1200DE Delayed Egress Magnalock®

Installation & Operating Instructions

ALARM CONTROLS.
ASSA ABLOY

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Installation Hardware Pack Components

1 Wrench 5mm HEX (1)

2 M8 x 35mm flat head socket screw patched (1)

3 Flat rubber washer 16mm x 8mm x 2mm (1)

4 Anti-Vandal Caps (4)

5 #10 x 1.5" Self-tapping flat head patched (14)

6 Compression spring (1)

7 Anti-Rotation pin 5mm x 30mm (2)

8 M3 x 18mm flat head anti-tamper screw (2)

9 2.54mm Jumper (2)

10 FPI Jumper (1)

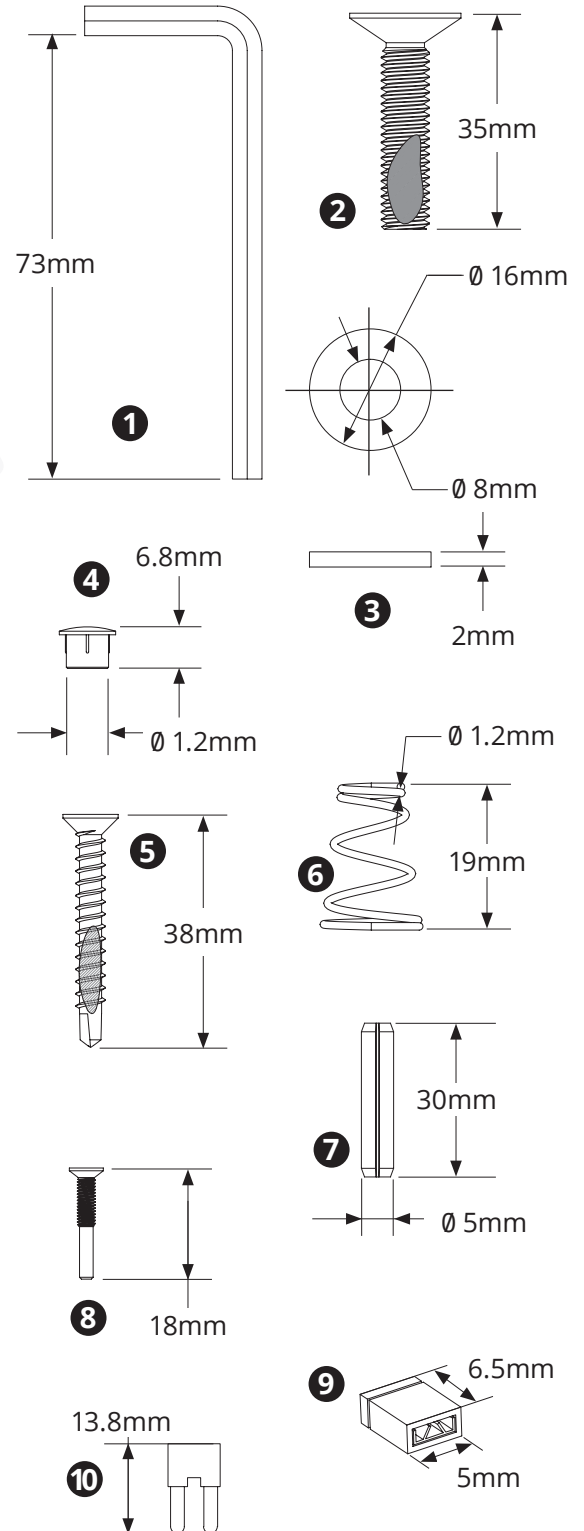**11** Pair of Keys – A126

Specifications

- 1200 lbs. holding force
- Input Voltage: Dual voltage auto sensing 12/24 VDC
- All Relay Outputs: 1A @ 30 VDC
- Tamper Switch Rating: 0.5A @ 30 VDC
- Maximum Current Draw:
  - 825mA @ 12 VDC
  - 490mA @ 24 VDC
- Energy Savings Mode Current Draw:
  - 262mA @ 12VDC
  - 165mA @ 24VDC
- Operating Temperature: +32 to +122F [0 to +50C]
- Certifications:
  - UL294
  - UL10C
- Digital countdown LED display
- Door prop alarm
- Energy savings mode
- Field configurable settings include:
  - Choice of English, French/English, Spanish/English voice message
  - Choice of voice and alarm tone or alarm tone only
  - Nuisance delay times 0, 1, 2, or 3 seconds
  - Bypass delay times 0, 5, 10, or 30 seconds
  - Door movement activation
  - Auto or manual relock
- Integrated two function keyswitch
  - Bypass (REX) and alarm reset
- Required sign included

UL 294 Performance levels: Access Control Line Security Level 1, Destructive Attack Level 1, Endurance Level IV, Standby Power Level 1.

IMPORTANT: UL 294 compliance requires that the locking device be powered by a Listed (ALVY, FULA, FWAX, FWAX2, or APHV) Class 2 power supply.

Additional Model Numbers

- 1200DE-CA15S California-required 15s exit delay
- 1200DE-CA30S California-required 30s exit delay
- 1200DE-CH Chicago-required 15s exit delay, 1s nuisance delay, and 0s bypass time

73mm

35mm

Ø 16mm

Ø 8mm

6.8mm

Ø 1.2mm

2mm

Ø 1.2mm

19mm

38mm

30mm

Ø 5mm

18mm

13.8mm

6.5mm

5mm

Delayed Egress Operation

Delayed Egress Activation:

Activation of the unlock cycle begins by causing door movement of at least 0.25". Immediately after activation, a short nuisance delay period is initiated. Nuisance delay time is field selectable* for 0, 1, 2 or 3 seconds. During nuisance, an alarm will sound, letting the user know exit delay will begin. The time set for Nuisance delay is included in the Exit Delay cycle and will not increase or decrease the total time to unlock once Exit Delay begins. To deactivate nuisance delay, the door must be released and returned to its normal state before nuisance time expires. Once the nuisance delay time is complete, exit delay begins, and the 1200DE enters an irrevocable countdown to egress. Digital countdown, voice messages and/or alarm tones begin and count down from set exit delay time (15 or 30 seconds, depending on device settings). Once the exit delay time has expired (digital countdown timer reads "00", voice message repeats in selected language or tone chirps every 5 seconds when voice is disabled), the maglock will release the door, allowing free egress.

Alarm Reset:

Depending on device configuration, the 1200DE can be manually reset by integrated keyswitch or set to automatically reset and relock after exit delay (see dipswitch table, switch 9). Please consult your local AHJ on code requirements prior to completing installation.

Request to Exit / Authorized Bypass:

This feature allows the 1200DE to function as a normal magnetic lock (e.g. in conjunction with a card reader or keypad). To momentarily initiate exit delay, use the integrated keyswitch located on the bottom of the unit or activate a N/O switch connected to the REX terminals. Turning the key counterclockwise activates the bypass function.

To keep the 1200DE bypassed for an extended period of time, place the integrated keyswitch in the bypass position (key can be removed) or place a maintained closure across the REX terminals. To restart normal operation, return the keyswitch to its normal position or release the remote contact. This will initiate exit delay and relock the door once the cycle has completed.

Mounting Instructions

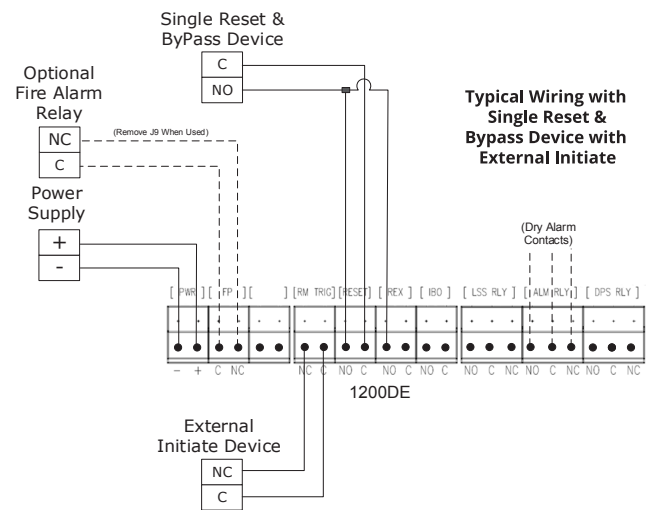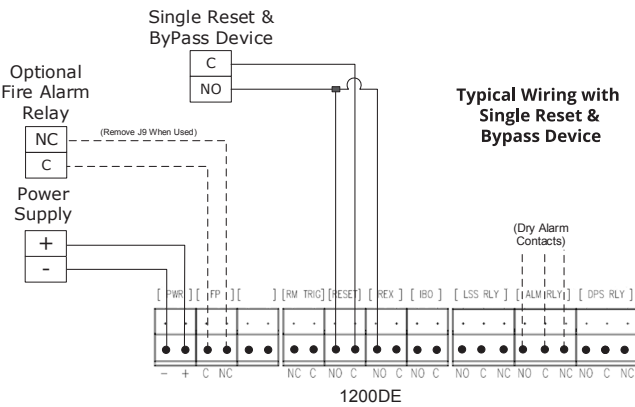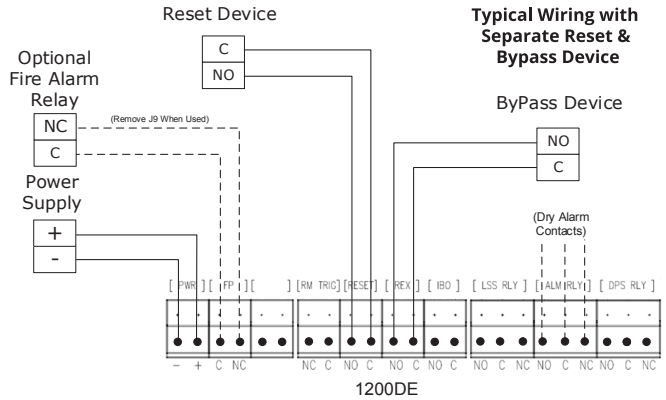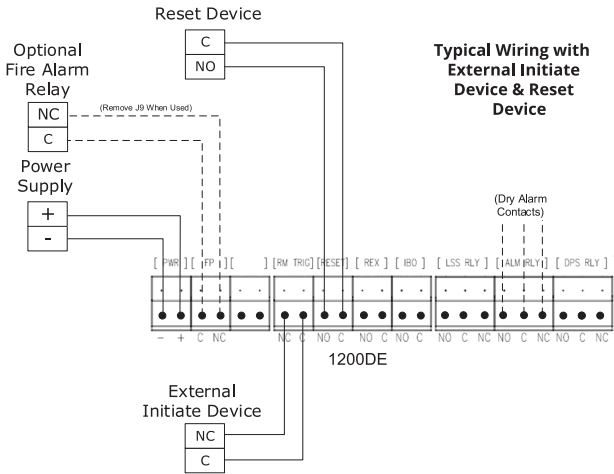Please see included mounting template.

Field Outputs

- **Fire Alarm**: If fire brake not used, install provided jumper on the terminal block if a dry normally closed contact from a fire alarm input OR smoke detector system is not connected.

- **Remote Trigger:** The 1200DE can be triggered by using an external initiate device equipped with a normally closed switch contact. (See additional information for SW7 in the "Dipswitch Settings" section).

- **Remote Reset:** Choose to reset the 1200DE either manually or by remote reset. Use this input to momentarily activate a normally open switch to reset the device.

- **Remote to Exit / Bypass**: Use this input for a remote normally open contact switch to momentarily activate bypass exit delay for 0, 5, 10 or 30 seconds. (See additional information for SW4 and SW5 in the "Dipswitch Settings" section)

- **Instant Bypass Override**: This input is used for immediate relock and does not impact exit delay. For example, when used with a patient wondering system, if the device is in bypass mode, and a patient approaches the door, the 1200DE will immediately lock, overriding the bypass setting, securing the opening and the patient.

Monitoring Outputs

- **Lock State Sensor (Bond sensor)**: Magnetic bond sensor to ensure the strike plate has bonded and the opening is secure.

- **Alarm Status**: Used to notify security that an irrevocable cycle has started or has been completed.

- **Door Position Switch (Powered)**: The powered door position switch output will indicate whether the door is open or closed only while the 1200DE has input power. If the lock is not powered, the door position switch will not indicate door status.

- **Tamper Switch**: Provides an extra layer of protection to the lock

*May not be applicable to specific Chicago and California variants. Please consult local AHJ to ensure code requirements are met.

Wiring Instructions

Typical Wiring with External Initiate Device & Reset Device

Reset Device
C
NO

Optional Fire Alarm Relay
NC
C
(Remove J9 When Used)

Power Supply
+
−

(Dry Alarm Contacts)

[PWR][FP][ ][RM TRIG] [RESET] [REX] [IBO] [LSS RLY] [ALM RLY] [DPS RLY]

− + C NC   NC C NO C NO C NO C   NO C NC NO C NC NO C NC

1200DE

External Initiate Device
NC
C

Typical Wiring with Separate Reset & Bypass Device

Reset Device
C
NO

Optional Fire Alarm Relay
NC
C
(Remove J9 When Used)

Power Supply
+
−

ByPass Device
NO
C

(Dry Alarm Contacts)

[PWR][FP][ ][RM TRIG] [RESET] [REX] [IBO] [LSS RLY] [ALM RLY] [DPS RLY]

− + C NC   NC C NO C NO C NO C   NO C NC NO C NC NO C NC

1200DE

Typical Wiring with Single Reset & Bypass Device

Single Reset & ByPass Device
C
NO

Optional Fire Alarm Relay
NC
C
(Remove J9 When Used)

Power Supply
+
−

(Dry Alarm Contacts)

[PWR][FP][ ][RM TRIG] [RESET] [REX] [IBO] [LSS RLY] [ALM RLY] [DPS RLY]

− + C NC   NC C NO C NO C NO C   NO C NC NO C NC NO C NC

1200DE

Typical Wiring with Single Reset & Bypass Device with External Initiate

Single Reset & ByPass Device
C
NO

Optional Fire Alarm Relay
NC
C
(Remove J9 When Used)

Power Supply
+
−

(Dry Alarm Contacts)

[PWR][FP][ ][RM TRIG] [RESET] [REX] [IBO] [LSS RLY] [ALM RLY] [DPS RLY]

− + C NC   NC C NO C NO C NO C   NO C NC NO C NC NO C NC

1200DE

External Initiate Device
NC
C

Jumper Settings

JP2 (Remote Trigger): NOTE: Switch 7 must be "ON" for Remote Trigger

Remote Trigger can be wired either NO or NC if an alternate delayed egress initiating device is required. See settings for "Trigger Type (SW7)" below for additional description. Default jumper position is NO.

JP3 (Door Prop Action):

INSTALLED: The 1200DE will enter the alarm mode if the door is held open past the request to exit period.

REMOVED: The 1200DE will remain unlocked if the door is held open past the request to exit period. Exit delay will not initiate. No alarm will sound. The 1200DE will relock and reset upon closure of the door.
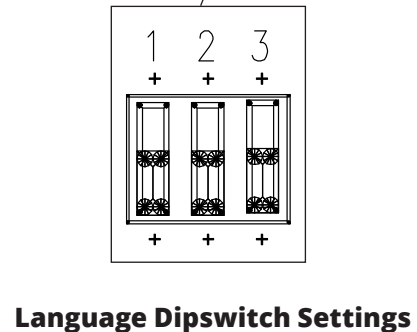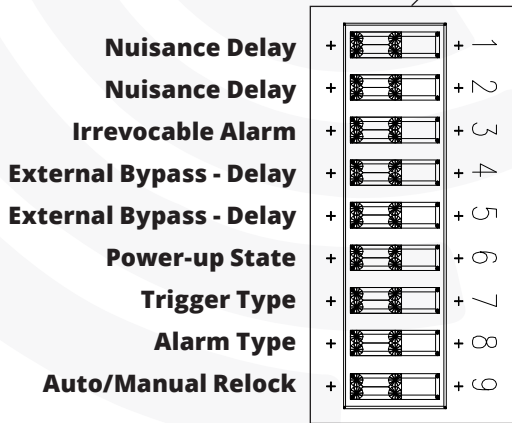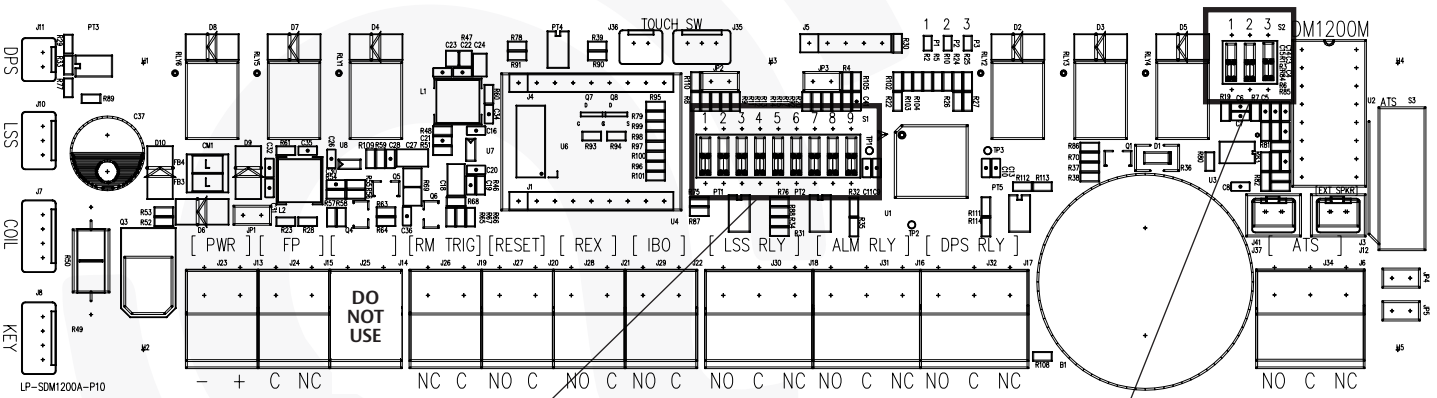
Diagram 1 1200DE Jumper Settings
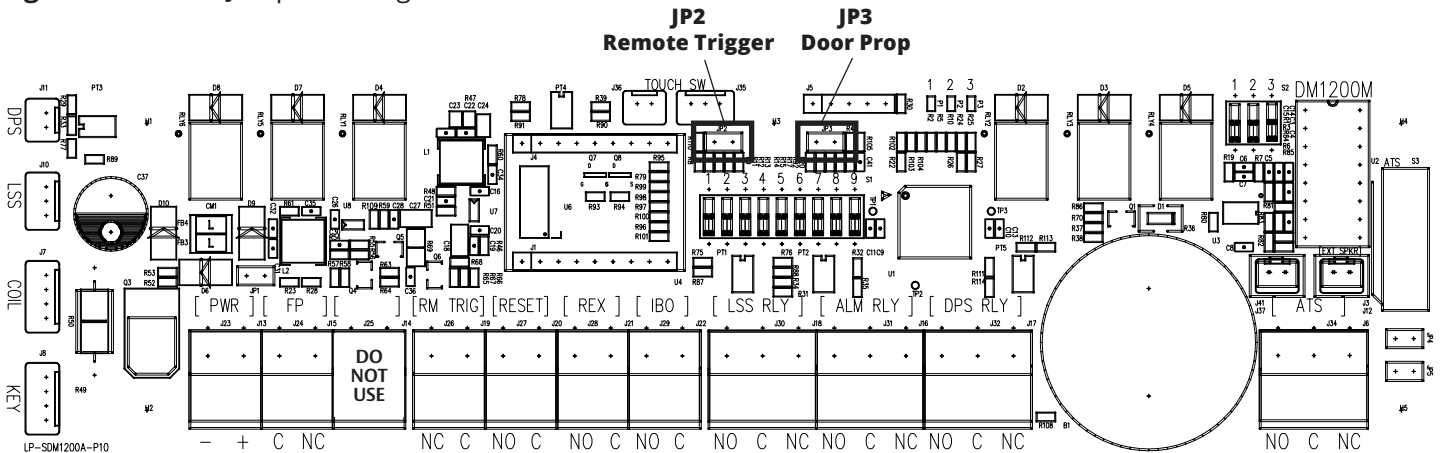
*May not be applicable to specific Chicago and California variants. Please consult local AHJ to ensure code requirements are met.

Terminal Board Connections

[PWR]		[FP]		[ ]		[RM TRIG]		[RESET]		[REX]		[IBO]		[LSS RLY]			[ARM RLY]			[DPS RLY]			[ATS]		
—	+	NC	C			NC	C	NO	C	NO	C	NO	C	NO	C	NC	NO	C	NC	NO	C	NC	NO	C	NC
POWER IN (12/24 VDC)		FIRE ALARM — If fire brake not used, install provided jumper (see "Fire Alarm" under "Field Outputs" above)		DO NOT USE — For future expansion		EXTERNAL REMOTE TRIGGER		EXTERNAL RESET STATUS		EXTERNAL REQUEST TO EXIT/ BYPASS		INSTANT BYPASS OVERRIDE		BOND AND LOCKED STATE SENSOR			EXTERNAL ALARM STATUS			DOOR POSITION SWITCH (POWERED)			TAMPER SWITCH STATUS		
INPUT		INPUT				INPUT		INPUT		INPUT		INPUT		OUTPUT			OUTPUT			OUTPUT			OUTPUT		

Diagram 2 1200DE PCB Dipswitch Settings (NOTE: All switches shown in the "OFF" position)
NOTE: Ensure wires are not pinched when cover is installed.

General Dipswitch Settings & Labels

Nuisance Delay
Nuisance Delay
Irrevocable Alarm
External Bypass - Delay
External Bypass - Delay
Power-up State
Trigger Type
Alarm Type
Auto/Manual Relock

NOTE: All switches shown in "OFF" position.

Language Dipswitch Settings

NOTE: All switches shown in "OFF" position.

*May not be applicable to specific Chicago and California variants. Please consult local AHJ to ensure code requirements are met.

Dipswitch Settings Overview

NUISANCE DELAY (SW1, SW2)

Nuisance delay is the configurable amount of time* (field configurable for 0, 1, 2 or 3 seconds) before the Exit Delay cycle begins. During this time, if the door is released or remote trigger ([RM TRIG]) removed, the maglock will not enter Exit Delay, the lock is reset and the door remains secure. If Nuisance delay time is exceeded, the maglock will enter the irrevocable Exit Delay cycle and countdown begins. The time set for Nuisance delay is included in the Exit Delay cycle and will not increase or decrease the total time to unlock once Exit Delay begins. Please note: Nuisance delay may not be configurable in specific Chicago (1200DE-CH) and California (1200DE-CA15S and 1200DE-CA30S) variants. Please consult local AHJ to ensure code requirements are met.

IRREVOCABLE ALARM (SW3)

Exit Delay can be selectable for 15 or 30 seconds*. The time set for Nuisance delay is included in the Exit Delay cycle and will not increase or decrease the total time to unlock once Exit Delay begins. Please note: Exit delay may not be configurable in specific Chicago (1200DE-CH) and California (1200DE-CA15S and 1200DE-CA30S) variants. Please consult local AHJ to ensure code requirements are met.

EXTERNAL BYPASS (SW4, SW5)

On standard 1200DE models, the bypass (unlock) time is selectable for 0, 5, 10, or 30 seconds. After the Request to Exit ([REX]) input is activated, the lock will remain "bypassed" (unlocked) for the selected time. The 1200DE will automatically relock if the door is opened, and then closed during the exit delay cycle. Please note: bypass timer begins upon removal of closure.

POWER-UP LOCKED/UNLOCKED (SW6)

For the standard version of the 1200DE, users have the option of powering-up in either a locked or unlocked state. In the locked state, the 1200DE will attempt to reset and secure the door automatically. In the unlocked state, a manual reset using the keyswitch or remote keyswitch ([RESET]) is necessary. Please note: both California variants as well as the Chicago variant require a manual reset after power-up.

TRIGGER TYPE (SW7)

Enables or disables the remote trigger input. Please note: the built-in "internal" exit delay cycle trigger is always active, regardless of the external trigger input being enabled or disabled.

ALARM TYPE (VOICE/TONE) (SW8)

Field configurable for all variants, users have the option to select either "TONE ONLY" or "VOICE" for alarm type. With VOICE selected, the Exit Delay countdown will include verbal exit instructions and warning beep (tone). Upon completion of Exit Delay, the lock will release and verbal instructions of "Exit Now" (in the appropriate language) will continue until the lock is reset. With TONE ONLY selected, the Exit Delay countdown will include a warning beep (tone) only, which changes to a continuous tone once the Exit Delay cycle is complete.

AUTO/MANUAL RELOCK (SW9)

Standard (Non-regional) Locks- "Auto" will automatically reset and relock after an exit delay cycle. "Manual" requires a manual reset of the lock after an exit delay cycle. Please note: auto relock may not be configurable in specific Chicago (1200DE-CH) and California (1200DE-CA15S and 1200DE-CA30S) variants. Please consult local AHJ to ensure code requirements are met.

Language DIP Switch Settings

3 DIP SW to select language (DIP3 Reserved)			
DIP1	DIP2	DIP3 Reserved	Language
ON	ON	OFF	English
ON	OFF	OFF	French/English
OFF	ON	OFF	Spanish/English
OFF	OFF	OFF	English

*May not be applicable to specific Chicago and California variants. Please consult local AHJ to ensure code requirements are met.

General DIP Switch Settings

Code	Nuisance Delay			Irrevocable Alarm		Bypass (Release) Delay			Power-Up lock/unlock		Remote Exit Cycle Trigger		Alarm Type		Auto or Manual Relock	
Standard for all other regions (Factory Setting Bolded)	**SW1**	**SW2**	Sec	**SW3**	Sec	**SW4**	**SW5**	Sec	**SW6**	Status	**SW7**	Status	**SW8**	Status	**SW9**	Status
	Off	**Off**	0	**Off**	15	**Off**	**Off**	0	**Off**	Unlock	**Off**	Disables External	**Off**	Voice	**Off**	Manual
	On	Off	1			On	Off	5								
	Off	On	2	On	30	Off	On	10	On	Lock	On	Enables External	On	Tone	On	Auto
	On	On	3			On	On	30								
Chicago	**SW1**	**SW2**	Sec	**SW3**	Sec	**SW4**	**SW5**	Sec	**SW6**	Status	**SW7**	Status	**SW8**	Status	**SW9**	Status
	Off	Off	1	Off	15	Off	Off	0	Off	Unlock	Off	Disables External	Off	Voice	Off	Manual
	On	Off	1			On	Off	0								
	Off	On	1	On	15	Off	On	0	On	Unlock	On	Enables External	On	Tone	On	Manual
	On	On	1			On	On	0								
California 15 Seconds	**SW1**	**SW2**	Sec	**SW3**	Sec	**SW4**	**SW5**	Sec	**SW6**	Status	**SW7**	Status	**SW8**	Status	**SW9**	Status
	Off	Off	0	Off	15	Off	Off	0	Off	Unlock	Off	Disables External	Off	Voice	Off	Manual
	On	Off	1			On	Off	0								
	Off	On	2	On	15	Off	On	0	On	Unlock	On	Enables External	On	Tone	On	Manual
	On	On	3			On	On	0								
California 30 Seconds	**SW1**	**SW2**	Sec	**SW3**	Sec	**SW4**	**SW5**	Sec	**SW6**	Status	**SW7**	Status	**SW8**	Status	**SW9**	Status
	Off	Off	0	Off	30	Off	Off	0	Off	Unlock	Off	Disables External	Off	Voice	Off	Manual
	On	Off	1			On	Off	0								
	Off	On	2	On	30	Off	On	0	On	Unlock	On	Enables External	On	Tone	On	Manual
	On	On	3			On	On	0								

*May not be applicable to specific Chicago and California variants. Please consult local AHJ to ensure code requirements are met.

Model Confirmation Display Codes

If auto relock is disabled, the 1200DE will show one of the following codes upon reset:

- **-0** Standard 1200DE variant
- **-1** 1200DE Chicago variant
- **-2** 1200DE California 15 second variant
- **-3** 1200DE California 30 second variant

Behavior of Delayed Egress with Regional Settings

California

Upon power up, lock goes into an alarm state and requires a manual reset. Nuisance delay is settable to 0, 1, 2 or 3 seconds and the exit delay is fixed at 15 or 30 seconds. A manual reset is required after a delayed egress event.

Chicago

Upon power up, lock goes into an alarm state and requires a manual reset. Nuisance delay is fixed at 1 second, the exit delay is fixed at 15 seconds, and the bypass delay is fixed at 0 seconds. A manual reset is required after a delayed egress event.

1200DE Display Modes

| 15. | **Door armed and locked** |

| 00. | **Alarm countdown has ended, door is unlocked and alarm sounding until reset.** |

| UN | **Door unlocked and alarm is shunted (REX or Bypass)** |

| OP | **Door has been opened after REX, Bypass or Alarm.** |

Test Procedure / Troubleshooting

NOTE: *Ensure wires are not pinched when cover is installed.*

Error Codes

| E1 | **Sensor Switch Error**
If E1 error occurs during initial install, adjust sex bolt and retry activation. Ensure sex bolt is flush or slightly below flush to the surface of the strike. |

| E2 | **Door Position Sensor Error** |

| 15. *Flashing Dot* | **Device not in energy savings mode. Please check Door Position Sensor and Sensor Switch** |

NOTE: *Fire Alarm input: If fire brake not used, install provided jumper on the terminal block if a dry normally closed contact from a fire alarm input OR smoke detector system is not connected.*

*May not be applicable to specific Chicago and California variants. Please consult local AHJ to ensure code requirements are met.
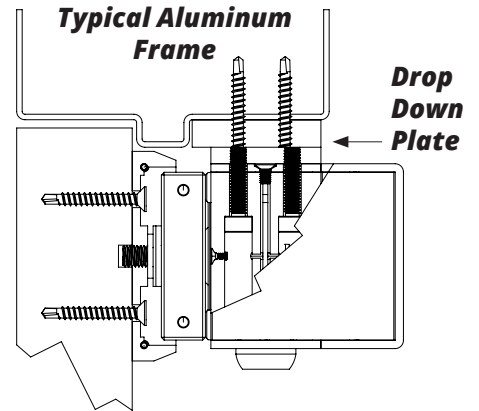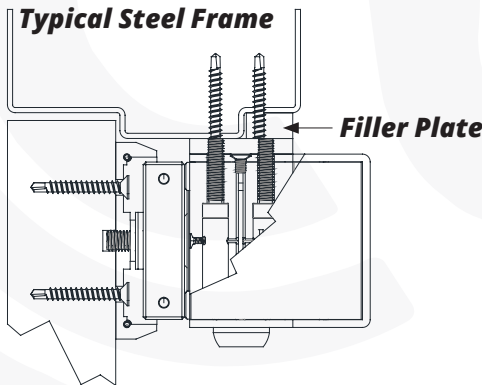
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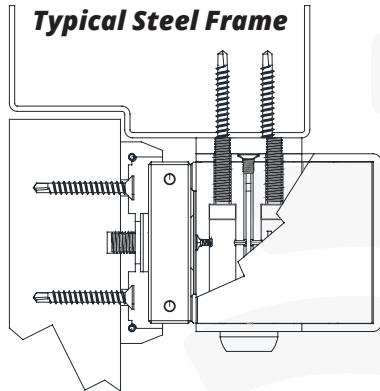
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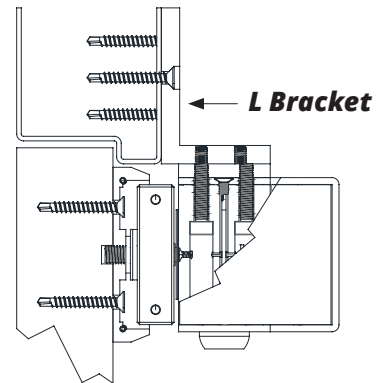
**Standard installation
No optional brackets needed**
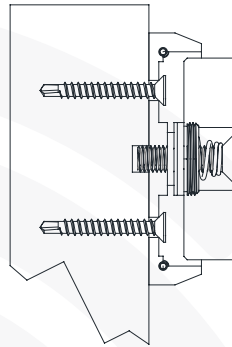
**Typical Armature
Installation**

**Typical Aluminum
Frame**

**Drop
Down
Plate**

**AM6300 1/2"
Drop Down Plate**

**AM6305 5/8"
Drop Down Plate**

Typical Steel Frame

Filler Plate

**AM6360 5/8" Filler Plate or
AM6361 1/2" Filler Plate**

L Bracket

AM6320 L Bracket

Warranty

For information on warranty coverage and replacement options, please visit **alarmcontrols.com/warranty**