

NATIONAL COMMUNICATIONS

**LINE SELECTOR
TWO LINES TO ONE DEVICE**

USER GUIDE

Contains important information which is required for full and correct operation

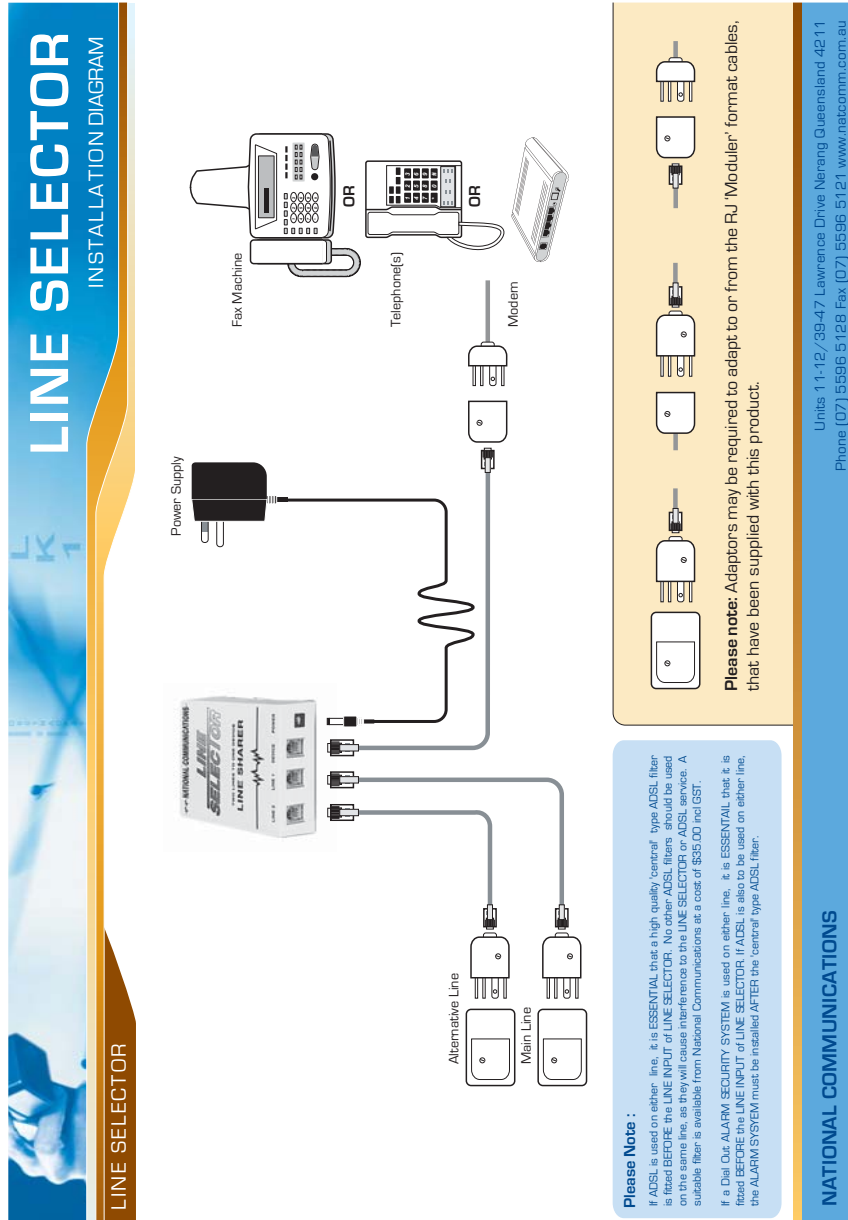


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INSTALLATION DIAGRAM



PACKING LIST

LINE SELECTOR is supplied as a complete kit, ready for quick and easy installation by the user.

Description	Qty
LINE SELECTOR Line Sharing Unit	1
Power supply	1
Telephone line cord fitted with male Telstra plug	1
Modular - Modular line cord	1

DESCRIPTION

LINE SELECTOR has been designed to allow your attached telephone device to be independently connected to 1 of 2 completely separate telephone lines.

The telephone lines used can be any combination of :

- Normal Telecom Lines as used by Telstra (POTS or PSTN)
- PABX Telephone Lines (also known as Key System or Commander)
- Cable Telephone Lines (such as OPTUS, TransACT etc)
- ISDN Telephone Lines (requires ISDN to PSTN adaptor)
- VOIP Lines (supplied by a VOIP interface)

POTS = Plain Old Telephone System
PSTN = Public Switched Telephone Network

DESCRIPTION continued

LINE SELECTOR has the following user programmable facilities :

CALL ADVICE FACILITY - This facility if enabled, will automatically inject an 'Advice Tone' into an existing call, to alert you that there is an incoming call on the other line. It will also allow you to place the existing call 'On Hold', while you answer the new call.

LINE SELECT FACILITY - You can program Line Selector to automatically select L2 when L1 is busy (or not connected), or you can set it to only select L2 when commanded by a user programmable DTMF code.

LINE BUSY FACILITY - You can set Line Selector to automatically 'Busy Out' the other line while in use.

LINE 1 - IS PROGRAMMED AS THE DEFAULT LINE

* In the event of loss of power, Line Selector will default to this line.

* You MUST connect your MAIN TELEPHONE LINE (POTS or PSTN) to the LINE 1 port of LINE SELECTOR, for several important reasons :

- 1) It will allow direct access to your normal telephone line to make emergency calls (000 in Australia, 911 in USA, etc).

Note - you may still have to use a prefix when connecting Line Selector to a PABX extension.

- 2) In the event of power loss, you will have direct access to your TELEPHONE LINE, to make or receive telephone calls.

- 3) If you are using a VOIP line, you should connect this to Line 2, to ensure that you can make emergency and other calls during loss of power.

LINE 2 - IS PROGRAMMED AS THE ALTERNATIVE LINE

In the event of loss of power, you will not be able to make or receive calls on Line 2.

OPERATION INCOMING CALLS

LINE SELECTOR will route an incoming call on either line, to the attached device(s).

Incoming calls on Line 1 will be connected direct to the attached DEVICE(S) without delay.

Incoming calls on Line 2 will be connected direct to the attached DEVICE(S) after a one ring delay.

In the event of LOSS OF POWER, you will ONLY receive calls on Line 1.

For maximum flexibility, you are given the option to 'Busy' Lines 1 or 2 independently, when the other line is in use.

(see page 10 - dip switch settings).

Where the attached 'device' consists of one or more TELEPHONE(S), you can elect to enable the 'Call Advice Facility' which will allow you to answer an incoming call on the other line, during a telephone call, by setting Dip Switch 4 to the ON position.

The recommended dip switch settings for this application are;

SW1 = OFF, SW2 = OFF, SW3 = OFF or ON, SW4 = ON.

Where the attached device is an AUTOMATIC RECEIVING DEVICE such as a Fax Machine or Modem, it is recommended that you set Dip Switches 1 & 2 to the ON position. This setting will cause the other line to always be "busy" whenever the DEVICE is in operation.

The recommended dip switch settings for this application are;

SW1 = ON, SW2 = ON, SW3 = ON or OFF, SW4 = OFF.

CALL ADVICE FACILITY

This facility will automatically inject an 'Advice Tone' into an existing call, to alert you that there is an incoming call on the other line. It is designed for use when one or more telephones are connected to the DEVICE port of the LINE SELECTOR. By pressing the * button on your telephone device, it will allow you to place the existing call 'On Hold', while you answer the new call. You can then place the new call 'On Hold' and return to the original call by again pressing *. This procedure can be repeated as many times as necessary. Note - The * command for this function is fixed and cannot be changed. Both calls will be terminated whenever you hang up your telephone.

CALLER ID (CLI) USERS

If you use Caller ID (CLI) on one or both of the attached telephone lines and your attached 'device' provides a display of Caller ID, then you should note the following considerations :

Caller ID can only be 'read' and displayed for incoming calls on Line 1. CLI cannot be detected on Line 2 because Line 2 can only be connected to the 'device' after the detection of 1 full ring. This causes a problem as CLI is transmitted before the first full ring.

2. The vast majority of CLI Readers will operate with Line Selector. However, a small number of CLI Readers with an 'intolerant' design may not detect Caller ID on Line 1 due to a small voltage drop that takes place.

ADSL USERS

If you use ADSL on one or both of the attached telephone lines, then you should note the following considerations :

Where ADSL is used on either telephone line connected to Line Selector, it is RECOMMENDED to fit a SINGLE High Quality ADSL filter immediately ahead of Line Selector. Failure to do so, or use of additional ADSL filters connected direct to your telephones, can cause problems in the operation of Line Selector and your ADSL service. A High Quality ADSL FILTER suitable for filtering your complete telephone line is available as an optional extra at a cost of \$35.00 (see On Line Order facility), or can be purchased from any TELSTRA shop for the same price (model C10245E). Basic ADSL FILTERS, designed for separate connection to each telephone on your line (as usually supplied with ADSL modems) are usually not suitable.

OPERATION - OUTGOING CALLS

By default, LINE SELECTOR will always select LINE 1 to make your outgoing calls.

This should be your normal TELECOM LINE (Telstra, Optus, PABX etc) to allow outgoing emergency calls (000 in Australia, 911 in USA etc) and to allow for incoming and outgoing calls, even when power is lost.

For outgoing calls, LINE SELECTOR can be set to select LINE 2 by the following methods :

MANUAL DTMF SELECTED Line Change
AUTOMATIC Line Change when Line 1 is Busy

1) MANUAL LINE CHANGE (set Dip Switch 3 = OFF)

To make an outgoing call on LINE 2, you should first dial * on your telephone (or other Telephone Device) and wait for your Line 2 dial tone. You can then enter your destination number.

The Line Change Code can be changed from * to any other digit.

(This will be necessary if you use the * key for special functions such as for enabling or disabling call waiting)

See page 11.

Note - A programmable time delay for LINE 2 selection can be set by the user if required. This delay may be necessary in some applications.

The Delay Time can be changed to a value of 1-9 seconds.

See page 11.

OUTGOING CALLS cont.

If you are using an automatic dialing method such as a preprogrammed speed dial number or you are using a Fax machine, you must enter a PAUSE COMMAND after programming the first digit OR you must manually press *, before commencing your automatic dialing.

2) AUTOMATIC LINE CHANGE

If Dip Switch 3 is set to ON, Line Selector will automatically select Line 2 to make an outgoing call, whenever Line 1 is busy (or not connected).

3) SETTING LINE 2 AS THE DEFAULT OUTGOING LINE.

You can use the following programming procedure to change **LINE SELECTOR** so that it always uses LINE 2 as the default outgoing call line. Please refer to Page 4 of this user guide for details of the significance in doing so.

1) Make an outgoing telephone call on **LINE 1** to establish a call.

You need to have silence during programming,
so a call to your Cellular Phone is recommended.

2) Press ### to access the programming mode. You will hear 3 short beeps to confirm that you are in program mode.

3) Press #9. You will hear 1 short beep to confirm this entry. If you hear 2 beeps, you have made an incorrect entry and you must start again.

4) Hang Up.

NOTE - If power is lost, LINE SELECTOR will RESET to the original FACTORY SETTING. You will need to re-program LINE SELECTOR if you wish to again set the default outgoing line to use Line 2.

INSTALLATION PROCEDURE

1. REMOVE the telephone line cord fitted to your DEVICE at the point that it connects to your DEVICE, but leave the other end connected to your Telephone Line socket.

2. CONNECT this same cable to the LINE 1 port of LINE SELECTOR.

Note - You MUST connect your MAIN TELEPHONE LINE (POTS or PSTN) to the LINE 1 port of LINE SELECTOR (see page 4).

3. Using one of the supplied Modular RJ - Modular RJ line cords, CONNECT your DEVICE, to the PHONE port of LINE SELECTOR.

If your DEVICE is required to ANSWER incoming calls automatically, please ensure that it is set to the AUTO-ANSWER mode, and is set to ANSWER in the FEWEST POSSIBLE RINGS.

4. Using the remaining supplied Modular RJ - Modular RJ line cord, CONNECT your ALTERNATIVE LINE to the LINE 2 port of LINE SELECTOR.

In the event of loss of power, you will not be able to make or receive calls on Line 2.

If you are using a VOIP line, you should connect this to Line 2, to ensure that you can make emergency and other calls during loss of power.

5. SET YOUR DIP SWITCHES (located on the underside of your unit to your particular requirements (see page 10).

If you are using a VOIP line, you should connect this to Line 2, to ensure that you can make emergency and other calls during loss of power.

6. Connect the supplied POWER ADAPTOR, and then switch the POWER ON.

7. If you have selected MANUAL LINE CHANGE (Switch 3 = OFF) and you cannot use * as your Line Change code, you should change this code to a suitable single digit number, that will never be used as the first digit in an outgoing telephone number.

DIP SWITCH SETTINGS

Four DIP switches are located on the underside of LINE SELECTOR. The position of each switch is important and will individually vary the operation of LINE SELECTOR. Please ensure that you understand the significance of the facility controlled by each switch and have it set to the correct position for your requirements.

- Switch 1** If set to **ON**, will "busy" Line 1 when Line 2 is in use.
If set to **OFF**, will not "busy" Line 1 when Line 2 is in use.
- Switch 2** If set to **ON**, will "busy" Line 2 when Line 1 is in use.
If set to **OFF**, will not "busy" Line 2 when Line 1 is in use.
- Switch 3** If set to **ON**, outgoing calls - use Line 2 if Line 1 is busy
If set to **OFF**, use Line 2 only when * is detected
- Switch 4** If set to **ON**, will enable the CALL ADVICE FACILITY
If set to **OFF**, will disable the CALL ADVICE FACILITY

The factory default settings are;

Switch 1 = OFF

Switch 2 = OFF

Switch 3 = OFF

Switch 4 = OFF

Note - When Switch 3 is set to ON, L2 will be selected whenever Line 1 is BUSY or if it is NOT CONNECTED.

Where Line Selector is used with one or more telephones, or an automatic answering device, the default settings may need to be changed to reflect individual requirements.

Note - Dip Switch 1 and Dip Switch 2 must be set to OFF when the Call Advice Facility is enabled (SW4 = ON).

PROGRAMMING

CHANGE LINE 2 SELECTION CODE

When SW3=OFF, LINE SELECTOR will only allow access to L2 for outgoing calls by pressing *. You can change * to any other single digit, by using the following procedure (Note: you must use Line 1)

- 1) Make an outgoing telephone call on **LINE 1** to establish a call.

You need to have silence during programming,
so a call to your Cellular Phone is recommended.

- 2) Press ### to access the programming mode. You will hear 3 short beeps to confirm that you are in program mode.

- 3) Press #1 followed by the new single digit Line Change code (0-9, or #). You will hear 1 short beep to confirm this entry. If you hear 2 beeps, you have made an incorrect entry and must re-enter #1.

- 4) Hang Up.

CHANGE LINE 2 WAIT TIME

When * is pressed to select L2 to make an outgoing call, there is a 3 second delay before Line Selector connects to Line 2. This delay is set to allow for the possibility of calls from Line 1 having a * command. This delay can be changed from 0-9 seconds, by using the following procedure (Note: you must use Line 1):

- 1) Make an outgoing telephone call on **LINE 1** to establish a call.

You need to have silence during programming,
so a call to your Cellular Phone is recommended.

- 2) Press ### to access the programming mode. You will hear 3 short beeps to confirm that you are in program mode.

- 3) Press #2 followed by the new wait time (0-9). You will hear 1 short beep to confirm this entry. If you hear 2 beeps, you have made an incorrect entry and must re-enter #2.

- 4) Hang Up.

SPECIFICATIONS

Dimensions	:	95 x 89 x 32 mm
Weight	:	200g
Power Supply	:	240VAC to 12VAC/300mA
Power Consumption	:	Idle - 0.5 Watts During Call - 0.75 Watts

Ringer Equivalence	:	0.3
Telephone Connectors	:	RJ 11 6 pin (2 centre)
Power Connector	:	2.5mm barrel connector
ACA (Aust.) PTC(NZ) compliant :	:	Supplier Number N 782
EMC compliant Aust. & NZ.	:	

WARRANTY

Your LINE SELECTOR is guaranteed against defects from workmanship for a period of two years (24 months) from date of purchase. In the event of failure, you should return the product, along with proof of purchase date, and a written statement about the nature of the problem for replacement.

The Warranty extends only to the original purchaser and is not transferable.

This Warranty shall not apply to any unit which has been subject to alteration, modification, abuse, negligence, accident, external voltage/lightning surge or used in any manner contrary to these instructions. The user is responsible for freight costs to the repair point. Warrantor will be responsible for freighting the replacement unit back to the user. This Warranty gives you specific legal rights and you may also have other rights which may vary from state to state. The obligation is solely to repair or replace the product. The warrantor is not liable for any incidental or consequential damages due to such defects. Damage caused to the line sharer, or attached equipment, by lightning strikes or over voltage surge is not covered under the terms and conditions of your warranty.

**CASE SEALED AT FACTORY
OPENING THE CASE VOIDS THE WARRANTY**