Mercury 8-Line
User Manual

(Manual Revision 4.10)

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COMPLIANCE NOTICES

AUSTRALIA: Where applicable, to ensure compliance with ACA Technical Standards, this equipment is labeled with a Telecommunications Compliance Label. For safety reasons, this equipment should only be connected to compliant telecommunications equipment in accordance with the manufacturer's instructions.

NORTH AMERICA: Where applicable, this equipment has been tested and found to comply with FCC Rules and Regulations, Part 15 with the limits of a Class B digital device, designed to provide reasonable protection against harmful interference. This equipment generates, uses and can radiate frequency energy and if not installed and used in accordance with the instructions, may cause interference harmful to radio communications. On the base of the equipment is a label containing an FCC Registration Number, if applicable.

Table of Contents

1.   ABOUT THE 8-LINE MERCURY

1.1   Features

"The Perfect partner for professionals on the move." The Commtech "Mercury 8-Line" Pager is in a class of its own. Specifically designed for *on site paging* applications, it's the perfect partner for professionals on the move.

Reliability

Reliability is one of the key factors when considering a pager. Not only does this determine how reliably the pager receives the message but it also determines the expected life span of the pager. That's why the Mercury 8-Line is backed by a full 12 month warranty.

Ease of Use

Plain and simple. That was the specification for the design of the 'user interface'.

The Mercury 8-Line will make all your wishes come true. Boasting simple delete, delete all and message reading facilities. It is also possible to change alert melodies, vibration and even the screen contrast if you wish.

Availability

Do you need a UHF pager on 450Mhz? The Commtech Mercury 8-Line can help. The 8-Line Mercury pager is synthesized meaning that the majority of the worlds frequencies can be programmed into the pager.

1.2   About This Handbook

This handbook is designed to assist users with the Mercury 8-Line Pager.

This handbook is set out in a series of easy to follow step by step instructions followed by a checklist to confirm the steps as outlined. Following the steps and checklists correctly will ensure that there will be no problems when using the Mercury 8-Line Pager.

◆ **NOTE: A note preceded with this symbol indicates secondary information pertaining to the topic under discussion.**

➔ **IMPORTANT: A Right-pointing arrow followed by text in this manner presents important information.**

⚠ **WARNING: Warnings like this alert you to the fact that you might damage your equipment or lose data if you don't follow instructions carefully.**

2.   THE MERCURY 8-LINE PAGER

2.1   Getting Started

2.1.1   Case Layout

The Mercury 8-Line pager has four buttons on its case.


--- Up Key

--- Down Key

--- Menu Key

--- Read Key

2.1.2   LCD Screen

The Mercury 8-Line Pager contains a backlit, 8-Line, alphanumeric LCD screen. Each line is 21 characters long. The screen can also be zoomed to 4 lines giving a larger font but less characters per line.

There are also a number of small icons underneath this line which give a quick indication of the current status and settings for the pager. The LCD screen is shown below.

The table below shows the meaning of each icon.

Icon	Description
	Beeping Alert
	Vibrate Alert
	Mute (silent alert)
	Daily Alarm On
	Range Indicator
	Low battery

3.   MERCURY 8-LINE PAGER OPERATION

3.1   Functions

3.1.1   Turning the Pager "ON"

To turn the pager ON, follow these steps:

1.   Insert the battery into the pager.

2.   Press the *Read Key* ⬭ , until the screen displays the Start-up message. The audio alert will sound or the pager will vibrate.

   To stop the Audio Alert or Vibration Press any key. If no key pressed during alert period, the alert stops automatically and the message is assumed to be an unread message.

3.   **To check for Unread messages and Total messages** Press the *Read Key* ⬭ again.

4.   **To read existing messages** Pressing either of the *Arrow Keys* ⬭⬭ will toggle between messages. Press the *Read Key* ⬭ again to view the selected message in detail.

3.1.2   Reading a New Message

When the pager is being used it will typically have a blank screen when a new message is received.

The pagers will either sound the audio alert or vibrate and the new message will be displayed on the screen.

1.   **To stop the audio alert or vibration** Press the *Read Key* ⬭ again and the screen will go blank.

2.   **To check the message** Press the *Read Key* ⬭ once.

   To read previous messages Use the *Arrow Keys* ⬭⬭ to scroll through the stored messages. Press the *Read Key* ⬭ again to view the selected message in detail.

3.   To return to the *Standby Screen*, press the *Menu Key* ⬭ twice.

3.1.3   Deleting Individual Messages

Go to the message to be deleted. To delete it:

*   Press the *Menu Key* ⬭ once. The *Delete Menu* will be displayed.

*   Using the *Arrow Keys* ⬭⬭ choose the *Delete Message* 🗑 icon, by making it flash.

*   Press the *Read Key* ⬭ to confirm your selection.

3.1.4   Deleting All Messages

Go to any message. To delete all messages:

- Press the *Menu Key* ⬭ once. The *Delete Menu* will be displayed.

- Using the *Arrow Keys* ⬭⬭ choose the *Delete All Messages* icon, by making it flash.

- Press the *Read Key* ⬭ to confirm your selection. You will then be asked to confirm deletion of all messages again. To do this, choose the ✔ icon by making it flash with the *Arrow Keys* ⬭⬭ and then press the *Read Key* ⬭ to confirm this.

- If you do not wish to delete all messages, select the ✗ icon and press the *Read Key* ⬭ to confirm.

3.1.5   Protecting a Message

Go to the message you wish to protect. To protect the selected message:

- Press the *Menu Key* ⬭ once. The *Delete Menu* will be displayed.

- Using the *Arrow Keys* ⬭⬭ choose the *Protect Message* icon, by making it flash.

- Press the *Read Key* ⬭ to confirm your selection. The message will then be unable to be deleted, until unprotected.

3.1.6   Un-protecting a Message

Go to the protected message you wish to unprotect. To un-protect the selected message:

- Press the *Menu Key* ⬭ once. The *Delete Menu* will be displayed.

- Using the *Arrow Keys* ⬭⬭ choose the *Un-Protect Message* icon, by making it flash.

- Press the *Read Key* ⬭ to confirm your selection. The message will then be able to be deleted.

3.1.7   Turning the Pager "OFF"

1.   Press the *Menu Key* once. The *Function Settings Menu* is displayed.

2.   Press either of the *Arrow Keys* until the *Power Off* icon flashes.

3.   Press the *Read Key* once to confirm. The pager will then turn off.

3.1.8   Audio or Vibration Alert (Vibration mode for discreet alerts)

With the Pager ON:

1.   Press the *Menu Key* until the *Function Settings Menu* is displayed.

2.   Using the *Arrow Keys* select the icon.

3.   Press the *Read Key* once. The alert function the pager is currently set to will flash.

4.   If you wish to change, Press either of the *Arrow Keys* until the correct setting is found. Choose either for beep or for vibrate or for mute.

5.   Press the *Read Key* once and this will change to the mode that is flashing.

3.1.9   Back-light (for viewing at Night)

The backlight is manually turned on.

On receipt of a message the backlight will not be on.

1.   Press and hold the *Menu Key* until the Back light comes on.

NOTE: To extend the battery life, the Backlight will automatically turn "off" after 15 sec.

2.   To turn the backlight off, you can wait for it to timeout, or hold the *Menu Key* until the Backlight turns off.

3.1.10   Setting the Alarm

With the Pager ON:

1.   Press the *Menu Key* until the *Function Settings Menu* is displayed.

2.   Using the *Arrow Keys* select the icon. Press the *Read Key* once. The *Alarm Settings Menu* will be displayed.

3.   Use the *Left Arrow Key* to decrease the value of a field and the *Right Arrow Key* to increase the value of a field.

4.   The *Read Key* will move you along to the next character for editing.

5.   Settings will be saved when you press the *Read Key* to the end of the line.

3.1.11   Adjusting the Time and Date

With the Pager ON:

1. Press the *Menu Key* ⬤ until the *Function Settings Menu* is displayed.

2. Using the *Arrow Keys* ⬤⬤ select the ▦ icon. Press the *Read Key* ⬤ once. The *Time and Date Settings Menu* will be displayed.

3. Use the *Left Arrow Key* ⬤ to decrease the value of a field and the *Right Arrow Key* ⬤ to increase the value of a field.

4. The *Read Key* ⬤ will move you along to the next character for editing.

5. Settings will be saved when you press the *Read Key* ⬤ to the end of the line.

3.1.12   To change the LCD level

With the Pager ON:

1. Press the *Menu Key* ⬤ until the *Function Settings Menu* is displayed.

2. Using the *Arrow Keys* ⬤⬤ select the ▦ icon. Press the *Read Key* ⬤ once. The *Contrast Menu* will be displayed.

3. Use the *Arrow Keys* ⬤⬤ to alter the LCD contrast.

4. The *Read Key* ⬤ to confirm your setting.

5. To return to the Standby Screen press the *Menu Key* ⬤ once.

4.   APPENDIX

4.1   Precautions

1.   This pager contains precision electronic components. Avoid temperature extremes during use and storage and do not subject it to strong impact.

2.   Avoid using the pager in an area where it might come into contact with liquids or very high humidity.

3.   Never try to take the pager apart. Doing so can lead to serious damage and malfunction.

4.   Replace the battery as soon as possible after you notice it getting low. Leaving a dead battery in the pager can result in damage caused by leaking fluids. The battery should be removed from the pager if you do not plan to use it for a long time.

5.   Clean the pager by wiping it with a soft dry cloth. You can also use a cloth moistened with a weak solution of mild neutral detergent and water. Wring as much liquid as possible from the cloth before wiping the pager. Never use thinner, benzene, alcohol or other volatile agents to clean the pager.

6.   Do not allow the pager to be exposed to direct sunlight, heat from heaters or other sources of heat (greater than 60°C). Do not leave the pager in a motor vehicle that is parked in the sun.

7.   Never expose batteries to direct sunlight or incinerate them. Doing so may cause the batteries to explode.

8.   Never try to charge batteries or take them apart. Doing so can cause them to leak fluid.

4.2   Further Help and Support

Contact your Place of Purchase

A Commtech Wireless Authorized Distributor or Dealer sets up most systems. Contact your place of purchase with inquiries beyond the scope of this manual.

This Product is Not Field Serviceable

Should a fault develop with the hardware or software, contact your place of purchase for the most appropriate form of action. Do not attempt to open or repair any of the products as this may void any warranty.

4.3   Specifications

Note: Specifications subject to change to any notice

Electrical Specification

Rx Frequency 135-175, 276-284, 406-478, 925-932
Nominal Battery Life .... more than 30 days ('AAA' alkaline battery)

Technical Specification

Code Format...POCSAG
Bit Rate 512/1200/2400bps
Number of Cap codes.. 6
Channel Space Receiver:... 12.5/25KHz
Modulation Method ....FSK-NRZ
Maximum Sensitivity...512bps 5mV/m
.... 1200bps 7mV/m
....2400bps 9mV/m
Optimal Deviation .... +/- 4.5KHz
Frequency Stability ....+10ppm (VHF), 5ppm (UHF), 3ppm (930 MHz)
Selectivity ....>65dB
Image Rejection ....>52dB
Spurious Rejection ....>60dB
Intermodulation ....>50dB
Alert Tone Level ....More than 75dB in 30cm distance
Nominal Battery ....'AAA' alkaline battery
Low Battery Voltage 1.1V
LCD ....8 line x 21chars or 4 line x 17 chars
Max Messages 60
Max chars per message 500
Backlight ....White LED
Alarm .... Daily alarm
Duplicate message rejection ....yes

Mechanical Specification

Unit size (mm): ....72mm(L) × 53mm(W)× 19mm(H)
....2.8 inch(L) x 2.0inch(W) x 0.75inch (H)
Weight .... 65grams / 2oz
No. of Keys: 4