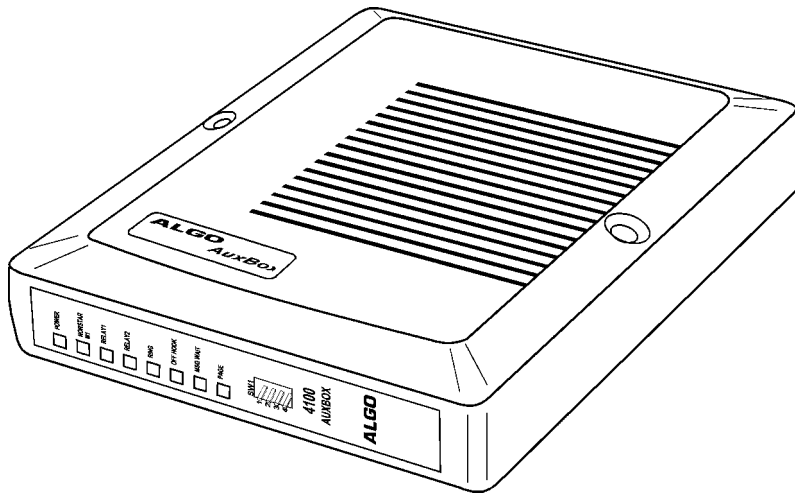




4100 *AuxBox* User Guide



Important:



CONCERNING THE LEGALITY OF RECORDING CONVERSATIONS

The 4100 AuxBox does not provide record beep tones and its use to record conversations may violate local laws. It is the responsibility of the user to ensure compliance with local laws concerning the recording of conversations.



CONCERNING SAFETY & EXPOSED WIRING

The 4100 AuxBox outputs are not rated for connection to exposed wiring that may potentially receive hazardous voltages. Therefore, any wiring connected to the 4100 AuxBox may not run outside of a building.

Table of Contents

☐	About the 4100 AuxBox	3
☐	Panel LED Functions	4
☐	Connections & Mounting	5
☐	μ law and A law Speech Encoding	6
☐	Rear Panel Functions	7
☐	Option Switches	8
☐	Application 1 Norstar Ringer	9
☐	Application 2 In Use Indicator	10
☐	Application 3 Desk Top Recording	11
☐	Application 4 Message Waiting Indicator	12
☐	Application 5 Set Paging	13
☐	Specifications	14
☐	Warranty and Repair	14
☐	Ordering Information	15

About the 4100 AuxBox

The 4100 AuxBox monitors the digital messages between a Norstar/M1 digital telephone and the Norstar/M1 telephone system by connecting to the telephone cable pair. The Auxbox may be installed at any point between the system and telephone, in the equipment room, or at the desk.

The AuxBox will provide dry contact closure for any two of the following events:

- Ringing
- Off-Hook / In-use (handset, headset, or hands-free)
- Message Waiting
- Hands-free Voice Call / Page

The AuxBox also converts the digital speech to analog and provides an output for recording conversations or amplifying speech to the speaker during paging or hands-free voice call.

The AuxBox will not impair the operation or loop limit of the digital telephone.

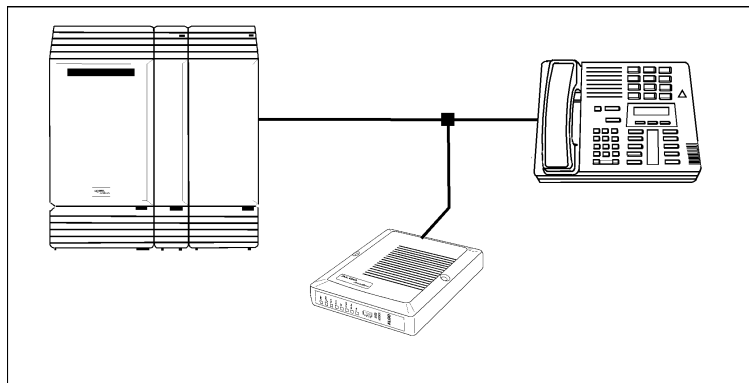


Figure 1.0

Panel LED Functions:

POWER	Power on
NORSTAR / M1	Off – No digital signal detected On & winking once – Meridian 1 On & winking twice – Norstar
RELAY 1	Relay 1 activated
RELAY 2	Relay 2 activated
RING	Telephone ringing
OFF HOOK	Telephone off-hook (handset/ headset/hands-free)
MESSAGE WAITING	Message waiting
PAGE	Voice call or intercom page in progress

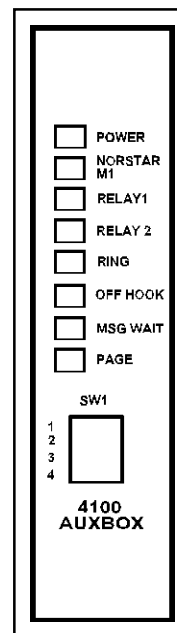


Fig 1.1 Front Panel

Connections & Mounting

The AuxBox is intended to be wall mounted although it can sit on a desktop. Secure the AuxBox to the wall using the supplied Screws through the mounting holes in the cover.

Two RJ12 telephone jacks are provided on the rear of the AuxBox, labeled **TCM 1** and **TCM 2**. Connection to the telephone cable pair is possible in two ways:

- 1 Using both modular jacks, connect the AuxBox in series with the telephone. For example, connect either of the two jacks to the wall jack using the supplied modular cord and then plug the telephone linecord into the remaining jack.
- 2 Using the supplied modular cord, connect from either modular jack to a duplex wall jack or splitter that provides connection to the digital cable pair tip and ring.

Once connected to the digital wire pair and powered, the AuxBox Norstar/M1 LED will begin to wink (LED is on and flashes off) once for the Meridian 1 and twice for Norstar.

For voice recording**, the 3.5mm (1/8") jack on the rear of the AuxBox provides analog audio output. The output level is nominal -12dBm if switch position #1 is UP suitable for connection to commercial voice recording equipment. The output level is nominal -52dBu if the switch position #1 is DOWN for connection to the microphone input of a tape recorder. (refer to Figure 2.0 Option Switch Settings)

** Refer to important statement CONCERNING THE LEGALITY OF RECORDING CONVERSATIONS (ON PAGE 1)

Connections & Mounting cont.

If required, the recording equipment can be controlled by one of the output relays programmed to provide OFF-HOOK (In-Use) indication as described in Figure 2.0 Option Switch Settings.

Two dry contact closures are available on the rear fo the AuxBox through 2.5mm (3/16") micro jacks labeled **RELAY 1** and **RELAY 2**.

The functions of these jacks are determined by the switch settings on the front of the AuxBox. (refer to Figure 2.0 Option Switch Settings)

One micro jack cord is supplied with the AuxBox. This cord may be used to directly connect into the "Remote" record activation of a tape recorder, or cut in half and used to connect both relays to peripheral equipment wiring.

μ law and A law Speech Encoding

The Auxbox is compatible with both μ law and A law speech encoding according to a jumper selection inside the AuxBox. This jumper will automatically be set according to the market destination and identified by a 'u' or 'A' at the end of the Manufacturing code eg. (yywwx)where x is the identier.

If for any reason the AuxBox must be switched between μ law or A law then the unit must be disassembled and the jumper J9 relocated. Contact Algo for more information if required.

Rear Panel Functions:

POWER	Jack for Algo 3242 Power Supply (<i>supplied</i>)
RELAY 1	2.5mm (3/16") jack relay contact
RELAY 2	2.5mm (3/16") jack relay contact
AUDIO	3.5mm (1/8") output jack for analog audio
TCM1 (LINE IN)	RJ12 Telephone jacks to connect unit to wall jack(Norstar / M1 telephone system
TCM 2 (LINE OUT)	RJ12 Telephone jacks to connect unit to Norstar / M1 telephone

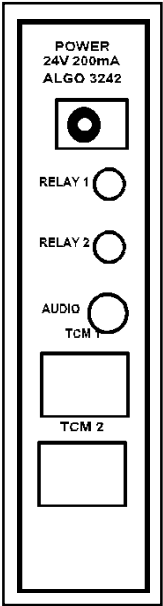


Fig 1.2 Rear Panel

Option Switch Setting

Four option switches are accessible through the front faceplate. By default, the AuxBox is shipped with Relay 1 activated by ringing and Relay 2 activated by off-hook. The audio output (Switch Position 1) is selected for microphone level suitable for connection to a desktop recorder**.

These options can be changed easily as shown in Figure 2.0:










Switch Settings	Audio Output Level	
UP 	-12dBm Output 600 ohm	
DN 	-52dBu Output 1kohm (Default)	
Switch Settings	Relay1 Trigger by	Relay2 Trigger by
1 	Ring	Off-Hook (Default)
2 	Ring	Page
3 	Ring	Msg Wait
4 	Off-Hook	Page
5 	Off-Hook	Msg Wait
6 	Page	Msg Wait
7 	Off-Hook	Off-Hook

Figure 2.0 Option Switch Settings

** Refer to important statement CONCERNING THE LEGALITY OF RECORDING CONVERSATIONS (ON PAGE 1)

Application 1 Norstar Ringer

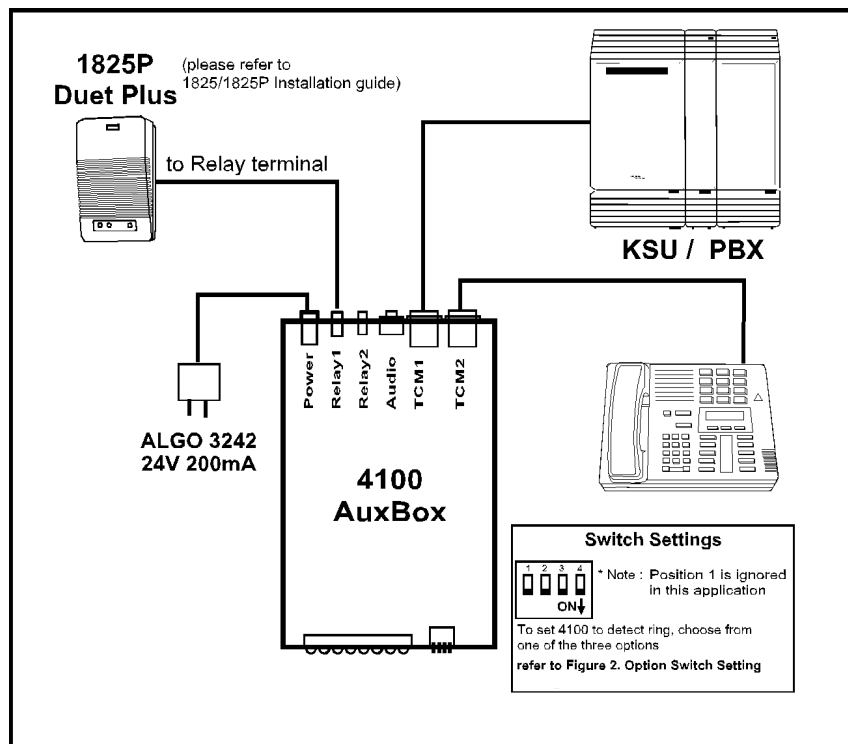


Figure 3.0

Application 2 In Use Indicator

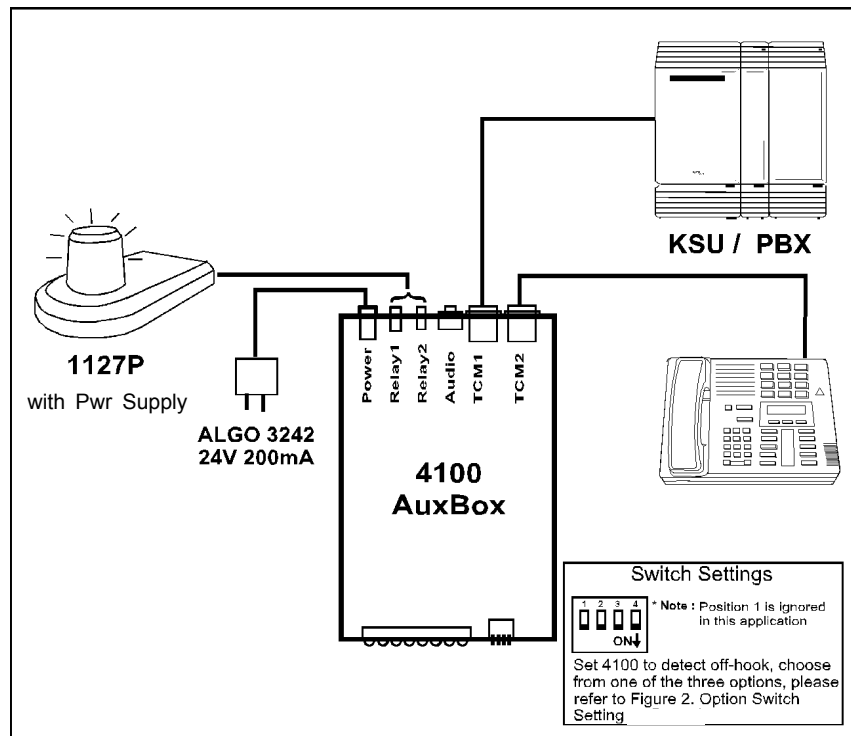


Figure 4.0

Application 3 Desk Top Recording

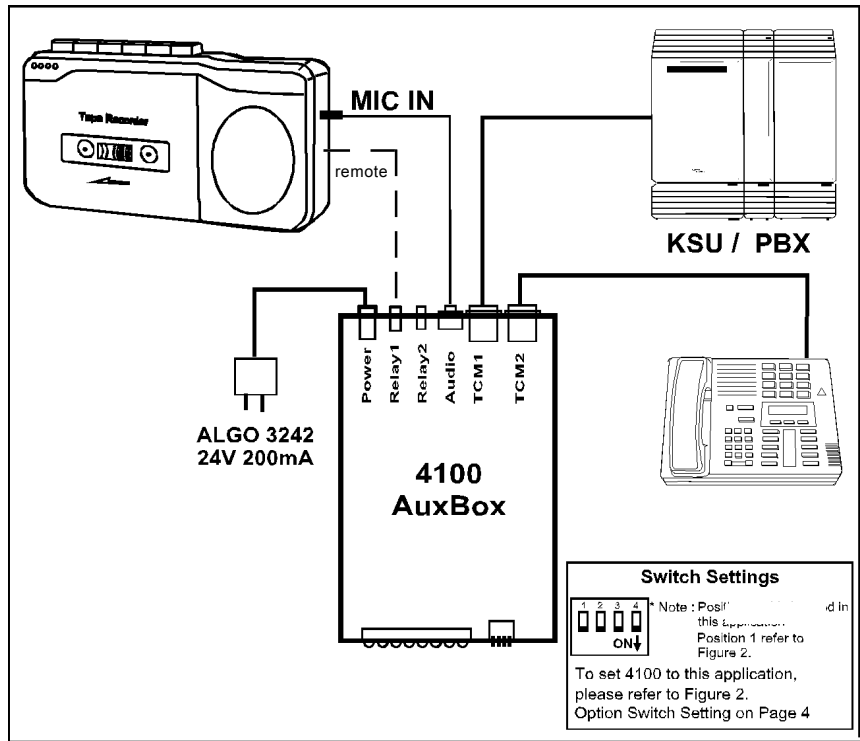


Figure 5.0

Application 4 Message Waiting Indicator

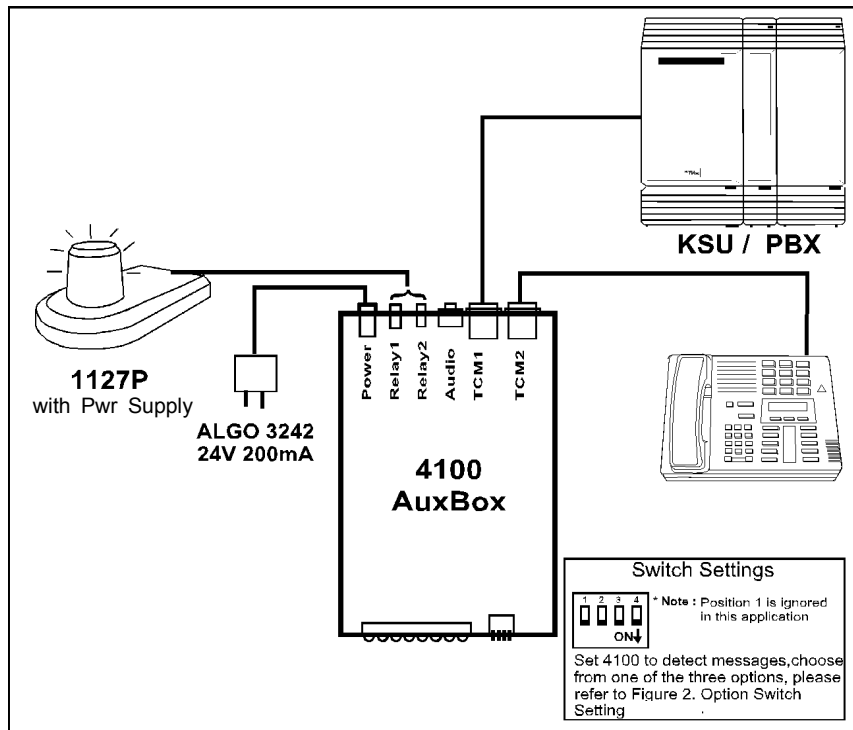


Figure 6.0

Application 5 Set Paging

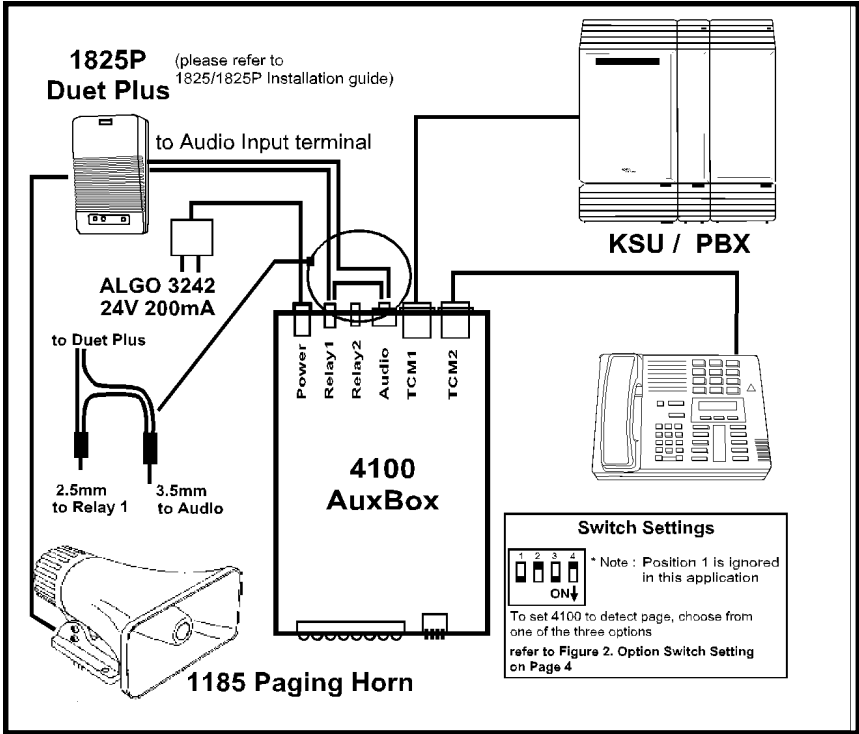


Figure 7.0

Specifications

Relay outputs	Normally open, 1A 30V
Audio output	-12 dBm 600 ohm nominal linelevel -50 dBu 1k ohm nominal mic level
Loop limit	2600 feet Norstar 4000 feet Meridian 1
Bridge wire limit	3m (10 feet)
Power supply (included)	22 – 33Vdc 150 mA Input jack polarity insensitive

Warranty and Repair

4100 AuxBox is warranted to be free of defects in material and workmanship for a period of 18 months from the date of manufacture. A label on the back of the 4100 AuxBox identifies the manufacture code in a year and week format. ie 9903 for the third week of 1999.

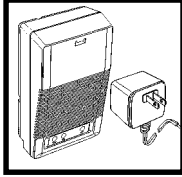
Prior to returning, please contact Algo customer support at **Toll-free (877)884-2546** in North America or **support@algosolutions.com** and please request a Return Authorization Number and instructions. All product returned for repair should be shipped freight prepaid. Product will be returned freight collect for out-of-warranty repair and freight prepaid for warranty repairs in Canada or the USA.

In Canada, ship product for repair to:

**Algo Communication Products Ltd
Repair Center
4500 Beedie Street
Burnaby, B.C.
Canada V5J 5L2
Toll-Free Support (877) 884- 2546**

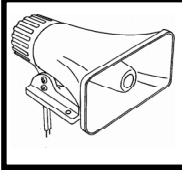
Outside of Canada, contact Algo for the name of the nearest repair center.

Ordering Accessories



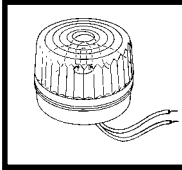
1825P Duet Plus e/w Power Supply

Duet Plus packaged with 1223 power supply.



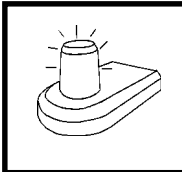
1185 Horn Speaker

8 Ohm 20 Watt horn speaker Water-proof white plastic.



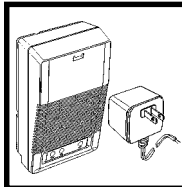
1126P Strobe Light e/w Power Supply

Provides a visual flash indication when connected to the Relay1 or Relay2 of Auxbox.
Equipped with Power supply



1127P Desktop Indicator e/w Power Supply

Work Station visual indicator with 4 different modes packaged with 3242 power supply.



1826P Talking Duet Plus e/w Power Supply

Talking Duet Plus packaged with 1223 power supply.

Customer Support:
Toll Free (877) 884-2546
or support@algosolutions.com

Nortel Networks, Nortel, Meridian 1, Northern Telecom and the Globemark logo are trademarks of Nortel Networks Corporation.
Duet Plus, AuxBox logo and Algo logo are trademarks of Algo Communication Products Ltd.