55°C

Appendix 4 – Multitone pagers
Multitone can offer a range of pagers for use with i-Page

RPR580 paging receiver Mk7	Part no.	http://www.multitonei-Page.com
		Selectable 2-line or 4-line alphanumeric display
		.3 selectable display fonts
		. Icon driven operation
		. Up to 1,000 character message length
		. Multiple message memories store up to 24,000 chtrs
		. 8 information service mailboxes
		. Selectable audible and/or vibrate alert
		. Free holster and lanyard
	UHF receiver	. Runs on one AAA battery
UHF receiver	RPR583MK4	. Battery saver

RPR750 paging receiver	Part no.	http://www.multitonei-Page.com
RPR750 Mk6		The RPR750 is supplied in a tough, dustproof and water-resistant case, protected to IP54. The specially designed grip-tight clip enables you to carry your pager safely.
UHF Receiver Mk6	RPR753MK6	
RPR750 Mk6 Intrinsically Safe		Safe (ATEX) versions are also available, allowing the RPR750 to operate in most hazardous and hostile environments.
UHF receiver Mk6 IS	RPR753MK6IS	
RPR750 Mk7		
UHF Receiver Mk7	RPR753MK7	
RPR750MK7 Intrinsically Safe		
UHF Receiver Mk7 IS	RPR753MK7IS	
RPR750 POCSAG		
UHF Receiver POCSAG	RPR753POC	
RPR750 POCSAG Intrinsically Safe		
UHF Receiver POCSAG IS	RPR753POCIS	

TLA850 paging receiver	Part no.	http://www.multitonei-Page.com
UHF POCSAG	TLA853Mk2	

Waterproof pager	Part no.	http://www.multitonei-Page.com
	TPW-WP	Robust waterproof and dustproof.
		POCSAG pager. IP67 rated.
		8 RIC codes with 4 sub addresses.
		Alarm contact on pager cradle.

MIT870 series pagers	Part no.	http://www.multitonei-Page.com
UHF POCSAG MIT873		Display LCD 6-line:150 (6 rows of 25 characters). Display LCD 4-line: (normal): 100 (4 rows of 25 characters). Display LCD 4-line (bold): 64 (4 rows of 16 characters).
	MIT873IS	

POCSAG pager	Frequency	http://www.multitonei-Page.com
See Multitone price list		•2-line, 2-line bold or 4-line alphanumeric display
UHF	448-452MHz,	•20 characters per line display (2-line: 40 characters, 4-line 80 characters)
UHF	452-456MHz	•8 CAP CODES
UHF	456-460MHz	•Synthesised frequency
UHF	460-464MHz	•50 message capacity
UHF	464-468MHz	•Priority tone override
UHF	468-472MHz	

Appendix 5 – i-Page Spares

Spares will be limited to complete field replaceable components.

Main spares

Transmitter board and endplate assembly	- 0402-0017
Encoder board assembly	- 0402-0018
i-Page IP133 housing	- 0761-8857
End plate	- 0761-8857

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