DataPage Lite

Desktop UHF Radio Paging System

Installation & User Manual

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PREFACE

Important Installation Information

It is the purchasers' responsibility to determine the suitability of this equipment and its derivatives for any given application, Scope cannot give specific advice in this manual, as each use will require independent evaluation.

Scope has, wherever possible, employed extra safeguards or designed optional equipment to further monitor the system's performance. Certain system installations, operational requirements or budgets may, however, limit the effectiveness of these safeguards. Again, the suitability of the system for any given application must therefore be decided by the installer and their customer, relative to the application and risk.

Licence

This equipment is cleared for use within the USA under a license assigned to the exclusive importer, PIPS Holdings Inc. License No. 950415906. Certain restrictions apply in respect of power output and antenna installations.
Alternative frequencies are available by formal license application (Form 600) via the FCC. These will not be subject to the same restrictions as the standard assigned license. You should obtain the FCC Rules and Regulations, Title 47, Part 80 to End, including Parts 90 and 95, available from the US Gov. Printing Office, GPO Bookstore, FCC Office or www.fcc.gov/oet/info/rules/

Important Safety Information

Scope products are designed to operate safely when installed and used according to general safety practices. The following requirements should be observed at all times.

Do NOT subject this equipment to:
Mechanical shock
Excessive humidity or moisture
Extremes of temperature
Corrosive liquids

This equipment is designed for indoor use, unless expressly stated otherwise, and must not be used in classified Hazardous Areas, including areas containing explosive or flammable vapours, unless express authorization has been given in writing by the manufacturer. If in doubt, consult your local product dealer for further information.

Do not obstruct any slots or openings in the product. These are provided for ventilation to ensure reliable operation of the product and to protect it from overheating.

Only use a damp cloth for cleaning (not liquid or aerosol based cleaners), and ensure that any power is removed from the unit prior to beginning the cleaning operation.

Removal of covers from the equipment must only be undertaken by authorized service personnel, who must ensure that power is isolated prior to removal.

PREFACE

Equipment Applications

It is the user's responsibility to determine the suitability of the Scope products for any given application. Scope, including its subsidiaries and Distributors, cannot provide specific advice within this manual, as each application will require independent evaluation. Common sense dictates that certain applications may require back up systems to cover in the event of mains or equipment failure. All applications should be thoroughly assessed by the installer in conjunction with the customer so as to minimize risk. Scope has no control of the use and application of the frequencies issued by the FCC. Some equipment that is individually licensed may have a greater degree of protection than other equipment that is operated on a FCC License Assignment basis. The following information, however, may be of benefit.

Equipment Testing

Range tests should be carried out at least once a week on portable radio equipment, more often when critical criteria apply. This should involve testing the unit past the limit of its required working range. Good working practice dictates that a suitable system installation log, covering both portable and fixed equipment must be generated, together with a record of the dates when the system has been manually checked and/or serviced, (with the aid of suitable test equipment etc.) enabling the system performance to be compared with the original installation data.

The frequency of the tests required will vary between applications. If portable equipment has been dropped or is worn by a person involved in an accident, the unit should be tested again before re-use. It must be stressed that the physical range tests are essential and that any construction work or movement of plant or equipment could alter the signaling capability of the unit. Radio equipment, like any other requires servicing from time to time to ensure that it is operating to its optimum performance. It is therefore essential that equipment is inspected and tested by authorized service centres at least once a year.

Literature

Scope Communications UK Ltd, the manufacturer, in conjunction with it's distributors operates a policy of continual improvement, and therefore reserve the right to modify or change any specifications without prior notice.

While every possible care has been taken in the preparation of this manual, Scope does not accept any liability for technical or typographical errors or omissions contained herein, nor for incidental or consequential damage arising from the use of this material.

Installation

Installation must only be undertaken by an Approved contractor, who shall ensure that all work is carried out in compliance with the appropriate State and Federal Regulations. For mains powered equipment, a readily accessible isolating fuse or socket must be located within 1 meter of the equipment.

Liability

Scope does not accept liability for any damage or injury, howsoever caused as the result of misuse of this equipment. It is the responsibility of the user to ensure that the equipment is operated in the manner for which it was intended and that it is the correct item of equipment for the required task.

PREFACE

Warranty

This product is warranted as free from defects of workmanship and materials for a period of one year from the original purchase date. During this time, if there is a defect or malfunction of this product, Scope will, with proof of purchase, repair or replace at its discretion any defective parts, free of charge. This does not include where the adjustments, parts and repair are necessary due to circumstances beyond the control of Scope, including but not limited to fire or other casualty, accident, neglect, abuse, abnormal use or battery leakage damage.

There are no other expressed or implied warranties except as stated herein, and those excluded include those of merchantability and fitness for a particular purpose. In no event will Scope or any of its agents be liable for direct, indirect, special incidental or consequential damages resulting from any defect in the product, even if advised of the possibility of such damages.

The warranties and remedies set forth above are exclusive and in lieu of all others, oral or written, expressed or implied. No Scope distributor, dealer, agent or employee is authorized to make any modification, extension or addition to this warranty.

Some states do not allow limitations on how long an implied warranty may last and some states do not allow exclusions or limitation of incidental or consequential damages.

Warning ! No User Serviceable Parts

Alteration or modification to any part of this equipment, without the prior written consent of the manufacturer, will invalidate all manufacturer approvals and warranties. No adjustments can be undertaken except by qualified and licensed persons as defined by the FCC Rules and Regulations. Operation of altered equipment can result in fines, imprisonment, and/or confiscation of such equipment.

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DataPage Lite (USA, ECO) Desktop UHF Radio Paging System

Contents of this box:

DataPage Lite Mk 1 UHF Base Station
AC Adaptor
Internal Antenna & mount cover
Manual

Supplied separately, to order:

Numeric or Vibrate only Display Pagers
Optional External Aerial/Coaxial Cable (See Section: Other aerials)

Before attempting to use this equipment, please read the instructions carefully.
WARNING ! Operating the system without an antenna can cause extensive damage.

Base Equipment make and model: **DataPage Lite**

Transmitter FCC ID: **JRNUSAECOLINK**

Transmitting Frequency: **457.575 MHz or 457.550MHz***

Effective Range: **Up to 1/2 mile with standard aerial**◆

*or as specified on separate configuration sheet
◆optional external aerials and amplifiers available for greater range

Description:

This unit provides keyboard entry of data for tone only or numeric message transmission. The data entry sequence allows for the insertion of a specific beep type where required. If the Send key is pressed without applying a beep type the unit will send its default setting.

Some major points to remember when installing the equipment:-

- Never install aerials near to overhead power lines or adjacent to telephone or public address or data communication lines.
- Avoid, wherever possible, running aerial feeder cables alongside other cables e.g.: telephone and mains.
- Avoid mounting the transmitter in the immediate vicinity of telephones, exchanges or computer equipment. A few feet can make the world of difference in avoiding interference from the radio frequency generated by the transmitter.
- Do NOT attempt to operate this equipment without a suitable antenna fitted. To do so may cause irreparable damage and will void any applicable warranty.
- Only use this equipment with the AC adaptor provided. Use with other adaptors may result in malfunction, failure or fire and in such instance all liability for any consequential damage is expressly excluded.

System Operation

1) Connect the 90 degree aerial to the BNC connector (bayonet twist lock) located at the side of the transmitter. Slide the plastic cover over the connector, engaging the two lugs into the corresponding recesses in the side of the case. This will maintain the aerial in an upright position, which is important for optimizing the range of the transmitter. See Figure 1.

2) Connect the AC adaptor power lead to the socket located at the far right hand rear corner of the base station. See Figure 2. ***Important note:*** *Only use the AC adaptor supplied with your system! The use of non-approved adaptors will invalidate all warranty and service.*

3) Check that the pagers have their batteries inserted and that they are turned on (refer to the individual pager instruction manuals supplied with the system).

4) Plug the AC adaptor into a convenient wall socket (110V ac). When the unit is first powered up, the system will display the following screen for a few seconds:

DataPage Lite	Followed by:	PAGER: (1-9999) **>**

The flashing cursor invites you to enter a pager number (this can be any number between 1 and 9,999) after which you must press ENTER for the number to be accepted. Pressing the CANCEL key at this stage will return the user to the pager number prompt to begin again.

5) After pressing ENTER, the next screen offers the selection of the beep types. The flashing cursor shows the default beep type (4).

At this point the operator may choose to select a beep type 1,2, 3 or 4, or press ENTER without making a selection, which will attach the default beep type (4) to the call. (It should be noted that not all pager types currently carry the transmitter selectable beep type). In the event that your pagers are so equipped, selecting 1,2,3 and 4 will correspond to beep types A, B, C and D respectively. Pressing the SEND key at this stage will send a tone only message together with the beep type selected.

BEEP TYPE (1-4):
>4

6) After selecting the beep type, press ENTER. The screen will now prompt for you to enter a message of up to 16 digits, including [,] and spaces. Note: the screen will confirm auto transmission of message if more than 16 digits are entered.

ENTER MESSAGE:
-

7) After selecting the message, press ENTER or SEND. The call will now be transmitted to the pager. A confirmation message will briefly appear on the screen.

Message
Transmitted

Fig. 1 Connecting the antenna and locking cover

Group Calls

As previously stated, this system will accept pager identities from number 1 through 9,999. Most pagers will accept a minimum of two identities, enabling the pager to respond to selected group calls as well as its own unique identity. Advanced pagers offer multiple identities, again, enabling one to be reserved for its own unique identity and then for the pager to belong to a selected number of groups of pagers which can be called collectively by entering just one identity or number. Sometimes the requirement is to have a global call and upon the entry of this specific number the system will call all pagers at one time. As group calls are created from single pager identities, any number of groups can be constructed to suit individual customers' requirements.

Over the Air Pager Switch Off

When used with pre-configured pagers, this feature allows all the pagers to be switched off over the air with a single command entered from the keypad. To initiate the pager shutdown sequence, key in **]12345** then press **ENTER**. All pagers on the system will then switch off. Pagers can be switched back on in the normal manner.

Performance

The system will normally cover 95% of all range requirements with the use of just the internal antenna. The helical quarter wave antenna supplied with the system can provide ranges of up to half a mile free space and will normally cover industrial buildings of considerable size. This short helical wound antenna can be replaced with a straight quarter wave which can provide ranges in excess of one mile in free space and considerably enhance the units performance in industrial or commercial environments. Position the unit on the opposite end of the desk to computers, telephones and intercoms etc. to minimize the potential for cross interference.

Also, remember that the capability of your system will be affected by:-

Foil backed wallboard, metal mesh, wire reinforced glass, metal sheeting, large mirrors, suspended ceilings, lift shafts etc. These can all reflect and thereby reduce the signaling capability of the transmitter. A little forethought prior to installation, coupled with a few tests, can normally avoid most of these problems.

Other Aerials

The range and performance of this equipment can be improved by the addition of more efficient aerials*. These can be installed either inside or outside the building and are connected to the transmitter with 50 ohm coaxial cable. An amplifier is also available for very large sites*. Consult your dealer for further details.

A glass mount is available to install on the inside of a suitable window which can boost range, especially if its required in one direction from the building.

The center fed half wave dipole measuring approximately 300 mm from tip to tip, will provide excellent all round local signaling. This can be mounted either inside or outside the building and is available in either a light weight or heavy duty stainless steel design.

*Subject to license conditions.

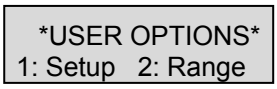
Collinear aerials are also available for external application and will, when elevated, boost overall range with a slight loss to some local signals.

Pre-terminated coaxial feeders are available for 5, 10 or 15 metre requirements. High frequencies can equate to high power losses. Always use the best quality cable. RG58 is only acceptable on cable runs of up to 5 meters. We recommend RG213 or equivalent on greater lengths. If in doubt consult your dealer. Coaxial cable intended for TV satellite or CCTV installations is normally 75 ohm and therefore totally unsuitable and can cause severe transmitter damage.

Program Parameters

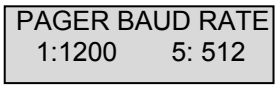
The standard models are factory pre-set and should not under any circumstances be adjusted by the customer. The factory settings can be viewed for the purposes of verification when ordering additional components etc.

The system parameters are protected from accidental change by password control. To enter the system type:
(72765 then press ENTER



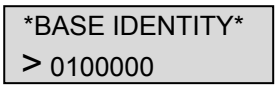
1: Setup

Press key 1. The screen changes to:



To change the transmission baud rate enter 1 for **1200** or 5 for **512**

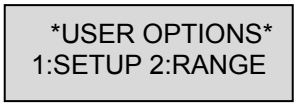
After pressing your selection the screen will change to:



The displayed Base number can be used or you can type in the required number.

After pressing ENTER, the screen will change to confirm the new settings and you are prompted to accept by pressing ENTER or Cancel. CANCEL will take you back to the *USER OPTIONS * screen.

After pressing ENTER, the screen display will return to the *USER OPTIONS* but with updated settings.



Press key 2 to select the out of range option

Press any key to toggle between out of range **OFF** or out of range **ACTIVE**, then press Enter to confirm.

To return to the pager entry screen press ENTER or CANCEL when at the main programming menu.

The default setting for the out of range cap code is **THE BASE ID,** the beep type is **A,** the TX baud rate is **1200**

NOTE! This feature is only available using 1200 baud.

Problems and Fault Finding

Check that there is power at the mains socket.

Check that the pagers are at least 3 meters from the transmitter and aerial. Under certain conditions it is possible to flood the pager receivers and corrupt the data received.

Check that the pagers have the battery installed with the correct polarity and are correctly powered up.

Check that the aerial is correctly installed.

Check the Base ID on the password menu matches the system data. Check the transmission baud rate matches the system data.