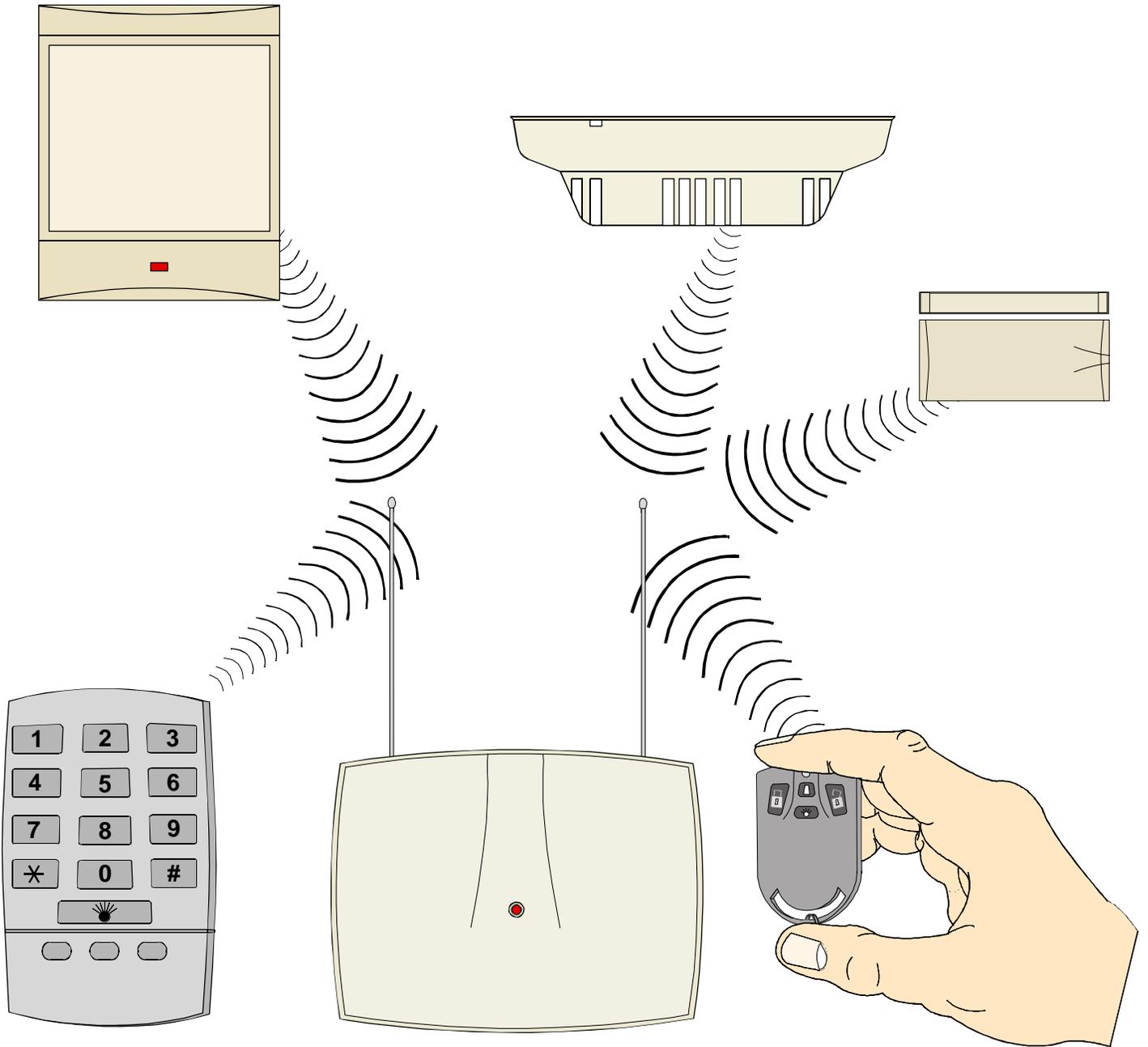


# Wireless Reference Guide for the DS7400Xi (4+) Control/Communicator



detection systems

A member of the  
Bosch Group

## Table of Contents

<p><b>1.0 Panel Programming Information ..... 3</b></p> <p>1.1 Receiver Setup: Address/Supervision ..... 3</p> <p>1.2 Receiver Programming: Program Address 2731 ..... 3</p> <p><b>2.0 Adding Wireless RF Sensors/Contacts .. to the System ..... 4</b></p> <p>2.1 General Information ..... 4</p> <p>Step 1 Programming the Zone Functions: Program Addresses (0001-0030) ..... 5</p> <p>Step 2: Assigning a Zone Function to the Zone: Program Addresses (0167-0278) ..... 6</p> <p>Step 3: Assigning a Zone Type to the Zone: Program Addresses (0483-0538) ..... 6</p> <p>Step 4: Assigning a Partition to the Zone: Program Addresses (0355-0410) ..... 7</p> <p><b>3.0 Adding RF3341 Keypads ..... 8</b></p> <p>3.1 General Information ..... 8</p> <p>Step 1: Setting RF3341 Keypad Supervision ..... 8</p> <p>Step 2: Assigning Keypad Type: Program Addresses 3131-3138 ..... 8</p> <p>Step 3: Assigning Keypad Partition: Program Addresses 3139-3146 ..... 8</p> <p>Step 4: Programming Wireless Keypads ..... 9</p> <p>Step 5: Wireless Keypad A, B and C Keys (Optional) ..... 9</p> <p>Step 6: Programming On-Board Outputs (Optional): Program Addresses 2734-2736 ..... 9</p> <p>Step 7: On-Board Output Partition Assignment and Chirp Control (Optional): Program Addresses 2737-2738 ..... 9</p> <p>Step 8: Programming Output Functions to Follow the Wireless Keypad Option  Key (Optional) ..... 10</p>	<p><b>4.0 Adding RF3332, RF3334, and RF3502 Keyfobs ..... 10</b></p> <p>4.1 General Information ..... 10</p> <p>Step 1: Assigning Zone Type: Programming Addresses 0483-0538 ..... 10</p> <p>Step 2: Zone Programming: Programming Addresses 0167-0278 ..... 11</p> <p>Step 3: Assigning Keyfobs to a Partition: Programming Address 0355 - 0410 ..... 11</p> <p>Step 4: Programming Wireless Keyfobs ..... 11</p> <p>Step 5: Wireless Keyfob Panic Function (Optional) ..... 11</p> <p>Step 6: Programming On-Board Outputs for the RF3334 Keyfob (Optional): Programming Addresses 2734-2736 ..... 11</p> <p>Step 7: On-Board Output Partition Assignment and Chirp Control (Optional): Programming Addresses 2737-2738 ..... 12</p> <p>Step 8: Programming Output Functions to Follow the Keyfob Output Buttons (Optional) ..... 12</p> <p><b>5.0 Programming Wireless RF Devices .... into the DS7400Xi (4+) Panel ..... 13</b></p> <p>5.1 General Information ..... 13</p> <p>5.2 Adding RF Zones ..... 13</p> <p>5.3 Testing RF Zones ..... 14</p> <p>5.4 Removing RF Zones (and RF Keypads) ..... 14</p> <p>5.5 RF Zone Troubles ..... 15</p> <p>5.6 Receiver Trouble Displays ..... 15</p> <p><b>Index ..... 16</b></p>
---	---

## 1.0 Panel Programming Information

### 1.1 Receiver Setup

#### Address

Each DS7400Xi Control Panel can accept up to two receivers. The appropriate receiver address (#1 or #2) is selected at the receiver and the default settings is #1. Use setting #1 if this is the only receiver on the panel. Use setting #2 if a second receiver is used. See Installation Instructions for configuration details.

#### Supervision

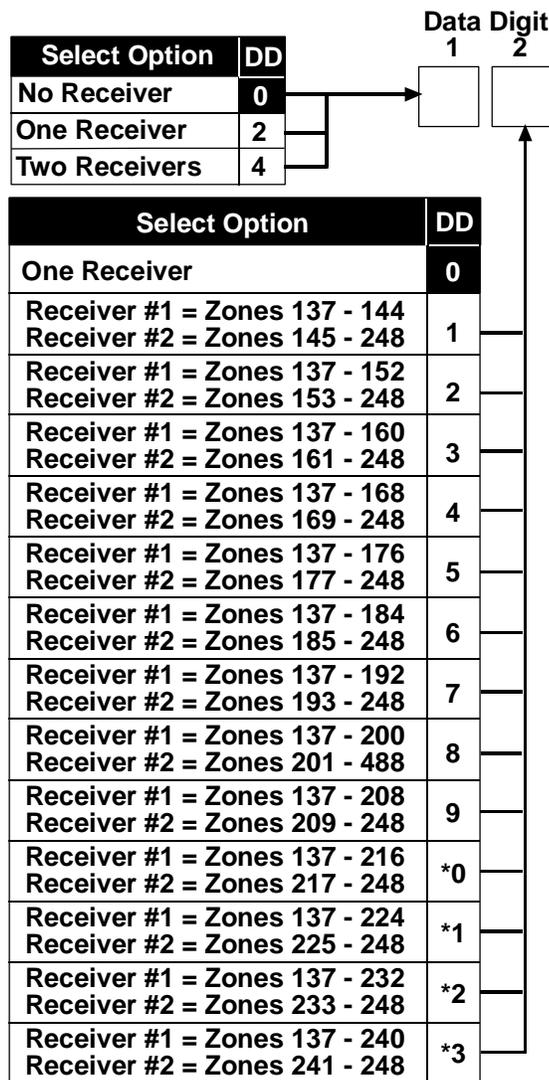
The receiver expects to periodically receive status from each installed transmitter and will report to the control panel when it has not heard from a specific transmitter for the interval selected at the receiver (typically 12 or 4 hours). See Installation Instructions for configuration details.

### 1.2 Receiver Programming: Program Address 2731

The DS7400Xi control panel can accept 1 or 2 receivers on the multiplex bus. The panel must be programmed for the number of receivers used and which zones are assigned to each receiver.

**Data Digit 1** defines if there are 0, 1, or 2 receivers.

**Data Digit 2** defines the zones covered by receiver #1 and receiver #2. If there is only one receiver, Data Digit 2 **must** be 0. If two receivers are programmed, Data Digit 2 should **not** be 0. Do **not** program two receivers if you are not programming zones to both receivers. Also, do **not** install a second receiver if it is not properly programmed.



## 2.0 Adding Wireless RF Sensors/Contacts to the System

### 2.1 General Information



Any zones used by RF devices must be programmed as RF zones before the wireless devices can be activated. This is accomplished by programming for an RF receiver in Address 2731. See *Section 1.1 - Receiver Programming: Program Address 2731*.

To install an RF (Wireless) Sensor or Contact perform the following:

- Program RF zones on the DS7400Xi (4+) Control Panel.
  - Programming a zone is a four step process. These steps must be performed, in order, to program a zone.
    - Step 1 is programming Zone Functions (what the zone will do in alarm),
    - Step 2 is assigning a Zone Function to the zone.
    - Step 3 is assigning a Zone Type to the zone.
    - Step 4 is assigning the zone to a partition.These steps allow you to define the RF (Wireless) Zone's address (zone number), its type (**always a single input zone, selection 0**), which zone or output function it will follow (1-30) and its partition (1-8).
- Install the RF Sensor(s) or Contact(s) according to its installation Instructions.
- Program the RF Sensor(s) or Contact(s) (refer to *Section 5.0 - Programming Wireless RF Devices into the DS7400Xi (4+) Panel*).
  - Add the RF zones.
  - Test the RF zones.

## Step 1: Programming the Zone Functions: Program Addresses (0001-0030)

A Zone Function is the description of how a zone will behave. Up to 30 different Zone Functions may be programmed. You may use the default values (which are already programmed into the panel) and skip this step, or change the defaults, or add new Zone Functions. See Section 6.2 of the DS7400Xi (4+) Reference Guide (P/N: 40816) for further details.



The Zone Functions for **RF Sensors** must always be set for "Alarm on Short" and "Trouble on Open" (options 4-7).

The Zone Functions for **RF Contacts** must always be set for "Alarm on Short" and "Trouble on Open" when using the **Magnet Only** (options 4-7). The Zone Functions for **RF Contacts** may be set for any appropriate value when using the **Input Loop Only** (options 0-5).

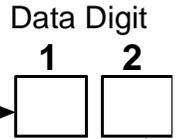
Select Options	Enter the Data Digit as a:											
	0	1	2	3	4	5	6	7	*2	*3	*4	*5
Invisible Alarm	●				●				●			
Silent Alarm		●				●				●		
Steady Alarm Output			●				●				●	
Pulsing Alarm Output				●				●				●
Alarm on Short	●	●	●	●	●	●	●	●				
Alarm on Open	●	●	●	●					●	●	●	●
Trouble on Open**					●	●	●	●				
Trouble on Short									●	●	●	●

\*2 - \*5 are Hex values. They will display as C - F at the keypads.

\*\* = Only when disarmed. When armed, this becomes Alarm on Open or Short for non-24-hour zones. **Note:** Multiplex contacts (DS7450 and DS7452) should not be programmed for Trouble on Open.

Select Option	DD
Interior Delayed	0
Perimeter Instant	1
24-Hour	2
Entry/Exit Delay #1	3
Entry/Exit Delay #2	4
Interior Entry/Exit Follower	5
Interior Home/Away	6
Interior Instant	7
Day Monitor	8
Keyswitch (See note below)	9
Fire Zone with verification	*0
Fire Zone w/out verification	*1
Waterflow	*2
Supervisory	*3
Entry/Exit Delay Cancel 1	*4
Entry/Exit Delay Cancel 2	*5

Value (fill in)	Zone Funct.	Address	Default Values (Will be forced to different values when in Commercial Fire Mode. See Section 10.18.3 of the DS7400Xi (4+) Reference Guide P/N: 40816)
	1	0001	2 = Steady alarm output, alarm on short and open. 3 = Entry/exit delay 1.
	2	0002	2 = Steady alarm output, alarm on short and open. 4 = Entry/exit delay 2.
	3	0003	2 = Steady alarm output, alarm on short and open. 1 = Perimeter Instant.
	4	0004	2 = Steady alarm output, alarm on short and open. 5 = Interior entry/exit follower.
	5	0005	2 = Steady alarm output, alarm on short and open. 6 = Interior home/away.
	6	0006	2 = Steady alarm output, alarm on short and open. 7 = Interior Instant.
	7	0007	2 = Steady alarm output, alarm on short and open. 2 = 24-hour.
	8	0008	7 = Pulsing alarm output, alarm on short, trouble on open. *0 = Fire zone with verification.
	9	0009	2 = Steady alarm output, alarm on short and open. 1 = Perimeter Instant.
	10	0010	2 = Steady alarm output, alarm on short and open. 1 = Perimeter Instant.
	11	0011	2 = Steady alarm output, alarm on short and open. 1 = Perimeter Instant.
	12	0012	2 = Steady alarm output, alarm on short and open. 1 = Perimeter Instant.
	13	0013	2 = Steady alarm output, alarm on short and open. 1 = Perimeter Instant.
	14	0014	2 = Steady alarm output, alarm on short and open. 1 = Perimeter Instant.
	15	0015	2 = Steady alarm output, alarm on short and open. 1 = Perimeter Instant.
	16 to 30	0016 to 0030	2 = Steady alarm output, alarm on short and open. 1 = Perimeter Instant.



**Note:** If digit 2 = 9 (keyswitch), use this chart for digit 1.

Select Option	DD
Single Partition-No Force Arm	0
Single Partition-Can Force Arm	1
All Partitions-No Force Arm	2
All Partitions-Can Force Arm	3

## Step 2: Assigning a Zone Function to the Zone: Program Addresses (0167-0278)

In this step, a Zone Function is assigned to the Zone.

Data Digit		<b>Options</b>	<b>Zone Function Value</b>
1	2		
<input type="text"/>	<input type="text"/>	Disable a zone	00
		Enter a Zone Function Value	01-30

Zone Number	Address	Zone Function Default
137	0167	00
138	0168	00
139	0169	00
140	0170	00
141	0171	00
142	0172	00
143	0173	00
144	0174	00
145-248	0175-0278	00

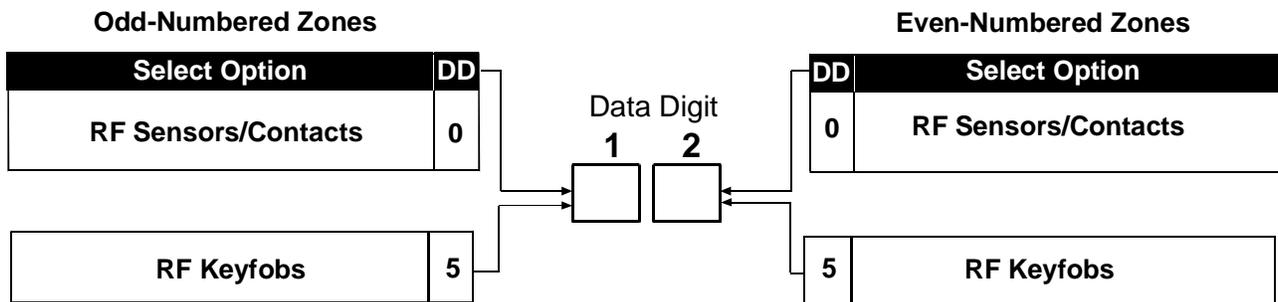
Hint: Address = Zone Number + 30

## Step 3: Assigning a Zone Type to the Zone: Program Addresses (0483-0538)

In this step, a Zone Type is assigned to the Zone.



For RF devices, this is always a Sensor or Contact, selection 0, or a Keyfob, selection 5. The zone type for odd numbered zones is programmed in the first data digit of these addresses. The zone type for even numbered zones is programmed in the second data digit of these addresses.



Zones	Address	Zones	Address	Zones	Address	Zones	Address
Zones 137 & 138	0483	Zones 165 & 166	0497	Zones 193 & 194	0511	Zones 221 & 222	0525
Zones 139 & 140	0484	Zones 167 & 168	0498	Zones 195 & 196	0512	Zones 223 & 224	0526
Zones 141 & 142	0485	Zones 169 & 170	0499	Zones 197 & 198	0513	Zones 225 & 226	0527
Zones 143 & 144	0486	Zones 171 & 172	0500	Zones 199 & 200	0514	Zones 227 & 228	0528
Zones 145 & 146	0487	Zones 173 & 174	0501	Zones 201 & 202	0515	Zones 229 & 230	0529
Zones 147 & 148	0488	Zones 175 & 176	0502	Zones 203 & 204	0516	Zones 231 & 232	0530
Zones 149 & 150	0489	Zones 177 & 178	0503	Zones 205 & 206	0517	Zones 233 & 234	0531
Zones 151 & 152	0490	Zones 179 & 180	0504	Zones 207 & 208	0518	Zones 235 & 236	0532
Zones 153 & 154	0491	Zones 181 & 182	0505	Zones 209 & 210	0519	Zones 237 & 238	0533
Zones 155 & 156	0492	Zones 183 & 184	0506	Zones 211 & 212	0520	Zones 239 & 240	0534
Zones 157 & 158	0493	Zones 185 & 186	0507	Zones 213 & 214	0521	Zones 241 & 242	0535
Zones 159 & 160	0494	Zones 187 & 188	0508	Zones 215 & 216	0522	Zones 243 & 244	0536
Zones 161 & 162	0495	Zones 189 & 190	0509	Zones 217 & 218	0523	Zones 245 & 246	0537
Zones 163 & 164	0496	Zones 191 & 192	0510	Zones 219 & 220	0524	Zones 247 & 248	0538

When using premises RF:

- zones 129 - 136 are reserved.
- zones 137 - 248 are available as RF zones only. Wired zones can not reside in zones 137 - 248 when using RF.

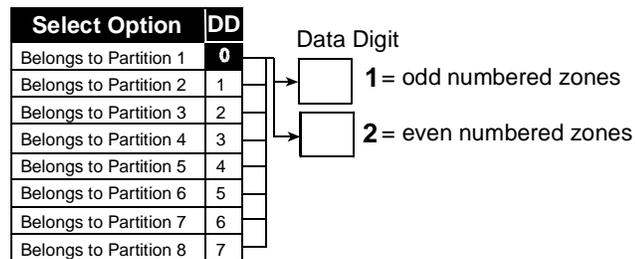
#### Step 4: Assigning a Partition to the Zone: Program Addresses (0355-0410)

In Zone Partition Assignment, each zone is assigned to a partition. By default, all zones are assigned to partition 1.

The partition assignment for odd numbered zones is programmed in the first data digit of these addresses. The partition assignment for even numbered zones is programmed in the second data digit of these addresses.

For example, to assign zone 137 to partition 1 and zone 138 to partition 2, program address 0355 as 01.

Zones	Address	Zones	Address	Zones	Address	Zones	Address
Zones 137 & 138	0355	Zones 165 & 166	0369	Zones 193 & 194	0383	Zones 221 & 222	0397
Zones 139 & 140	0356	Zones 167 & 168	0370	Zones 195 & 196	0384	Zones 223 & 224	0398
Zones 141 & 142	0357	Zones 169 & 170	0371	Zones 197 & 198	0385	Zones 225 & 226	0399
Zones 143 & 144	0358	Zones 171 & 172	0372	Zones 199 & 200	0386	Zones 227 & 228	0400
Zones 145 & 146	0359	Zones 173 & 174	0373	Zones 201 & 202	0387	Zones 229 & 230	0401
Zones 147 & 148	0360	Zones 175 & 176	0374	Zones 203 & 204	0388	Zones 231 & 232	0402
Zones 149 & 150	0361	Zones 177 & 178	0375	Zones 205 & 206	0389	Zones 233 & 234	0403
Zones 151 & 152	0362	Zones 179 & 180	0376	Zones 207 & 208	0390	Zones 235 & 236	0404
Zones 153 & 154	0362	Zones 181 & 182	0377	Zones 209 & 210	0391	Zones 237 & 238	0405
Zones 155 & 156	0364	Zones 183 & 184	0378	Zones 211 & 212	0392	Zones 239 & 240	0406
Zones 157 & 158	0365	Zones 185 & 186	0379	Zones 213 & 214	0393	Zones 241 & 242	0407
Zones 159 & 160	0366	Zones 187 & 188	0380	Zones 215 & 216	0394	Zones 243 & 244	0408
Zones 161 & 162	0367	Zones 189 & 190	0381	Zones 217 & 218	0395	Zones 245 & 246	0409
Zones 163 & 164	0368	Zones 191 & 192	0382	Zones 219 & 220	0396	Zones 247 & 248	0410



### 3.0 Adding RF3341 Keypads

#### 3.1 General Information

**If using wireless keypads, please observe the following:**

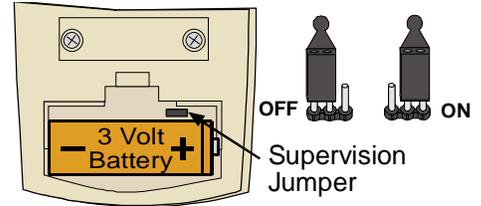
- There must be at least one **wired** keypad in the system.
- If only one wired keypad is used, it must be keypad #1.
- Wireless keypads must not be assigned as master keypads.
- The system may have a maximum of five wireless keypads.
- Wireless keypads can only be assigned as keypads 1-5.
- Both a wired and a wireless keypad may be assigned to the same address.
- If both a wired and a wireless keypad are assigned to the same address, select the option for the appropriate wired keypad in Addresses 3131-3133.
- If a wireless keypad without a wired counterpart is desired, program the Data Digit as 0 (Disabled).
- Wireless keypads may be assigned to any partition.



For UL Listed installations, an indicating light programmed to follow the armed/disarmed states of the system is required near the primary entry/exit point. See your control panel programming reference guide for information on programming an output to follow the armed/disarmed state.

#### Step 1: Setting RF3341 Keypad Supervision

Set the Supervision Jumper to ON, if the keypad will be supervised by the control panel. Select **ON (Supervised)** only if the keypad will **always** be in radio range of the control panel receivers. If the keypad is moved beyond the range of the receivers, a keypad fault condition will be displayed at the wired keypads. Select **OFF (Unsupervised)** if the keypad will be removed from the premises.

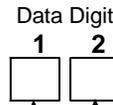


#### Step 2: Assigning Keypad Type: Programming Addresses 3131-3138

Keypad type is either wired or wireless. If both a wired and a wireless keypad will be sharing an address, program the Data Digit for the wired keypad type.

**Data Digit 1** defines the first keypad in the address.

**Data Digit 2** defines the second keypad in the address.



Select Options	0	1	2	3
Disabled or Wireless Only Keypad	●			
Alpha (LCD) Keypad		●		●
LED Keypad			●	
Master Keypad***				●

\*\*\*Wireless keypads must not be assigned as master keypads.

<b>Program Address 3131</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 1    Keypad 2 default = 1    default = 0	<b>Program Address 3132</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 3    Keypad 4 default = 0    default = 0
<b>Program Address 3133</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 5    Keypad 6 default = 0    default = 0	<b>Program Address 3134</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 7    Keypad 8 default = 0    default = 0
<b>Program Address 3135</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 9    Keypad 10 default = 0    default = 0	<b>Program Address 3136</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 11    Keypad 12 default = 0    default = 0
<b>Program Address 3137</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 13    Keypad 14 default = 0    default = 0	<b>Program Address 3138</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> 0 Keypad 15    Must Be 0 default = 0    default = 0

Grayed addresses are **not** available for wireless keypads.

#### Step 3: Assigning Keypad Partition: Programming Addresses 3139-3146

Keypad Partition Assignment is where both wired and wireless keypads are assigned to a partition. Wireless keypads may only be keypads 1-5. Wireless keypads may be assigned to any partition.

**Data Digit 1** defines the first keypad in the address.

**Data Digit 2** defines the second keypad in the address.

Select Option	DD
Belongs to Partition 1	0
Belongs to Partition 2	1
Belongs to Partition 3	2
Belongs to Partition 4	3
Belongs to Partition 5	4
Belongs to Partition 6	5
Belongs to Partition 7	6
Belongs to Partition 8	7

<b>Program Address 3139</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 1    Keypad 2	<b>Program Address 3140</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 3    Keypad 4
<b>Program Address 3141</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 5    Keypad 6	<b>Program Address 3142</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 7    Keypad 8
<b>Program Address 3143</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 9    Keypad 10	<b>Program Address 3144</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 11    Keypad 12
<b>Program Address 3145</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> Keypad 13    Keypad 14	<b>Program Address 3146</b> Data Digit 1    Data Digit 2 <input type="checkbox"/> <input type="checkbox"/> 0 Keypad 15    Must Be 0

Grayed addresses are **not** available for wireless keypads.

#### Step 4: Programming Wireless Keypads

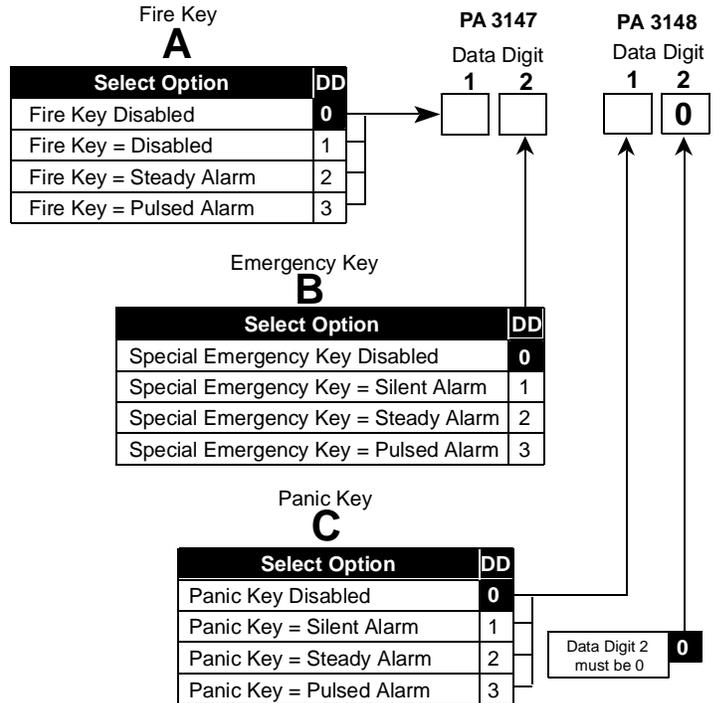
Once the Keypad Assignment Programming (Addresses 3131-3138) and Keypad Partition Assignment Programming (Addresses 3139-3146) have been completed, the wireless keypads may be programmed into the system. The keypads will appear as zones 130 (for keypad #1) through zone 134 (for keypad #5). See *Section 5.0 - Programming Wireless RF Devices into the DS7400Xi Panel* for programming the keypads.

#### Step 5: Wireless Keypad A, B and C Keys (Optional)

The A, B and C keys will only be operational if programmed in your control/communicator. Programming Addresses 3147 and 3148 allow you to disable or activate the A, B, and/or C keys on the keypad for silent, pulsed, or steady alarm. See *“Emergency Key Programming: Program Addresses 3147-3148”* in your *DS7400Xi (4+) Reference Guide (P/N: 40816)* for more information.

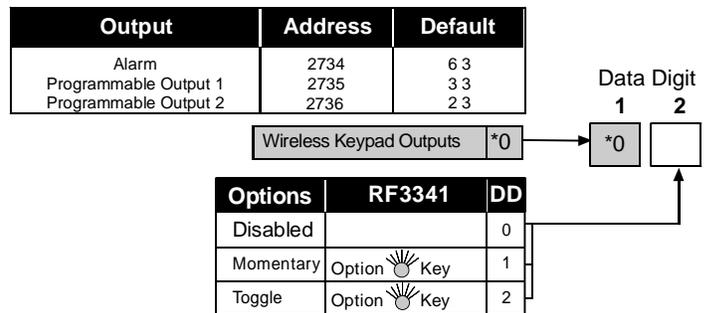


If your Control Panel is set for Commercial Fire Mode, the values for the Fire Key “A” and the Panic Key “C” may be forced to different values. For more information, refer to *“Commercial Fire Mode Programming: Program Address 2733”* in your *DS7400Xi (4+) Reference Guide (P/N: 40816)*.



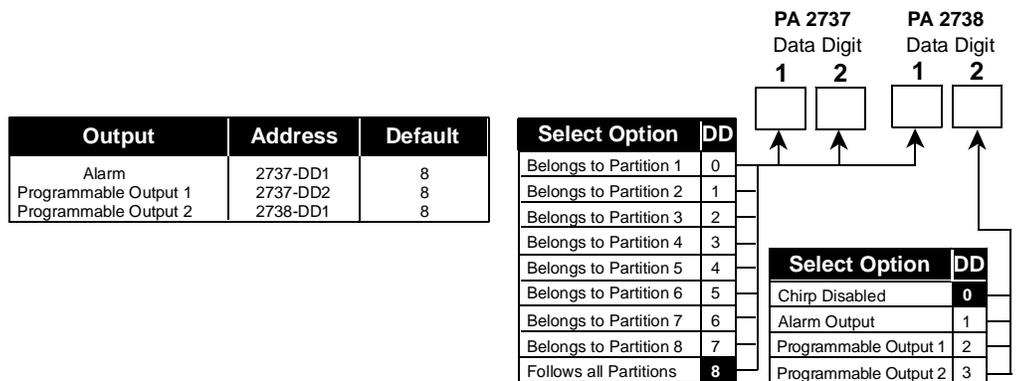
#### Step 6: Programming On-Board Outputs: Program Addresses 2734-2736 (Optional)

The operation of the Option Key will be the same on all keypads and keyfobs if they are assigned to the same partition. The RF3341 Keypad has an Option key which may be programmed to drive the control panel outputs. The Option key may be used to drive any of the three panel outputs or any of the 24 custom programmable outputs.



#### Step 7: On-Board Output Partition Assignment and Chirp Control: Program Addresses 2737-2738 (Optional)

The outputs may be assigned to follow the Option Key in one or all partitions in the Output Partition Assignment Addresses 2737-2738. Outputs may also be programmed to “Chirp” (a 1/2 second sounder output when the panel is armed or two 1/2 second sounder outputs when the panel is disarmed).



## Step 8: Programming Output Functions to Follow the Wireless Keypad Option Key (Optional)

Output functions can be assigned to off-board devices, MUX devices, etc.

Data Digit 1 Option \*0 is used to program an Output Function to follow the Wireless Keypad Option Button.

Follow Wireless Keypad Option Key \*0 → \*0

Options	RF3341	DD
Disabled		0
Momentary	Option  Key	1
Toggle	Option  Key	2

Program Address 1

Data Digit 1 2

Output Function Number	Program Address 1	Output Function Number	Program Address 1
1	2772	13	2808
2	2775	14	2811
3	2778	15	2814
4	2781	16	2817
5	2784	17	2820
6	2787	18	2823
7	2790	19	2826
8	2793	20	2829
9	2796	21	2832
10	2799	22	2835
11	2802	23	2838
12	2805	24	2841

## 4.0 Adding RF3332, RF3334, and RF3502 Keyfobs

### 4.1 General Information

**NOTE:** Keyfobs are zone inputs. They do not require Keypad Assignment programming.

 **IMPORTANT** If the system is using two receivers, please note the following: Because keyfobs are assigned to a zone and zones are assigned to a receiver, the coverage of the keyfob is limited to the assigned receiver.

Each RF3332 (2-Button) or RF3334 (4-Button) or RF3502 (Panic) Keyfob occupies 1 RF zone. It is possible to have up to 112 Keyfobs on a system. The RF3334 Keyfob can also operate programmed outputs.

 **IMPORTANT** For UL Listed installations, an indicating light programmed to follow the armed/disarmed states of the system is required near the primary entry/exit point. See your control panel programming reference guide for information on programming an output to follow the armed/disarmed state.

### Step 1: Assigning Zone Type: Programming Addresses 0483-0538

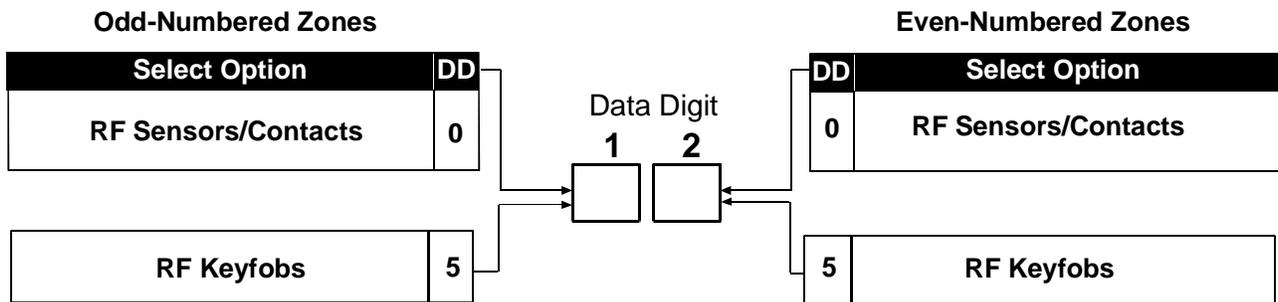
The zone type for odd numbered zones is programmed in the first data digit of these addresses. The zone type for even numbered zones is programmed in the second data digit of these addresses.

- Each Zone that will be used for a keyfob must be programmed as zone type 5.
- Each Keyfob must be assigned to a zone.



Any zones used by RF devices must be programmed as RF zones before the wireless devices can be activated. This is accomplished by programming for an RF receiver in Address 2731. Refer to *Section 1.0* of this Guide or to the *DS7400Xi (4+) Reference Guide (P/N: 40816)* for additional information.

Data Digit 1 and/or Data Digit 2 must be set to 5.



Zones	Address	Zones	Address	Zones	Address	Zones	Address
Zones 137 & 138	0483	Zones 165 & 166	0497	Zones 193 & 194	0511	Zones 221 & 222	0525
Zones 139 & 140	0484	Zones 167 & 168	0498	Zones 195 & 196	0512	Zones 223 & 224	0526
Zones 141 & 142	0485	Zones 169 & 170	0499	Zones 197 & 198	0513	Zones 225 & 226	0527
Zones 143 & 144	0486	Zones 171 & 172	0500	Zones 199 & 200	0514	Zones 227 & 228	0528
Zones 145 & 146	0487	Zones 173 & 174	0501	Zones 201 & 202	0515	Zones 229 & 230	0529
Zones 147 & 148	0488	Zones 175 & 176	0502	Zones 203 & 204	0516	Zones 231 & 232	0530
Zones 149 & 150	0489	Zones 177 & 178	0503	Zones 205 & 206	0517	Zones 233 & 234	0531
Zones 151 & 152	0490	Zones 179 & 180	0504	Zones 207 & 208	0518	Zones 235 & 236	0532
Zones 153 & 154	0491	Zones 181 & 182	0505	Zones 209 & 210	0519	Zones 237 & 238	0533
Zones 155 & 156	0492	Zones 183 & 184	0506	Zones 211 & 212	0520	Zones 239 & 240	0534
Zones 157 & 158	0493	Zones 185 & 186	0507	Zones 213 & 214	0521	Zones 241 & 242	0535
Zones 159 & 160	0494	Zones 187 & 188	0508	Zones 215 & 216	0522	Zones 243 & 244	0536
Zones 161 & 162	0495	Zones 189 & 190	0509	Zones 217 & 218	0523	Zones 245 & 246	0537
Zones 163 & 164	0496	Zones 191 & 192	0510	Zones 219 & 220	0524	Zones 247 & 248	0538

## Step 2: Zone Programming: Programming Addresses 0167-0278



Zone Programming (Program Addresses 0167-0278) is different when programming for keyfobs. Data Digit 1 is always 0, and Data Digit 2 can only be 1, 2, 3, or 4.

Keyfob function programming is programmed starting at Program Address 0167.

**Hint:** Zone number + 30 = The Program Address

**Example:** Zone 137 + 30 = Program Address 0167

Select Options	Data Digit			
	1	2	3	4
Single Partition No Force Arming Allowed	●			
Single Partition Force Arming is Allowed		●		
All Partitions No Force Arming Allowed			●	
All Partitions Force Arming is Allowed				●

## Step 3: Assigning Keyfobs to a Partition: Programming Address 0355 - 0410

- Each Keyfob must be assigned to one or all partitions. If one of the "All Partitions" options was selected for the zone (see Step 2 above) you do not need to assign a partition to the zone.
- The partition assignment for odd numbered zones is programmed into the first data digit of these addresses. The partition assignment for even numbered zones is programmed into the second data digit.

Select First Zone Option	DD
Belongs to Partition 1	0
Belongs to Partition 2	1
Belongs to Partition 3	2
Belongs to Partition 4	3
Belongs to Partition 5	4
Belongs to Partition 6	5
Belongs to Partition 7	6
Belongs to Partition 8	7

Select Second Zone Option	Data Digit	
	1	2
Belongs to Partition 1	0	
Belongs to Partition 2	1	
Belongs to Partition 3	2	
Belongs to Partition 4	3	
Belongs to Partition 5	4	
Belongs to Partition 6	5	
Belongs to Partition 7	6	
Belongs to Partition 8	7	

For Partition Assignment Addresses, refer to Step 4 of Section 2.0 of this Guide or to the DS7400Xi (4+) Reference Guide (P/N: 40816).

## Step 4: Programming Wireless Keyfobs

Once the Keyfob Zone Programming (Addresses 0167-0278) and Keyfob Partition Assignment Programming (Addresses 0355-0410) have been completed, the wireless Keyfobs may be programmed into the system. See Section 5.0 - Programming Wireless RF Devices into the DS7400Xi Panel for programming the Keyfobs.

## Step 5: Wireless Keyfob Panic Function (Optional)

The Panic function will only be operational if programmed in your control/communicator. Programming Address 3148 allows you to disable or activate the Panic "C" key on the keyfob for silent, pulsed, or steady alarm. See "Emergency Key Programming: Program Addresses 3147-3148" in your DS7400Xi (4+) Reference Guide (P/N: 40816) for more information.



If your Control Panel is set for Commercial Fire Mode, the values for the Panic Key "C" may be forced to different values. For more information, refer to "Commercial Fire Mode Programming: Program Address 2733" in your DS7400Xi (4+) Reference Guide (P/N: 40816).

Panic Key	C	Select Option	DD	PA 3148 Data Digit	
				1	2
Panic Key Disabled		0		0	
Panic Key = Silent Alarm		1			
Panic Key = Steady Alarm		2			
Panic Key = Pulsed Alarm		3			

Data Digit 2 must be 0

## Step 6: Programming On-Board Outputs for the RF3334 Keyfob: Programming Addresses 2734-2736 (Optional)

The RF3334 Keyfob has two key outputs which may be programmed to drive the control panel outputs. Either key may be used drive any of the three panel outputs or any of the 24 custom programmable outputs.

The operation of the Option  key will be the same on all keypads and keyfobs if they are assigned to the same partition.

Output	Address	Default
Alarm	2734	6 3
Programmable Output 1	2735	3 3
Programmable Output 2	2736	2 3

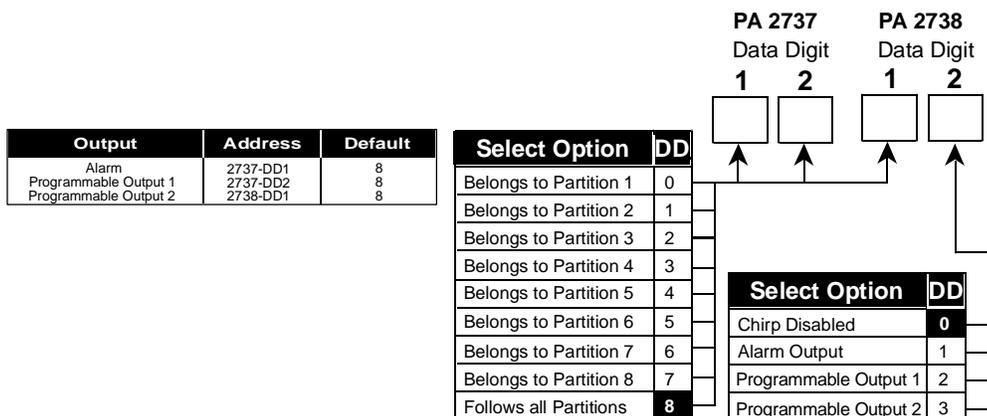
Wireless Keyfob Outputs		*0	Data Digit	
			1	2
Disabled		0	*0	
Momentary	Option  Key	1		
Toggle	Option  Key	2		
Momentary	Auxillary  Key	3		
Toggle	Auxillary  Key	4		



For any of these addresses, the first digit must be \*0 for Keyfobs.

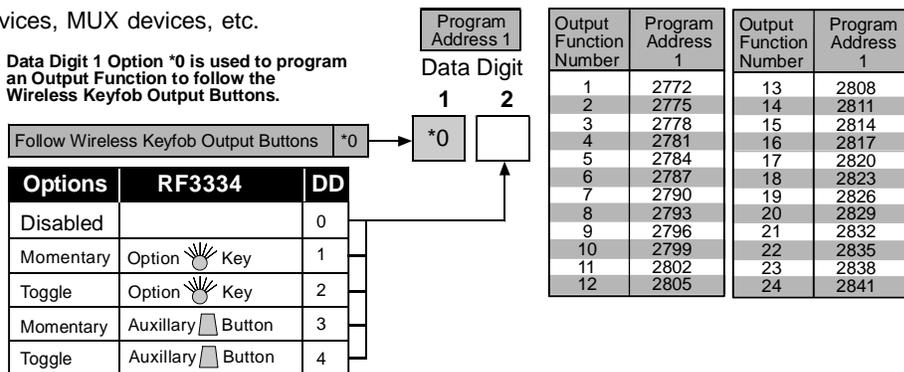
## Step 7: On-Board Output Partition Assignment and Chirp Control: Programming Addresses 2737-2738 (Optional)

The outputs may be assigned to follow the Option  Key in one or all partitions in the Output Partition Assignment Addresses 2737-2738. Outputs may also be programmed to "Chirp" (a 1/2 second sounder output when the panel is armed or two 1/2 second sounder outputs when the panel is disarmed).



## Step 8: Programming Output Functions to Follow the Keyfob Output Buttons (Optional)

Output functions can be assigned to off-board devices, MUX devices, etc.



## 5.0 Programming Wireless RF Devices into the DS7400Xi (4+) Panel

### 5.1 General Information

All Wireless RF devices (Keypads, Keyfobs, PIRs, Smoke Detectors and Contact Points) must be programmed into the DS7400Xi panel in order to be recognized.

Each wireless device will have a unique ID code attached to the device in the form of a two part bar code sticker or a number set as shown here:



It is suggested that you keep one part of the sticker for your records and leave the second part attached to the device.

To program a wireless device after the DS7400Xi (Ver. 4+) Control/Communicator has been programmed for RF zones, perform the following:

- Enter the programmer's mode by entering the default code followed by #0.

**NOTE:** The code for the programmer's mode is preprogrammed at the factory as 987654. The panel's factory default for PIN length is four digits. Therefore, as the panel is shipped, the default code for the programmer's mode is 9876. However, if you change the PIN length default from four digits to six digits, the programmer's mode default code will change to 987654.

**NOTE:** You may exit the programming mode at any time by pressing the [\*] key for two seconds. If no keystrokes are detected for thirty minutes, the panel will automatically exit the programmer's mode.

- Enter the RF programming mode by entering [9] [9] [9] [0] followed by the [#] button.

**NOTE:** If you make an entry mistake while in RF programming mode, you can clear the mistake by pressing the ✕ key twice.

**NOTE:** You may exit the RF programming mode at this time by pressing the "Off" key.

- If no RF zones have been programmed into the panel the following message will appear:

No RF Zones  
Press Off

- If the panel has been programmed with RF zones the RF Installer's Menu will then appear:

Add RF Zone?  
Press 1

Test RF Zone?  
Press 2

Remove RF Zone?  
Press 3

### 5.2 Adding RF Zones

- Select "Add RF Zone" by pressing the 1 key.
- If all of the RF zones have been added, the following message will appear:

Last RF Zone  
Press Off

- If zones are ready to be added, the following display will appear:

Add Zone ###  
Press #

- The zone number shown will be the lowest number zone available to be added. If no wireless devices (including keypads) are yet programmed, the zone shown will be 130. Zones 130 through 134 are reserved for wireless keypads and zones 137 through 248 are reserved for other wireless devices. You may step forward to other programmed and ready to be added zones by pressing the "ON" key on the keypad. If you step through all the zones and the message "Last RF Zone - Press Off" appears, you may return to the first available zone for programming by pressing the "On" key. You cannot step backward through the zones - only forward.



RF input zones and keyfobs will appear on the display as zones 137-248. RF keypads will appear as zones 130 (for keypad #1) through zone 134 (for keypad 5).

- When the desired zone number is shown in the display, press the # key to accept that zone number and display the following:

Enter ID Zn ###

- At this time, enter the 9 digit code from the ID sticker on the device followed by #. The system will confirm acceptance of the device with a single beep from the keypad and display the following message:

Added Zone ###  
Press On

- Pressing the "On" key at this time will prompt the system to the next zone ready to be added to the system or display the message "No Zones To Add Press Off" if there are no zones to be added.

- A three beep tone from the keypad will indicate that the device was not accepted by the system for one of the following reasons.
- If the display shows the following message, it indicates that the sensor code has already been added to the system. The sensor shown can be removed from the system (see Section 5.4) or another sensor may be added to the system.

Duplicate Zn ###  
Press #

- Pressing the # key will attempt to program the zone again.

- If the following message appears, it indicates that the device ID number was not entered correctly:

ID Entry Error  
Press #

- Pressing the "Off" key will exit the Add RF Zone mode. The system will pause while the RF zones are configured.

Configuring RF  
Please Wait

### 5.3 Testing RF Zones

From the RF Installer's menu, select Test RF Zone (selection 2).

Test RF Zone?  
Press 2

- If there are no RF zones programmed into the system or if the zones have not been "Added", the display will read:

No RF Zones  
Press Off

- If RF zones are programmed into the system and the sensors have been "Added", the display will show the first RF sensor available for testing:

Test Zone ###  
Press #

- You may test the zone shown by pressing the # key or advance to another zone by pressing the "On" key. When a zone is selected you will be prompted to activate the point. You may activate the point by creating an alarm or tamper condition.

Zone XXX  
Activate Point

- The test values will now be displayed.

Zn XXX XXXXXXXX  
P:XX L:XXX A:XXX

Good  
Marginal  
Relocate

- The information displayed will be the Zone Number and the "P" or Packet Count. (When transmitting information the transmitter sends the same information 4 or 8 times in "Packets" and the receiver must receive at least 1 of these packets. The number of packets sent depends on the device sending the information and the type of information. The number of packets does not reflect the actual strength of the signal).

"Good," "Marginal," or "Relocate" will also appear depending on the relative signal strength. If the signal is Good, the keypad will beep eight times, four times for a Marginal signal and only once for a Relocate signal. The "L" represents the relative signal strength above the ambient noise level and is displayed as a value of 0-99. The "A" represents the ambient noise level and is displayed as a value of 0-99.

- Pressing the # key will allow you to select another zone. Pressing the "Off" key exits the test mode.

### 5.4 Removing RF Zones (and RF Keypads)



Removing RF zones is a two step process. First, the zone must be removed from the receiver using the following procedure. After the zone has been removed from the receiver you must then remove the zone from its zone programming address (0167-0278) by setting the appropriate zone programming address to 00. To remove an RF Keypad, use the following procedure. Since zone addresses for RF Keypads are already set to zero, they do **not** need to be changed.

From the RF Installer's Menu, select "Removing RF Zones" (selection 3).

Remove RF Zone?  
Press 3

- If no RF zones have been programmed or "Added," the following message will be displayed:

No RF Zones  
Press Off

- If there are RF zones that may be removed, the first available zone will be displayed:

Remove Zone ###  
Press #

- You may select the zone displayed or advance to another zone by pressing the "On" key. If the # key is selected at this time, the panel scans the receiver to remove the ID for the specified sensor. When completed, the display shows the following message:

Zone Removed ###  
Press #

- Pressing the # key at this time will present the next zone that can be removed. Press the "Off" key to exit the Remove Zone mode.

## 5.5 RF Zone Troubles

RF Zone Troubles will only appear on the display after a user code followed by [#] [8] [7] has been entered into the keypad.

One or more of the following messages will appear if there is a problem with a RF Zone:

- **Missing Zone** indicates that the sensor zone failed to receive a report from the sensor during the supervisory period of 4 or 12 hours.
- **Trouble Zone** indicates that the RF sensor has determined that there is some type of trouble with itself. Not all types of sensors have the capacity to report troubles.
- **Zone Trouble** may indicate a loop trouble condition.
- **Tamper Zone** indicates that the cover tamper has been violated on the sensor.
- **Low Battery** indicates that the sensor battery is low.

Missing Zone ###  
(Zone Text)

Trouble Zone ###  
(Zone Text)

Zone Trouble ###  
(Zone Text)

Tamper Zone ###  
(Zone Text)

Low Bat Zone ###  
(Zone Text)

## 5.6 Receiver Trouble Displays

**NOTE:** Receiver #1 refers to the receiver with the lower zone numbers. Receiver #2 refers to the receiver with the upper zone numbers. Refer to the receiver's *Installation Guide* for additional information.

The Keypad displays may show the following receiver troubles:

- **RF Receiver Tamper** Indicates that one of the receiver's covers have been removed or tampered with. Receiver #1 refers to the receiver with the lower zone numbers.
- **RF Receiver Jammed** indicates that the receiver may be getting interference from outside sources. Such types of interference may be caused by older Cell Phones, multichannel cordless phones, some business/police/fire band radios and "Walkie Talkies." Receiver #1 refers to the receiver with the lower zone numbers.
- **RF Receiver Trouble** indicates that the receiver has not received any supervisory signals from any of the sensors during the supervision interval. Check the receiver antennas and test all the sensors. If the sensor tests are unsuccessful, then the problem is likely to be in the receiver. Receiver #1 refers to the receiver with the lower zone numbers.
- **RF Receiver Communications** indicates that the receiver is not communicating with the multiplex interface module at the control panel. Check for open, shorted, reversed or miswired connections between the multiplex interface module and the receiver. Be sure the receiver has +12 VDC power from the control panel. The multiplex module or the receiver may also be at fault.

Control Trouble  
Tamper RF Rcvr #

Control Trouble  
Jammed RF Rcvr #

Control Trouble  
Trouble RF Rcvr #

Control Trouble  
Radio RX# Comm

# Index

<b>A</b>			<b>L</b>			<b>S</b>		
A, B and C Keys .....	9		Low Battery .....	15		Signal		
Adding						Good .....	14	
Keyfobs .....	10		<b>M</b>			Marginal .....	14	
Keypads .....	8		Marginal Signal .....	14		Relative Strength .....	14	
RF Zones .....	13		Missing Zone .....	15		Relocate .....	14	
Wireless RF Devices .....	4		<b>O</b>			Single Input Zone .....	4, 6	
Ambient Noise Level .....	14		Option Key .....	12		Smoke Detectors .....	13	
<b>B</b>			Output Function .....	4		Supervision Jumper .....	8	
Bar Codes .....	13		<b>P</b>			<b>T</b>		
<b>C</b>			Packet Count .....	14		Tamper		
Chirp .....	9, 12		Partition .....	4, 7, 8, 11		RF Receiver .....	15	
Communications			Partition Assignment .....	7		Tamper Zone .....	15	
RF Receiver .....	15		PIRs .....	13		Testing RF Zones .....	14	
Contact Points .....	13		Programmer's Mode .....	13		Trouble		
<b>D</b>			Programming			Receiver .....	15	
Default Code .....	13		Chirp .....	9, 12		Trouble Zone .....	15	
Default Values .....	5		Emergency Key .....	9, 11		<b>W</b>		
<b>F</b>			Option Key .....	9, 12		Wired Zone .....	6	
Function			Output for the RF3334 Keyfob .....	11		Wireless Keypads .....	9	
Output .....	4		Receiver .....	3		Wireless Zone .....	4	
Zone .....	4		Wireless Keypads .....	9		<b>Z</b>		
<b>G</b>			Wireless RF Devices .....	13		Zone		
Good Signal .....	14		Zone .....	6		Missing .....	15	
<b>I</b>			<b>R</b>			Partition Assignment .....	7	
ID Codes .....	13		Receiver Programming .....	3		RF .....	6	
Input Zones .....	13		Receiver Trouble .....	15		Single Input .....	4, 6	
<b>J</b>			Relative Signal Strength .....	14		Tamper .....	15	
Jammed RF Receiver .....	15		Relocate Signal .....	14		Trouble .....	15	
<b>K</b>			Relocating RF Zones .....	14		Wired .....	6	
Keyfobs .....	13		RF (Wireless) Zone .....	4		Wireless .....	4	
RF3332 .....	10		RF Installer's Menu .....	13		Zone Address .....	4	
RF3334 .....	10		RF Receiver Communications .....	15		Zone Function .....	4, 5, 6	
RF3334 Output Programming .....	11		RF Receiver Jammed .....	15		Zone Number .....	4, 13, 14	
Keypad Partition Assignment .....	8		RF Receiver Tamper .....	15		Zone Type .....	4, 6	
Keypads .....	8, 13		RF Receiver Trouble .....	15		Zones		
Master .....	8		RF Zone Troubles .....	15		Input .....	13	
Partition Assignment .....	8		RF Zones .....	4, 6		RF .....	4	
Wired .....	8		Adding .....	13				
Wireless .....	8, 9		Removing .....	14				
			Testing .....	14				
			RF3332 Keyfob .....	10				
			RF3334 Keyfob .....	10				
			Output Programming .....	11				
			RF3341 Keypads .....	8				