

Challenger Version 8 Keypad Arming Stations.

AN10

This document provides details of the programming requirements for adding a Keypad (PIN code) type Arming Station to a Version 8 Challenger System for use in Alarm Control and/or Access Control functions.

On a Version 8 Challenger Panel LAN a Keypad Arming Station may be:

- TS0003** 4 LED Arming Station.
- TS0801** 8 Area LCD Arming Station
- TS0804** 16 Area LCD Arming Station

Note: These units are designed to perform alarm control functions and/or access a door. If used for alarm control functions the 4 LED Arming Station (TS0003) is intended to control a single area, while the LCD Arming Stations (TS0801/4) can control multiple areas.

A programming flow chart is provided at the end of this document for quick reference.

Accessing the Install Menu:

To display menu option 19 (Install Menu) in the User menu, the alarm group of the user code must allow it. The Master Installer is User Number 50. The default master PIN code (User 50) = 4346. The master PIN code should be changed. The Alarm Group assigned to User 50 should never be changed.

The Installer menu is accessed via the User menu and is User menu option 19.

The system must be disarmed before it is possible to use the Installer Menu.

To disarm the system:

4 3 4 6 (Master PIN code) **<OFF>** then **0** (Select all areas) **<ENTER>**

To access the Install Menu:

<MENU> **4 3 4 6** (Master PIN code) **<ENTER>** Accesses User Menu.
then **1 9** **<ENTER>** Selects Install Menu

1. Determine how the Arming Station is to be used in the system and fill out the appropriate programming sheets.

Blank programming sheets are found at the rear of the Version 8 Programming guide.

For this application you will need to consider the following Installer Menu databases.

For Alarm Control functions:

- 3. Arming Stations
- 5. Alarm Groups
- 10. Text Words
- 13. Time Zones

For Access Control functions:

- 3. Arming Stations
- 5. Alarm Groups
- 6. Timers
- 7. System Options
- 10. Text Words
- 13. Time Zones
- 16. Map Relays
- 21. Input Shunts
- plus Door Groups. (USER MENU Option 20)
- Users (USER MENU Option 14)

2. If the Arming Station is being used for Access control functions, program the SYSTEM OPTIONS to specify general functional parameters.

Following is the Option relevant to this application which you may wish to select or change. Disregard other options at this stage.

Alarm/Door Code Prefix Length.

If you require both alarm control & access control functions on an Arming Station you may wish to specify an "Alarm Prefix length".

The Alarm prefix allows a PIN code of 5 digits or more to be used for the alarm control functions and a shorter code to be used just for door access.

The number of prefix digits is the number of digits to be dropped from the front of a full PIN code when used for door access only.

3. Program a TEXT WORD if required for the Arming Station's alarm group name if not already provided in the word library.

Up to 100 custom words can be added to the library.

4. Program any TIMEZONES that may be required in order to limit the alarm or access control functions of the Arming Station/s to specific time periods.

TIMEZONES 1 to 24

There are 24 "Real-time" timezones in the system, based on the built-in real-time clock.

Each Timezone may have up to 4 segments, each programmed with a Start time, End time and Days.

Timezone 0 is always valid 24 hours every day. It may be used wherever a 24 hr Timezone is required.

SYSTEM OPTIONS are programmed in Installer Menu Option 7: - System Options.

From the Install Menu select Option 7.

Use the <ENTER> key to scroll through the available options.

Enter the number of digits required (if any)
A value of 1 to 4 may be entered. Remember that the minimum code length (for alarm or access functions) is 4 digits.

e.g. Prefix length = 2. Alarm Code 654321
 Door Code 4321

TEXT WORDS are programmed in Installer Menu Option 10: - Text Words.

From the Install Menu select Option 10.

Use <*> to scroll through the list of programmable words.

Select a word number to program or change.

TIMEZONES 1 to 24 are programmed in Installer Menu Option 13.

From the Install Menu select Option 13.

Select a Timezone number to program and enter the start and end times and days for each segment. e.g.

<u>TIMEZONE 1:</u>	<u>STRONGROOM</u>						
	<u>ARMING STATION</u>						
		START		END			
Tz 1.1	Mo	08:30	Tu We Th	18:00	-	-	-
	-						
Tz 1.2		08:30		21:30	Fri	-	-
	-						
Tz 1.3		08:30		13:00		Sat	-
	-						
Tz 1.4		00:00		00:00			
	-						

5. Program the ALARM GROUP/S required for the Arming Station/s in your system. One of the pre-programmed alarm groups may be suitable so this step may not be necessary.

An Alarm Group defines the area/s, Alarm control functions and User menu options available to the Arming Station to which it is assigned.

For a 4 LED Arming Station (TS0003) the User Menu options are irrelevant as there is no LCD.

If the Arming Station is to be used for access control only, the alarm group simply defines the area that the Access/Secure LEDs will follow.

The pre-programmed Alarm Groups 14 to 29 are intended for Arming Stations that control a single Area and are ideal for 4 LED Arming Stations.
Alm Grp 14 = Area 1
Alm Grp 15 = Area 2 etc.

(Refer to V8 Programming Guide:- Appendix 1, Table 4 for more specific details)

Alarm Groups 30 to 138 have no default programming and are intended to be programmed according to the system requirements.

Program an appropriate name for the Alarm Group

Specify the Area/s assigned to this Alarm Group.

Specify whether the Alarm Group is going to be assigned to Users.

NOTE:

If the Arming Station is to be used for Access Control only, no more Alarm Group programming is required.

Continue on to specify functions if the Arming Station is to be used for alarm control.

Specify the Alarm Sytem Control functions and features that this Alarm Group will allow (Arm, Disarm, Reset etc.)

Alarm System Control

Prompt With List of Areas
Relevant to LCD Arming Station only.

ALARM GROUPS are programmed in Installer Menu Option 5.

From the Install Menu select Option 5.

If a pre-programmed Alarm Group is not suitable, select an Alarm Group to program.

?? (Alarm Group number) <ENTER>

Enter a text word number from the word library

Enter the area number/s required

Set to YES or NO as required

Set options to YES or NO as required

- YES Alarm System Control functions will be allowed, depending on other settings specified in the Alarm Grp.
- NO No Alarm System Control functions will be allowed, regardless of other settings in the Alarm Group

If set to YES, User will be prompted with a list of relevant areas for selection when arming & disarming.



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Can User Activate Keyboard Duress	If set to YES Duress Code will activate Keypad Duress Alarm.
Reset System Alarms	If "Latching System Alarms" is set to YES in the System Options, setting this option to YES will allow those alarms to be reset from this RAS.
Disable Auto De-isolate	If set to YES, prevents certain users (eg cleaners) from being able to automatically de-isolate inputs in the area they disarm.
Arm & Reset Only Disarm Only Alarm Reset Only	Setting one of these options to YES will restrict the level of Alarm System Control as specified.
Auto Isolate Unsealed Inputs	If set to YES, allows unsealed inputs to auto isolate when arming to prevent them causing alarms.
Forced Arming When Unsealed Inputs	If set to YES, area/s will arm regardless of any unsealed inputs which may subsequently cause an alarm.
Prevent Forced Disarming	If set to YES, area/s cannot be disarmed if there are unsealed inputs. (Access alarms)
User Categories (See AN16-The Timed Disarm Functions for details on the programming of User Category functions)	
Prevent Arming If Category Not Timing (See AN16-The Timed Disarm Functions for details on the programming of User Category functions)	
Specify the <u>USER MENU OPTIONS</u> that this Alarm Group will allow Access to. (User Menu Options are not relevant to 4 LED Arming Stations)	Set YES or NO for each option in the list as required.
For User Menu Options 1 to 24. (See the Challenger Version 8 User Guide for specific details on these User Menu options)	
An Alarm Group can be restricted to be valid only during a specific time period. To achieve this a <u>TIMEZONE</u> is assigned to the Alarm Group.	Enter a Timezone number if required "No Timezone" specifies the Alarm Group is ALWAYS valid.
If a Timezone restriction has been specified for an Alarm Group, you may assign an <u>ALTERNATE ALARM GROUP</u> that will take effect when the Timezone on this Alarm Group is not valid.	Enter an alternate Alarm Group Number if required You must then program the alternate Alarm Group to specify the new Area/s, functions, options etc. that will be relevant.

6. Program ARMING STATION DETAILS for each individual Arming Station.

Specify the Arming Station (RAS) number/s to be polled by The Challenger panel.

It is recommended that RASs not be programmed to be polled until they are actually powered and addressed correctly.
(See Installation guides for details)

Specify the details for each RAS to be polled.

Program the relevant options for each Arming Station. Options not relevant are not described here and should be disregarded at this stage.

Area Alarm Group

The Area Alarm Group defines the area/s, alarm control and user menu options available at this arming station.

Menu Alarm Group

(Not relevant to 4 LED Arming Stations)
Specifies user menu options available if requirements are different from those specified in the area alarm group.

Door Event Flag

If the Arming Station is to activate a relay to unlock a door, then a Door Event Flag number must be entered here.

Relay Control Group

If the Open Collector output on the Arming Station is to be used to activate a Warning buzzer or a relay etc., then a Relay Control Group must be assigned to the Arming Station.
The Open Collector output is treated as a system relay. To define the relay number for this output, a Relay Control Group is assigned and the output becomes the first relay number in the Group.

Group	Relay Numbers
1	1 - 8
2	9 - 16
3	17 - 24
4	25 - 32
5	33 - 40
6	41 - 48
7	49 - 56
8	57 - 64
9	65 - 72
10	73 - 80
11	81 - 88
12	89 - 96
13	97 - 104
14	105 - 112
15	113 - 120
16	121 - 128

ARMING STATIONS are programmed in Installer Menu Option 3.

From the Install Menu select Option 3.

Enter the number/s of the RASs to be polled.
If the Arming Station is not yet powered up and addressed, polling the RAS will cause a "RAS Fail" condition.

Select the RAS to be programmed.

Assign an appropriate alarm group from the factory defaults or the alarm groups you have programmed specially for the system.

Assign an appropriate alarm group as required

Enter any Event Flag number from 17 to 256 if required, as long as the number is not used elsewhere in the system.

If you know the Relay number of the relay that is to be used to unlock the door, you may choose to make the Event Flag number the same.

Enter a Relay Control Group number if required
It is recommended to use higher relay control group numbers to avoid the possibility of having relay numbers on Arming Stations that clash with relay numbers on relay cards connected to the panel or DGPs.
e.g. Assigning Relay Control Group 30 would make the Open Collector output; Relay Number 233.

Group	Relay Numbers
17	129 - 136
18	137 - 144
19	145 - 152
20	153 - 160
21	161 - 168
22	169 - 176
23	177 - 184
24	185 - 192
25	193 - 200
26	201 - 208
27	209 - 216
28	217 - 224
29	225 - 232
30	233 - 240
31	241 - 248
32	249 - 256.



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LCD Arming Station	Set to YES for LCD Arming Stations Set to NO for 4 LED Arming Stations
Toggle Keyboard Control It is recommended that this option be left at NO and the client instructed to perform alarm control functions with the ON & OFF keys.	If the client wishes to use the ENTER key for Arming & Disarming instead of the ON & OFF keys, then this option is set to YES.
Enter Key Opens Door Only	May be set to YES if <ENTER> is only to be used for door access and not for alarm control functions.
Door Event Flag on Alarm Codes. See "Alarm Code prefix" in "System Options"	YES The door event flag will operate when any valid alarm code OR door code is used. NO The door event flag will only operate using a door code.
Reset Without Code	If it is not necessary for a user to enter a code to reset alarms which have occurred in the area assigned to this Arming Station's Alarm Group, set this option to YES.

NOTE:

If the Arming Station is to be used for Alarm Control only, no more programming is required.

Continue on to specify door access restrictions, relay mapping and input shunting functions for Access control.

7. If the Arming Station is performing access control functions, DOOR GROUPS must be programmed to specify which Door/s (Arming stations) a user may access.

Each User in the system may be assigned one "Door Group"

Each Door Group contains a list of door numbers, and a time zone for each individual door within the group.
Authorized access by a user at a particular door is only allowed during the timezone specified for that particular door in the user's Door Group.

Select a Door Group to program.
There are 10 Door groups with standard memory or 128 Door Groups with memory expansion fitted.

Select the Door number to add to the Door Group.
The Door number is the same as the Arming Station address of the 4 LED Arming Station that will unlock the door.

Enter the timezone number for the door selected, or disable the door in this group.

DOOR GROUPS are programmed in User Menu Option 20.

From the User (Main) Menu select Option 20.

Enter a Door Group number to program or modify

Enter a Door number

Enter a Timezone number **or**
Disable the door

Return to selection of another Door number to add to the Door Group.

8. If the Arming Station is activating a Relay to unlock a door, program the "Door/s Access Time" in the TIMERS menu option.

Door/s Access Time (seconds)
Default setting is 5 seconds.

9. If the Arming station is activating a relay to unlock a door, determine the "Relay Number" of the relay you wish to use. The relay numbers allocated for the panel and each DGP address are listed in the table opposite.

10. If the Arming Station is activating a relay to unlock a door, program the details for the relay.

Select the relay number that is to be used to unlock the door.

Enter the "Door Event Flag" number that was assigned to the Arming Station in step 6.

If you require the door to be held unlocked or locked for specific time period/s, assign the Timezone that will control the relay.

If a Timezone has been assigned, select whether the relay is to be held ACTIVE or INACTIVE during the timezone.

If the relay is required to operate in INVERTED mode.

TIMERS are programmed in Installer Menu Option 6.

From the Install Menu select Option 6.

Enter the door access time period

RELAY NUMBERING

Challenger Panel	1 to 255
DGP 1 17-32	DGP 9 145-160
DGP 2 33-48	DGP 10 161-176
DGP 3 49-64	DGP 11 177-192
DGP 4 65-80	DGP 12 193-208
DGP 5 81-96	DGP 13 209-224
DGP 6 97-112	DGP 14 225-240
DGP 7 113-128	DGP 15 241-255
DGP 8 129-144	

RELAYS are programmed in Installer Menu Option 16: - Relay Mapping.

From the Install Menu select Option 16.

Enter the relay number to program

Enter the "Door Event Flag" number

Enter a Timezone number if required
Note that the timezone will override the event flag.

Select Active or Inactive

Select Inverted or Non-inverted

11. If an input is required to be shunted (disabled) for a period of time when the Door Access function is performed at the Arming Station, a SHUNT TIMER must be programmed.

A Shunt timer allows the Door Contact to be shunted for long enough to allow access through the door without causing an alarm.

Select a Shunt Timer number to program.

Specify the Input number that is to be shunted. e.g. The input that the door contact is wired to. See AN1: Basic Alarm System Programming for information on how to program the Input if req'd.

If another system function is to also shunt this input a Relay Number may be assigned that will shunt the input whenever the relay is active.

Specify the amount of time that the input will be shunted by programming the Shunt Time.

If a warning indication is required before the Shunt timer expires, then a Warning Time is specified.

If an indication is required when the shunt timer is running a Shunt Event Flag may be programmed that may be used to activate a relay etc.

If an indication is required when the warning time is running a Shunt Warning Event Flag may be programmed that may be used to activate a relay etc.

To ensure that only a valid code or Egress command at the arming station will activate the Shunt Timer; set the Door Open Command to YES.

To specify when the input is to be shunted in relation to the status of the area/s assigned to the input, set one or both of the questions: Door Shunted in Access & Door Shunted in Secure to YES.

If you require the input assigned to the shunt timer to cancel the door event flag and cancel the shunt timer when it reseals, set Cancel Door Event Flag to YES. This prevents the door being opened a second time, unless the code is used again.

INPUT SHUNT TIMERS are programmed in Installer Menu Option 21.

From the Installer Menu select Option 21.

Enter a Shunt Timer number
The Shunt timer number must be the same number as the Arming Station Address.

Enter the Input number.

Enter a relay number if required.

Enter the Shunt Timer period
If the value entered is less than 128, the time is in seconds. Use seconds where possible. A value of 129 to 256 represents a period of 1 to 127 minutes. i.e. Time required in minutes + 128 = the value entered.
eg. For 30 minutes enter 158 (128+30= 158)

Enter the Warning Timer period
The warning time value entered will be in seconds if the shunt time is in seconds, and minutes if the shunt time is in minutes.

Enter an Event flag number from 17 to 256 as long as the number is not used elsewhere in the system.

Enter an Event flag number from 17 to 256 as long as the number is not used elsewhere in the system.

Set to YES or NO as required

Set to YES or NO as required
Do not leave both set to NO

Set to YES or NO as required

If Drop bolts or Magnalocks etc, are used set Input Holds Door Event At 2 Secs to YES to allow a settling (debounce) time after the door is closed before it re-locks.

Entry/Exit Shunting is set to YES if the door may be accessed before the code is entered at the keypad.

Report Door Open/Close will cause the input to report to Printer/Computer when unsealed & resealed if set to YES.

12. USERS will be programmed in the normal manner, but you must ensure that any Users who are to perform any access control functions with the Arming Station must have an appropriate Door Group assigned to them.

The client will normally have the authority to program users into their system.

This programming option may not need to be performed by the Installer except to ensure that a user is programmed into the system who has the necessary authority to program the remaining users.

It is important that the client is provided with details of the User's Alarm Groups and Door Groups to facilitate this.

Select the Option to CREATE a user

Select a USER NUMBER to program.

Note: User number 50 is the Master Installer Code. The PIN code for user 50 should be changed from the factory default of 4346, but no other parameter should be altered.

Assign an ALARM GROUP to the user to specify the area/s and functions allowed.

Assign a DOOR GROUP to the user to specify the door/s that the user may access.

It is not necessary to assign a Floor Group for this application.

Program the USER NAME.

Note: Only possible for Users 1 to 200.

Program the User's PIN CODE.

Note: Only possible for Users 1 to 1000.

Set to YES or NO as required

Set to YES or NO as required

Note: If YES, "Door Open Command" must be NO.

Set to YES or NO as required

USERS are programmed in the User Menu Option 14.

From the User (Main) Menu select Option 14.

Space is provided at the rear of the User Guide for a summary of the User's Alarm Groups and the Door Groups that the client will use when adding and/or changing users in their system.

Select the CREATE option

Enter a User Number to program

Only users 1 to 1000 can be PIN code users

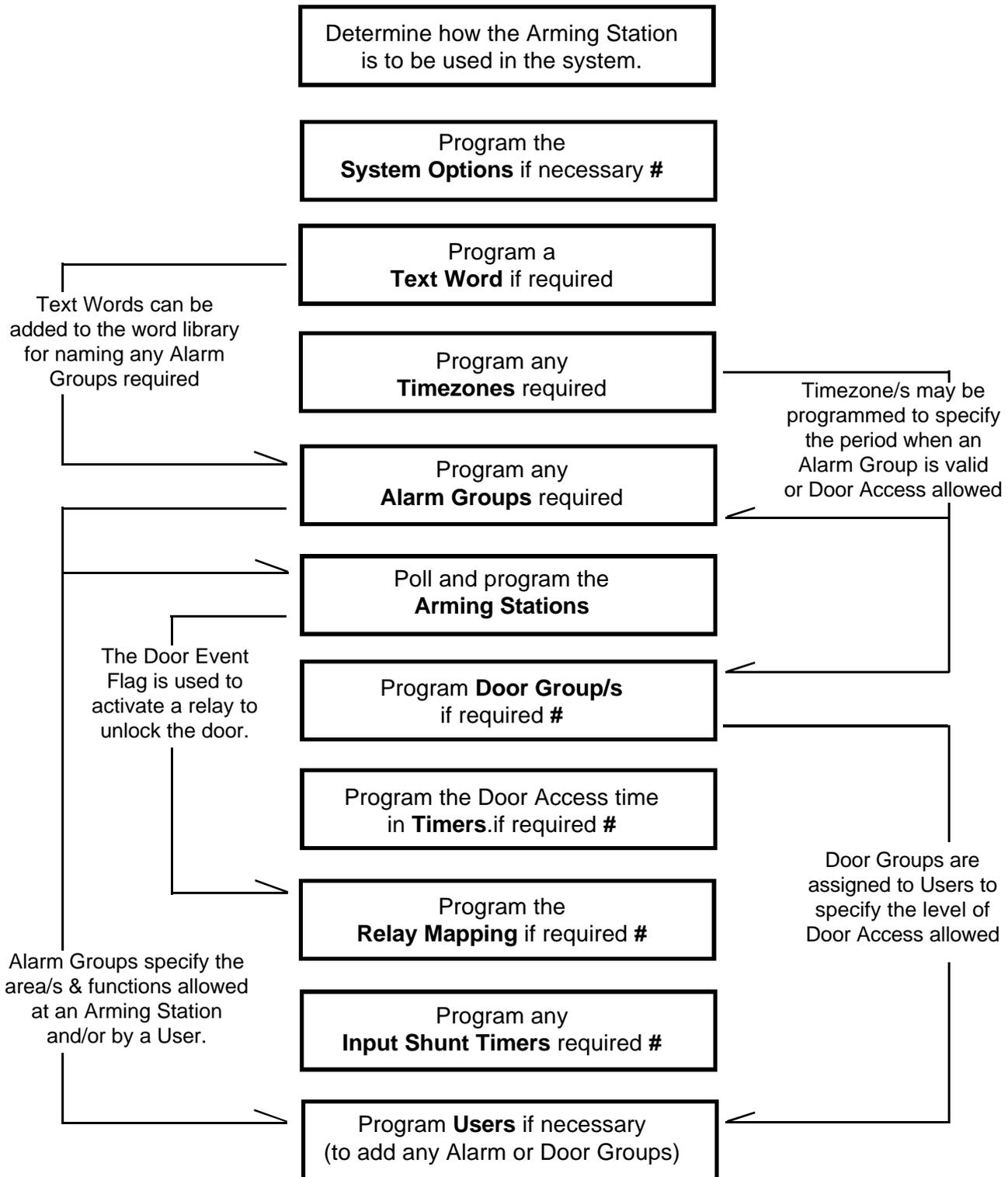
Enter an Alarm Group Number if required

Enter a Door Group Number if required

Enter text for the User's name if required

Enter a PIN code of between 4 and 10 digits

SUGGESTED PROGRAMMING SEQUENCE



These options only need to be programmed if Access Control required.