



Model
PBX 308 Plus
System Administration Guide

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Introduction

Thank you for choosing the Orchid Telecom PBX 308 telephone system. Please take time to read through this Administration guide to get the most from your new purchase.

Installation Hints

- Ensure the 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 3 lengths; 10cm, 5m and 10m. Please contact your supplier for more details.
- Only extensions 21-24 will ring on incoming calls (factory default setting) unless you nominate any other extensions to ring. See page 7 of the Administration Guide.

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 21 ONLY.

NOTE: If Programming is being done successfully you will hear a Beep (**beep**) after every **#**, if unsuccessful you will hear a Series of Beeps after the **#**.

In this guide all dialed digits will appear in **RED** text.

System Password

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

Changing the Password

Ext 21 Dial: Current Password * 0 1 1234 # (beep)

Dial: New Password * 0 2 xxxx # (beep)

Hang Up

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

Entering the password in Direct Dial mode

If you change the programming Extension 21 to **Direct Dial mode** (page 10) you will need to dial an extra * in front of the Password:

*** * 01 1234 # 2**

NOTE: When you enter the programming mode on 21 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 308 is configured at the factory for 3 Exchange Lines to be connected. If you only have 1 or 2 lines connected it is important that the system is set-up as follows:

1 Exchange Line connected:

Ext 21 Dial: Password (beep) * 3 1 1 # (beep) Hang Up
Line

2 Exchange Lines connected:

Ext 21 Dial: Password (beep) * 3 1 1 2 # (beep) Hang Up
Lines

If at a later date you want to add another line, making a total of 3 lines:

Ext 21 Dial: Password (beep) * 3 1 1 2 3 # (beep) Hang Up
Lines

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: The factory set default is to ring Extensions 21 – 24 only.

If you want to add further extensions to ring, please use the following examples to help you get your PBX set up as per your requirements.

Add extensions 27 and 28 to ring on Line 1

Ext 21	Dial:	Password (beep)	* 12	01	27	#	(beep)	
			* 12	01	28	#	(beep)	Hang Up
				Line	Ext			

Now extensions 21 – 24 and 27 – 28 will ring on Line 1.

Further Examples

If you do not want one or all of extensions 21 – 24 to ring, you must first clear the factory default setting as follows:

To assign Extensions 27 and 28 ONLY to ring on Line 1

Clear Line 1:

Ext 21	Dial:	Password (beep)	* 11	01	#	(beep)	Hang Up
				Line			

Ext 21	Dial:	Password (beep)	* 12	01	27	#	(beep)	
			* 12	01	28	#	(beep)	Hang Up
				Line	Ext			

To cancel this assignment:

Ext 21 **Dial: Password (beep) * 44 03 # (beep) Hang Up**

To Assign Extensions for Direct Dial Mode

As currently configured all extensions must Dial 9 for a line (Factory Default Setting). This can be changed so that Extensions automatically access the next available outside line as soon as they pick up the phone.

To convert ALL extensions to Direct Dial mode:

Ext 21 **Dial: Password (beep) * 8 10 # (beep) Hang Up**

To revert ALL extensions to Dial “9” mode:

Ext 21 **Dial: Password (beep) * 8 00 # (beep) Hang Up**

To convert extensions 27 and 28 ONLY to Direct Dial mode:

Ext 21 **Dial: Password (beep) * 82 27 1 # (beep)**
Dial: Password (beep) * 82 28 1 # (beep) Hang Up

To revert extensions 27 and 28 ONLY to Dial “9” mode:

Ext 21 **Dial: Password (beep) * 82 27 0 # (beep)**
Dial: Password (beep) * 82 28 0 # (beep) Hang Up

NB:

1. Direct Dial Extensions must Dial * in front of the Extension number when making internal calls.
2. If Extension 21 is converted to Direct Dial and wants to program system features, an extra * must be inserted in front of the Password. (* * 01 1234 #)

Least Cost Routing (LCR) for All Calls

Many Phone companies offer attractive rates for their National, Mobile and International calls. To use their services however you will have to prefix all Internationals with a 4,5 or 6 digit access code.

The Orchid PBX can be programmed to automatically insert the Phone companies access code for all calls starting with 0, as follows:

To Prefix all calls on ALL lines with Carrier Call18185

Ext 21 Dial: Password (beep) * 35 18185 # (beep) Hang Up

To Cancel LCR Prefix

Ext 21 Dial: Password (beep) * 35 # (beep) Hang Up

If you only want the LCR function on one line say line 3:

Ext 21 Dial: Password (beep) * 34 03 18185 # (beep) Hang up

To Cancel LCR on line 3

Dial: Password (beep) * 34 03 # (beep) Hang Up

Assign a Second Digit for accessing IP calls

As currently configured you need to dial 9 to access the BT or Cable line to make outgoing calls. If you also have an IP service connected to one or more of your lines you can program a digit 1 - 8 to access the IP service automatically.

Example 1: To assign Digit 7 to access IP service on lines 2 and 3

Ext 21 Dial: Password (beep) * 971 7 02 # (beep)

To Cancel **Dial: * 971 # (beep)**

Example 2: To assign Digit 8 to access IP services on line 3

Ext 21 Dial Password (beep) * 971 8 03 # (beep)

To Cancel **Dial * 971 # (beep)**

To make IP calls just dial 7 as in example 1 or 8 as in example 2.

NOTE: If your Extensions have been change for Direct Dial mode you need to dial * in front of the 7 or 8 as above

Call Barring / Call Restrictions

The Orchid PBX has a very flexible Call Restrictions package which should enable you reduce your phone Bill by eliminating unnecessary calls.

For example you can restrict individual or All extensions from calling premium rate numbers, International numbers, mobile numbers or calls to the Speaking clock or Directory enquires.

Calls can also be limited to just any of the 99 System Speed Dial memories.

Call types such as Local, National, Mobile, International, Non Geographic, Directory enquiries etc can be programmed into Call Groups.

CALL BARRING

There are Call barring groups 1 to 6, and each group can have up to 20 call types of up to 4 digits.

For Example Group 1 could contain Premium rate 09 and mobile 07 call types, Group 2 could contain International calls to Asia 008 and Directory enquiries 118 etc. These groups can be assigned to individual or all extensions.

Example 1.

To assign 09 and 07 into group 1 and 008 and 118 into group 2

Ext 21 Dial: Password (beep) * 57 1 09 # 07 * 57 2 008 # 118 # (beep) Hang Up

Example 2.

To assign 01 and 02 into group 3 and 100, 123, 00, 07 and 09 into group 4

Ext 21 Dial: Password (beep) * 57 3 01 # 02 * 57 4 100 # 123 # 00 # 09 # (beep) Hang Up

INTERNAL CALLS only Group 0

To assign Extensions for Internal calls only they should be assigned to Group 0. The system has already been programmed for Group 0 to only allow internal calls. For example, you may have a phone in your reception area or in a public area.

TO ASSIGN GROUPS 1 - 6 or 0 to Extensions

Example 1.

To assign Group 1 to all extensions (Group 1 may bar calls to 09 numbers)

Ext 21 Dial: Password (beep) * 54 1 # (beep) Hang Up

To Cancel Group 1 being assigned to All Extensions,

Ext 21 Dial: Password (beep) * 53 # (beep) Hang Up

Example 2.

To assign Group 2 to Ext 24 and Group 0 to Ext 28

Ext 21 Dial: Password (beep) * 51 2 42 # * 51 2 80 # (beep) Hang Up

To cancel Ext 24 being assigned to group 2

Ext 21 Dial: Password (beep) * 53 24 # (beep) Hang Up

To Assign Extensions to dial speed-dial memories ONLY

This is the ultimate cost saving feature to prevent unauthorized telephone use. In this mode, the extensions can only call business related numbers; suppliers, customers or colleagues for example.

We strongly recommend that you program emergency services numbers in to a memory when using this feature.

Example: To assign extensions 27 and 28 to Dial system speed-dials only

Ext 21 Dial: Password (beep) * 51 27 92 # * 51 28 92 # (beep) Hang Up

To cancel Ext 24 being assigned to group 2

Ext 21 Dial: Password (beep) * 53 27 92 # * 53 28 92 # (beep) Hang Up

System Speed Dials

Up to 99 telephone numbers can be stored into the PBX systems memory bank and can be dialled by any Extension which has been Programmed to use this feature.

NOTE: Any Extension which has been programmed to use Speed-Dials can ALSO store numbers into the memory bank.

The Administrator may or may not want certain Extension users to change, delete or add speed-dials therefore the programming instructions are excluded from the Extension Userguide. Only how to use the Speed-Dials is included

Storing Speed-Dials and Dialling Speed-Dials is the same sequence for "Dial 9" or " Direct dial" extensions.

Assign Extensions for Speed Dialling

Example 1: To assign Extensions 21 and 22 for Speed Dialling;

Ext 21 Dial: Password (beep) * 40 21 1 # 22 1 # (beep)

Example 2. To assign ALL extensions for Speed dialling

Ext 21 Dial: Password (beep) * 40 21 1 # 22 1 # 23 1 # 24 1 # 25 1 # 26 1 # 27 1 # 28 1 # (beep)

To Remove Extensions from using the Speed Dialling

Example to remove Ext 25

Ext 21 Dial: Password (beep) * 40 25 0 # (beep)

Storing Speed-Dial numbers

Store Speed-Dial numbers in locations 01-99. Up to 24 digits can be stored per Speed-Dial.

Any assigned Extension can add, delete or change a Speed-Dial memory (Please note these instructions are not contained in the Extension Guide, they should be released at the discretion of the Administrator)

Example 1. To store 01572 717888 into Speed-Dial location 01

*** No Password needed ***

Dial: **# * * 01 01572 717888 # (beep)** replace the handset.

Example 2. To store 07722225678 into Speed-Dial location 33

Dial: **# * * 33 07722225678 # (beep)** replace the handset

Dialling Speed Dial numbers

To call the number in Speed-Dial location 01, Dial **## 01**

To call the number in Speed-Dial location 33, Dial **## 33**

Deleting and changing a Speed-Dial number

To change a number you must delete it first

Example: To change the number stored in Speed-Dial location 01 to 01572 222333

Dial: **# * * 01 # (beep) Hang up** The number is now deleted

Dial: **# * * 01 01572 222333 # (beep) Hang up**

Music On Hold

The PBX 308 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 a 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

Ext 21 Dial: **Password (beep) * 2 4 # (beep) Music will be played for 10 secs**

Auto Attendant Mode / DISA Direct Inward System Access

All lines or individual lines can be programmed for Auto Attendant Mode (AA). In AA mode the PBX308 answers incoming callers and they will hear your personalised Outgoing Message (OGM).

During the OGM you can instruct the callers to Dial any extension or 0 for the operator, the Operator Extension is 22 by default, but this can be changed to any Extension of your choice. In fact you can program Operator 1 and Operator 2.

The PBX also allows you to record OGMs for Engaged or Non-answered Extensions.

To record the Auto Attendant outgoing message (OGM)

You have up to 15 seconds for the OGM.

A Suggested message is as follows:

" This is Smith and Co. If you would like the Sales department please Dial 21, if you would like Customer Services please Dial 28, and for all other enquiries, please Dial 0 for the operator"

Ext 21 Dial: Password (beep) * 221 # (beep) Record Message Hang Up

To playback the Auto Attendant Outgoing Message (OGM)

Ext 21 Dial: Password (beep) * 231 # (beep) Listen to Playback Hang Up

OGM if the Extension is Busy

You can record a message to inform the caller to Dial 0 for the Operator because the Extension is Busy.

The maximum message length is 7 seconds. A suggested message is as follows:

" I am sorry the Extension you require is Busy please dial 0 for the operator"

Ext 21 Dial: Password (beep) * 222 # (beep) Record Message Hang Up

To Playback the Extension Busy OGM

Ext 21 Dial: Password (beep) * 232 # (beep) Listen to Message Hang Up

OGM if Extension is unanswered after 25 seconds.

You can record an OGM informing the Caller to Dial 0 for the operator because the Extension is not answering. To record the Unanswered OGM, Max 7 seconds:

A suggested message is as follows "I am sorry, the Extension you require is not answering, please Dial 0 for the operator"

Ext 21 Dial: Password (beep) * 223 # (beep) Record Message Hang Up

To cancel Auto fax detect

Ext 21 Dial: Password (beep) * 27 # (beep) Hang Up

To Assign single digit for Auto Attendant operation

This feature enables your incoming callers to dial a single digit to access Extensions eg: Press 1 for Sales, 3 for Service, 4 for Accounts etc.

To activate single digit operation

Ext 21 Dial: Password (beep) * 29 1 # (beep) Hang Up

To Cancel single digit operation

Ext 21 Dial: * 29 0 # (beep) Hang Up

To assign Single digits for an Extension or Extensions

IMPORTANT NOTE: Only Digits 1,3,4,5,6,7,8,9 can be used do not use 2.

Example 1: To assign Extensions 21,22,and 23 to Digit 1.
These Extensions will ring in turn if the first Extension is busy.

Ext 21 Dial: Password (beep) * 150 1 21 # * 150 1 22 # * 150 1 23 # (beep) Hang Up

Example 2: To assign Extensions 24 to 25 to Digit 5.

Ext 21 Dial: * 150 5 24 # * 150 5 25 # (beep) Hang Up

Note: To change the Extensions assigned to a Digit you must first clear the Programming as follows:

Ext 21 Dial: Password (beep) * 140 Digit # (beep) Hang Up

Confirm Extension number

If you have a Caller Display phone you can confirm the Extension number.

Dial: # * 9 hang up, the phone will ring and the display will show 6 digits. The first 3 digits show the Extension Jack number ie; 004 and the last 3 digits show the Extension number ie; 024

Operator Call

Any extension can **Dial: 0** and they will be automatically connected to Extension 22. If 22 is busy they will be connected to 23.

Ringback on Busy

If the Extension you call is busy you can enter Ringback mode by Dialling **Recall (R) ## 0 0** and hang up.

When the Extension is Free your phone will ring, lift the handset and the Free Extension will ring automatically.

Transfer calls when busy

This feature enables you to transfer Internal and External calls to another Extension if you are engaged on a call.

To Activate Transfer **Dial: # * 1 Ext no**

To Cancel Transfer when engaged **Dial: # * 1 00**

Transfer All calls to another Extension

To transfer all calls to another Extension **Dial: # * 2 Ext no**

To cancel the transfer of all call **Dial: # * 2 00**

Transfer all calls to your secretary

To transfer all calls to your secretary **Dial: # * 6 Ext No**

In this mode only the Secretary can call your Extension.

To cancel calls being transferred to your secretary **Dial: # * 6 00**

Do not disturb mode

If you do not want to receive internal or external calls **Dial: # * 71** and hang up.

To cancel "Do not disturb" mode **Dial: # * 70**

BT or Cable Select (Star) Services

Select Services (Also known as Star Services) such as Call Divert, 3 way Calling etc, can be set up on extensions that are in "Dial 9 for a Line" mode or 'Direct Dial' mode.

To operate Star Services from an extension in "Dial 9 Mode".

Dial **#** followed by Line number 1, 2 or 3 followed by the service On or Off code.

To operate Star Services from an extension in "Direct Dial Mode"

Dial *** #** followed by the line number 1, 2 or 3 then the service On or Off code.

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

The Extension can either be in "Dial 9 for a Line" Mode or Direct Dial Mode.

Lift Handset & Dial:

1 (For Line 1)

2 (For Line 2)

3 (For Line 3)

When in Direct Dial Mode, please remember to add a * in front of the above examples.

*** # 1 (For Line 1)** for example

Power Failure

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

Line 1 to 21

Line 2 to 22

Line 3 to 23

Remote Programming

This is a useful feature if a company has several offices, it enables the Administrator to program PBX features including Speed Dial memories, remotely. It also enables your PBX provider to assist you in setting up the system.

To program the system remotely call the PBX and get transferred to Extension 21, the person on Extension 21 should be instructed to Dial **RECALL (R)** then **# * # ***. You can now program the System as required, NO NEED to dial the system password before programming.

Alternatively the person on 21 of the system that needs programming can call you, Dial **RECALL (R)** followed by **# * # *** both parties should hang up when programming is completed.

Troubleshooting

The factory default settings are as follows:

- All Extensions are Dial 9 For a Line.
- Extension 21 to 24 ONLY ring on incoming calls
- Call restrictions removed on all extensions
- Auto Attendant (DISA) OFF.

To Reset the System to Factory Default settings

Ext 21 Dial: Password (beep) * 6000 # (beep) Hang Up

Reset Password

Ext 21 Dial: # 62 * 1234 # (beep) Hang Up

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

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 10 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 21 to 24 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 extension number required.

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 21.
- 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 (**beep**) when the password or any programming sequence is entered correctly.
- If extension 21 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

Technical Specification

Capacity:	3 Lines and 8 Extensions
External sockets:	Line and Extensions terminated on RJ11 sockets. External Music socket 3.5 mm Mono
Communication channels:	4
Transmission loss:	Extension to Extension < 1.5 dB Extension to Exchange < 2 dB
Ringling Current:	AC65V/50Hz
Balance about earth:	* 300Hz...600Hz < 40dB * 600Hz...3400Hz < 46dB
Dialling mode:	DTMF
Signalling:	Internal Dial tone 400 Hz continuous Sine wave Internal Ring tone 400 Hz 1s on/4s off Internal Busy tone 400 Hz, sine wave, 0.3s on/0.3s off
Caller Display:	Receive; DTMF and FSK (Bell 202) Send; FSK (Bell 202)
Power Supply:	AC230V/12W Secondary 24V and 5V
Approvals:	CE and RoHS compliant