D1255RB/D1256RB/D1257RB



Installation InstructionsFire Keypads andEN Fire Alarm Annunciator



Listings and Approvals

UL 365 Police Station Burglar Alarm Units and Systems Local Burglar Alarm Units and Systems **UL 609 UL 864** Control Units for Fire-protective Signaling Systems UL 985 Household Fire Warning System Units Household Burglar Alarm System Units **UL 1023** UL 1076 Proprietary Alarm Units UL 1610 Central-station Burglar-alarm Units UL 1635 Digital Alarm Communicator System Units

Contents

1.0	Introduction4
2.0	Overview4
2.1	D1255RB/D1256RB/D1257RB Features4
2.1.1	D1255RB4
2.1.2	D1256RB4
2.1.3	D1257RB
2.2	Description
2.2.1	Display
2.2.2	Audible Tones4
2.2.3	Switch Settings
3.0	Installation5
3.1	Mounting Information (D1255RB, D1256RB, and D1257RB)5
3.2	Wiring Information (D1255RB, D1256RB, and D1257RB)5
3.3	Installation Procedure
4.0	D1256RB Programming Requirements9
4.1	Keypad (COMMAND CENTER)
	Assignments
4.2	Area Text9
4.3	Custom Functions10
4.4	Function List10
4.4.1	Menu Item and Function11
4.4.2	CC Address #11
4.4.3	Passcode Worksheet11
4.4.4	Passcode11
4.4.5	Keypad (Command Center) Functions12
5.0	Specifications13

Figures

Figure 1:	D1255RB, D1256RB, and D1257RB	
-	Internal Arrangement	5
Figure 2:	Releasing the Enclosure Base	6
Figure 3:	Lifting the Keypad from the Enclosure	
	Base	6
Figure 4:	Removing the Enclosure Base	6
Figure 5:	Lifting the Red Cover	6
Figure 6:	Removing the Red Cover	7
Figure 7:	Removing the Faceplate	7
Figure 8:	Setting the Address Switches	7
Figure 9:	Address DIP Switches	7
Figure 10:	Mounting the Enclosure Base	8
Figure 11:	Wiring Harness Connection to Keypad	
	or Annunciator	8
Figure 12:	Installing the Enclosure Base – Top	8
Figure 13:	Closing the Enclosure Base - Bottom	8
Figure 14:	Example – Area Text for Fire	
	Applications	9
Figure 15:	Example – Custom Functions	
	Recommended for UL864 9 th Edition 1	
Figure 16:	Example – Function List 1	0
Figure 17:	Example - Fire Passcode Worksheet 1	
Figure 18:	Example – Keypad Functions 1	2
Figure 19:	Custom Functions 1	3

Tables

Table 1:	DIP Switch Address Settings 7
Table 2:	Keypad or Annunciator Connections 8
Table 3:	Function List Description11
Table 4:	Specifications for the D1255RB and D1255RB Krown do not discussed as a discussion of the D1257BB
	D1256RB Keypads and the D1257RB Annunciator

1.0 Introduction

Before installing the D1255RB, D1256RB, or D1257RB, you should be familiar with the operation and installation guide and the program entry guide for the control panel you are using. Before proceeding with the installation instructions in this manual, be sure that you are familiar with the programming recommendations in the *Guide to UL 864 9th Edition Programming Requirements* section of the *Introduction* in the *D9412GV2/D7412GV2 Program Entry Guide* (P/N F01U003636).

2.0 Overview

2.1 D1255RB/D1256RB/D1257RB Features

The **D1255RB** and **D1256RB Fire Keypads** and the **D1257RB Fire Alarm Annunciator** are 4-wire serial devices used with the following Bosch Security Systems control panels with firmware version 7.04 or higher:

- D9412GV2
- D7412GV2
- D7212GV2

The D7212GV2 is not approved for commercial fire applications.

Each of these control panels supervises up to eight keypads or annunciators. You can connect a total of 32 keypads or annunciators to the system. The number of supervised keypads or annunciators, number of areas, and the available power affect the total number of keypads or annunciators you can connect to the system.

2.1.1 D1255RB

The D1255RB has number keys (0 to 9) and function or menu keys, including [COMMAND] and [ENTER]. The D1255RB can be used as a system controller and an annunciator.

Because a passcode is required to use the keypad, it is usually installed in building entrances and areas with unrestricted access. Near an exterior door in a hotel or in a business lobby is an ideal mounting location, allowing a responding agency or persons evacuating the building to identify quickly the type and location of the emergency from outside without being in danger.

2.1.2 D1256RB

The D1256RB provides annunciation and system control. Four function keys on the D1256RB provide quick execution of alarm silencing, trouble silencing, annunciator display reset, and sensor reset functions.



The D1256RB should be mounted in a secure area or locked inside an approved clear plastic enclosure.

2.1.3 D1257RB

The D1257RB provides remote annunciation without system control capability. It can be mounted in public access locations.

Two keys on the D1257RB allow the user to select forward or backward through a list of system events.

2.2 Description

2.2.1 Display

The D1255RB, D1256RB and D1257RB use a 16-character display with custom programmable text. The custom text programmed at the control panel appears in the vacuum fluorescent display (VFD). Refer to *Figure 1, Item 1.*

The keypads and annunciator show the latest status conditions of the fire system using words, numbers, and symbols. When an alarm occurs, a message remains in the display until the user acknowledges the event at a keypad or annunciator. When a series of events affecting the system occurs, each event appears in order of its priority.

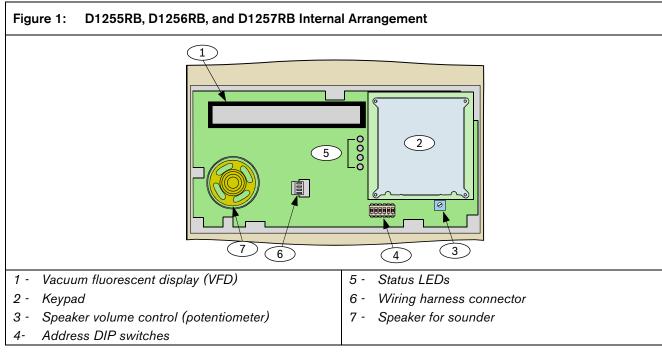
2.2.2 Audible Tones

The D1255RB, D1256RB and D1257RB have a builtin speaker that produces several distinct warning tones. To change the speaker volume, adjust the potentiometer (*Figure 1, Item 3*). Turn the potentiometer clockwise to increase and counterclockwise to decrease the volume.



You cannot connect external annunciation devices to the D1255RB, D1256RB, and D1257RB.

- **Fire Signal** Pulsed, high pitched bell tone when the system is in alarm
- Invalid Key Buzz Flat buzz tone when an invalid key, or sequence of keys, is pressed
- **Keypad Encoding Tone** Muted beep tone as each key is pressed to indicate that the entry has been accepted. To disable the keypad encoding tone, refer to *Section 2.2.3 Switch Settings*.



• **Trouble Buzzer** – Two-tone warble when a trouble event occurs, such as a service alert. To stop the signal on a D1255RB Keypad, press [COMMAND][4]. To stop the tone on a D1256RB, press the [TROUBLE SILENCE] key.



The D1257RB does not have a manual method of stopping the trouble buzzer.

Refer to the Fire System User's Guide

(P/N: F01U011793) for information about silencing the signals.

• Lost Communication – Single trouble tone followed by a 30-second silence when a keypad or annunciator loses communication from the control panel. To stop the tone, restore communication or remove power from the keypad or annunciator.

2.2.3 Switch Settings

A 6-position DIP switch (*Figure 1, Item 4*) located under the cover allows you to select the address of each keypad or annunciator and silence the keypad encoding tones.

For information on accessing the switches, refer to *Section 3.3 Installation Procedure* on page 6.



For supervised keypads, assign only one keypad to each address.

3.0 Installation

3.1 Mounting Information (D1255RB, D1256RB, and D1257RB)

The D1255RB, D1256RB, and D1257RB are lowprofile, surface-mounted units molded in durable red plastic. Use the D56 Keypad Conduit Box (protected surface or flush mount) for mounting the units.

Mounting Locations

	•	Do not mount the keypads and
/!\\		annunciators in locations where they are
		exposed to direct sunlight. Direct
		sunlight can interfere with the display
		screen's visibility and damage internal
		components.
	•	Do not mount the units in wet or moist

• **Do not** mount the units in wet or moist locations.

3.2 Wiring Information (D1255RB, D1256RB, and D1257RB)

A four-wire flying lead is required for the data and power connections between the keypad or annunciator and the control panel. The unit includes a wiring harness with four color-coded flying leads at one end and a female four-pin connector at the other end.

Refer to *Figure 10* and *Figure 11* on page 8 to wire the D1255RB, D1256RB, or D1257RB.

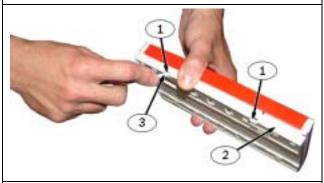
3.3 Installation Procedure

- 1. Power down the control panel.
- 2. Using a small flat-bladed screwdriver, gently push the two bottom tabs up and in to release the enclosure base. Refer to *Figure 2*.

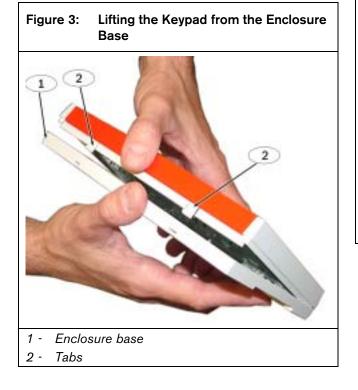


Use caution to avoid damage to the tabs and hinges.

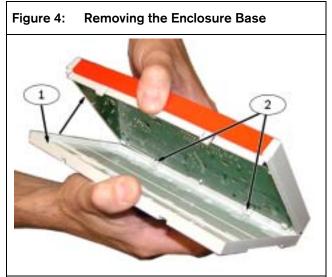
Figure 2: Releasing the Enclosure Base



- 1 Screwdriver
- 2 Tabs
- 3 Enclosure base
- 3. Gently lift the unit from the enclosure base as the tabs are pushed in.

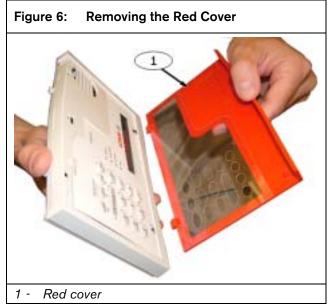


4. Gently pull the keypad apart from the enclosure base at the top hinges.



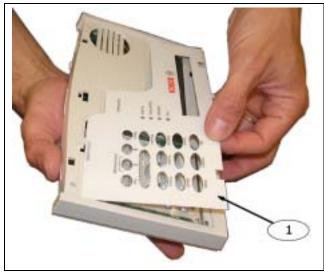
- 1 Enclosure base
- 2- Top hinges
- 5. Lift and remove the red cover.

Figure 5: Lifting the Red Cover



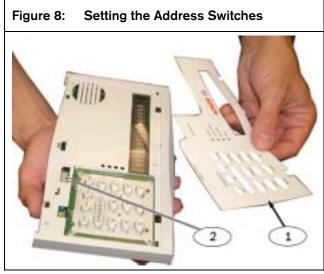
6. Remove the faceplate.

Figure 7: Removing the Faceplate



1 - Faceplate

7. Set the address switches. Refer to *Figure 8*, *Figure 9*,, and *Table 1*.



- 1 Faceplate
- 2 Address switches

Figure 9: Address DIP Switches

0	Ν				
1	2	3	4	5	6

Table 1: **DIP Switch Address Settings** Address Switch Number Number 1 2 5* 6 3 4 1 ON ON ON ON ON OFF ON ON ON ENCODING TONE ON/OFF ON 2 ON ON 3 OFF ON ON OFF ON 4 OFF ON ON 5 ON ON OFF ON ON ON 6 OFF ON OFF ON 7 ON ON OFF ON OFF 8 OFF OFF OFF ON ON Switch 5 toggles the encoding tone ON and OFF. With the

 Switch 5 toggles the encoding tone ON and OFF. With the encoding tone turned on, the keypad sounds a beep each time a key is pressed.



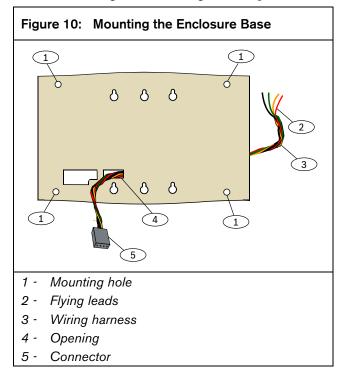
Warning: Avoid injury. Do not wire the D1255RB, D1256RB, or D1257RB if power is applied to the control panel.

8. Connect the flying leads on the wiring harness (*Figure 10*) to the wiring terminals on the control panel. Refer to *Table 2*.

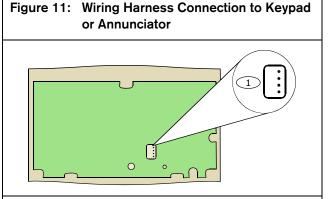
Table 2:	Keypad or Annu	Inciator Con	nections
D9412GV2/ D7412GV2 Terminal	Function	Keypad Wire Color	Function
32*	POWER +	Red	12 VDC
31	DATA BUS A	Yellow	Data
30	DATA BUS B	Green	Data
29	COMMON	Black	Common
	at least 1.5 m (5 ft.) of 1.2 mm [18 AWC	-	WG) wire

9. Feed the connector end of the wiring harness through the opening in the back of the enclosure base (*Figure 10*).

10. Secure the keypad or annunciator to its mounting location from inside the enclosure base by inserting screws through the mounting holes (*Figure 10*).

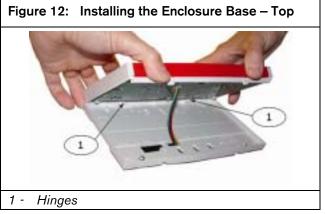


11. Connect the wiring harness to the connector on the back of the keypad or annunciator (*Figure 11*).

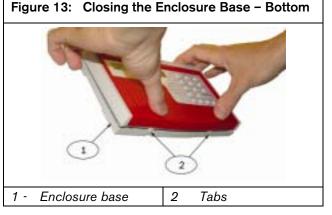


1 - Connector

- 12. Replace the faceplate.
- 13. Replace the cover. Align and insert the top two tabs of the cover into the top two tab slots on the front of the keypad.
- 14. Install the enclosure base:
 - a. Hold the unit at an angle to the enclosure base and snap the hinges on the top edge of the unit into place first.



b. Press the bottom edge of the unit toward the enclosure base until the tabs snap into the openings in the base.



4.0 D1256RB Programming Requirements

For D1255RB and D1257RB programming information, refer to the appropriate program entry guide and program record sheet for the control panel.

Important programming recommendations and requirements are described in this section. For information about the displays and functions available from the D1256RB, refer to Keypad (Command Center), User Interface, and Function List in the GV2MAIN section, and User (Passcode) Worksheet in the RADXUSR1 Handler or RADXUSR1/RADXUSR2 Handlers section of the program record sheet for the control panel.

4.1 Keypad (COMMAND CENTER) Assignments

- **Keypad Text:** The D1256RB can be assigned to any one of the eight addresses in the control panel. Refer to Sections *4.2 Area Text*, *4.3 Custom Functions* on page 10, and *4.4 Function List* on page 10 for programming descriptions for one D1256RB assigned to Keypad 1, Area 1.
- **Supervised:** Certain local jurisdictions might require supervision of fire system annunciators. If your area has that requirement, set the supervision to YES for the addresses that use fire alarm annunciators.
- **Scope:** The D1256RB acknowledges fire alarms and troubles, not burglar alarms and troubles. Set the scope to include fire areas only.
- **Area:** Program the area number of the fire area(s) as normal.

4.2 Area Text

e – Area Text for Fire Applications	
Area 1	Area 2
PRESS ALARM SIL	
CHECK FIRE SYS	
FIRE SYSTEM	
PRESS ATARM STT.	
	PRESS ALARM SIL CHECK FIRE SYS

Area # is On - PRESS ALARM SIL

Fire area should remain in the OFF state at all times. If the authority level is not programmed correctly, and the fire alarm area arms, PRESS ALARM SIL shows on the display. Pressing the [ALARM SILENCE] key silences any alarms(s) and disarms the area.

The idle text, * FIRE SYSTEM *, appears on the display when the area is disarmed.

Area # Not Ready - CHECK FIRE SYS

Most fire alarm areas consist of all 24-hour points and the **Area # Not Ready** display is not used. If a controlled point type is used for some type of fire supervision device, and the device becomes off-normal, CHECK FIRE SYS appears on the fire keypad.

Area # is Off - * FIRE SYSTEM

This is the normal idle text for the fire keypad and annunciator.

Area # Acct is On - PRESS ALARM SIL

Fire area should remain in the OFF state at all times. If the authority level is not programmed correctly, and the fire alarm area arms, PRESS ALARM SIL shows on the display. Pressing the [ALARM SILENCE] key silences any alarms(s) and disarms the area.

The idle text, * FIRE SYSTEM *, appears on the display when the area is disarmed.

4.3 Custom Functions

Figure 15: Example – Custom Functions Recommended for UL864 9th Edition

Custom Function Text

```
CF 128
CF 129
CF 130
```

Custom Function Keystrokes 1 2 5 6 0 0 E _ _ _ _ _ _ ALARM SILENCE? TROUBLE SILENCE? A4CC_____ DETECTOR RESET? A 4 7 CF 131 125600CA47 ANUNCIATOR RESET



In Figure 15, C = [ESC], E = [ENT], A = [Command].

In the D1256RB, Custom Functions must be programmed as indicated in Figure 15. Refer to Keypad (Command Center), Custom Functions in the program record sheet for your control panel for information on making the function keys operational.



The passcode 125600 is used in the following examples. You can use any passcode.

CF 128 - ALARM SILENCE ?

Keystrokes: [1] [2] [5] [6] [0] [ENT]. Program this custom function as the first Menu item in the D1256RB display. The Alarm Silence function is executed when the [ALARM SILENCE] key is pressed on the D1256RB. The control panel sees the keystroke entry as a valid passcode having the authority to silence a ringing fire bell in the area. The [ENT] key has the enter function.

CF 129 - TROUBLE SILENCE ?

Keystrokes: [A] [4] [ESC][ESC]. Program this custom function as the second item in the Menu. The function is executed whenever the [TROUBLE SILENCE] key is pressed on the D1256RB. This entry is the equivalent to executing a [COMMAND] [4] on the D1256RB.

CF 130 - DETECTOR RESET ?

Keystrokes: [A] [4] [7]. Program this custom function as the third item in the Menu. The function is executed whenever the [DETECTOR RESET] key is pressed on the D1256RB. This entry is the equivalent to executing a [COMMAND] [4][7] on the D1256RB.

 $CF \ 131 - \text{ANNUNCIATOR RESET}$?

Keystrokes: [1] [2] [5] [6] [0] [0] [ESC] [Command] [4] [7]. Program this custom function as the fourth command item in the Menu. The function is executed whenever the [ANNUNCIATOR RESET] key is pressed on the D1256RB. Executing this function clears the "View Memory" buffer, but does not clear the event out of the event log contained with the control panel.

4.4 Function List

Figure 16: Example – Function List

Menu Item	Function	CC Address 1	CC Address 2	CC Address 3	CC Address 4	CC Address 5	CC Address 6	CC Address 7	CC Address 8
1	128	Yes / No							
2	129	Yes / No							
3	130	Yes / No							
4	131	Yes / No							
5	9	Yes / No							
6	_10	Yes / No							
7	-12	Yes / No							
8	21	Yes / No							
9	29	Yes / No							
10	-32	Yes / No							
11		Yes / No							

Refer to *Function List* in the program record sheet for the control panel.

4.4.1 Menu Item and Function

Program the first ten menu items as indicated in *Table 3*. This programming is necessary for the D1256RB to operate properly. The first four keys on the D1256RB execute the first four menu items enabled at the keypad address. Menu items five through ten are optional features that can be programmed into the D1256RB system. Refer to the *Fire System User's Guide* (P/N: F01U011793) for further explanation of these optional programmable items.



Ensure that *CF 128* through *CF 131* are programmed **E** (enabled) and not **P** (passcode required).

Table 3:	Function Lis	st Description
Menu Item	Function	Description
1	128	ALARM SILENCE?
2	129	TROUBLE SILENCE?
3	130	DETECTOR RESET?
4	131	ANNUNCIATOR RESET
5	9	VIEW MEMORY?
6	10	VIEW PT STATUS?
7	12	FIRE TEST?
8	21	VIEW LOG?
9	29	REMOTE PROGRAM?
10	32	DISPLAY REV?

4.4.2 CC Address



CC = command center = keypad

Program the keypad (command center) addresses as **Yes** for the first four menu items and for the optionally programmed menu items five through ten.

4.4.3 Passcode Worksheet

	-			lorks							
Jser	(Passcode) V	Vorksł	neet	: (Us	sers	000) to	029)		
User					A	rea A	uthori	ty			
## #	Passcode	User Group	1	2	3	4	5	6	7	8	User Name
000	123		15	15	15	15	15	15	15	15	SERVICE PASSCODE
001	$1\ 2\ 5\ 6\ 0\ 0$		14	_	_	_	_	_	_	_	USER 1

Refer to User (Passcode) Worksheet in the program record sheet for the control panel.

4.4.4 Passcode

A special passcode must be programmed as a valid passcode for the system to work properly. This passcode is used in Custom Functions 128 through 131. Use any user number to establish this mandatory valid passcode. You must also create it as a valid passcode in the area to which the D1256RB is assigned. Use Authority Level 14 together with the passcode you select. Ensure that **Passcode Arm** is disabled (blank) for the Authority Level. Refer to *Authority Level Selections* in the program record sheet for the control panel.

4.4.5 Keypad (Command Center) Functions

The following keypad function must be enabled or passcode required to enable the [DETECTOR RESET] key.

#27 Reset Sensors

Include the following items in the menu:

- #9 View Event Memory
- #10 View Point Status
- #12 Fire Test
- #21 View Log
- #29 Remote Program
- #32 Display Rev

Refer to Figure 18.

For the D9412GV2 Control Panel, program each of the keypad functions with **E** (enabled) and not **P** (passcode required). If restricting any of the keypad functions with a passcode is required, those functions must be executed from a custom function that includes an authorized passcode.

Example (Refer to *Figure 18*.): If the keypad function *View Memory* is programmed as **P** (passcode required), and the passcode 125600 has authority to execute it, the keystrokes would be:

[A] [4] [0] [1] [2] [5] [6] [0] [0] [E]

When creating a Menu Function List for a keypad address, consider that the D1256RB Keypad does not have numeric keys. Ensure that:

- no passcode-protected keypad functions are in a Menu Function List enabled at an address that coincides with the installed address for a D1256RB Keypad.
- the *CC# Menu Key Lock* prompt is set to No for the D1256RB address.

Figure 18: Example – Keypad Functions

	Keypad Fu		
#	Functions	Command	E/P*
1	Disarm ?		P
2	Master Arm Delay ?	CMD 1	Р
3	Master Arm Instant ?	CMD 11	
4	Perimeter Instant ?	CMD 2	Р
5	Perimeter Delay ?	CMD 3	Р
6	Watch Mode ?	CMD 6	Ε
7	Perimeter Part ?	CMD 8	Р
8	View Area Status ?		Р
9	View Memory ?	CMD 40	E
10	View Pt Status ?		E
11	Walk Test ?	CMD 44	Ε
12	Fire Test ?	CMD 58	Р
13	Send Report ?	CMD 41/42	Р
14	Door Control ?	CMD 46	Р
	Cycle Door ?		Ε
	Unlock Door ?		Ε
	Secure Door ?		Е
37	Access Control Level?		Р
15	Change Display ?	CMD 49	Ε
16	Change Time/Date ?	CMD 45	Ε
17	Change Passcode ?	CMD 55	Р
18	Add User ?	CMD 56	Р
19	Del User ?	CMD 53	Р
20	Extend Close ?	CMD 51	Р
21	View Log ?		E
22	Print Log ?		Р
23	User Command 7 ?	CMD 7	Р
24	User Command 9 ?	CMD 9	Р
25	Bypass a Point ?	CMD 0	P
26	Unbypass a Point ?	CMD 00	P
27	Reset Sensors ?	CMD 47	Ē
28	Change Relays ?	CMD 54	Р
29	Remote Program ?	CMD 43	P
30	Move To Area ?	CMD 50	P
32	Display Rev ?	CMD 59	Ē
33	Service Walk ?		P
34	Default Text ?	CMD 57	P
35	Change Skeds ?	CMD 52	P
36	Invisible Walk ?	0	P

Keypad Function options: P = Passcode;
 E = Enabled (no passcode required);
 Blank = Disabled



Ensure that CF 128 through CF 131, and any other functions you are using in the menu, are programmed **E** (enabled), not **P** (passcode required). Refer to *Figure 19*.

	Keypad Functions	
#	Custom Functions	E/P*
_128	Custom Function 128	E
129	Custom Function 129	E
130	Custom Function 130	E
131	Custom Function 131	E
132	Custom Function 132**	
133	Custom Function 133**	
134	Custom Function 134**	
135	Custom Function 135**	
136	Custom Function 136**	
137	Custom Function 137**	
138	Custom Function 138**	
139	Custom Function 139**	
140	Custom Function 140**	
141	Custom Function 141**	
142	Custom Function 142**	
143	Custom Function 143**	

5.0 Specifications

Table 4: Specifications for the D1255RB and D1256RB Keypads and the D1257RB Annunciator		
Power	Nominal 12 VDC supplied by the control panel	
Current Required	Idle:	104 mA
	Maximum:	225 mA, with annunciator lit, all 4 Status LEDs on, and warning tone on
Wiring	4-wire supplies Data In, Data Out, + 12 VDC, and Common.	
	Maximum data loop resistance is 10 Ω .	
Dimensions (H x W x D)	Base (HxW):	4.6 in. x 8.2 in. (11.6 cm x 20.7 cm)
	Cover :	4.3 in. x 8.12 in. x 0.8 in. (10.9 cm x 20.6 cm x 2.9 cm)
Color	Red	
Display	16-character vacuum fluorescent display (VSD).	
	Each character is a 14-segment unit.	
Operating Temperature	+32°F to +122°F (0° C to +15° C)	
Relative Humidity	5% to 85% at +86°F (+30° C)	

Bosch Security Systems, Inc. 130 Perinton Parkway Fairport, NY 14450-9199 Customer Service: (800) 289-0096 Technical Support: (888) 886-6189

© 2006 Bosch Security Systems, Inc. F01U011791B



