

# Audiological fitting bulletin no. 51

Guidelines for matching the RC4 remote control

News from Audiological Research and Communication

### Guidelines for matching the RC4 remote control

During the RC4 matching procedure, the functionality of the RC4 can be individualised according to the preferences of the client. The matching procedure is part of the hearing aid fitting procedure in Compass or iP5. Each fitting produces three codes: Code 1, Code 2 and Code 3. The three codes contain all information necessary for the RC4 to function properly with the hearing aid. Code 1 is a number in the range of 0 to 63, Code 2 and Code 3 are numbers in the range of 0 to 255. Enter these codes into the remote control during the fitting session.

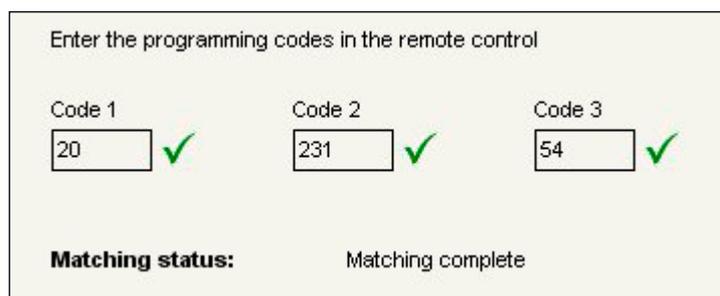


Figure 1: Compass screen after a successful RC matching procedure

**Note:** You cannot programme the RC4 before you know the three codes from Compass or iP5.

Always use the centre key of the remote control to navigate from one step to the next in the matching procedure.

#### Step 1: Enter programming mode

During matching, the remote control will stay turned on in programming mode until you have gone through all the necessary steps to match the remote control with a hearing aid.

1. Insert the batteries in the battery compartment on the back of the remote control (two batteries, type: CR2032, 3V), and close the battery compartment cover.
2. Within two minutes after inserting the batteries, press and hold down the upper left '+' key and press the centre key. The display shows 'Pro', and the remote control is now in programming mode.



#### Step 2: Show RC model

1. Press the centre key.
2. The display shows RC4. This display is for information only.

#### Step 3: Enter Code 1 from Compass or iP5

1. Press the centre key. The display shows 'c 1'. The number you have to enter is displayed as Code 1 in the RC matching step of the fitting procedure.
2. Change the code to the number displayed in Compass or iP5 by using the two keys on the right side of the remote control (2/▲ and 3/▼). For fast forward press and hold down the key.



c1:0 - 63  
c2 + c3:0 - 255

The remote control sends the code to the hearing aid. The hearing aid acknowledges the correct code and produces a check mark for the code.

#### **Step 4: Enter Code 2 from Compass or iP5**

1. Press the centre key. The display shows 'c 2'. The number you have to enter is displayed as Code 2 in the RC matching step of the fitting procedure.
3. Change the code to the number displayed in Compass or iP5 by using the two keys on the right side of the remote control (2/▲ and 3/▼).

#### **Step 5: Enter Code 3 from Compass or iP5**

1. Press the centre key. The display shows 'c 3'. The number you have to enter is displayed as Code 3 in the RC matching step of the fitting procedure.
4. Change the code to the number displayed in Compass or iP5 by using the two keys on the right side of the remote control (2/▲ and 3/▼).

#### **Step 6: Set RC4 options (typically not needed) / End matching**

After the three codes have been entered, the display shows 'Opt'.

All options are set to default values, and it is normally not necessary to change these during matching of the remote control. In the Options menu you can change the timeout setting and ID code, and view the IC chip and software program version.

The following paragraphs describe how you can change an option. If this is not required, proceed to end the matching mode.

1. Press the centre key.
2. The display shows 'End'. The settings and options are programmed and saved in the RC4.
3. Wait for the timeout.

The remote control turns off automatically after the timeout period. The remote control is now in user mode and ready to be used with the hearing aid. If you wish to stay in programming mode, press the centre key within three seconds.

#### **Step 6.1: Adjust timeout setting**

The timeout function automatically turns off the RC4 if it has not been used within a certain time interval. The default setting is 30 seconds for RC4 ('t o 30').

1. Press and hold down the centre key while pressing the 2/▲ key to open the timeout submenu. The display shows the setting of the timeout function.
2. Change the setting of the timeout function by using the two keys on the right side of the remote control (2/▲ and 3/▼). The available range is 3 to 120 seconds.
3. Press the centre key to return to the 'Opt' menu.

### **Step 6.2: Change RC4 ID code**

The ID code is the RC4 identification code and is used by the hearing aid when commands are sent to the hearing aid.

1. Press and hold down the centre key while pressing the '-' key to open the RC4 ID code menu.
2. The display shows the RC4 ID code ('Id xxx'). Change the ID code by using the two keys on the right side of the remote control (2/▲ and 3/▼). The available range is 1 to 250.
3. Press the centre key to return to the 'Opt' menu.

**Note:** Every RC4 comes with an ID code between 1 and 250. The ID code should only be manually changed if 1) the remote control is used within the operating range of another remote control with the same ID code, or 2) when replacing a lost remote control. The remote control's ID code is automatically stored in the hearing aid during the matching procedure. If you change it in the remote control at a later time, you must repeat the matching procedure.

### **Step 6.3: Show software program and IC chip version**

1. Press and hold down the centre key while pressing the '+' key to open the service information menu. The display shows the RC4 unit's current software program version and IC version. This is for your information only.
2. Press the centre key to return to the 'Opt' menu.

### Replacing a remote control

If you have saved a record of all the individual settings of the RC4, you can easily replace a lost or defective RC4 without having to ask your client to come to your practice. Simply go through the RC4 programming steps as described above and set all the functions as listed in your record. Pay special attention to the three codes and the RC4 ID code. These settings need to be identical to the original setting, or the remote control cannot communicate with the hearing aid. As long as the three codes and the RC4 ID code set in the remote control are identical to the settings saved in your client's hearing aid, you do not have to go through the matching procedure again. Once the new RC4 has been programmed as the original, you can simply send the remote control to your client, ready for use.

### Troubleshooting tips

Problem	Possible solution
The hearing aid does not react when the remote control is used	<ul style="list-style-type: none"> <li>The RC4 batteries are dead (the battery icon will be shown in the display)</li> <li>The RC4 is too far away from the hearing aid. The RC4 must be within a 1-metre distance of the hearing aid when used.</li> <li>The RC4 and hearing aid matching is invalid. Connect the hearing aid to Compass or iP5, open the RC matching menu and repeat the matching procedure.</li> </ul>
Only RC4-2: Separate adjustment of hearing aids does not work	The function might not have been enabled in programming mode. Check whether this function is enabled in Compass.
The 1-minute event log does not start	The function might have been disabled. Check whether the function is disabled in Compass.
Only RC4-2: The timer function does not work	The function might not have been enabled in programming mode. Check whether this function is enabled in Compass.
The remote control shuts down too fast	Increase the timeout interval. The timeout is set in the options menu in step 6.1 in the programming procedure.
The keys do not react	With the key guard in position, the keys are protected against accidental use. Flip open the key guard and try again.
RC ID code conflict	If two RC devices with the same ID code are used in the same room, the hearing aid might pick up signals from both RC4s. If there is a risk of several RC4s being used within the same operating range, make sure that they have different ID codes. The ID code can be manually changed in the Options menu in step 6.2 in the matching procedure.