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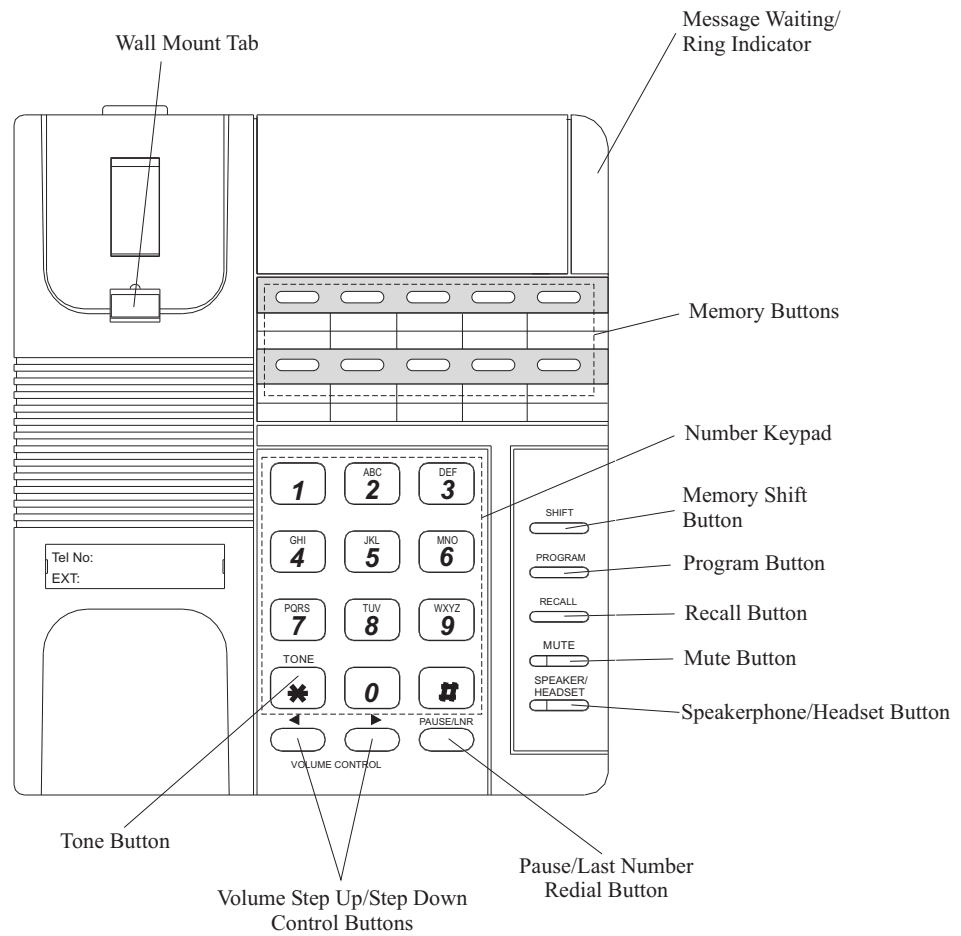
NRX



NRX 2
USER GUIDE

www.nrx-telecom.com

The layout of your NRX 2



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Installation & Operation

1. INSTALLATION

The Model NRX 2 requires no batteries to be fitted as the memories are stored in EEPROM solid state memory which does not require battery backup.

Connect one end of the coiled cord to the handset and the other end to the socket at the left of the base unit. Replace the handset on the cradle.

Connect the small plug (RJ-11) of the telephone line cord to the socket at the back of the unit and the other plug to the telephone socket at the wall.

NOTE: If the RJ-11 to RJ-11 line cord is used, please ensure that the Blue plug is connected to the wall socket.

2. OPERATION

2.1 Dialling

Lift the handset and dial the number. The telephone is pre-set at tone mode.

To terminate a phone call, simply replace the handset.

2.2 Tone or Pulse Option

The NRX 2 telephone can be programmed to either Tone or Pulse dialling via the keypad. The procedure for programming this facility is as follows:

TONE: [PROGRAM] [PAUSE/LNR] [1] [PROGRAM] [#]
PULSE: [PROGRAM] [PAUSE/LNR] [0] [PROGRAM] [#]

The telephone is set by default to Tone dialling.

2.3 Mixed Mode dialling (how to switch from pulse to tone in mid-call)

Even if your local exchange only allows pulse dialling, there may still be occasions when you need tone dialling. For instance, when you call into a bank's computer system, you may be asked to enter number codes. You can only do this if your telephone sends out tones when you press the keypad.

The TONE button helps you make change over from pulse to tone dialling in the middle of a call.

What to do: Pulse-dial the telephone numbers you require. When you are connected, press the "TONE" button.



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Operation

(This also introduces a four second pause into the dialling sequence)

What to do: Dial the rest of the sequence you require.

What you hear: Each number you dial emits a tone.

When the handset is replaced, the unit goes back to pulse dialling.

2.4 Programming Memory Buttons

There are 20 memory locations in the NRX 2, which can be used to store your frequently used or important telephone numbers. The following is an example of storing a number in one of the locations:-

1. Lift the handset or press the 'Speaker/Headset' button once.
2. Press the 'PROGRAM' button.
3. Enter the telephone number for storing.
4. Press the 'PROGRAM' button.
5. Select one of the direct memory locations for storing the number at that location (Use the shift button to access locations 11 to 20).



5. Repeat steps 2 to 4 for successively storing more than one telephone number. When all numbers have been stored replace the handset.

The programming can be enabled and disabled by entering the following codes.

PROGRAMMING ON:
[PROGRAM] [PAUSE/LNR] [0000] [PAUSE/LNR] [1] [PROGRAM]

PROGRAMMING OFF:
[PROGRAM] [PAUSE/LNR] [0000] [PAUSE/LNR] [0] [PROGRAM]

The default setting for the telephone is 'Programming ON'.

2.5 Memory Dialling

To dial a telephone number that has been stored in one of the direct memory locations:-

1. Lift the handset or press the 'Speaker/Headset' button.
2. When you hear the dial tone, press one of the memory location buttons for dialling from that memory (Use the shift button to access locations 11 to 20).



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2.6 Privacy (Muting the Microphone during Conversation)



During a telephone conversation, you may switch off the microphone in the handset by pressing the Mute button on the telephone base. The mute LED will be lighted to indicate that the microphone is muted and the party, on the other end of the telephone line is not able to hear your conversation. Press the Mute button again to release the Mute function and the LED will be off.

Alternatively, you may press the Mute button on the handset. As long as the handset Mute button is pressed, the microphone mute function is activated. Releasing the handset Mute button will re-enable the microphone for conversation.

2.7 Impedance Matching

The Impedance Matching switch inside the switch compartment allows the NRX 2 to be connected to different types of PABXs. There are 3 positions on this switch for selecting the matching impedance with the PABX. The default setting is compatible to the BT's PSTN network, for matching other PABXs, make a phone call and slide the switch at different locations and

find the position where the sound on the receiver is at best quality.

2.8 Modem/Data Connection Socket

The NRX 2 has an additional socket marked MODEM, which allows the user to connect an extra telephone, modem or fax machine to the telephone line. This socket is at the back panel of the base cabinet and has a removable plastic cover.

Only equipment complying with EN 60950 and intended for connection to the telephone network should be connected to this port marked MODEM.

2.9 Message Waiting

The NRX 2 has built-in message waiting indicators that are compatible with most types of PABX with such a facility. Different types of message waiting signal can be programmed into the telephone using the following procedure:

MESSAGE WAITING OFF - Lift Handset then enter:
[PROGRAM] [PAUSE/LNR] [0] [PROGRAM] [[*]

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POLARITY REVERSAL - Lift handset then enter:
[PROGRAM] [PAUSE/LNR] [1] [PROGRAM] [[*]

To set the line configuration - Lift Handset then enter:
[PROGRAM] [PAUSE/LNR] [0000] [PAUSE/LNR] [[n] [#]

n=0 - B Line is low
n=1 - B Line is high

90VDC

The telephone will operate with 90V MWI systems as standard and therefore the telephone's MWI software should be turned off. Lift handsets then enter:
[PROGRAM] [PAUSE/LNR] [0] [PROGRAM] [[*]

HIPATH/HICOM - Lift handset then enter:
[PROGRAM] [PAUSE/LNR] [3] [PROGRAM] [[*]

MD 110 - Lift handset then enter:
[PROGRAM] [PAUSE/LNR] [4] [PROGRAM] [[*]

AT & T/ALCATEL - Lift handset then enter:
[PROGRAM] [PAUSE/LNR] [5] [PROGRAM] [[*]

The telephone is supplied set to the default setting of message waiting OFF.

2.10 Pause Button

If the NRX 2 is being connected to a PABX system which requires the dialling of an additional digit (most commonly digit "9"), a pause may be required for accessing the external telephone line. The Pause key may be used for providing the pause period of about 2 seconds waiting for this dial tone after the first digit has been dialled. This will be stored in the Last Number Redial memory and be automatically inserted in the number when the 'PAUSE/LNR' button is used.

2.11 Recall Facility

The NRX 2 has a Recall facility which is used to access network/PBX services. The Recall facility can be configured for different system requirements as follows:

SET TO EARTH RECALL:
[PROGRAM] [PAUSE/LNR] [0] [PROGRAM] [RECALL]
SET TO TIME BREAK RECALL
[PROGRAM] [PAUSE/LNR] [n] [PROGRAM] [RECALL]

NOTE: TBR Timing can be set by altering the value of n. n=1 (100ms) n=2 (200ms) etc. up to 600ms
The telephone default setting is n=1 (TBR 100ms).

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2.12 Last Number Redial

If you dial a number and find it is engaged or there is no reply, replace the handset. The number will be retained in the memory until you dial a different number.

What to do: Lift the handset
Press the 'Pause/LNR' button



2.13 Adjustable Ringing Volume

On the right of the unit is a switch, this adjusts the ringing volume of incoming calls. From left to right it has three positions: low, medium and high. Move the switch to the position you require. In addition to the ringing tone there is a **Ring Indicator Lamp** on the unit that will flash when the telephone is ringing as a visual indication. The Ringer Switch does not control this Ring Indicator Lamp.



2.14 Adjustable Ringing Tone Pitch

On the right of the unit, there is also a switch that adjusts the ringing pitch of incoming calls. From left to right it has three positions: low, medium and high. Move the switch to the position you require.

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2.15 Headset Facility

The 'SPEAKER/HEADSET' button enables you to use the telephone without lifting the handset. Connect a headset and simply press the 'Headset' button once to connect to the line. Pressing the 'Headset' button again will disconnect the telephone line and terminate the call.

During a headset (handsfree) conversation, lifting the handset will switch the unit to the handset mode. The headset will be disabled and the handset should be used for conversation instead. The headset mode will be activated again by pressing the 'Headset' button and replacing the handset.

2.16 SPEAKERPHONE

The 'SPEAKER/HEADSET' button allows the user to operate the telephone without lifting the handset. Press the 'SPEAKER/HEADSET' button once, then operate the telephone as normal. Communication with the party at the other end of the telephone line is possible using the built in Microphone and Speaker. To indicate that the telephone is in Speakerphone mode, an Icon will appear on the LCD. It is possible to switch from Handset to Speaker during a call, by pressing the 'SPEAKER/HEADSET' button then replacing the handset.

Approved Use

2.17 Hear-aid compatibility

The handset receiver is hearing aid compatible.

3. WALL-MOUNTING THE UNIT

The NRX 2 can be wall mounted using the wall mount bracket installed on the bottom of the unit.

- Dismount the wall mount bracket from the unit.
- Placing the wall mount bracket to the required position on the wall
- Drill two holes on the wall according to the distance as marked by two mounting holes.
- Install the two screws supplied with the unit in the wall.
- Re-install the wall mount bracket to the bottom cabinet for the wall mount position.
- Position the wall mount slots on the bracket of the unit over the two screws on the wall. Pull down and lock into place.
- Beneath the earpiece section of the cradle you will find a small tab. Pull this up to form the hook for the handset.
- When you are on the telephone, you sometimes need to put the handset down for a moment. There is a special hook at the back (top) of the unit so that you can hang the handset on the unit, when it is wall-mounted, without terminating the call.

4. APPROVED USE

The NRX 2 can be connected to the Public Switched Telephone Network (PSTN) and compatible to PABX's but not connected in the following manner: -

1. As an extension to a payphone.
2. On shared service line or 1+1 carrier system.

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Network Compatibility

The NRX 2 has been approved pursuant to Commission Decision 1999/303/EC for pan-European connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTNs provided for in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems you should contact your equipment supplier in the first instance.

The NRX 2 is designed to interwork with the following networks

Austria	✓	Germany	✓	Liechtenstein	✓	Spain	✓
Belgium	✓	Greece	✓	Luxembourg	✓	Sweden	✓
Denmark	✓	Iceland	✓	The Netherlands	✓	Switzerland	✓
Finland	✓	Ireland	✓	Norway	✓	UK	✓
France	✓	Italy	✓	Portugal	✓		

This product may have interworking problems with the following networks.

Austria		Germany		Liechtenstein		Spain	
Belgium		Greece		Luxembourg		Sweden	
Denmark		Iceland		The Netherlands		Switzerland	
Finland		Ireland		Norway		UK	
France		Italy		Portugal			

Approved Use

5. CEAPPROVED

This unit has been EMC tested and meets the requirements with respect to EN50081-1 emissions and EN50082-1 immunity.

6. THE NUMBER OF TELEPHONES THAT MAY BE CONNECTED

If you connect too many telephones to your line they may not ring correctly. To determine the number of telephones that can be satisfactorily connected to your line, add together the ringer equivalent numbers (RENs) of all the equipment you wish to connect. If this number exceeds four, your telephones may not ring. Your NRX 2 telephone has an REN of one (1). BT telephones have an REN of one unless otherwise marked.

7. WARRANTY

Trojan Telecom have built the NRX 2 telephone to a high standard. Our warranty reflects our belief that during its working life you should not experience any mechanical failures.

However, on the rare occasion a breakdown occurs, the NRX telephone is covered by a two year warranty.

Trojan Telecom will at all times use a sensible and supportive attitude towards warrantable returns, working with you in identifying 'no fault found'.

The following terms and conditions apply:

- 1) Where we find a genuine warranty failure, Trojan Telecom will replace the faulty instrument with a one-for-one replacement.
- 2) It is the responsibility of the user to return the faulty telephone to Trojan Telecom. We ask you to cover this cost and we will

return your replacement telephone at our expense.

- 3) We reserve the right to repair the faulty item or replace it with a similar telephone of the same make.
- 4) Discontinued models under warranty will be replaced with a similar or more featured telephone.
- 5) We reserve the right to charge for items considered to be chargeable under fair wear and tear.
- 6) User misuse or any modification carried out to the NRX telephone by the customer is not considered a manufacturing fault or component defect. Therefore it is not covered by the warranty.
- 7) Accidental damage such as liquid spillage or user damage will not be covered under the terms of the warranty.
- 8) When returning the telephone please ensure you fully complete the returns authorisation form, failure to do so could cause you unnecessary delay.

The terms of this warranty do not effect your statutory rights. Warranty applies to UK customers only.

Faulty units should be returned to our service centre at the following address, together with the completed return form on the opposite page.

SERVISCOMM
UNIT 2, RED BARNES WAY
McMullen Road, Darlington
DL1 2RR UK

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Warranty

Returns Authorisation Form

Customer Details

Address: Tel No: Returns Auth No:

..... Fax No:

..... Account No:

Date of Purchase	Model No	Details of Fault

Trojan Telecom's full liability will extend to the cost of repair or complete replacement of the returned item only.

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