

This guide is in two parts. Part I is for users of this instrument. Part II is for the sole use of the approved installer

## PART I - USER GUIDE

### RA705/4000 SERIES OF AUTODIALLER WEATHERPROOF TELEPHONES

The types of telephones covered by this guide are approved in the United Kingdom under the no. S/3064/3/N/XXXXXX for connection to a direct exchange line (i.e a line exclusive to the exchange meter, not a shared or party line), to an extension of a direct exchange line or to an extension on certain types of PBX, with the exception of the illuminated panel versions (/41X0).

These versions can only be indirectly connected to the Public Telephone Network via special PABX equipment approved to offer on-hook line current up to 5 milliamps.

No versions are suitable for use on party line installations or as extensions to pay phones.

#### APPROVED FACILITIES

This apparatus has been approved for the use of the following facilities:-

1. Automatic dialling from prestored memory.
2. Audible alarm indication of incoming calls.
3. Installation access using special tools only.
4. Provision to introduce equivalent 'master socket' bell capacitor for directly wired applications, set by plug link on installation.
5. Provision to connect external extension bell.
6. Provision to enable automatic clear down of call loop, after approx. 6 min. Set by plug link on installation.
7. Selectable Loop Dial or DTMF dialling, set by plug link on installation.
8. With a PBX with or without secondary dial tone.
9. Hearing Aid compatible earphone
10. Line powered illuminated panel area versions (/41X0) (1mA or 5mA set by plug link on installation)
11. Optional Extensible (/4X0X version) or Armoured (/4X5X version) handset cable.

Any other usage will invalidate the approval of the apparatus if as a result it then ceases to comply with the standards against which approval was granted.

Connection is effected by plugging in to the appropriate line socket. If your telephone connection is not fitted with new style sockets contact your approved telephone installer or the telephone network supplier (using the postcard provided).

If this method of connection is inadequate because for example the telephone is to be mounted outside, where new sockets are not intended to be used, arrange for your telephone network supplier to directly connect the instrument (using the postcard provided).

The telephone should operate correctly when connected to most compatible PBXs, including those that use secondary dialling tone. However it cannot be guaranteed that the apparatus will operate under all possible conditions of connection. Any cases of difficulty particularly in the case of the illuminated panel versions, should be referred in the first instance to your local supplier of the instrument.

This apparatus is intended to be internally accessible for installation purposes, only to authorized personnel and must be installed such that user access is prevented. Correct fitting and installation are mandatory as failure to prevent such user access will invalidate any approval given to this apparatus.

On the illuminated versions (/41X0) a user definable text panel is provided. To access this, first remove the clear cover using a small pointed tool. Insert required message printed on a thin clear piece of plastic film. This should be cut to be of maximum size of 74mm wide and 85mm high leaving 6mm clear area at the top and the bottom to allow for any masking effects when mounted.

## **OPERATING PROCEDURE**

To make a call:

Open the door.

Lift handset, dial tone may be heard at a reduced level.

Press call button (any one if multinumber version).

NOTE: The microphone is disabled until dialling is completed.

Await call connection.

At end of call replace Handset and close door.

To answer a call:

Open the door.

Lift Handset.

At end of call replace Handset and close door.

RA705/1000 SERIES OF WEATHERPROOF TELEPHONES**INSTALLATION INSTRUCTIONS**

The RA705 telephone may be mounted either on the surface of a wall or to the side or top of a pole, using one of the accessory fixing kits available.

4 holes are provided at the rear corners of the telephone suitable for use with bolts up to 10mm diameter thread and 20mm diameter head size. Wall holes drilling pitch is rectangular, 155mm across and 412mm down.

To access the line connections, open the door and remove the four corner screws using a 2.5mm hex key. The cables are passed through relevant conduit and connected (in the case of directly wired situations) to the tag block on the lower part of the circuit card.

Both the front of the door and the sides of the telephone are designed to accept self adhesive labelling. Maximum size for all areas is 90mm wide by 375mm high.

**LINE TERMINAL connections and selections**

The number of telephones which can be connected to a direct exchange line or PBX extension is limited by the ringer equivalence number (REN) of all the telephones connected, which should not exceed a total value of 4.

The REN value of this telephone is 1. In case of doubt consult your telephone supplier.

The Terminal block mounted at the back of the unit is labelled as follows:-

1.	]	Handset		
2.	]	Loop		
3.		Line (B)	]	Rd
4.		Bell mute & extension bell	]	B1 plug
5.		not connected	]	Gn 431A
6.		Line (A) & extension bell	]	Wh
		(Terminals 7,8 & 9 not connected)		

**Mode selectable plug links as follows:-****Factory set:**

LK1	enables 5mA illumination of panel	Fitted
LK3	Loop pulse/Tone dialling	Loop Dial
LK6	enables internal bell capacitor (only used when Master Socket not fitted)	Not fitted
LK7	disables panel illumination	Fitted
LK8	6 minute call clear disable.	Fitted
LK9	]	One of these only
LK10	]	to alter ringer
LK11	]	frequency
		Fitted
		Not fitted
		Not fitted

Two spare plug links are provided, 'parked' at the top of the circuit board.

#### Internal Audible Ringer.

The instrument has three different sounder types as set by the plug links LK9, LK10 and LK11. This allows for different audible call alarms to be set in instances where co-located telephones cause confusion on incoming calls.

Only one of the links should be set at any one time.

#### External Bell (or tone caller).

All bells must be approved for connection to the telephone network. They are of the low frequency A.C. type (15Hz-25Hz). D.C. or unapproved versions must NOT be used. Connect to terminals 4 and 6 of the tag block.

Ensure that plug link LK6 is fitted enabling the internal bell capacitor if a master socket is NOT used.

#### Call restriction timeout:

If this facility is enabled (LK8 not fitted) then each call will be time restricted to approximately 6 minutes.

#### Prestore Number Programming:

All versions require the telephone number stores to be programmed prior to final installation and use. These are held (once programmed) by the battery which is fitted internally to the telephone.

1. Connect the telephone to an exchange line or equivalent line power feed circuit.

Note: Except for the single number illuminated versions (/41X0) no dialling out to line will take place during programming of the telephone number stores.

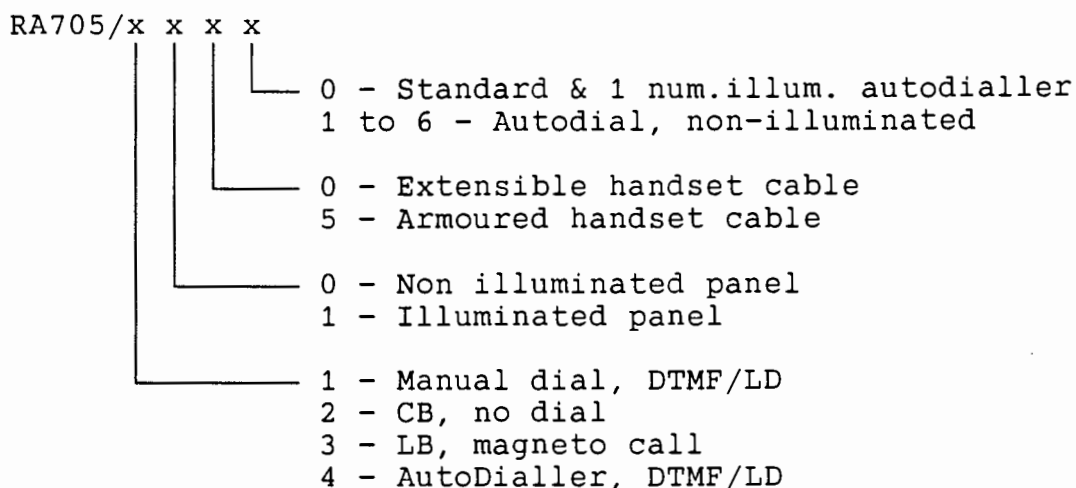
2. Lift handset off the hook switch.
3. Press 'STORE' (at rear on telephone circuit board) followed by the particular front panel dial key to be programmed.

Note: This step 3 not required for /41X0 versions.

4. Key telephone number to be stored using the number keypad at the rear on the circuit board. Include any dialling time delay requirements by keying 'PAUSE' as required. This will insert a 5 second delay between dialled digits when in use.
5. Place handset back on hook again to complete the programming. Repeat above for the other front panel dial keys as required.

\* \* \* \* \*

The weatherproof telephones described in this guide are part of a family of instruments from Racal Acoustics Ltd. viz:

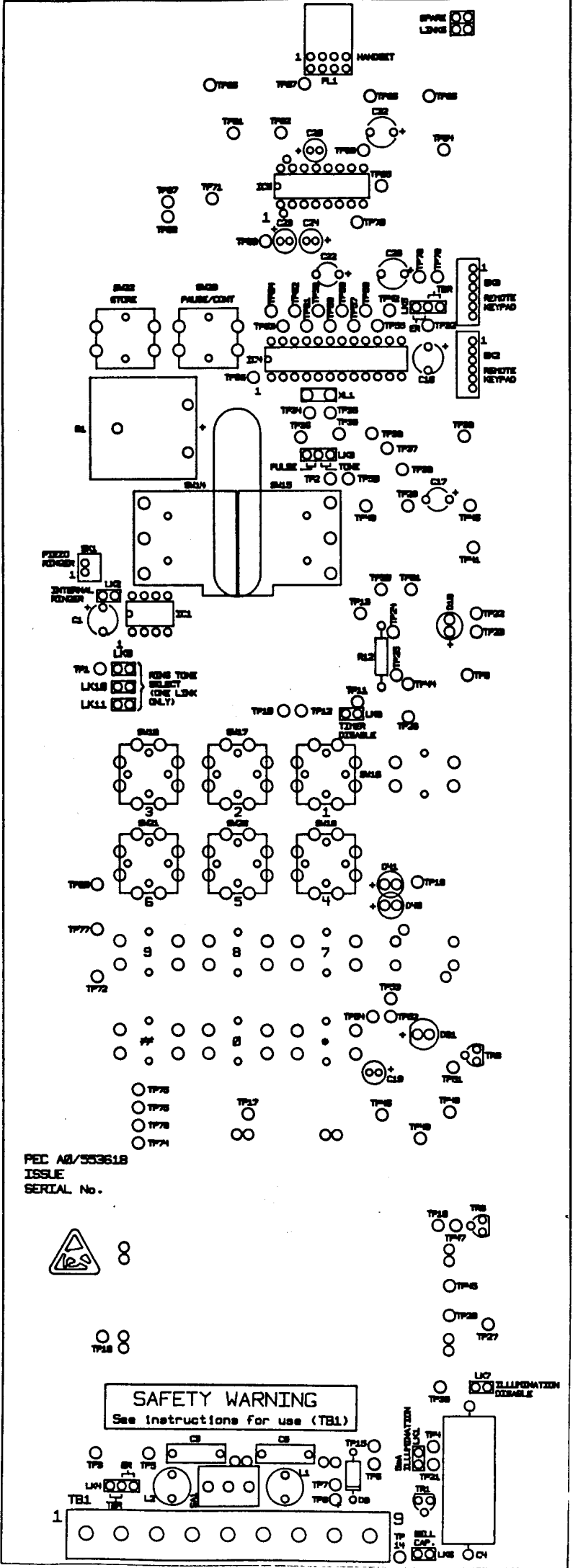


Spares & Accessories:

Side of pole fixing kit - Part No. ....  
Top of pole fixing kit - Part No. ....  
Armoured Handset - Part No. ....  
Extensible Handset - Part No. ....

\* \* \* \* \*

Racal Acoustics Ltd., Waverley Industrial Park, Hailsham Drive,  
Harrow, Middlesex. HA1 4TR.

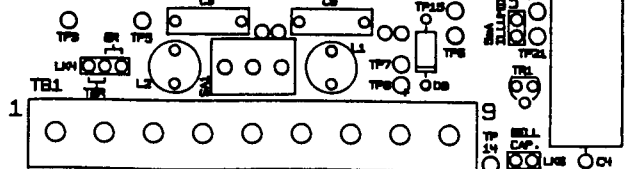


PEC A8/553618  
 ISSUE  
 SERIAL No.



TP18

**SAFETY WARNING**  
 See instructions for use (TBI)



LK3 ILLUMINATION  
 DISABLE

**RA705/4000 Series Autodialler Telephone**

NOTE FOR TESTER

These versions of the RA705 family of telephones have a facility that mutes the use of the microphone immediately after lifting the handset off-hook.

This is done for security reasons.

In order to test the instrument for any reason where the microphone is required to be switched on (as per normal conversation mode) dialling must have had to have taken place.

To do this ensure that a telephone number has first been programmed into at least one of the memory stores. Lift handset and then dial from that memory.