Orchid
Telecom Limited

Model
PBX 416
System Administration Guide

Contents

Introduction

Thank you for choosing the Orchid Telecom PBX 416. Please take time to read through this Administration guide to get the most from your new purchase.

Installation Hints

- Ensure power On/Off switch located on the left hand side of the PBX is switched to On.

- All extension sockets should be Master type with built in ringing capacitor. (If you use a secondary type socket, and your extension phones are older type 4-wire working, they will not ring). We have a range of "Easy Install" adaptors for connecting the extensions. They are available in 4 lengths; 10cm, 5m, 10m and 20m. Please contact your supplier for more details.

- Only extensions 201-204 will ring on incoming calls (factory default setting) unless you nominate any other extensions to ring. See page 6 of the Administration Guide.

- The Exchange Lines should be connected to the PBX using the telephone leads supplied

Wall Mounting:

- Drill 2 holes, 16cm apart. (Take extra care not to drill through electrical wiring or pipes.)
- Adjust the screw heads until the PBX fits firmly against the wall.

System Programming

All programming is done on Extension 201 ONLY.

NOTE: If Programming is done successfully you will hear a Beep, if unsuccessful you will hear a Series of Beeps.

System Password

The factory default password is: *** 0 1 (1234) #**

Changing the Password

**Off Hook
Ext 201**

Dial: Current Password * 0 1 1234 #

Dial: New Password * 0 2 xxxx #

**On Hook
Ext 201**

NB: Your new Password will be: *** 0 1 xxxx #**

If you change the programming Extension 201 to Direct Dial mode (page 6) you will need to dial a * in front of the Password ie: * * 01 1234 # 2

 When you enter the programming mode on 201 all the other Extensions will be cut off. Therefore ensure that other Extensions are not on calls before you start programming.

We strongly recommend that you store your new password into a one-touch memory. This will simplify all future programming.

IMPORTANT - Exchange Lines

The PBX 416 is configured at the factory for 4 Exchange Lines to be connected. If you only have 1, 2 or 3 lines connected it is important that the system is set-up as follows:

1 Exchange Line connected:

Off Hook   **Dial: Password * 3 1 #**   **On Hook**
Ext 201   **Ext 201**

2 Exchange Lines connected:

Off Hook   **Dial: Password * 3 1 2 #**   **On Hook**
Ext 201   **Ext 201**

3 Exchange Lines connected:

Off Hook   **Dial: Password * 3 1 2 3 #**   **On Hook**
Ext 201   **Ext 201**

If at a later date you want to add another line, making a total of 4 lines:

Off Hook   **Dial: Password * 3 1 2 3 4 #**   **On Hook**
Ext 201   **Ext 201**

Assign Incoming Calls to ring Nominated Extensions

This is a useful feature for spreading the incoming call load over certain extensions or a specific line direct to a specific extension. Useful if you are sharing the PBX with another company.

IMPORTANT: Only Extensions 201 – 208 can be nominated for incoming calls.

How to assign the lines to ring specific extensions is best explained by the following 2 examples:

Example 1: - To assign all incoming calls on line 1 to ring Extensions 202, 206 and 207:

Off Hook   **Dial: Password * 1   1   267   #**   **On Hook**
Ext 201   Line Extensions   **Ext 201**

Example 2: - To assign all Incoming calls on line 3 to extensions 205 and 206:

Off Hook   **Dial: Password * 1   3   56   #**   **On Hook**
Ext 201   Line Extensions   **Ext 201**

To Assign an Extension to use Only a Specific Exchange Line for Outgoing Calls

A useful feature if you want to keep lines 1 and 2 free for incoming calls or other priority Extensions for outgoing calls. This does not restrict other extensions from using the same outside line.

Example:

To restrict extension 208 to use exchange line 3 only.

Off Hook   **Dial: Password * 42   3   208   #**   **On Hook**
Ext 201   Line Extension   **Ext 201**

To Assign an Exchange line for exclusive use for outgoing calls by nominated extensions

This applies to Outgoing calls only, incoming calls can be answered by all extensions.

Example:

To assign Extensions 207 and 208 to be the only Extensions that can make outgoing calls on line 3.
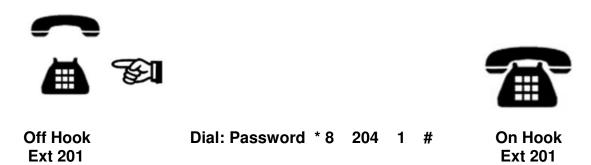
Off Hook   **Dial: Password * 41 207 # * 41 208 #**   **On Hook**
Ext 201   **Ext 201**

To Assign Extensions for Direct Dial Mode

As currently configured all extensions must Dial 9 for a line (Factory Default Setting). Extensions that make a lot of outgoing calls and a few internal calls (Telesales for example) can be changed to Direct Dial Extensions, whereby as soon as they go off hook they immediately get an outside line (if one is free). No need to dial 9 and makes redialing very easy.
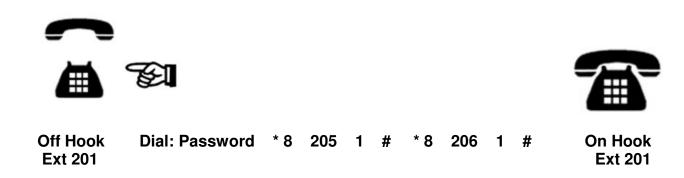
Example 1:

To convert Extension 204 to Direct Dial:

Off Hook   **Dial: Password * 8   204   1   #**   **On Hook**
Ext 201   **Ext 201**

Example 2:

To convert Extensions 205 and 206 for Direct Dial:

Off Hook   **Dial: Password   * 8   205   1   #   * 8   206   1   #**   **On Hook**
Ext 201   **Ext 201**

NB:
1.   Direct Dial Extensions must dial * in front of the Extension number when making internal calls.
2.   If Extension 201 is converted to Direct Dial and wants to program system features, a * must be inserted in front of the Password.
3.   Direct Dial Extensions cannot set up or remove BT or Cable select services provided by the telephone exchange. These select services can only be set up on Dial 9 extensions.

To revert Direct Dial Extensions back to Dial 9 Extensions

Example: To revert Extension 204 back to a Dial 9 for a line Extension:

Off Hook　　　　　　　**Dial: Password * 8 204 0 #**　　　　　　　**On Hook**
Ext 201　　　　　　　　　　　　　　　　　　　　　　　　　　　**Ext 201**

To revert ALL Direct Dial Extensions back to Dial 9 for a Line Extensions:

Off Hook　　　　　　　**Dial: Password   * 8   000   #**　　　　　　　**On Hook**
Ext 201　　　　　　　　　　　　　　　　　　　　　　　　　　　**Ext 201**

Call Barring / Call Restrictions

The Orchid PBX 416 has a flexible Call Restriction Feature. Allowing extensions to call only essential numbers thereby keeping call costs to a minimum.
Call Restrictions of a varying degree can apply to any or all extensions.

There are 7 groups of Call Barring / Call Restrictions available. Groups 1 to 5 enable you to program Call types to be Barred. For example Calls to Mobile (07) numbers can be assigned to Group 1 and any extensions assigned to Group 1 will not be able to make a call to a mobile phone.

Any extensions assigned to Group 6 can only make Internal Calls

Group 0 is for Allowed Calls only. It may be quicker and easier to use this feature instead of the Call Barring / Call Restriction option depending on your requirements.

To allow ALL extensions to only dial certain call types, the allowed call types must be programmed in Group 0. For example you may want all extensions to only call local and National numbers (01 & 02) and emergency numbers.

NB: 999, 112 & 911 must always be programmed as Allowed Calls

Example – To program 999, 911,112, 01 & 02 numbers into Group 0:

Off Hook   **Dial: Password   * 50   999 # 911 # 112 # 01 # 02 #**   **On Hook**
Ext 201   **Ext 201**

NB: Call Types can be added to the above at any time up to a maximum of 10 call types.

To delete any call types you can only delete ALL call types as follows:

Off Hook   **Dial: Password   * 50   #**   **On Hook**
Ext 201   **Ext 201**

You must now re-program all allowed call types as above including 999, 112 & 911

To assign ALL extensions to the allowed call types only in Group 0:

Off Hook   **Dial: Password * 56   0   #**   **On Hook**
Ext 201   **Ext 201**

Internal Call Only – Group 6

To restrict an extension(s) to internal calls only, no outgoing calls.

Off Hook   **Dial: Password   * 56   2xx   6 #**   **On Hook**
Ext 201   Extension   **Ext 201**

NB: Internal Calls only extensions CANNOT make calls to the Emergency Services.

Call Barring – Groups 1 to 5

Allows you to set up 5 different groups with various call types being barred.

Suggestions:

Group	Suggested Call Type to be Barred	
1	Mobiles	07
2	International	00
3	Premium Rate	09
4	Network Services	123,118 etc
5	Non Geographical Numbers	0845, 0870 etc.

Each call type can be up to 4 digits and up to 20 call types per group can be programmed.

Example 1: Programming Premium Rate numbers starting with 09 into Group 3

Off Hook   **Dial: Password   * 5   3   09   #**   **On Hook**
Ext 201   Code   Group   Barred   **Ext 201**

Example 2: Programming Non Geographic numbers 0845 and 0870 into group 5

Off Hook   **Dial: Password**   *** 5**   **5**   **0845 # 0870 #**   **On Hook**
Ext 201   Code   Group   Barred   **Ext 201**

Assigning Call Barring Groups to Extensions

Example 1. To assign Call Barring Group 5 to Extension 206

Off Hook   **Dial: Password**   *** 56**   **206**   **5**   **#**   **On Hook 201**
                      Code   Extension   Group

Example 2. To assign Call Barring Group 1 to Extension 204 and 205

Off Hook   **Dial: Password**   *** 56**   **204**   **1**   **#**   **205**   **1**   **#**   **On Hook**
Ext 201   Code   Ext   Group   Ext   Group   **Ext 201**

Example 3. To assign Group 3 to ALL Extensions

Off Hook   **Dial: Password**   *** 56**   **3**   **#**   **On Hook**
Ext 201   Code   Group   **Ext 201**

Changing Extension Numbers

Extensions are numbered 201 -216 but you can change Extension numbers to suit. It could be your previous PBX Extensions were numbered 101 - 116 or some other 3 digit number range.

To change Extension number(s)
 Example to change Ext 207 and 208 to Ext 100 and 200 respectively:

Off Hook   **Dial: Password * 7 207 100 # * 7 208 200 #**   **On Hook**
Ext 201   **Ext 201**

Administrators Personal Pin Number to Override "Internal Calls" only extensions (Group 6)

The factory set Pin Number is 1234. To change the Pin Number to say 4567 proceed as follows:

Off Hook   **Dial: Password * 04   4567   #**   **On Hook**
Ext 201   Code   New Pin   **Ext 201**

To make outgoing calls on 'Internal Calls' only extensions

Off Hook **Any Ext**	**Dial:** # 61 4567 Code New Pin	**Dial Number**

Music On Hold

The PBX 416 has an intermittent comfort tone which the caller hears while the call is being transferred. However we recommend you make use of the external Music On Hold Port, located on the rear of the unit. This will provide more variety of music and a more professional image. A standard CD player, fixed or portable, can be connected to this port using a Mono Audio Cable with 3.5mm plugs connected at both ends. The CD Player should have a "Repeat" function. If using a portable CD player we recommend you use a DC power adaptor which is usually an optional extra. Contact your supplier for details about the Orchid Music On Hold Kit.

To check or listen to Music On Hold

Off Hook **Ext 201**	**Dial: Password * 2 4 #**	**On Hook** **Ext 201**

Auto Attendant Mode / DISA Direct Inward System Access

Auto Attendant mode can be applied to All lines or individual lines.
When in the Auto Attendant mode your incoming callers can be instructed to dial the extension they want (if known) or dial 0 for the operator or wait for the operator.
The caller must dial the extension number after the beep at the end of your outgoing message or hold on for the operator.

NOTE: The Operator Extension is 202, therefore this extension should be manned the most.

If the incoming caller dials an **engaged** extension the call will be automatically transferred to the operator (Ext 202).

If the caller dials an extension that is **not answered within 25 seconds**, the call will be automatically transferred to the operator (Ext 202).

If the caller **does not dial an extension, within 25 seconds, or they dial 0** they will be automatically transferred to the operator (Ext 202).

To record the Auto Attendant outgoing message

The maximum recording time is 15 seconds.
An example message is as follows:

"Thank you for calling Smiths & Sons, if you know the number of the extension you require, please dial it now or Dial 0 for the operator."

Off Hook	**Dial: Password * 2 2 #**	**On Hook**
Ext 201	You will hear a beep.	**Ext 201**
	Record your message.	

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To playback the Auto Attendant Outgoing Message

Off Hook
Ext 201

Dial: Password * 2 3 #
Listen to Playback

On Hook
Ext 201

To assign all Lines for Auto Attendant

Off Hook
Ext 201

Dial: Password * 2 0 # * 252 # * 254 #

On Hook
Ext 201

To assign a Line for Auto Attendant

Example – To Assign Line 3 only for Auto Attendant mode

Off Hook
Ext 201

Dial: Password * 2 0 3 # * 252 # * 254 #

On Hook
Ext 201

To remove the Auto Attendant feature from All Lines

| **Off Hook**
Ext 201 | **Dial: Password** | ***21**
Code | **#** | **On Hook**
Ext 201 |

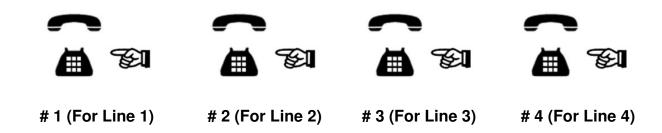## BT or Cable Select (Star) Services

Select Services (Also known as Star Services) such as Call Divert, 3 way Calling etc, can only be set up on extensions that are in "Dial 9 for a Line" mode. They cannot be set up on extensions which have been programmed for "Direct Dial" mode.

If it is essential that all extensions are programmed for "Dial Direct" mode, we suggest plugging in a dedicated telephone using a double adaptor, into the Exchange Line socket.

To select a specific line on a "Call By Call" basis

The Extension must be in "Dial 9 for a Line" Mode.

Lift Handset & Dial:

| **# 1 (For Line 1)** | **# 2 (For Line 2)** | **# 3 (For Line 3)** | **# 4 (For Line 4)** |

Power Failure

In the event of a power failure the exchange lines will automatically be extended as follows:

Line 1 to 201
Line 2 to 202
Line 3 to 203
Line 4 to 204

Troubleshooting

The factory default settings are as follows:

- All Extensions are Dial 9 For a Line.
- Extension 201 to 204 ONLY ring on incoming calls
- Call restrictions removed on all extensions
- Auto Attendant (DISA) removed.

To Reset the System to Factory Default settings

Off Hook　　　　　　**Dial: Password　 * 6000　 #**　　　　**On Hook**
Ext 201　　　　　　　　　　　　　　　　　　　　　　　　　　　　**Ext 201**

Reset Password

Off Hook　　　　　　**Dial:　 # 62 * 1234 #**　　　　　　**On Hook**
Ext 201　　　　　　　　　　　　　　　　　　　　　　　　　　　**Ext 201**

The Password will be re-set to factory default 1234.

FAQ's

No Dial Tone on Extension Handsets...?

- The PBX is compatible with 2 wire phones only, if they are 4 wire, we recommend using the Orchid Easy Install Adaptors. To check if the phone is 2 wire compatible, look at the small RJ11 plug that connects to the phone, if it is 2 wire it will only have 2 connections like the black cable below.

- Do you dial 9 for a line, dial the number and are unable to get through? It could be that your BT service is Feature Line which requires you to dial 9 to make outgoing calls.

  If so you will need to dial 9 to get a line and 9 again followed by the number.
  If you are on "Feature Line" we recommend you convert all extensions to "Direct Dial" mode.
  See Page 7 in the Admin User Guide. In Direct Dial mode, as soon as you lift the handset to make a call, you will get a BT line without having to Dial 9, therefore, you will only have to dial 9 ONCE before the telephone number.

Unable to Dial 9 for a line...

- Ensure that the phone connected is in TONE dialling mode and NOT Pulse dialling mode.

On Incoming calls, not ALL extensions ring...

- The factory default setting will make only extensions 201 to 204 ring on incoming calls. See page 5 of the Admin Guide for instructions to make other extensions ring on incoming calls.

- Check to ensure that the phone is NOT 4 wire, if it is, you will need to use Orchid Easy Install Adaptors or if the phone is plugged in to a secondary socket you will need to replace the secondary socket for a master socket.

- Ensure the ringer setting on the phone is set to ON.

I am unable to call another extension...

- Ensure the power supply is on, the Power LED on the PBX should be on.

- Is the extension in Direct Dial Mode?
  If so, you will need to dial * then the required extension number.

I am unable to transfer calls...

- You must use Recall or 'R' button when transferring calls, please ensure the Recall type is set to TBR (Time Break Recall). A TBR – ELR switch is normally located on the base of the phone.

I am unable to program the PBX...

- ALL programming must be done from extension 201.

- Make sure the phone being used to program is set to TONE not PULSE dialling mode.

- Dial the password (* 01 1234 #) before entering programming strings. You will hear a confirmation beep when the password is entered correctly.

- If extension 201 is in Direct Dial Mode, the password needs to be entered as * * 01 1234 #.

Contact Orchid for more assistance

You can email us at the following address with any further enquiries regarding the Orchid PBX Range.

PBX_Support@orchid-telecom.com