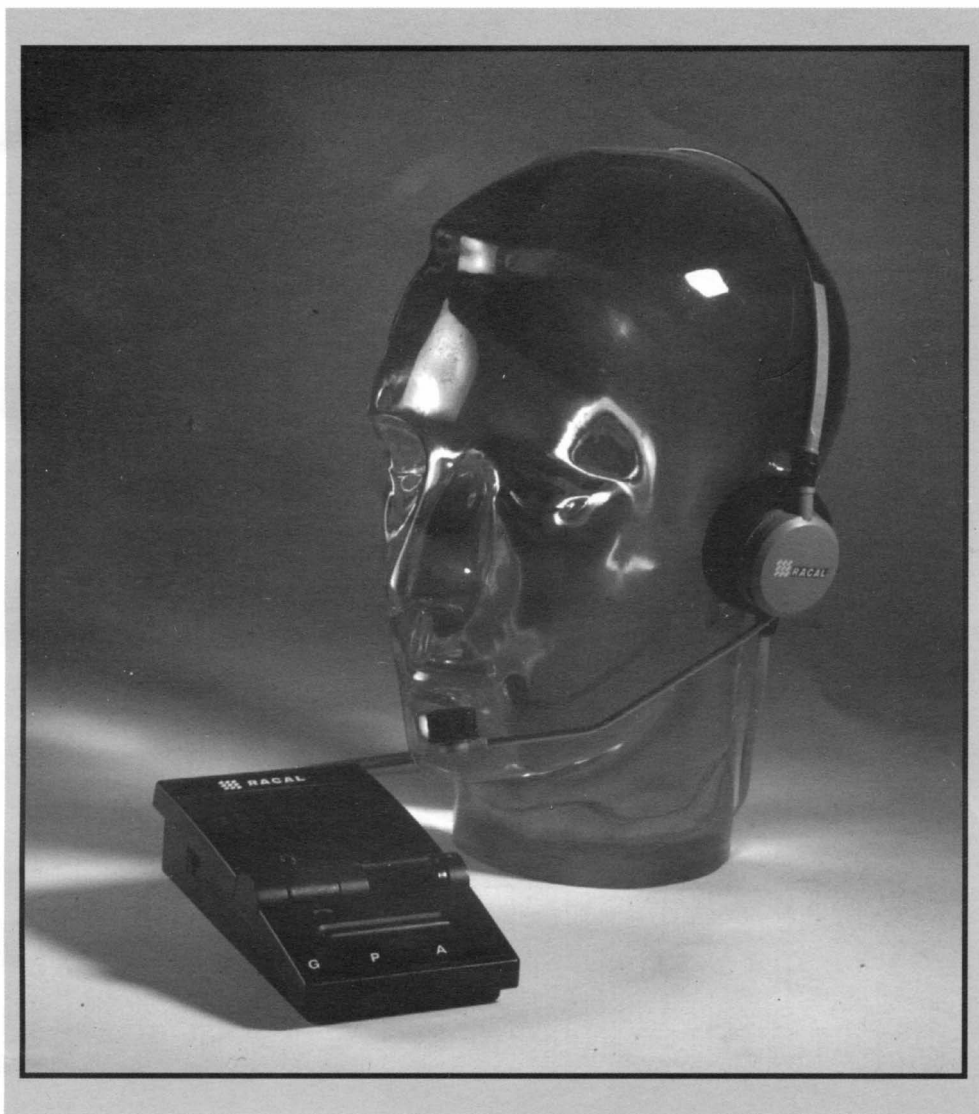


USER GUIDE for Freedom General Purpose Amplifier



R A C A L A C O U S T I C S

General

General

Your new Freedom Headset is exceptionally lightweight and comfortable, enabling you to wear it for long periods without discomfort. When used with telephones it frees both hands, enabling you to be more efficient.

The headset, together with the General Purpose Amplifier (Part No: 552984) has been designed and approved for use, primarily, with telephones and switchboards that incorporate the transmission circuitry of the 700 and 8700 series type of telephones. However, due to the general purpose nature of this amplifier, it can be connected to virtually any telephone or system provided it has a suitable approved connection.

If the headset is associated with other apparatus that incorporates a handset, it is strongly recommended that the handset should be electronically disconnected when the headset is in use. Use of the handset can be maintained by plugging it into the handset port at the rear of the amplifier. The handset/headset switch can be used to select between the two.

Compatibility

Due to the continuing development of the Freedom Headset and compatible equipments, the range of compatible products is expanding and therefore you should check with your equipment supplier to ascertain whether your particular equipment is on the current list of approved apparatus. Due to the design of this headset and amplifier combination it is almost certain that a setup exists that will enable your system to work well with your Freedom Headset.

Quick Disconnect

Your headset comes fitted with a quick disconnect facility that lets you leave your phone without removing your headset. Disconnecting during a conversation automatically puts the call on hold. When you reconnect, the conversation can be resumed. Your call will not be lost!

General

Headset Fitment

Your Freedom Headset has several adjustment features which will allow you to place it on your head in a secure and comfortable position. It will also allow you to place the microphone within 25mm of a line extending directly forward from the centre of the mouth. The adjustments you make will depend upon whether you intend to wear the headset on your left or right ear. For precise information about your headset type see attached specific fitting instructions:-

RA130/1047 Freedom Monaural Headset

Instruction No: 554485

RA130/1048 Freedom Binaural Headset

Instruction No: 554491

RA146/1000 Freedom Intra-aural Headset

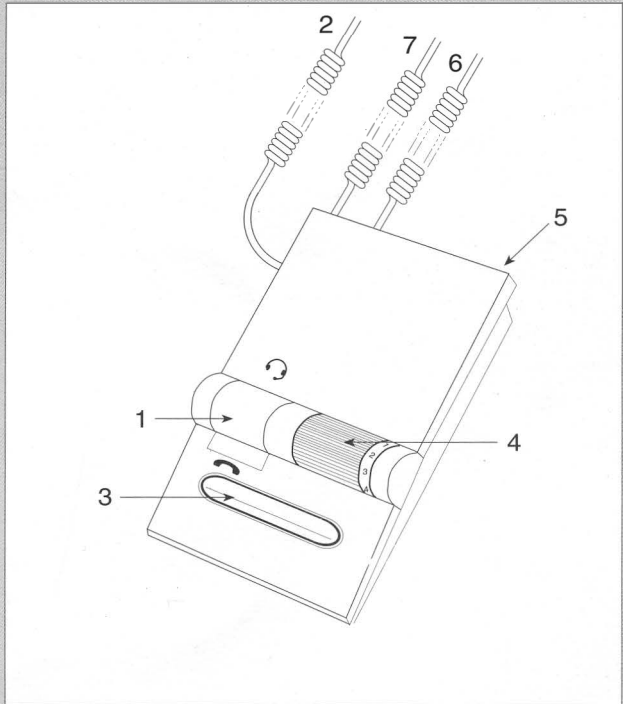
Instruction No: 554492



Control Functions

Amplifier

Your Freedom Headset is supplied with an amplifier that provides the correct connections and levels for your particular system. To achieve this there are a number of controls and adjustments that you can use for your preference. For certain telephones, batteries are required for the amplifier to work. Depending on your telephone usage, these batteries will last up to a year. When the audio quality of your caller's voice continues to be low and unclear replace them with new ones. For best performance, alkaline types are recommended such as Duracell, etc.



1. Handset/Headset Selector

Push back for headset use and slide forward to select handset operation.

2. Headset Cord with Quick Disconnect

Gives you maximum mobility while using your headset, extends up to 3m.

3. Mute Switch

Press down temporarily to cut off the microphone allowing you to have a private Aside conversations. Release to resume communications with your caller.

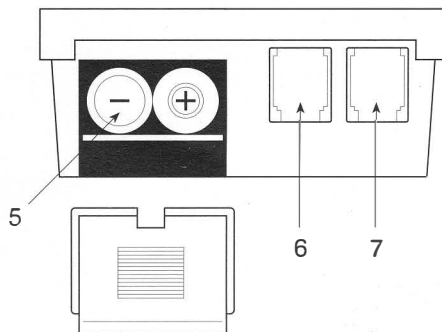
4. Listening Volume Control

Lets you increase or reduce your caller's voice. Set the control at "0" and increase the volume as needed.

Batteries & Control Switches

5. Batteries

Powers the amplifier for telephones that use electret or magnetic microphones. To fit, slide the battery door down to open and install 2 "AA" size cells. Note the proper polarity indicated on the battery door and then replace. Always disconnect the amplifier from the telephone before installing or replacing batteries.



6. Telephone Cable

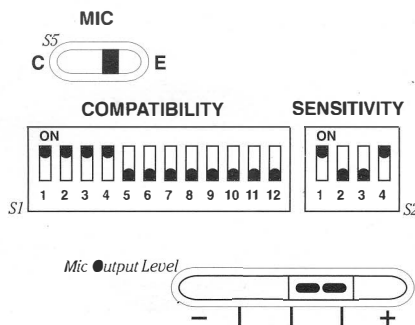
Connects to your telephone's handset jack.

7. Handset Jack

Where you connect your handset's curly cord.

Underneath the amplifier unit are four more controls, see fig. 3; MIC type switch (S5), MIC Output Level slider type volume control, and two DIP type switches (S1 & S2). These will be set initially at the factory, for Carbon Mic type 700 series telephone. Should your telephone or system not be of this type contact your supplier for assistance in setting up the unit.

The MIC Output Level control allows you to set the volume of your voice as heard at the distant end so that you can speak normally. Please note this control is inoperative if the MIC switch is set to 'C' (i.e. Carbon telephone type 1 mode is selected).



Set-up

Installation

Unplug the curly handset cable from your telephone's base and plug it into the rear of your General Purpose Amplifier. Plug the amplifier's short curly cable between the amplifier's socket marked with a telephone symbol and the telephone's handset jack socket (from where you unplugged the curly handset cable).

Connect your Freedom Headset to the General Purpose Amplifier at the port, on the left hand side, marked with a headset symbol.

Amplifier Setup Guide

Your General Purpose Amplifier is compatible with 99% of all telephones sold. It requires only a few moments to get it properly adjusted to suit your particular telephone system.

1. Connect your General Purpose Amplifier to your telephone or console (as above).
2. Lift your handset or touch the line key on your phone to get a dial tone. If you do not have a dial tone through your headset...
 - Check that the Handset/Headset switch is set to "Headset"
 - Check that fresh batteries are installed, if needed
 - Check that all switches are set correctly for your phone system type
 - Check that all cables are connected and are firmly inserted

3. Fine Tuning

Once you have a dial tone, you can fine tune your headset by calling a friend...

- If you sound as good as your handset then your headset is properly adjusted
- If your friend cannot hear you at all, set the switches to type 1, Carbon setting (see table) and remove any batteries
- If your voice is faint and the MIC switch is set to "E", first try moving the Mic Output slide control towards the "+". If it is still faint set Sensitivity switch S2-2 to "ON". Again adjust the Mic Output slide control if necessary.
- If you sound like you are in a tunnel and the Mic switch is set to "E" then try moving the Mic Output slide control towards "-"
- If your friend's voice is low, first try moving the rotary volume control up to "9". If it is still low, decrease the volume control and set the Sensitivity switch S2-1 to "OFF".

Operating Instructions

Lift your phone's handset off the rest to make your first call.

1. *Can't hear the caller*

Increase the sound with the rotary volume control. If necessary set switch S2-1 of the Sensitivity Switches on the bottom of the unit to "OFF".

2. *Caller can't hear you*

Be sure your headset microphone is properly positioned near your mouth, no more than 25mm away. Increase your speaking volume with the MIC Output Level slide control, underneath the amplifier. Note that over-adjustment may cause your voice to be distorted or echo back in the headset.

3. *Callers can't hear me and I can't hear them*

Check the installation. Be sure that all cables are properly connected. Check the Handset/Headset switch. Push the switch back for headset use and slide forward to select handset operation. If none of the above actions allow you to hear or be heard, your telephone may have a special "pin-out". Contact your dealer or contact Racal on 081 427 7727 and ask for Freedom Sales.

4. *Caller's voice is distorted*

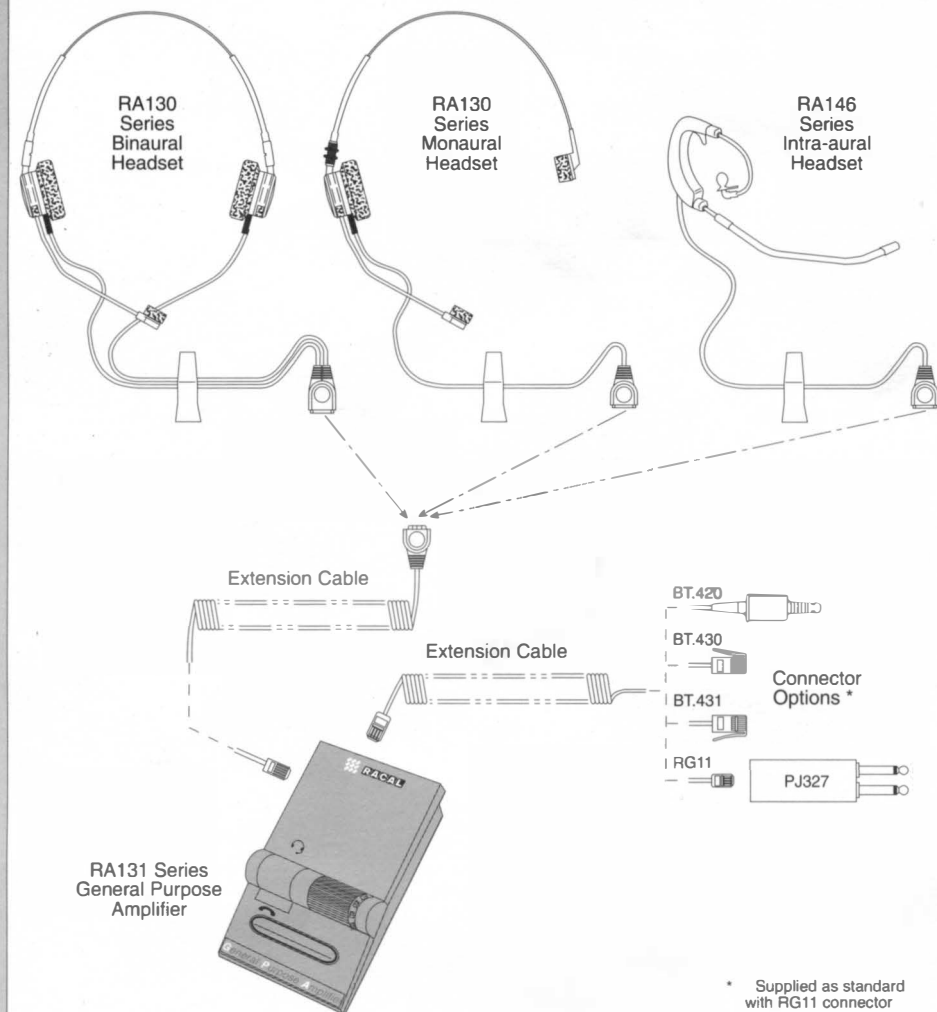
Change batteries

Optional Parts

The telephone cable is normally supplied terminated with a modular RJ11 type telephone connection cable. Other plug connection types are available to order:-

Part No: 555403	Suitable for BT420
Part No: 555404	Suitable for BT430A
Part No: 555405	Suitable for BT431A
Part No: 411643	PJ327 American 2-prong

Connection Data



* Supplied as standard with RG11 connector

APPROVED for connection to telecommunication systems specified in the instructions for use subject to the conditions set out in them

S/3064/3/N/502560



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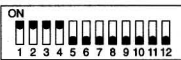





Tel: 0181 - 427 - 7727

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
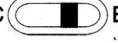














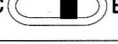





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Switch Settings

Type	Battery Required	(C)arbon or (E)lectronic	S1	S2	Comments
1	No	C			700 series (Carbon mic) telephones and operator's consoles <i>Note: Switch S2-3 ON will reduce Mic gain by approx. 6dB</i> <i>Switch S2-1 to OFF will give approx. 12dB extra earphone level</i>
2	Yes	E			General modern electronic telephones with Electret mic. <i>Note: Switch S2-1 to OFF will give approx. 12dB extra earphone level</i>
3	Yes	E			General modern electronic telephones including magnetic mic. (dynamic) <i>Note: Switch S2-1 to OFF will give approx. 12dB extra earphone level</i>

For switch settings specific to your phone system contact your dealer or Racal at the address below.

Example Systems

System	S5	S1	S2	Battery Fitted
Panasonic GX	C  E			N
Panasonic SDBS	C  E			Y
NT Meridian	C  E			Y
Siemens HiCom	C  E			Y
SDX	C  E			Y
Phillips K365	C  E			Y
Phillips P370, P375, S375	C  E			Y
Gold Star GSX21	C  E			N



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