SOHO-PBX

Model – SP416 (4 lines x 16 extensions)
Automated Telephone System

SOHO-PBX is your ideal small or home office receptionist. The SP416 is features packed and very easy to use. For more information please go to SOHO-PBX website at www.soho-pbx.com or send email to support@soho-pbx.com

SP416 FEATURES

DIALING OUT

1. Direct outside line access
   Outside line can be accessed by dialing the number directly and no access code required. Any one of the outside line can be accessed by all extensions.

2. Secretary assisted dialing
   A secretary can make outgoing calls from any extension and then transferred the call to another extension. Once the call is connected to the second extension; the secretary can hang-up or remain connected for three way conference call.

3. Toll restriction scheme
   Long-distance dialing can be disabled on any extension by restricting the dialing of certain numbers.

4. Password protected outside line scheme

Outgoing calls and long-distance dialing on any extension can be restricted by the use of password. The extension is automatically password protected after each use.

5. Forced disconnect
    All outgoing calls can be programmed to disconnect after a programmable delay of a certain period (in minutes).

6. Listening-in
    Extension 81 can listen-in on any outside calls made to any extension.

INCOMING CALLS

7. Automated attendant
    Greet callers with a digital self recorded message and connect callers to the appropriate extensions.

8. Attendant call selection (incoming call route selection)
    Incoming calls can be transferred automatically to a programmed extension on duty.

9. Do not disturb
    Extension with 'do not disturb' turned on will not ring and the call will be transferred to another extension.

10. Call hold, transfer
    Incoming calls can be put on hold and transferred from any extension without any limit even on misdials. Incoming caller hears music on hold during the transfer.

11. Secretary assisted transfer
    Secretary can first talk to the extension on request before transferring an incoming call (to prevent taking unnecessary incoming calls).

12. Transfer with no answer

Incoming call will be redirected back to extension first made the transfer if the requested extension does not answer within 20 seconds. Incoming caller hears music on hold during the transfer.

13. Incoming call pick-up
    Incoming calls can be picked up from any extension.

INTERCOM CALLS

14. Internal calls
    Intercom calls can be made between different extensions.

ADDITIONAL FEATURES

15. Most communication equipments capable
    The SP416 can be connected to telephones, Facsimile machines, computers and other communication equipments requiring a phone line.

16. Power failure tolerant
    During a power failure extension number 81 to number 84 remains functional for both internal and outgoing calls.

17. Incoming call alert
    Engaged extensions will receive a special tone alerting both parties there is an incoming call.

OPERATING INSTRUCTIONS:

- The SP416 can be placed on a desk or mounted on a wall.

- Plug in all external phone lines to the phone jack at the back of the SP416 (line 1 to line 4). Then plug in all extension lines (801 to 816).

- Connect the SP416 to a power source and it must be on before use (the power indicator should start blinking).

- Programming of all functions needs to be done on extension number 801 with a touch tone telephone (if a feature is set correctly you will hear one beep similar to a busy tone. If the feature is set incorrectly you will hear a continuous tone similar to a misdialed signal and you will need to perform the task over again).

- During a power failure, extension 801 to 804 will be connected to the respective outside lines. The rest of the extensions will not function.

- All extension lines can be connected to telephone sets, facsimile machines, telephone answering machine and computers.

1. Accessing outside lines
   *Outside line can be dialed directly without any prefix. Line 1 will first be accessed then line 2, line 3 and finally line 4. However, any line can be picked specifically to make outgoing calls. To dial out using a specific line press '*90W' (W = 1,2,3,4).For example, to dial out using line 2 press '*902'. If all lines are in use you will hear a busy signal when you try to dial out. If a busy signal occurs when dialing out and there are outside lines available (not all led indicators are light), that particular extension has been set to prohibit outgoing calls (to cancel see the section on restricting outgoing calls).*

2. Secretary assisted outgoing calls
   *For example if your extension is number 801 and your secretary's extension is number 802. After connecting to the outside line your secretary only needs to press '#*8ab' (ab=01, to 16) to transfer the line to extension number 801 (during the transfer the other end will hear music while on hold). Extension number 801 can pick up the call as soon as the phone rings.*

3. Restricting outgoing calls
   To restrict all extensions from accessing a specific outside line – press '#4001W' (W = 1,2,3,4).*
   To allow all extensions to access a specific outside line – press '#4000W' (W=1,2,3,4).*
   To restrict specific extension from accessing all outside lines – press '#4ab10' (ab = 01 to 16).*

To allow specific extension to access all outside lines – press '*#4ab00' (ab = 01 to 16).
To restrict a specific extension from accessing a specific outside line – press '*#4ab1W' (ab = 01 to 16, W = 1,2,3,4).
To allow a specific extension to access a specific outside line – press '*#4ab0W' (ab = 01 to 16, W = 1,2,3,4).

4. Dialing restriction on certain number keys (restrict long distance dialing)
   Restrict dialing of certain prefixes such as '1' and '01' can prevent unauthorized national and international long distance dialing. To set this feature for one number restriction – press '*#5abD#' (ab = 01 to 16, D = 0 to 9). For example, to restrict extension 804 from dialing '1' press '*#5041#'. To set this feature for two number restriction – press '*#5abDD' (ab = 01 to 16, D = 0 to 9). For example, to restrict extension 804 from dialing '01' press '*#50401'.
   To cancel the restriction - press '*#5ab##' (ab = 01 to 16).

5. Extension lock using security code
   To lock an extension – press '*#8abDDDD' (ab = 01 to 16 and D = 0 to 9 represent security code digit). To set a new code just repeat the above procedure with a different set of digits.
   To unlock an extension – press '*#9abDDDD' (ab = 01 to 16 and D = 0 to 9 represent security code digit).
   After each use the extension becomes protected again.

6. Time limit on outgoing calls
   To set a time limit on outgoing calls to all extensions - press '*#600DD' (DD = 0 to 9 represent the number of minutes). For example, you want to restrict all extensions to a maximum of 10 minutes on all outgoing calls press '*#60010'. To cancel the restriction – press '*#60000'.
   To set a time limit on outgoing calls to specific extensions - press '*#6abDD' (ab = 01 to 16 and DD = 0 to 9 represent the number of minutes). For example, to restrict extension 803 to a maximum of 10 minutes on all outgoing calls press'*#60310'. Extensions with a time limit on outgoing calls will hear a warning tone once the time is up and the line will automatically disconnect after one minute.

To cancel the restriction on an extension press '*#6ab00' (ab= 01 to 16). The factory default is no limit on all extensions.

7. Listen in
Extension number 801 can listen in on any one of the engaged outside line by pressing '*90W' (W=1,2,3,4). Ensure that only authorized personnel can access extension number 801.

8. Digital recording
Recording and playback must be done on extension number 801. A premium quality telephone should be used to ensure sound quality on the recording. To record your message press '*#2200' wait for a beep signal tone and start your recording. After you finish recording just press'#' (the maximum recording time is 10 seconds) and you will hear another beep if the recording was successful. Your recording must prompt caller to dial an extension number (801 to 816) or dial '0' or dial the attendant on duty extension 8ab (ab = 01 to 16. See section on setting attendant on duty). To play back your recorded message press '*#2300'. To record a new message just repeat the above procedure. To play the music on hold press '*#2400'.

9. Incoming calls
Outside calls can be answered manually by picking up the handset or can be answered by the automated attendant (the factory default setting on attendant on duty is extension number 802).

    a. Manual attendant:
    To set all outside lines to manual attendant press '*#2000'. Once this feature is set all incoming calls will be answered manually and incoming calls will ring all extensions with the 'do not disturb' feature turned off. Therefore, all non attendant extensions must have the 'do not disturb' feature turned on. (see section below on 'do not disturb' feature). To set designated outside line to be answered by manual attendant – press '*#200W' (W = 1,2,3,4).

    b. Automated attendant:

To set all outside lines to be answered by automated attendant - press '#2100'. Once this feature is set all incoming calls will be answered by your recorded message. The recorded message should prompt caller to dial the requested extension or dial '0' for assistance (to connect to the attendant on duty). If the caller does not respond to the prompt in 4 seconds after listening to the recorded message for the second time, the line will automatically connect to the attendant on duty.*
To set designated outside line to be answered by automated attendant – press '#210W (W = 1,2,3,4).*
For example, if you want to set line 2 to be designated automated attendant and the other 3 lines to be set manual attendant – press '#2000' and then press '*#2102'*

10. Setting designated attendant on duty

To set designated extension as attendant on duty - at extension number 801 press '#25ab' (ab = 01 to 16). For example, setting extension number 803 as attendant on duty - press '*#2503'.*

11. Do not disturb feature

Any extension except the attendant on duty extension can have this feature turned 'on'. To turn on the do not disturb feature to all non attendant on duty extensions - press '#3001'.*
To cancel or turn off the do not disturb feature to all extensions - press '#3000'.*
To set the do not disturb feature to a specific extension – press '#3ab1' (ab = 01 to 16).*
To cancel or turn off do the not disturb feature for a specific extension – press '#3ab0 (ab = 01 to 16).*

12. Incoming call transfer

An incoming call can be transferred to other extension by dialing the extension number directly and the call will connect to the requested extension number (801 to 816). There is no limit on the frequency of transfer. Once the extension number is dialed and the music on hold comes on, the person transferring the call can hang-up (Note: In transferring a call do not press the hook on misdialed extension number. Misdialed number can simply be redialed otherwise the line will be disconnected).

- *If the person transferring the call hangs up after dialing the requested extension number, the requested extension will connect directly to the incoming caller just by picking up the handset (the incoming caller will hear music while on hold). If the requested extension does not pick up the call within 20 seconds the incoming call will reconnect to the extension that made the transfer.*
- *If the requested extension number is busy and if it is on an internal call, the person on the phone will hear an incoming call warning signal. If the person hangs up within 10 seconds the phone will ring and the incoming call will connect once the handset is picked up (the incoming caller will hear music while on hold).*
- *If the extension making the transfer does not hang up after dialing the requested extension number and the call is picked up by the requested extension, the extension making the transfer will connect to the requested extension. If the requested extension does not wish to take the incoming call can just hang up and the person transferred the call will reconnect to the incoming caller once the requested extension hangs up.*
- *If the person transferred the incoming call hangs up after dialing the requested extension, the incoming call will connect to the requested extension if the call is answered within 20 seconds. If the requested extension does not answer the call within 20 seconds, the extension initiated the transfer will ring and the call can be transferred again if it is answered otherwise the line will disconnect after10 seconds.*

13. Incoming call alert
When there is an incoming call and all extensions are engaged on internal calls, the attendant on duty extension will receive an incoming call alert and if the attendant on duty extension or any extension without the' do not disturb' feature turned on hangs up at this time the phone will ring and it will be connected to the outside caller.

14. Call pickup
*Apart from the ringing extension, incoming calls can be picked up from any extension by pressing '*7'. The call can also be transferred after it is answered.*

15. Intercom
    If the SP416 is not connected to any external line then to make internal calls just dial the desired extension number (801 to 816). If the SP416 is connected to external lines then to make internal calls you need to press '' and when you hear a normal dial tone just dial the extension number (801 to 816).*

16. Conference calls
    *The attendant on duty extension must initiate the conference call. To set up a conference call - press '*200'. All extensions except 801 will ring 8 times at 1.5 seconds interval and the line will connect to the attendant on duty extension once it is answered. All engaged extensions will hear a call alert signal and the extension can choose to take the call by hanging up and answering again. If there are extensions still not connected to the conference call, the attendant on duty can ring that extension by pressing '*2ab' (ab = 01 to 16). Again the phone will ring 8 times.*
    During the conference call, all incoming calls will alert the attendant on duty or any extension with the 'do not disturb' feature turned off with an incoming call signal. At this time the extension can hang up to terminate the conference call and answer the incoming call once the phone rings.
    *More than one conference call can be set up at the same time from the attendant on duty extension. To initiate another conference call just press '*2ab' (ab = 01 to 16) and repeat the above procedure.*

RESETTING TO FACTORY DEFAULT
    The SP416 features can be reset to factory default by pressing '#1000'. Factory default setting*
    - *Incoming calls…. …………. manual attendant for all 4 outside lines*
    - *Do not disturb……………………………. …… off for all extensions*
    - *Outgoing call restriction …………… No restriction for all extensions*
    - *Time limit on outgoing calls ………… No restriction for all extensions*
    - *Number dialing restriction …………. No restriction for all extensions*
    - *Security lock ………………………………. No lock for all extensions*

TROUBLESHOOTING

If the SP416 fails to function as expected, check the list of common problems below:

- *Problem – Can not make outgoing nor intercom calls*
  Possible cause – Outside line problem or outside line not connected; no power; pbx problem
- *Problem – Can make incoming calls but not outgoing calls*
  Possible cause- The phone is not a touch tone unit or outgoing call restriction is turned 'on'.
- *Problem – The line automatically disconnects after a period of time*
  Possible cause – Time limit is set on that particular extension or the outside line problem
- *Problem – Static interference*
  Possible cause – Outside line interference or phone lines not connected properly; improper power source; incomparable telephone set
- *Problem – Poor sound quality*
  Possible cause – Low quality telephone set; low quality telephone line and too long
- *Problem – Can not restore factory default settings*
  Possible cause - Not using line number 801 to perform the restore
- *Other problem – Go to SOHO PBX website at www.soho-pbx.com*