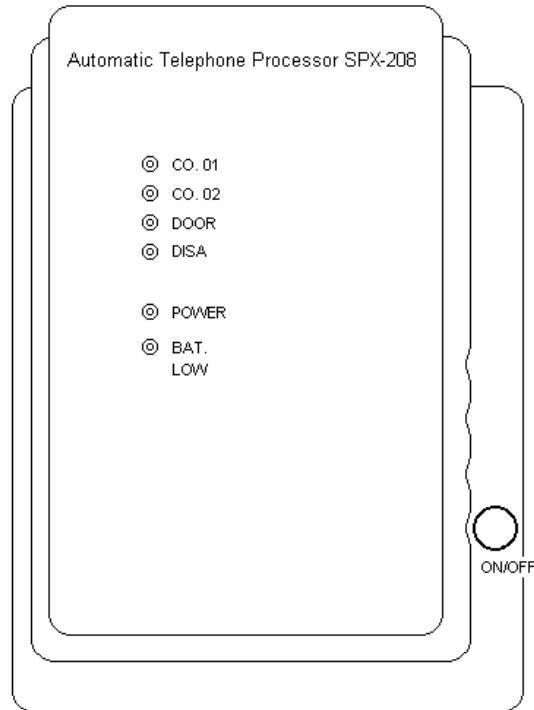




# SPX-208

## *Mini-Com System*



# Owner's Manual

*Please Read this manual carefully before using the equipment.*

Imported, Distributed & Serviced By



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## 1) INTRODUCTION

### A. Thank You For Choosing the SOLOMON SPX208 Mini-Com System!

Congratulations on your purchase of a SOLOMON SPX208 Mini-Com System. Your new SPX208 represents the very latest technology. It is full featured, high performance machine build to strict quality standards. We are proud to offer you a product that will provide convenient and dependable service for years to come.

### B. What is the SOLOMON SPX208?

The SPX208 is an Automatic Telephone Processor that works like a mini-PBX system and has many features similar to a business telephone system at a fraction of the cost of a keyphone or PBX system. The SPX208 can handle 1 or 2 telephone lines and support up to 8 telephone extensions and a door station with or without electronic door lock release. Any New Zealand Telepermitted analog device (ie single line telephone, cordless telephone, fax or modem) can be connected to the SPX208 from any extension. The SPX208 is wall mountable with screws (not supplied).

### C. Who Should Own a SOLOMON SPX208 Mini-Com System?

The SPX208 has been designed and engineered to provide an easy-to-use and dependable telecommunications system for use in large residential homes, home offices and small businesses such as retailers, restaurants, professional offices, real estate, insurance and travel agencies, petrol stations, panel beaters and more. It can also be used on boats such as cabin cruisers and fishing vessels with an appropriate power supply.

The SPX208 will enable you to use your telephone lines more efficiently which should save you time and money and if used for a business, it will also make your business look more professional to your suppliers and customers.

## 2. IMPORTANT SAFETY INFORMATION

To reduce the risk of fire, electrical shock, and other injuries, keep these safety consideration in mind while installing, using and maintaining your SPX208.

### A. Safe & Stable Location

Place the SPX208 on a secure, stable surface or mount it on the wall using two screws. A fall can cause serious damage to the SPX208.

### B. Correct Power Supply

Only use the Power Adaptor supplied with the SPX208. Be sure to connect it to the correct power supply as listed under "Specifications". If you are unsure of the type of power that's supplied to your home or office, then call your electric company.

### C. Electrical Overload

Do not plug too many electrical devices into a wall outlet or extension cord. An overloaded outlet is a fire and electrical shock hazard.

### D. Cleaning Procedures

Before cleaning the machine, unplug it from the power outlet. Clean exposed parts with a soft cloth slightly dampened with water. Do NOT use aerosol cleaners.

### E. Thunderstorms

Unplug electrical appliances during thunderstorms. Avoid using any telephone (except a cordless model during a thunderstorm, since there is a small chance you could get an electrical shock from lightning.)

### F. Gas Leaks

Never use any telephone close to a gas leak. If you think gas is leaking, contact the gas company immediately from an outside telephone. A small electrical spark in the telephone could cause a fire.

### **3) FEATURES**

The main features of the SOLOMON SPX208 Mini-Com System are as follows:

#### **A. Capacity**

- 1 or 2 Telephone (C/O) Lines
- Up to 8 Extensions
- 1 Door Station with or without Electronic Door Lock Release

#### **B. Data Capability**

You can connect a modem to any extension of the SPX208.

#### **C. True Hybrid Operation**

Enables you to connect any New Zealand Telepermitted analog telephone, cordless telephone, fax or modem to any extension of the SPX208. This enables you to use your existing phones or buy new ones and use them as desired. We recommend ALCATEL and AUDIOLINE Telephones, AUDIOLINE and BELCOM Cordless Telephone, AUDIOLINE and TAKACOM Answering Machines, SAMSUNG Fax Machines, and PLANTRONICS Headsets.

#### **D. Outgoing Line Selection**

Choose either line for your outbound telephone call or fax/data transmission.

#### **E. Answering Incoming Calls**

You can answer incoming calls from any extension.

#### **F. Auto Attendant Service with DISA (Direct Inward Station Access)**

Enables you to leave a voice message up to 22 seconds in length for callers explaining how they can access particular extensions to reach selected staff or for specific purposes (ie send a fax or leave a message on an answering machine).

#### **G. Auto Tel/Fax Switch & Telecom FaxAbility Decoding**

Enables calls to be sent and received by the fax even if no one answers the telephone by automatically routing fax calls to Extension 8. The SPX208 is also Telecom FaxAbility Capable for this telephone network service.

#### **H. 3 Party Conference Calls (1 outside and 2 inside parties)**

Enables you to have two simultaneous 2 way conference calls (one on each telephone line).

#### **I. Long Distance Call Restriction**

Enables you to prohibit the calling of either national and/or international toll calls from any extension via DTMF programming from any telephone.

#### **J. Call Transfer Between Extensions**

Enables you to transfer an incoming call to another extension.

#### **K. Internal Intercom**

Enables you to call a selected extension from another extension.

#### **L. Intercom Paths**

While 2 extensions are connected to the intercom, another extension can make an outgoing call or pick up an incoming call.

#### **M. Internal Paging**

Enables you to page all other extensions from any one extension.

#### **N. Music on Hold**

Provides the external caller with music when you put the call on hold. The SPX208 is programmed with internal music but an external music device (ie radio, cassette player or CD player) can be connected to replace the internal music.

#### **O. Do Not Disturb**

Enables you to programme each extension to ring or not when there is an incoming call.

#### **P. Power Failure Service**

**In the event of a power failure, you can still receive or make a telephone call during the power failure. Line 1 is connected to Extension 1 and Line 2 is connected to Extension 2.**

#### **Q. Optional Door Station (SAS-110)**

**Enables you to answer a call from the door station located at the door or gate from any programmed extension telephone. The SAS-110 has a door button and a built-in microphone and speaker and comes with a 6 metre cable.**

#### **R. Electronic Door Lock Release**

**Enables you to release an electronic door lock that is connected to the SPX208 via the Door Station.**

#### **S. Optional Caller ID Packages**

**Enables you to connect Caller ID adjuncts to the system so that you can see the number of the person calling you and record the numbers of unanswered calls. Telephone Network Caller ID Services must be subscribed for these packages to operate. Please note that a Caller ID board has to be added to the SPX208 Circuit Board by Atlas Gentech. Also, up to two Caller ID Adjuncts can be added per extension (one for each Telephone Line) if desired. Please note that additional telephone cabling may be required depending on your premises' current telephone wiring.**

## 4) OPERATION

### A. System Dial Tone

Take the handset off hook and you will hear the System Dial Tone ( 1 long tone with a short pause or 1 long tone followed by 1 long pause). The system is now ready to accept dialling.

### B. Busy Tone

A 0.5 or half second ON and 0.5 or half second OFF tone indicates Busy Tone. This indicates that all facilities are in use and dialling is not permitted.

### C. Ring Tone

A One-second ON and a Two-second OFF Tone to the calling party indicates Ring Tone.

### D. Outside Call (Telephone C/O Line, External Call)

Dial 9.... to access Line 1 or 2

Dial 1....to access Line 1

Dial 2...to access Line 2

### E. Auto-Attendant Service (DISA)

The SPX208 is equipped with an Auto Attendant which acts like an “electronic receptionist.” You can record a message up to 22 seconds in length to explain dialling instructions to the caller (ie Dial 1 for my family, Dial 8 for my fax). When there is an incoming call, the system will answer and play your Message. To connect to the desired extensions, the caller must do the following:

Dial 1 for EXTENSION 1

Dial 2 for EXTENSION 2

Dial 3 for EXTENSION 3

Dial 4 for EXTENSION 4

Dial 5 for EXTENSION 5

Dial 6 for EXTENSION 6

Dial 7 for EXTENSION 7

Dial 8 for EXTENSION 8

If the call is not answered within 15 seconds from the dialled extension, the call will automatically be transferred to Extension 1. After a further 15 seconds if the call is still unanswered, the SPX208 will terminate the call. If Extension 1 is dialled or the caller does not enter an extension number, then the call will automatically be sent to Extension 1 and it will ring for 30 seconds before terminating the call.

If the caller disconnects the call, the SPX208 will still be engaged for 30 seconds and no other inward or outward call can be made on the occupied telephone (C/O) Line. Also, the SPX208 may ring an extension after the caller hangs up until the 30 seconds has expired. If you pick-up the handset you will hear busy tone. Simply hang-up and the line will be cleared.

**NOTE: To place the system in DISA MODE, press the DISA button located on the front of the SPX208. The DISA light will come on. (or see page 6 to turn DISA on from an extension) Pressing the DISA again will switch the DISA mode to OFF and the light will go out. (or see page 6 to turn DISA off from an extension).**

When another extension is ringing, pick up the non-ringing phone and you will hear Internal Dial Tone. Dial “4” to answer the incoming call.

## G. Call Hold

If you want to put the other party on **HOLD** during a conversation with an external call, press the **FLASH/RECALL** key on your telephone or depress the hook switch for 1/2 second to place the call on **HOLD**. The caller will hear music while on **HOLD**. Press the **FLASH/RECALL** key or depress the hook switch once again to continue the conversation. If you hang up the phone after pressing the **FLASH/RECALL** key or depressing the hook switch, the party on hold will be connected to the next person who lifts a handset at an extension. If an incoming call has been put on **HOLD** for over 5 seconds, the phone will ring once again and after a further 15 seconds, all extension phones will ring and anyone can answer the call. After a further 15 seconds, the call will be disconnected.

**Note: When you place a call on HOLD, you will hear the HOLD Dial Tone (1 short tone with a short pause). Also some telephones may NOT be equipped with a FLASH/RECALL key. If not, depress the "hook switch" for approximately 1/2 second to place the call on HOLD.**

## H. Intercom Calling Between Extensions

Lift the handset, listen for Internal Dial Tone and dial the extension number required. If that extension is free, you will hear a Ring, and this indicates that the extension is ringing. If the extension is busy, you will hear a Busy Tone.

FOR EXTENSION 1, DIAL "51"

FOR EXTENSION 2, DIAL "52"

FOR EXTENSION 3, DIAL "53"

FOR EXTENSION 4, DIAL "54"

FOR EXTENSION 5, DIAL "55"

FOR EXTENSION 6, DIAL "56"

FOR EXTENSION 7, DIAL "57"

FOR EXTENSION 8, DIAL "58"

## I. External Call Transfer

During an external telephone conversation, if you want to transfer the call to another extension, press the **FLASH/RECALL** key on your telephone or depress the hook switch for 1/2 second and dial the desired extension number. You may remain on the phone and speak to the party to whom you are transferring the call. When you hang up, the call will be transferred.

## J. Paging

To page (ring) all extensions, lift the handset and dial "77". All extensions phones will begin to ring. The ringing will stop when one of the other extension phones is answered.

## K. Do Not Disturb (DND)

If you wish to place your extension in DND Mode, do the following

- 1) Lift the handset.
- 2) Dial "6" (receive 2 beeps).
- 3) Dial "55" (receive 2 beeps).
- 4) Return the handset to the phone cradle.

Your extension is now programmed to restrict ringing (outside, inside, or paging).

To restore your phone to the Normal Mode, do the following

- 1) Lift the handset.
- 2) Dial "6" (receive 2 beeps).
- 3) Dial "56" (receive 2 beeps)
- 4) Return the handset to the phone cradle.

Your extension has been restored to receive ringing.

#### L. Call Waiting (Telephone C/O Line Calls Only)\*

When engaged in an outside call, if the CALL WAITING tone is heard, press the FLASH/RECALL key on your phone or depress hook switch for 1/2 seconds to place the present caller on HOLD. You will receive Internal Dial Tone. Dial "73" to receive the second call. At any time you may press the FLASH/RECALL key or depress the hook switch for 1/2 second to return to the other call.

***\* Note: Call Waiting is a telephone network service and must be subscribed to from your service provider.***

#### M. Three Party Conference Call

While talking on an outside line you may conference in another Internal party by pressing the FLASH/RECALL key or depressing the hook switch for 1/2 second, dial the desired extension when the extension party answers press the FLASH/RECALL key or depress the hook switch again, you are now engaged in a 3-way conference. You can hold a three way conference (1 external/2 internal parties ) call on both telephone lines simultaneously.

#### N. SAS-110 DOOR STATION OPERATION (Optional Extra)

You can connect the optional SAS-110 Door Station (Intercom) to your SPX208 Mini-PBX System. When someone presses the doorbell, the programmed extensions will ring. Lift the handset on the ringing telephone to connect to the door phone to hold a conversation. Or from a non-programmed extension you can dial "36" to connect to the door station, you will hear 3 beeps to confirm connection. If you have an electronic door lock connected to the system, you can release the electronic lock by pressing the FLASH/RECALL key on your phone or depressing the hook switch for 1/2 second. You will receive 2 beeps to confirm connection, then simply dial "39" to release the electronic lock.

***Note: To open the electric lock you must be connected to the door phone (ie. dial "36") to activate the door phone first.***

#### O. Remotely Release Electronic Door Lock

You may release the Electronic Door Lock from any remote location.

- 1) Call in to your SPX208 system.
- 2) While the DISA message is playing, dial "#" plus "\*" plus your 4 digit security code.
- 3) You will receive 2 beeps indicating the door is open, 4 beeps indicates you have mis-dialled  
If you mis-dialled, simply dial "#" and "\*" plus your 4 digit security code once again.  
(The electronic lock will automatically re-lock after 2 seconds.)

## 5. PROGRAMMING THE SYSTEM

To enter the programming mode, dial “6” you will hear two “beep-beep” After each dialling procedure, make sure the “beep-beep” is heard to confirm successful data entry.

### A. Programming Your Personal 4-Digit System Access (Security Code)

Dial “6”... (“beep, beep”)

Dial “11”... (“beep, beep”)

Dial “XXXX” (4-digit security code)... (“beep, beep”)

### B. Changing System Access Code (Security Code)

Dial “6”... (“beep, beep”)

Dial “11”... (“beep, beep”)

Dial “XXXX” (OLD 4-digit Access/Security Code)... (“beep, beep”)

Dial “12”... (“beep, beep”)

Dial “XXXX” (NEW 4-digit Access/Security Code)... (“beep, beep”)

### C. Enable Do Not Disturb

Dial “6”... (“beep, beep”)

Dial “55”... (“beep, beep”)

### D. Disable Do Not Disturb

Dial “6”... (“beep, beep”)

Dial “56”... (“beep, beep”)

### E. DISA Message Recording (maximum: 22 seconds)

Dial “6”... (“beep, beep”)

Dial “11”... (“beep, beep”)

Dial “XXXX” (4-digit security code)... (“beep, beep”)

Dial “31”... (“beep, beep”) Start Recording Your DISA Message.

### F. DISA Message Checking

Dial “6”... (“beep, beep”)

Dial “32”... (“beep, beep”) DISA Message Starts to Play.

### G. Enable Long Distance Calling

Dial “6”... (“beep, beep”)

Dial “11”... (“beep, beep”)

Dial “XXXX” (4-digit security code)... (“beep, beep”)

Dial “50”... (“beep, beep”)

Dial the extension numbers you want to enable for long distance (1-8)

Dial “#” to finish setting... (“beep, beep”)

#### H. Long Distance Call Restriction - Level 1 (International)

Prohibits the dialling of international long distance calls with phone numbers that start with "00".

Dial "6"...("beep, beep")

Dial "11"...("beep, beep")

Dial "XXXX" (4-digit security code)...("beep, beep")

Dial "51"...("beep, beep")

Dial the extension numbers you want to prohibit (1-8)

Dial "#" to finish setting... ("beep, beep")

#### I. Long Distance Call Restriction - Level 2 (National & International)

Prohibits the dialling of both domestic and International long distance calls with phone numbers that start with "0".

Dial "6"...("beep, beep")

Dial "11"...("beep, beep")

Dial "XXXX" (4-digit security code)...("beep, beep")

Dial "52"...("beep, beep")

Dial the extension numbers you want to prohibit (1-8)

Dial "#" to finish setting...("beep, beep")

#### J. Enable Auto-Attendant Service (DISA MODE ON)

Dial "6"...("beep, beep")

Dial "11"...("beep, beep")

Dial "XXXX" (4-digit security code)...("beep, beep")

Dial "53"...("beep, beep")

**If the Fax Detection Tone is ENABLED, there will be a 5 second delay before the DISA Message is played.**

#### K. Disable Auto-Attendant Service (DISA MODE OFF)

Dial "6"...("beep, beep")

Dial "11"...("beep, beep")

Dial "XXXX" (4-digit security code)...("beep, beep")

Dial "54"...("beep, beep")

#### L. Enable FAX (FAX TONE DETECTION MODE ON)

Once a line has been programmed to receive fax transmission it will be routed to EXTENSION 8 automatically

Dial "6"...("beep, beep")

Dial "11"...("beep, beep")

Dial "XXXX" (4-digit security code)...("beep, beep")

Dial "57"...("beep, beep")

Dial the C/O line number "1" or "2" which you want to use to receive fax calls

Dial "#" for finish setting...("beep, beep")

**When DISA is off and the Fax Tone Detection Mode is ON, there will be 5 seconds of silence to the caller and the Music On Hold will be played while the programmed extensions ring. This 5 second delay is used to listen for CNG tone to allow detection of the tone and determine if a fax is being transmitted.**

#### M. Disable Fax (FAX TONE DETECTION MODE OFF)

Dial "6"...("beep, beep")

Dial "11"...("beep, beep")

Dial "XXXX" (4-digit security code)...("beep, beep")

Dial "58"...("beep, beep") (ALL LINES ARE DISABLED FROM AUTOMATICALLY RECEIVING A FAX )

#### N. FaxAbility

The Extension that will ring when FaxAbility (DA4) ring is detected on an incoming call on line 1 or 2.

Dial "6" ...("beep,beep")

Dial "11" ...("beep,beep")

Dial "XXXX" (4-digit security code)...("beep, beep")

Dial "701 - 708" ...("beep,beep") (Select one only 701-708)

**If Extension 8 (708) is selected to ring on FaxAbility (DA4) and fax tone detect is enabled then both FaxAbility and fax tone detect will be directed to Extension 8.**

#### O. Setting Up System Defaults

Dial "6"...("beep, beep")

Dial "11"...("beep, beep")

Dial "XXXX" (4-digit security code)...("beep, beep")

Dial "59"...("beep, beep")

#### DEFAULT PROGRAMME SETTINGS

- 1) When Telephone (C/O) Line 1 is Ringing....EXTENSIONS 1-8 will Ring
- 2) When Telephone (C/O) Line 2 is Ringing....EXTENSIONS 1-8 will Ring
- 3) Extensions 1-8 can use both Telephone Lines 1 and 2.
- 4)When you receive a call from the Door Station....EXTENSIONS 1-8 will Ring
- 5) Fax Tone Detection Mode is Disabled on both Telephone Lines 1 and 2.
- 6) FaxAbility Decoding is Enabled on both Telephone Lines 1 and 2 EXTENSION 7 will ring.
- 7) All Toll Restrictions are set to "OFF" (Normal Mode).
- 8) System Access Code is the Default Access Code (9999).

#### P. Extension Access to Telephone Line 1

Dial "6"...("beep, beep")

Dial "11"...("beep, beep")

Dial "XXXX" (4-digit security code)...("beep, beep")

Dial "711"...("beep, beep")

Dial the extension numbers (1-8) that you wish to access using Telephone Line 1....or dial "0" to NOT allow access to Telephone Line 1 for all extensions

Dial "#" to finish setting...("beep, beep")

#### Q. Extension Access to Telephone Line 2

Dial “6”... (“beep, beep”)

Dial “11”... (“beep, beep”)

Dial “XXXX” (4-digit security code)... (“beep, beep”)

Dial “721”... (“beep, beep”)

Dial the extension numbers (1-8) that you wish to access using Telephone Line 2...or dial “0” to NOT allow access to Telephone Line 2 for all extensions.

Dial “#” to finish setting... (“beep, beep”)

#### R. Line 1 Extension Ring Select

Dial “6” ... (“Beep, beep”)

Dial “11”... (“beep, beep”)

Dial “XXXX” (4-digit security code)... (“beep, beep”)

Dial “811”... (“beep, beep”)

Dial the EXTENSION numbers (1-8) you want to ring when an incoming call is received on Telephone Line 1...

Dial “#” to finish setting... (“beep, beep”)

**Note: If the system is placed in the DISA MODE, and no extension number is dialed, the stations programmed here will ring after a period of time. Also, the same extensions will ring during HOLD RECALL.**

#### S. Line 2 Extension Ring Select

Dial “6”... .. (“beep, beep”)

Dial “11”... (“beep, beep”)

Dial “XXXX” (4-digit security code) ... (“Beep, beep”)

Dial “821”... (“Beep, beep”)

Dial the EXTENSION numbers (1-8) you want to ring when an incoming call is received on Telephone Line 2

Dial “#” to finish setting... (“beep, beep”)

#### T. Door Station Ringing at Extensions

Dial “6”... (“beep, beep”)

Dial “11”... (“beep, beep”)

Dial “XXXX” (4-digit security code)... (“beep, beep”)

Dial “831” ... (“Beep, beep”)

Dial the EXTENSION numbers (1-8) you want to ring when the door station is activated

Dial “#” to finish setting... (“beep, beep”)

## 4. PRE-INSTALLATION PROCEDURES

### A. Check SPX208 System Contents

When unpacking the SPX-208 Mini-PBX system, you should check that the following items are included:

- \* 1 x SPX-208 Mini-PBX System
- \* 1 x Power Adaptor
- \* 1 x SPX-208 Owner's manual
- \* 1 x Quick Reference Guide (Operating Table/System Programming Code)

If you are missing any of the above contents, contact Atlas Gentech's Service Department at by phone (09) 276-1167 or by facsimile at (09) 276-1867.

### B. Tools/Supplies Required (NOT SUPPLIED)

You will require the following tools: a Standard Screwdriver and a pair of Pliers for stripping the wires from within the telephone cable and for stripping the copper from the coloured wires for connection. If you are modifying or installing telephone wall jacks, you will also require a telephone crimping tool.

If you decide to wall mount the SPX208, you will also require 2 screws and if you decide to use the DISA Features, you will require 4 x AA batteries for the DISA Message Battery Back-up.

If you purchase the SAS-110 Door Station and you want to install it more than 6 metres from the SPX208, then you will require additional telephone line cabling and if you want to add an electronic lock you must source this locally.

### C. Check Premises Existing Telephone Wiring

1) The SPX208 must be connected to the 1 or 2 Telephone (C/O) Lines that come into your home or business from the local telephone exchange via your telephone lines which will be connected to one or two of your telephone wall jacks.

-8-

2) Houses and Businesses can be telephone cabled in a number of ways. You must determine if your premises are cabled in a "Daisy-Chain" (linear) or "Star" format as shown below.

"Daisy-Chain" Cabling: [Telephone (C/O) Line]---[EXT]---[EXT]---[EXT]---[EXT]---[EXT]---[EXT]---[EXT]---[EXT]---[EXT]

"Star" Cabling:           [EXT]                           [EXT]                           [EXT]  
                          [EXT]-----[Telephone(C/O) Line]-----[EXT]  
                          [EXT]                           [EXT]                           [EXT]

Most houses are cabled using the "Daisy-Chain" format. The SPX208 is a two-wire product and can utilise the "Daisy-Chain" wiring method for up to 3 extensions by using two wires per extension within the existing 6 wire telephone cabling. The SPX208 must be located near the first (master jack) extension. The Telephone (C/O) Line should be disconnected from the Master Wall Jack and should be connected to the SPX208 either directly or via a wall mounted safety plate (preferred) which will prevent the telephone line from being accidentally pulled (disconnected) from the SPX208. The Telephone (C/O) Line is connected to the Safety Plate and then a "fly" cable is connected from the safety plate. You then secure the safety plate to the wall and connect the "fly" cable to the SPX208.

[Telephone (C/O) Line]-----[Safety Plate]-----"Fly" Cable-----[SPX208]

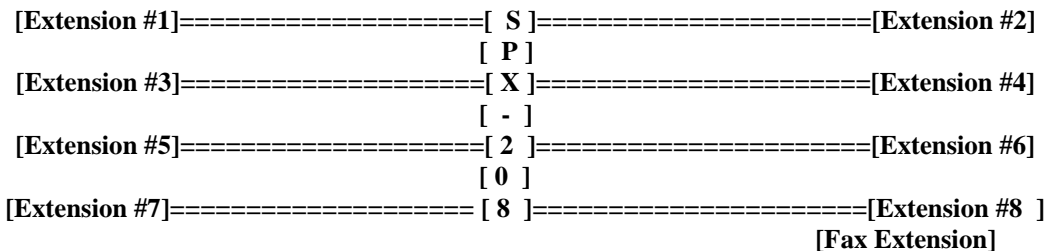
You can then use the existing Telephone Cable to connect up to 3 extensions. (Telephone Line Cable usually has 6 individual wires (called 3 pairs) inside which are colour coded as follows - White, Red, Green, Blue, Orange and Black. )

Telephone Cable

[ S ]	-----White Wire-----	[Extension]
[ P ]	-----Red Wire-----	[#1 ]
[ X ]	-----Blue Wire-----	[Extension]
[ 2 ]	-----Green Wire-----	[#2 ]
[ 0 ]	-----Orange Wire-----	[Extension]
[ 8 ]	-----Black Wire-----	[#3 ]

You can match two colour pair per extension (ie White and Red for Extension 1, Blue and Green for Extension 2 and Orange and Black for Extension 3). For more than 3 extensions you will have to run cable from the additional extensions back to the SPX208. This can be done within the walls/attic/crawlspace (preferred) or along and tacked to the floor moulding (can be accessed and damaged by children playing or while cleaning) and 2-wire connect those additional extensions directly to the SPX208.

The “STAR” cabling method is preferred (and required if you want to use the caller ID option) and can be used for up to 8 extensions as well as the Caller ID adjuncts. A 6-wire Telephone Cable is to be run from the Telephone (C/O) Line to each extension. Again, you should connect the same coloured pairs (ie White and Red) per extension at the extension telephone jack and at the SPX208 Extension terminal. The remaining four pairs can be used for two caller ID adjuncts (2 per adjunct) if you purchase the Caller ID Optional Package.



3) Please note that there are three types of telephone wall jacks as follows:

Older Premises

MASTER Wall Jacks - Have electronic components inside.

SLAVE Wall Jacks - Do not have any electronic components inside.

Newer Premises

2-WIRE Wall Jacks - Have some electronic components (barrel shaped capacitor) inside.

Older telephone products may be 3-wire products and will not work on a SLAVE Jack. You must install a MASTER or 2-wire Wall Jack for any 3-wire products or replace the 3-wire product with a 2-wire product.

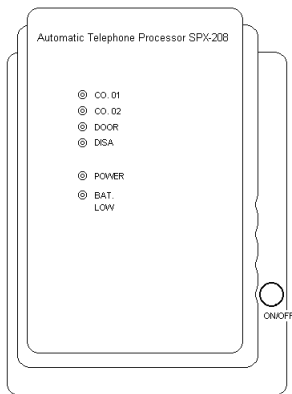
D. Select A Suitable Location

The SPX208 can be desktop or wall mounted with screws (not supplied). The location of the system should be safe, with some ventilation and near both a power supply and a telephone jack.

E. Review Circuit Diagrams

Before installing the SPX-208, it is recommended to study the following diagrams to determine the location of the different connection ports. Then carefully follow the installation instructions following.

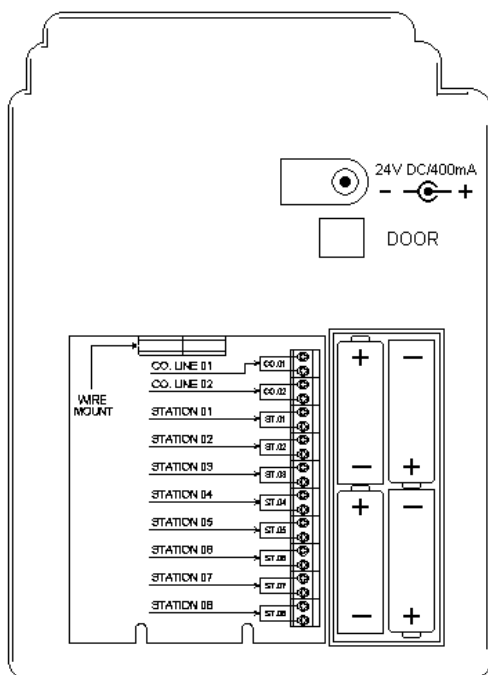
## SOLOMON SPX208 - Front Cabinet



### Features Shown

- \* Telephone (C/O) Line 1 Operational (Light) Indicator Lamp
- \* Telephone (C/O) Line 2 Operational (Light) Indicator Lamp
- \* Door Station Operational (Light) Indicator Lamp
- \* DISA ON (Light)/OFF Indicator Lamp
- \* Power ON (Light)/OFF Indicator Lamp
- \* Low Battery (Light) Indicator Lamp
- \* DISA ON/OFF Button

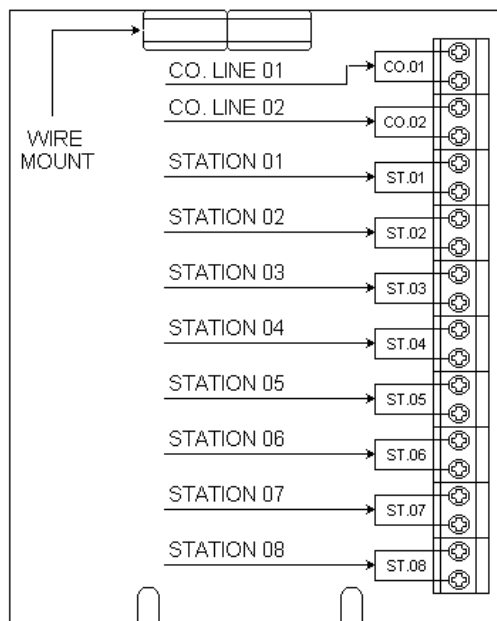
## SOLOMON SPX208 - BACK CABINET with Panel Removed



### Features Shown

- \* Power Adaptor Connection Socket for 24V, 400mA power adaptor supplied.
- \* SAS-110 Optional Door Connection Terminal for Door Station and Electronic Door Lock
- \* Adjustable Wire Mounting Bracket for all Telephone Wires
- \* Telephone Wire Connection Panel (Terminal Block)
- \* Four AA Battery Location for DISA Message Battery Back-up.  
(AA Batteries Not Included)

## SOLOMON SPX208 - Close-up View of Wire Connection Panel



### **Features Shown**

- \* Adjustable Telephone Wire Mounting Bracket
- \* Terminal Block for connection Telephone Wires to SPX208
- \* 2 Telephone Wire Mounting Locations for Telephone (C/O) Lines 1 and 2
- \* 2 Telephone Wire Mounting for Extensions (Stations) 1-8

## 5. INSTALLATION PROCEDURES

It is recommended that you use a trained telecommunications installer for the installation of the SPX208 Mini-Com System. You should contact the telecommunications stockists from which you purchased the SPX208 system. If they cannot assist you, then contact Atlas Gentech's Service Department and we can arrange for a professional installer to contact you. Please call Atlas Gentech's Service Department by telephone at (09) 276-1167 or by facsimile at (09) 276-1867. If you cannot get the SPX208 to work properly, we do NOT advise you to call Telecom Faults as they will charge you if the telephone line is not at fault.

### A. SPX208 Mini-PBX Installation Procedures

- 1) Open the back cover and connect the Telephone (C/O) Lines (incoming telephone line) to the CO. 1 and/or CO. 2 terminals. The connection is a two wire screw type terminal located on the interface board.

[Telephone (C/O) Line]===== [Safety Plate]===== "Fly" Cable===== [SPX208]

- 2) Connect the station lines (Extensions) to the terminals marked ST.01 ~ ST.08. using two coloured wires per extension (station). (HINT: If you are using a STAR wire configuration, Telecom New Zealand recommends that you use a 2-wire pair for all new connections. If you use the existing wiring for existing extensions, we suggest you use the same coloured wire pairs for each extension ie White and Red). If you have a fax machine it should be connect to EXTENSION 8 (ST.08) to allow operation of the fax functions.

[Extension #1]=====(2-wires)=====[ S ]=====(2 wires)=====[Extension #2]

[ P ]

[Extension #3]=====(2-wires)=====[ X ]=====(2 wires)=====[Extension #4]

[ - ]

[Extension #5]=====(2 wires)=====[ 2 ]=====(2 wires)=====[Extension #6]

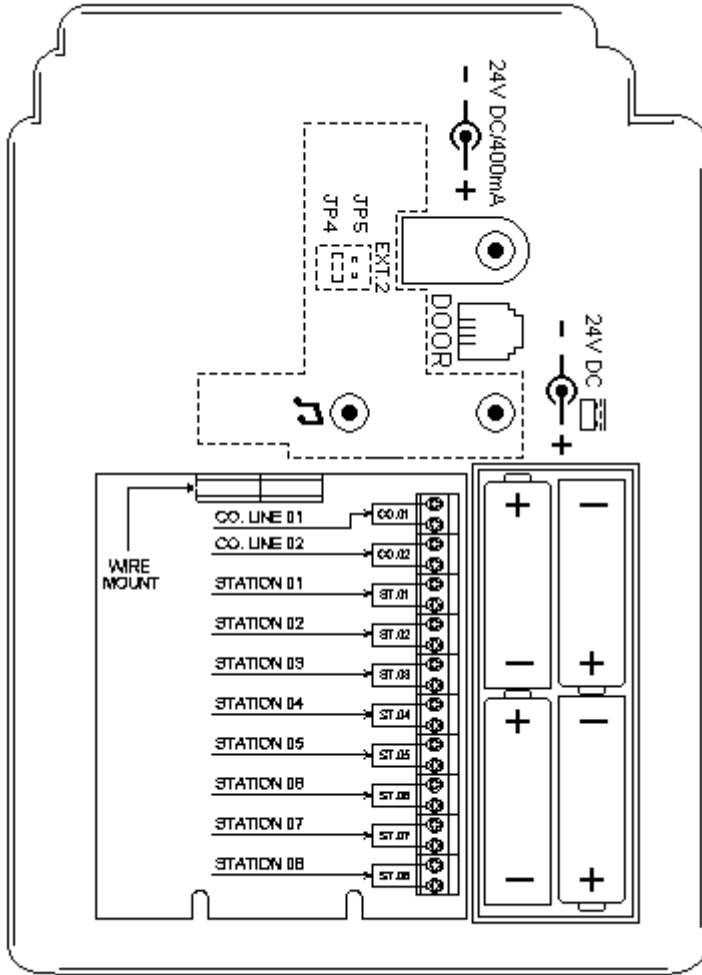
[ 0 ]

[Extension #7]=====(2 wires)=====[ 8 ]=====(2 wires)=====[Extension #8 ]

[Fax Extension]

- 3) If installing an answering machine or a modem, it may be connected to any Extension wall jack.

- 4) Insert 4 UM-3 (1.5V AA) batteries into the battery holder located on the rear of the SPX-208. (NOT supplied with SPX208). These are required to back-up the Auto Attendant (DISA) Message.



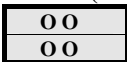
4 x AA 1.5V Batteries

- 5) Connect the Power Adaptor to the SPX208 to the 24V DC 400mA socket located on the back of the SPX208 and Plug it into an AC outlet (NOTE: Only use the supplied adaptor).
- 6) If all above steps are done correctly, the DISA LED should flash. You are now ready to test and use your SPX-208 Mini PBX system.

## B. EXTERNAL MUSIC CONNECTION INSTALLATION PROCEDURES

The SPX208 is set to play internal music to callers on hold. If you want to connect external music, you have to move the jumper connector (black) from the JP4 pins to the JP5 pins per the following diagram. To do so, you must turn the power OFF and remove the PVC plate (plate has music note symbol j j and battery picture on it) to access the the JP4 to JP5 pins located inside the "EXT.2" port. Using tweezers, pull up and remove the jumper located on JP4 pins and insert in on the JP5 pins located directly above the JP4 pins. Please note that when the jumper is on the JP5 pins, the internal music will no longer play. The external music device should be connected to CNT.2 indicated by the musical note j j symbol.

JP5 (External Music)



JP4 (Internal Music)



To External Music Device

(CNT.2)

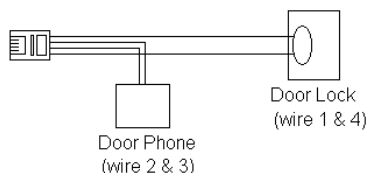
If you install an external Music On Hold device, you should test and adjust the MOH audio level on the external audio device to half the level of a normal voice communication to accommodate the dynamic range of the external audio device.

## C. EXTERNAL POWER SUPPLY

You can connect a 24V battery pack to the SPX208 to operate the entire phone system in case of a power failure. Please note that this battery pack will only last a few hours before it will need to be recharged. We recommend that you contact a telecommunications professional to install this battery back-up system.

## D. SAS-110 OPTIONAL DOOR STATION INSTALLATION PROCEDURES

Open the SAS-110 Door Station and wire the 6 metre telephone cable supplied (wires 2 & 3) through the hole in the back cover to the door station board (Screw Terminals L1 and L2). If using an electronic door lock, connect wires 1 & 4 to the electronic door lock as shown in the diagram below. (NOTE: The maximum distance between the door station and SPX-208 should not be greater than 75 meters.) Then plug in the RJ11 connector into the Door Station outlet on the bottom of the SPX208. Adjust the volume control on the Door Station. Secure the back cover to the Door Station using the screw supplied. Then mount the Door Station (and Electronic Door Lock).



**Note: The door lock contacts are rated at 24 volts 1 amp switching.**

## 8. TROUBLE SHOOTING GUIDE

If your SOLOMON SPX208 Mini-PBX System is not working as it should be, this Trouble Shooting Guide should help you to eliminate the problem. If the SPX208 still does not operate properly after you follow the following suggested procedures, contact the telecommunications stockists you purchased it from for assistance or call Atlas Gentech on our Consumer Helpline (Toll Call) at 0900-500-25.

PROBLEM SYMPTOMS	LIKELY CAUSE	SUGGESTED SOLUTION
No Power	Loose Power Adaptor or Power Failure or Power is not turned ON.	Check both internal and power outlet connections of power adaptor.
Phones Won't Ring	Phones programmed to Do Not Disturb or 3-wire phones are being used on 2 wire wall jacks.	Disable Do Not Disturb or replace SLAVE Jacks with MASTER Jacks or replace 3-wire products with 2-wire products.
Phantom Ringing	DISA 40 second delay in line release	Pick-up phone and hang-up to clear line
Telephone Line is Busy but no one is using it.	DISA 40 second delay in line release	Wait 40 seconds for SPX208 to clear the line.
Fax Won't Receive	Fax Tone Detection Not Programmed. Wrong Line Programmed for Fax. Fax not on extension 8.	Check Fax Extension Programming Fax should be on Extension 8.
DISA Message Not Working	Message Not Recorded or Recording lost due to power failure or DISA turned off.	Check DISA Message and make sure DISA is programmed ON.
Door Phone Not Working	Door Station not programmed to ring at any extension.	Check Door Station programming.
Cannot call another Extension	Incorrect Dialling Procedure	Dial 5+Extension Number (ie 51 for Extension 1)

## 9. NEW ZEALAND WARRANTY

Your SOLOMON SPX208 Mini-PBX System comes with a 1 year Limited Warranty from date of purchase. Please refer to the enclosed warranty card for Terms & Conditions. If you have any questions, about your Warranty, please contact Atlas Gentech's Service Department by telephone at (09) 276-1167 or by facsimile at (09) 276-1867.

## 10. TECHNICAL SPECIFICATIONS

<b>Capacity</b> * 2 CO Telephone Lines * 8 Extensions * 1 Door Port with or without Electronic Door Lock	<b>Power Supply</b> * Input - AC 220-240V 50/60 Hz * Output - DC 28V * Power Consumption - 8.0W * Power Failure Back-up - 4 x 1.5V AA Batteries	<b>Dimensions &amp; Weight</b> 250mm (Height) x 160mm (Width) x 45mm (Depth) 1 Kg <b>Operating Temperature</b> * 0-45 C
<b>Auto Attendant (DISA) Message</b> * Maximum 22 Seconds	<b>Optional Extras</b> * SAS-110 Door Station * Caller ID Package (Requires fitting of Caller ID board to SPX208 Cabinet.) * External Music Device * External Power Supply	<b>Front Panel LED Indicators</b> Telephone (C/O) Line 1, Telephone (C/O) Line 2 Door Station, DISA, Power On, Battery Low

# Solomon SPX208 quick programming guide

“-” indicates you hear two beeps  
 “XXXX” indicates system access code

		DEFAULT
<b>Changing system access code</b>	6 - 11 - "old code" - 12 - "new code"	9999
<b>Enable Do Not Disturb</b>	6 - 55 -	
<b>Disable Do Not Disturb</b>	6 - 56 -	
<b>Record DISA Message</b>	6 - 11 - XXXX - 31 start recording then hang up to finish	
<b>Check DISA Message</b>	6 - 32 - message plays	
<b>Enable Long Distance Calling</b>	6 - 11 - XXXX - 50 - "extn No's to enable (1-8)" # -	All
<b>Long Distance Call Restriction LEVEL 1 (International)</b>	6 - 11 - XXXX - 51 - "extn No's to prohibit (1-8)" # -	off
<b>Long Distance Call Restriction LEVEL 2 (National &amp; International)</b>	6 - 11 - XXXX - 2 - "extn No's to prohibit (1-8)" # -	off
<b>Enable DISA (turn on)</b>	6 - 11 - XXXX - 53 -	DISA on
<b>Disable DISA (turn off)</b>	6 - 11 - XXXX - 54 -	
<b>Enable Fax Line (FAX detect ON)</b>	6 - 11 - XXXX - 57 - "CO line No (1 or 2)" # -	Fax Detect off
<b>Disable Fax Line (FAX detect OFF)</b>	6 - 11 - XXXX - 58 -	
<b>Set FaxAbility Extension</b>	6 - 11 - XXXX - "701-708 (which ever extn 1-8 you what FaxAbility call transfered to) -"	Extn 7
<b>Reset Settings to Default</b>	6 - 11 - XXXX - 59 -	
<b>Enable Extension Access to CO1</b>	6 - 11 - XXXX - 711 - "extn No's to enable (1-8) 0 to disable all" # -	All
<b>Enable Extension Access to CO2</b>	6 - 11 - XXXX - 721 - "extn No's to enable (1-8) 0 to disable all" # -	All
<b>Enable Extension Ringing for CO1</b>	6 - 11 - XXXX - 811 - "extn No's to enable (1-8)" # -	All
<b>Enable Extension Ringing for CO2</b>	6 - 11 - XXXX - 821 - "extn No's to enable (1-8)" # -	All
<b>Enable Extension Ringing for Door Phone</b>	6 - 11 - XXXX - 831 - "extn No's to enable (1-8)" # -	All

A few hints for installation of the Solomon SPX 208

1. FaxAbility connect positive of C/O to 'B' leg and negative to 'A' leg on both C/O lines.
2. Fax machine use C/O line 1 as your Fax line(Tone detect)
3. The long pause during fax detect mode can not be changed.
4. There are no adjustable timers.