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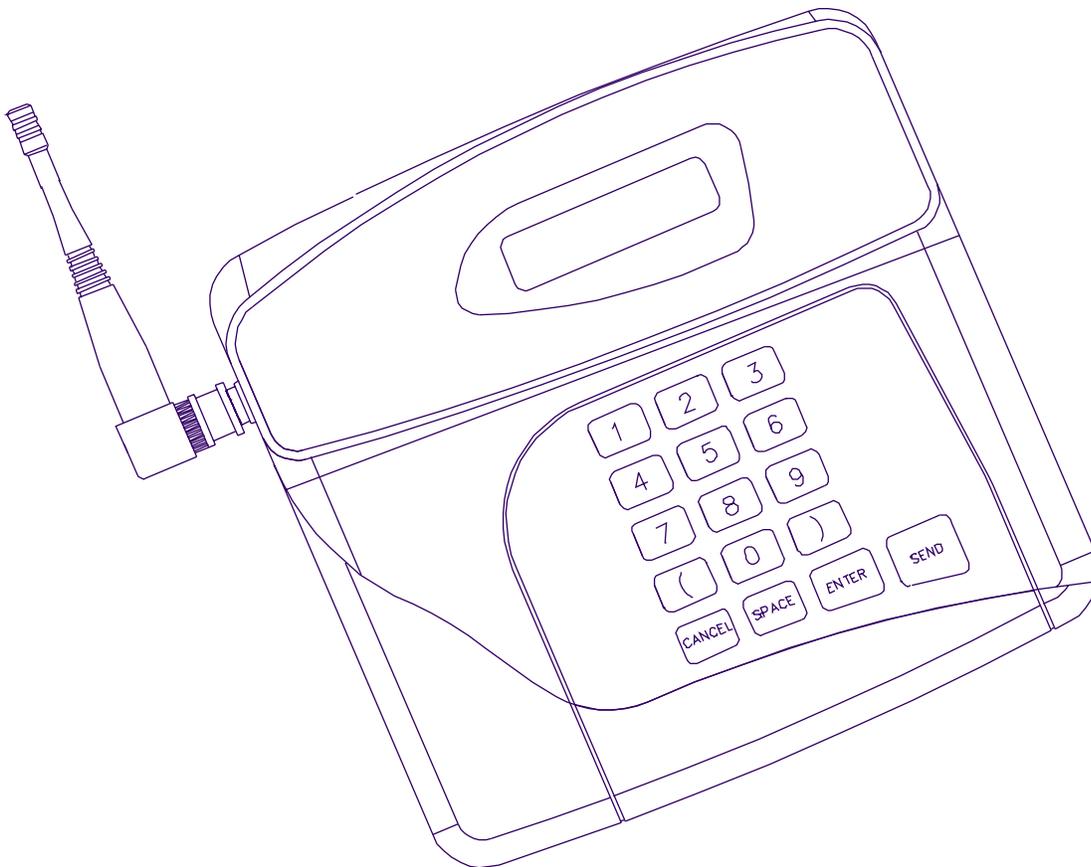
# *DataPage Lite*

## Desktop UHF Radio Paging System

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# Installation & User Manual



## 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 to 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.

Good working practice dictates that a suitable system installation log must be generated, together with a record of the dates when the system has been manually checked, (with the aid of signal strength meters etc.) enabling the system performance to be compared with the original installation data.

For UK equipment, Scope has no control of the use and application of the frequencies issued by OFCOM. Some equipment that is licensed may have greater protection than other equipment which is operated on a WT Act License Exempt basis.

The supply of this equipment is governed by our standard terms and conditions of sale, which can be found on the reverse of all order acknowledgements\*, proforma invoices\*, delivery notes, price lists and invoices. Alternatively, these can be provided on request.

\* Faxed proforma invoices and quotations refer to "conditions available upon request".

### ***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 authorisation 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 authorised service personnel, who must ensure that power is isolated prior to removal.

## Preface

### **Installation**

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

### **No User Serviceable Parts**

Alteration or modification to any part of this equipment, without the prior written consent of the manufacturer, will invalidate all Approvals and Warranties attaching to the equipment. Further liability for the operation of the equipment, under the applicable law, will pass to the user, who will absolve the manufacturer of any further responsibility for its correct operation and use.

### **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.

### **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.

**WARNING ! No User Serviceable Parts**  
**Celui-ci ne contient aucune piece pouvant etre reparee par l'utilisateur**

**Caution ! Risk of electric shock, do not open.**  
**Attention ! Risque de choc electrique, ne pas ouvrir.**

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 authorised by Scope.

This product complies with the essential requirements of the R&TTE Directive 1999/5/EC. Copies of the Declaration of Conformity covering this product can be obtained from Scope at: Quantum House, Steamer Quay, Totnes TQ9 5AL United Kingdom.

Do not discard. At end of life this equipment must be sent to an authorised waste treatment centre. Contact Scope at the above address for further details.



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## DataPage Lite 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.***

Note ! This system requires a valid OFCOM licence for operation in the UK. It is the user's responsibility to apply for an On-Site Paging licence on form Of21 Private Business Radio Licence Application Form, available online at [www.ofcom.org.uk](http://www.ofcom.org.uk).

The relevant clauses on the Of21 form should be completed as follows:

Section 2, item 9. Tick "**Self-Select PBR licence**"

Section 4, item 28. Generally, antennas provided by Scope are **Omni-Directional**, with a gain of **0 dB**.

Section 4, item 30. ERP level: **0.5W** as standard, **2W** if the optional amplifier is fitted.

### **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.

## DataPage Lite Desktop UHF Radio Paging System

### 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 (230V 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

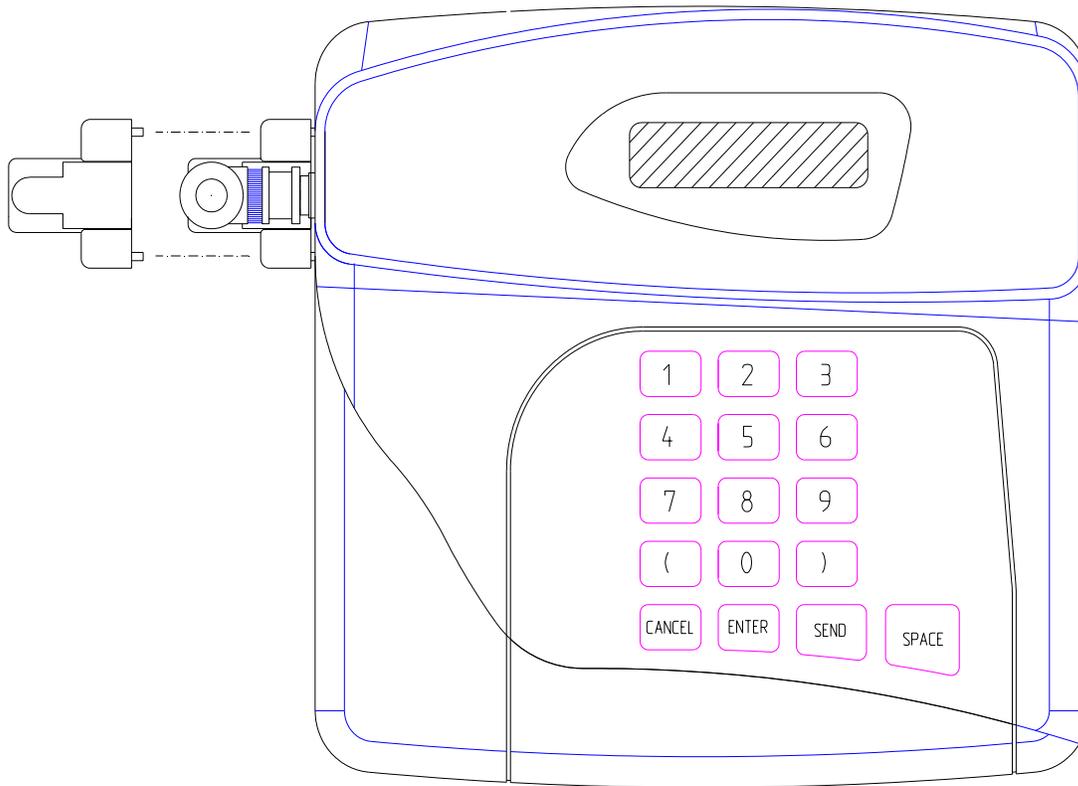
6) After selecting the beep type, press ENTER. The screen will now prompt for you to enter a message of up to 16 digits, including [, ] and spaces. Note: the screen will confirm auto transmission of message if more than 16 digits are entered.

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.

## DataPage Lite Desktop UHF Radio Paging System

### 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

\*USER OPTIONS\*  
1: Setup 2: Range

## DataPage Lite Desktop UHF Radio Paging System

### 1: Setup

Press key 1. The screen changes to:

```
PAGER BAUD RATE
1:1200  5: 512
```

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

After pressing your selection the screen will change to:

```
*BASE IDENTITY*
> 0100000
```

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.

```
*USER OPTIONS*
1:SETUP 2:RANGE
```

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.