

**DESIGN GUIDE
FOR THE
“NO PHONE BILL INTERFACE” SYSTEM**

Sentexsystems

INTRODUCTION

The purpose of this guide is to assist you in meeting any specification requirements you may encounter when installing a “No Phone Bill Interface” system (hereafter referred to as an NPBI system). The information enclosed in this manual is to be used for reference purposes only and is not intended to be an installation or programming manual.

IMPORTANT NOTE: The information contained in this guide relates only to the No Phone Bill Interface. This guide does not contain any information about the entry panel that is used in conjunction with the No Phone Bill Interface. For information regarding the entry panel, please refer to the Design Guide for the style of entry panel you have chosen.

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IMPORTANT: The Sentex Systems, Inc. warranty on this system is conditioned upon Sentex Systems, Inc. being paid in full for this equipment. The warranty will not be honored until such payment is received by Sentex Systems, Inc.

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Chatsworth, CA

Visit us at www.sentexsystems.com

CABINET DIMENSIONS

<u>TYPE OF CABINET</u>		<u>HEIGHT</u>	<u>WIDTH</u>	<u>DEPTH</u>
Controller Board Housing		23.0"	14.0"	2.75"
LIB Housing	Large	13.25"	17.25"	6.25"
	Small	13.25"	6.75"	6.25"

WIRE CHART

PLEASE NOTE: If the wires you are pulling for this installation are going to be run through an indoor, weather-proof location, it is acceptable to use unshielded cable. If the wires are going to be run through an outdoor location, we recommend that you use shielded cable. Recommendations for both types of cable are provided where needed.

SINGLE ENTRANCE

<u>Cabling to the Controller Board</u>	<u>Type of Wire</u>	<u>Recommendations</u>																		
From the Connector Board in the first LIB Housing	4 twisted pair cable	Shielded - Belden # 9504 Unshielded - Belden # 8757																		
From the power transformer at the 120 VAC outlet	2 conductor shielded cable	<u>Shielded Cable Only!</u> (see chart below)																		
<table border="1"> <thead> <tr> <th>DC POWER WIRE SIZE</th> <th>DISTANCE</th> <th>AC POWER WIRE SIZE</th> </tr> </thead> <tbody> <tr> <td>18 AWG</td> <td>30' and under</td> <td>18 AWG</td> </tr> <tr> <td>18 AWG</td> <td>30'-75'</td> <td>14 AWG</td> </tr> <tr> <td>14 AWG</td> <td>75'-150'</td> <td>12 AWG</td> </tr> <tr> <td>12 AWG</td> <td>150'-250'</td> <td>10 AWG</td> </tr> <tr> <td>10 AWG</td> <td>250'-500'</td> <td>-----</td> </tr> </tbody> </table>			DC POWER WIRE SIZE	DISTANCE	AC POWER WIRE SIZE	18 AWG	30' and under	18 AWG	18 AWG	30'-75'	14 AWG	14 AWG	75'-150'	12 AWG	12 AWG	150'-250'	10 AWG	10 AWG	250'-500'	-----
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12 AWG	150'-250'	10 AWG																		
10 AWG	250'-500'	-----																		
From the entry panel	2 conductor 22 awg cable	Shielded - Belden #9501 Unshielded - Belden #8740																		
Additional features	See requirements as specified on the product.																			

Cabling to the Line Interface Boards**Type of Wire****Recommendations**

From the power transformer at the 120 VAC outlet

2 conductor shielded cable

Shielded Cable Only!
(see chart below)

DC POWER WIRE SIZE	DISTANCE	AC POWER WIRE SIZE
18 AWG	30' and under	16 AWG
18 AWG	30'-75'	12 AWG
14 AWG	75'-150'	10 AWG
12 AWG	150'-250'	-----
10 AWG	250'-500'	-----

Between the Connector Boards in each LIB Housing

4 twisted pair cable

Shielded - Belden #9504
Unshielded - Belden #8757**MULTIPLE ENTRANCES****Cabling to the Controller Board****Type of Wire****Recommendations**

From the MUI Board in the first LIB Housing

4 twisted pair cable

Shielded - Belden #9504
Unshielded - Belden #8757

From the power transformer at the 120 VAC outlet

2 conductor shielded cable

Shielded Cable Only!
(see chart below)

DC POWER WIRE SIZE	DISTANCE	AC POWER WIRE SIZE
18 AWG	30' and under	18 AWG
18 AWG	30'-75'	14 AWG
14 AWG	75'-150'	12 AWG
12 AWG	150'-250'	10 AWG
10 AWG	250'-500'	-----

From each entry panel (up to four panels)

2 conductor 22 awg cable

Shielded - Belden #9501
Unshielded - Belden #8740

Additional Features

See requirements as specified on the product.

Cabling to the Line Interface Boards**Type of Wire****Recommendations**

From the power transformer at the 120 VAC outlet

2 conductor shielded cable

Shielded Cable Only!
(see chart below)

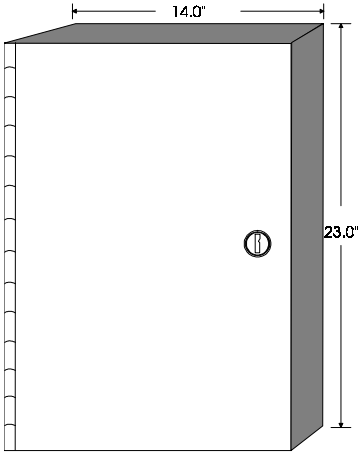
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12 AWG	150'-250'	-----
10 AWG	250'-500'	-----

Between the Connector Boards in each LIB Housing

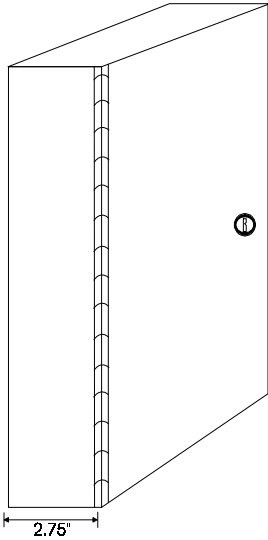
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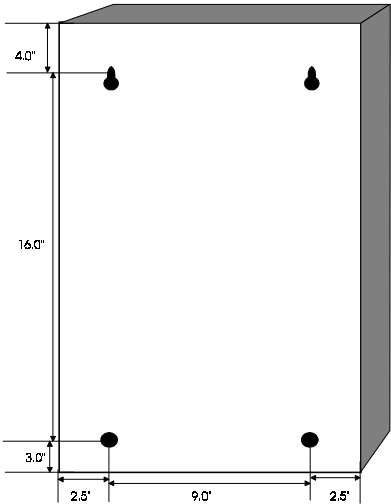
DIMENSIONAL DRAWING OF THE CONTROLLER BOARD CABINET



FRONT VIEW



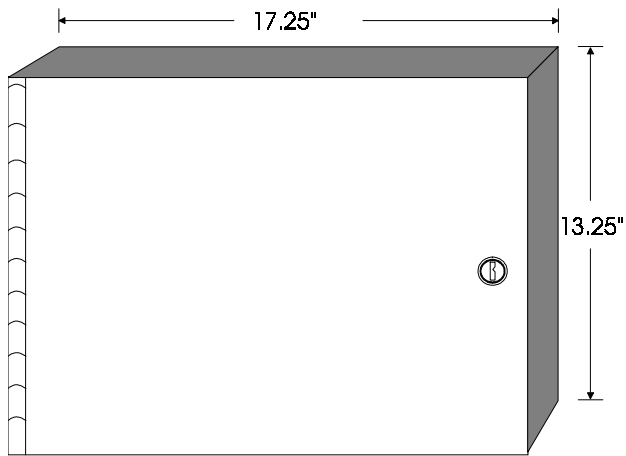
SIDE VIEW



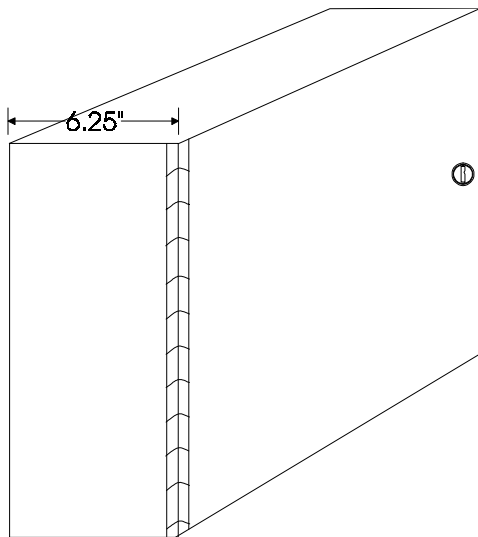
REAR VIEW

This line drawing is intended for dimensional reference purposes only and is not intended to be an actual drawing of the NPBI system itself.

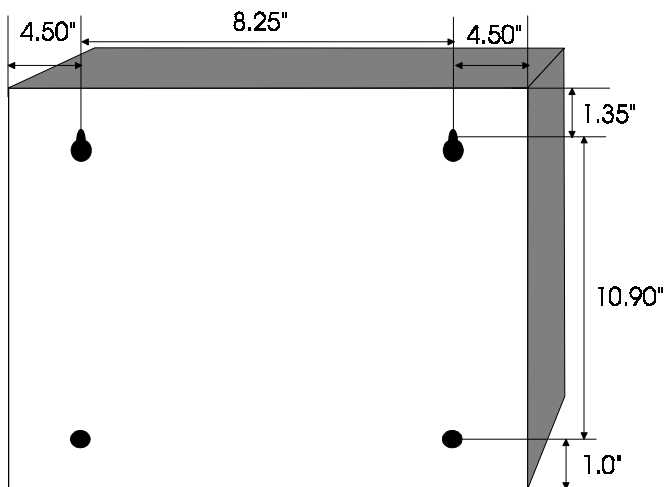
DIMENSIONAL DRAWING OF THE LARGE LIB CABINET



FRONT VIEW



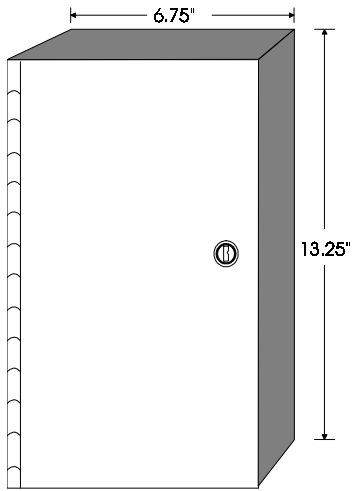
SIDE VIEW



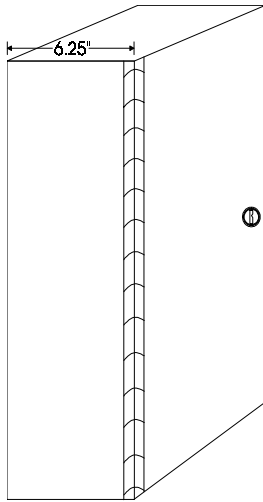
REAR VIEW

This line drawing is intended for dimensional reference purposes only and is not intended to be an actual drawing of the LIB cabinet itself.

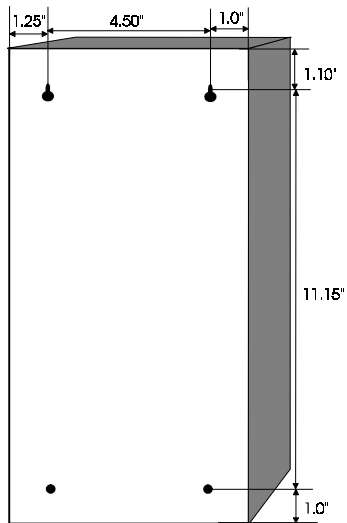
DIMENSIONAL DRAWING OF THE SMALL LIB CABINET



FRONT VIEW



SIDE VIEW

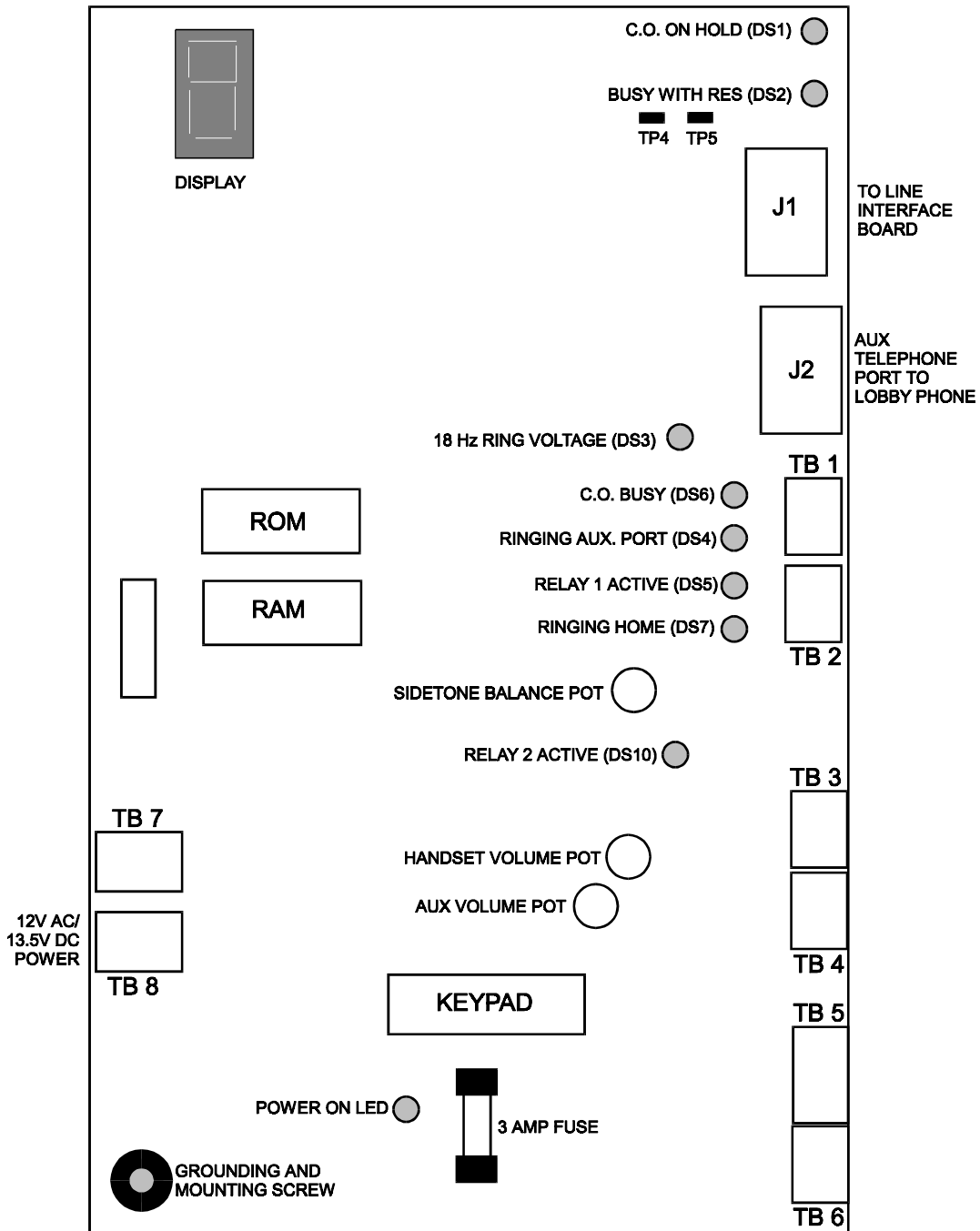


REAR VIEW

This line drawing is intended for dimensional reference purposes only and is not intended to be an actual drawing of the LIB cabinet itself.

ILLUSTRATION OF THE MAIN PROCESSOR BOARD

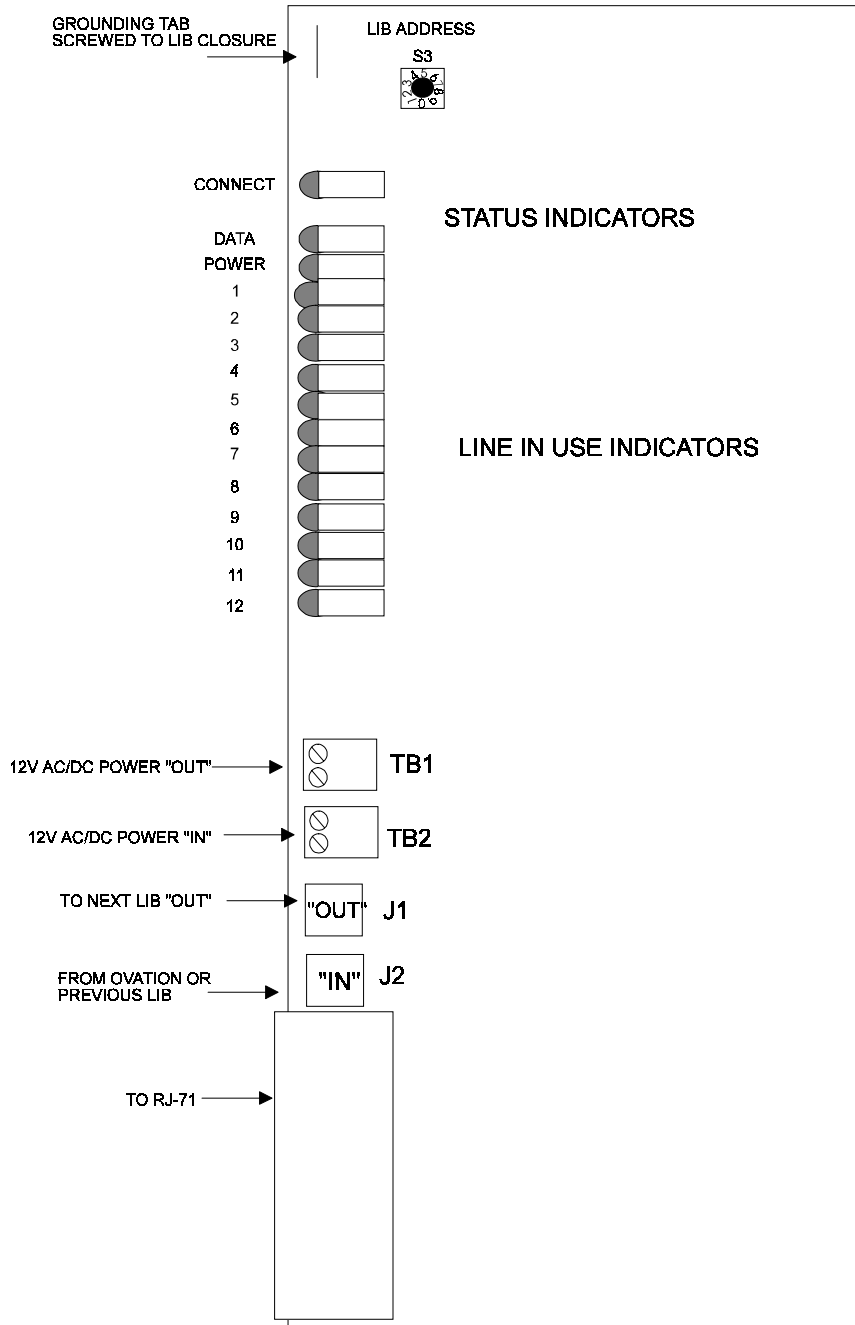
(Located in the Controller Housing)



(1111F1.CDR)

LINE INTERFACE BOARD (LIB) WITH A SINGLE DECADE SWITCH

(Located in LIB Housing)



LINE INTERFACE BOARD (LIB) WITH THREE DECADE SWITCHES

(Located in LIB Housing)

