FA116

Executive Programmer

User Manual

01860

for FA416, FA426 and FA464
***Frequency Agile*® Receivers**
and
C404 4-channel slave receiver

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Overview:

The FA116 Executive Programmer allows the user to alter receiver and transmitter parameters to fit specific applications.

It is compatible with Inovonics FA416, FA426 and FA464 *Frequency Agile*™ receivers as well as the C404 receiver. The programmer also allows the user to monitor signal margin of points, to test output functions, to clear faults, to add, modify and delete transmitters and to program transmitters. The FA116 has built-in programming cables for programming transmitters and receivers.

The FA116 is menu-driven. Users locate main menu headings using arrow keys, then select headings by pressing the **ENTER** key. The programmer displays option screens which allow the user to accept, change or reject current settings for the receiver, receiver outputs and transmitters. Transmitters are programmed by connecting them to the programmer via the built-in programming cable.

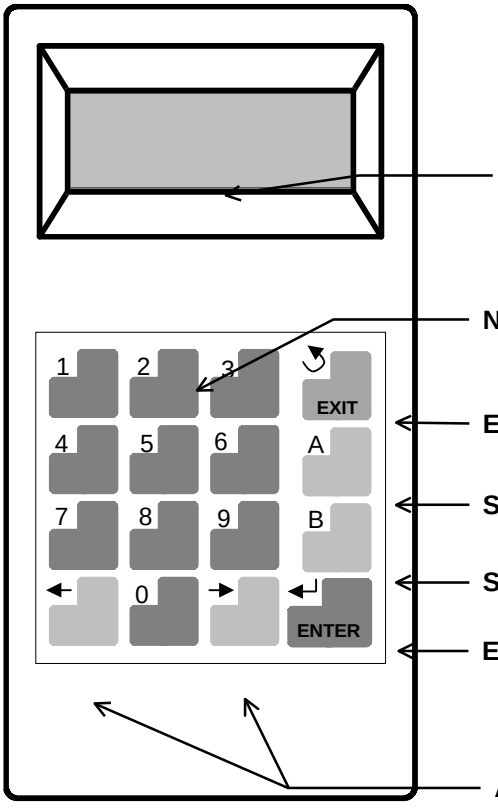
Features

- Programs all multi-channel FA-series receivers; adaptable for C404 receivers.
- Sets receiver and transmitter parameters.
- Permits transmitter zoning.
- Programming cables store in rear compartment.
- Available C404 adapter: stereo jack to 4-pin header. (Not included.)
- 16-Key tactile keypad.
- Built-in bench stand.

Installation: Connect receiver programming cable (located in rear compartment) to mini-stereo jack on receiver.

Dimensions

- Housing: 7.0" x 3.9" x 1.75"
- Display: 2.4" x .625"
- Weight: 10.9 oz.



2-Line x 16-character liquid crystal backlit supertwist **DISPLAY.**

NUMERIC keys 1 through 0 enter values.

EXIT key leaves the current option level.

SPECIAL function key **A**.

SPECIAL function key **B**.

ENTER key advances to the next available option or menu heading.

ARROW keys move through menu options.

For C404, the adapter cable is required.

Programming FA416 and FA464 Receivers with the FA116 Executive Programmer

Following are descriptions of menu and option displays. Main menu headings are **POINT STATUS, RECEIVER SETUP, OUTPUT SETUP, PROGRAM POINT, DELETE POINT, CLEAR FAULTS** and **TEST OUTPUTS**.

When the FA116 is first powered up, the display briefly shows software version information, then shows the logo display, including receiver type:

INOVONICS FA416 FREQUENCY AGILE	INOVONICS FA464 FREQUENCY AGILE

To enter programming mode, enter the access code. Default access code is **3446**. The display will show:

Point Status

Press ENTER for ← POINT STATUS →

Press **ENTER** to see signal margins, signal levels and current point status. Press ← to go to Receiver Setup menu or press → to go to Test Outputs.

Signal margin is an indicator of relative signal strength to background noise. Margin values are from 3 (signal just distinguishable from background) to 33 (strongest). Signal margins below 10 are reported as "Weak".
Signal level is an absolute measure of intensity, ranging from about -65dB (very strong) to below -110dB (very faint).

←1 ALM TMP BATT→ GOOD SIGNAL

The top line of the display shows the current status of the transmitter. The second line will read "Good Signal" or "Weak Signal". Press **ENTER** to view

←1 ALM TMP BATT→ LVL:-nnn MAR:+mm

The top line of the display shows the current status of the transmitter. The bottom line shows real-time values in dB and dBm for signal level and signal margin. Press **ENTER** to toggle back to "Good Signal / Weak Signal" display.

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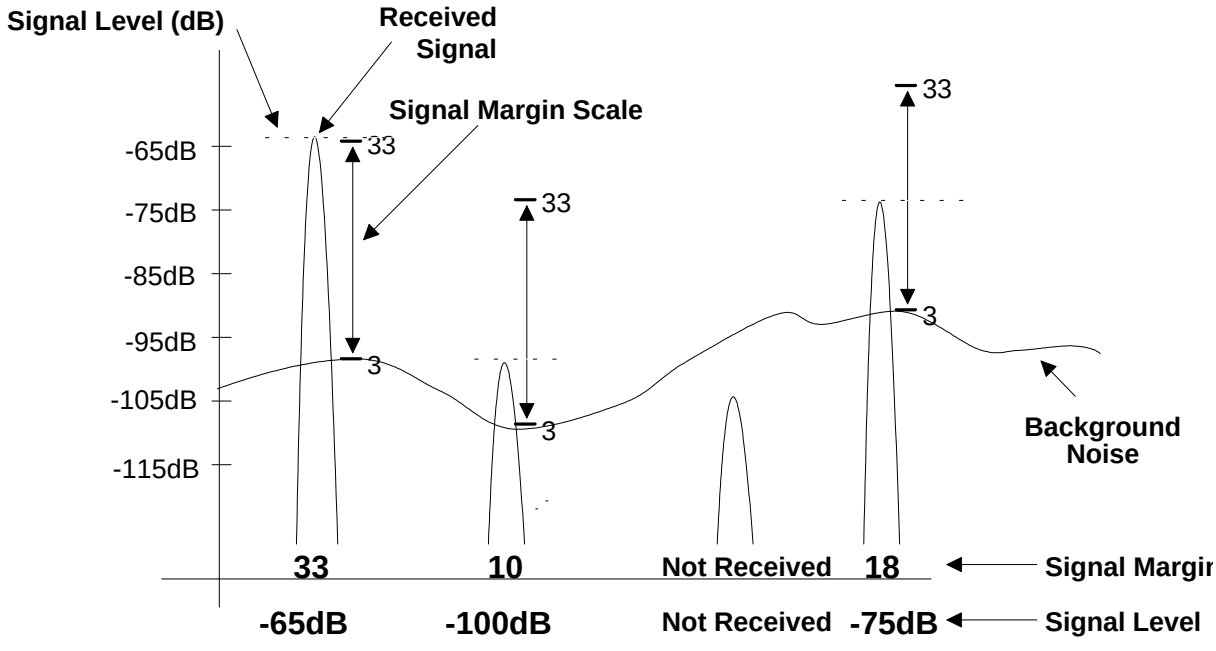


Programming FA416 and FA464 Receivers

Receiver Setup

Press ENTER for ← RCVR SETUP →	Press **ENTER** to review or to modify receiver settings. Press ← to go to **Output Setup** menu or → for **Review Points**.
SYSTEM ID: 123	System ID is encoded in all data transmissions to identify transmitters to their respective receivers. Enter a code from **000** to **255**.
SUPERVISE POINTS ← YES →	Should the receiver monitor transmitters for inactivity? Arrow keys toggle between **YES** and **NO**.
MAX TX INACTIVE TIME: 4 ← HRS →	How long should the receiver wait for a supervisory signal to declare points inactive? Enter value from **1** to **99.** Arrow keys toggle between **MIN** and **HRS**.
ACCESS CODE 3446	To change dealer access code enter number from **0000** to **9999**. (**3446** is default.) **Note:** Default access code may be reset ONLY by restoring receiver to factory defaults. See below.
VISION COMPATIBLE ← NO →	Should the receiver look for transmitter data for Vision Plus systems? Arrow keys toggle between **YES** and **NO**.

Reminder: Press **ENTER** to advance to next menu option. **ENTER** accepts data in display and proceeds.

What is "Vision Plus Compatibility"?

Vision Plus Compatibility permits transmitters programmed by a the Vision Plus panel to be monitored by an FA416 or an FA464 receiver AS LONG AS BOTH SYSTEMS HAVE THE SAME SYSTEM ID.Transmitters monitored by FA receivers need not be programmed by the receiver. Once the receiver hears a Vision Plus-programmed transmitter, the receiver will consider it one of its own. (Note: any transmitters programmed by an FA416 receiver will NOT be received by a Vision Plus .)

Initializing FA416 or FA464 receivers: The following sequence will restore the receiver to factory default settings: (**ADV**, **RESET** and **DEL** Buttons are located on the receiver.)

1. Press and Hold **ADV.**
2. Press and release **RESET**.
3. Release **ADV**.
4. Immediately, while the Decode and Valid LEDs are off, press and hold **DEL** for 6 to 7 seconds.
5. The receiver will flash the **TX PRGM LED,** indicating restoral complete.

Refer to appropriate appendices for factory default settings.

Programming FA416 and FA464 Receivers

Output Setup

Press ENTER for ← OUTPUT SETUP →	Press **ENTER** to review or to modify output settings. Press ← to go to **PROGRAM POINTS** menu option or → to go to **RCVR SETUP**.

OUTPUT nn: ← ALARM →	Press **ENTER** to advance through all numbered outputs. Press ← or →to select from options **ALARM, ALARM+TAMPER, TAMPER, LO BATT, INACTVE, TAMP+LOBATT, TAMP+INACTVE, BATT+INACTVE, ANY TX FAULT,** and **DISABLED.**

Note: **ALARM** and **ALARM+TAMPER** are point-specific: points programmed to a given output will trip the output if alarmed or if tampered. All other fault options are global; i.e., **any** listed fault (or combination of faults) will cause the output to activate. Attempts to assign duplicate global fault conditions to other outputs are not allowed.

OUTPUT 1: GLOBL ← TAMP+LO BATT →	Global faults will be indicated.

If an output is modified to function as a global fault output and is currently assigned as alarm to an active point, the user will be prompted for permission to re-assign the output:

OUTPUT 1 IN USE REASSIGN?← YES →	Note: an output cannot activate based on both fault and alarm conditions.

When output setup is complete, points affected by re-assignment will be shown.

CHECK POINT 1 OUTPUT ASSIGNM'T

Note: "Follower" outputs go on and off as the transmitter changes between alarm and secure states. "Latching" outputs go on at first activation, and stay on until reset. "Momentary" outputs go on for a prescribed duration then turn off, regardless of what the transmitter does after first activation.

ALARM OUTPUTS ← FOLLOWER →	Press ← or → to select from options **FOLLOWER, MOMENTARY** or **LATCHING**.

TAMPER OUTPUT ← FOLLOWER →	Press ← or → to select from options **FOLLOWER, MOMENTARY** or **LATCHING**.

LO BATT OUTPUT ← LATCHING →	Press ← or → to select from options **FOLLOWER, MOMENTARY** or **LATCHING**.

INACTIVE OUTPUT ← FOLLOWER →	Press ← or → to select from options **FOLLOWER, MOMENTARY** or **LATCHING**.

If any outputs are programmed **MOMENTARY**, the user will be prompted for the number of seconds of momentary activation.

MOMENTARY OUTPUT TIME: 4 secs	Enter a value from **1** to **16** seconds.

Programming FA416 and FA464 Receivers

Program Points

Press ENTER to
←PROGRAM POINT→

Press **ENTER** to program a point or to modify settings.
Press ← to go to **DELETE POINTS** menu option or → to go to **OUTPUT SETUP**.

POINT NUMBER:
ENTER #(1 to nn)

Enter point number from keypad. Press **ENTER**.
(Note: nn=16 or nn=64, depending on receiver.)

EXT SWITCH TYPE
← NORM/OPEN →

Is the external transmitter switch loop Normally Open or Closed?
Arrow keys toggle between **N/O** and **N/C**.

END OF LINE
RESISTOR: ← NO →

Is a 2.2K end of line resistor being used?
Arrow keys toggle between **YES** and **NO**.

USE INTERNAL
CONTACT: ← NO →

Is the FA200W widegap magnet contact being used?
Arrow keys toggle between **YES** and **NO**.

CHECK-IN TIME
← 60 SECONDS →

How often should transmitters send supervisory data?
Arrow keys toggle between **UNSUPERVISED**,
10, 30, or **60 SECONDS**, **5** or **60 MINUTES** and **8** or **18 HOURS**.

OUTPUT TO USE:
← OUTPUT 1 →

Which output should this point activate?
Arrow keys select desired output.

If the selected output has been previously assigned as a global fault output, the programmer will prompt for confirmation:

OUTPUT n GLOBAL
CONFIRM?← YES →

It is recommended that the output be redefined as an alarm, or that the point be assigned to another output. Arrow keys toggle between **YES** and **NO**.

ENTER TO PROGRAM
"A" to REVIEW

Press **ENTER** to proceed with transmitter programming.
or press **A** to go through transmitter options again.

CONNECT TX+RESET
OR PRESS "A"

Connect transmitter to the FA116 and press transmitter reset to program device, or press **A** to save program information, activate the point and select a new point number, or press **EXIT** to save program information without activating the point. One of the following displays will appear:

POINT NUMBER nn
TX PROGRAMMED

If a transmitter is connected, display indicates successful transmitter programming sequence. Display remains for about 3 seconds, then returns to the point number selection screen.

POINT NUMBER nn
POINT ACTIVATED

If special key **A** is pressed, the point is saved and activated, even though no transmitter has been programmed. This may be necessary when replacing receivers or when using the FA100.

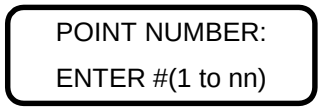
POINT NUMBER nn
PROGRAM SAVED

If **EXIT** is pressed, point program information is saved without activating the point.

Programming FA416 and FA464 Receivers

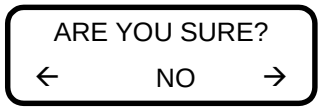
Delete Points

Press **ENTER** to delete a point. Programming remains in memory, but the receiver will not look for the point. To reactivate the point, go to Program Points. Press ← to go to **CLEAR FAULTS** menu option or → to go to **PROGRAM POINT**.



Enter point number from keypad. Press **ENTER**.
(nn = 16 or nn = 64, depending on receiver.)

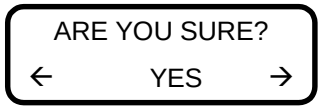
At this point the programmer requests confirmation:



Press **ENTER** to accept answer in next line.
Arrow keys toggle between **NO** and **YES**.

Clear Faults

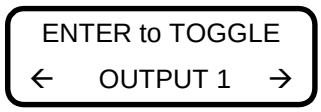
Faults may be registered during programming and operation.
Press **ENTER** to clear latched fault outputs.
Press ← to go to **TEST OUTPUTS** menu option or → to go to **DELETE POINT**.



Press **ENTER** to accept answer in next line.
Arrow keys toggle between **YES** and **NO**.

Test Outputs

Press **ENTER** to test outputs.
Press ← to go to **POINT STATUS** menu option or → to go to **CLEAR FAULTS**.



Press **ENTER** to turn selected output on and off.
Press ← or → to select a different output.

Note: The FA416 has 4 outputs, plus the fault output. The FA464 has 16 outputs, plus the fault output.

Creating Zones with the FA116: By assigning transmitter alarm conditions to specific alarm outputs, it is possible to differentiate between types of alarms, areas of alarms, etc. For example, suppose an application in a small business requires 10 holdup buttons, 1 fire exit door and 3 removable pendants. Program outputs 1, 2 and 3 to be active on alarm and program the FA200s attached to the holdup buttons to use output 1. Assign the fire exit point to output 2 and the pendants to output 3. Configure the system to monitor low batteries and tampers at output 4.

Programming C404 Slave Receivers with the FA116 Executive Programmer

Following are descriptions of menu and option displays. Main menu headings are **POINT STATUS**, **RECEIVER SETUP**, **PROGRAM POINT**, and **DELETE POINT**.

When the FA116 is first powered up, the display briefly shows software information, then shows the logo display, including receiver type.

INOVONICS C404
SLAVE RECEIVER

To enter programming mode, enter the access code. Default access code is **0000**. The display will show:

Point Status

Press ENTER for
← POINT STATUS →

Press **ENTER** to see signal strength and current point status.
Press ← to go to **RECEIVER SETUP** menu or → for **DELETE POINT**.

← 1: ALM TMP B →
GOOD SIGNAL (-nn)

The first line shows point status, including a low battery symbol. The value beside the **GOOD SIGNAL** or **WEAK SIGNAL** is dBm above receiver threshold level, from -99 (weak) to -65 (strong).

Receiver Setup

Press ENTER for
← RCVR SETUP →

Press **ENTER** to review or to modify receiver settings.
Press ← to go to **PROGRAM POINT** menu or → for **REVIEW POINTS**.

SYSTEM ID: 123

System ID is encoded in all data transmissions to identify transmitters to their respective receivers. Enter a code from **000** to **255.**

SUPERVISE POINTS
← YES →

Should the receiver monitor transmitters for inactivity?
Arrow keys toggle between **YES** and **NO**.

MAX TX INACTIVE
TIME: 60 MINUTES

How long should the receiver wait for a supervisory signal to declare points inactive?
Enter value from **1** to **254** minutes.

ACCESS CODE
0000

Change dealer access code, if desired.
Enter access code from **0000** to **9999**. (**0000** is default.)

WARNING:The C404 access code cannot be recovered or reset if lost.

ALARM OUTPUTS :
← FOLLOWER →

Set mode of all C404 **ALARM** outputs. Arrow keys select option: **FOLLOWER, LATCHING** or **MOMENTARY.**
Press ← or → to change option.

Note: This setting affects all of the C404's alarm outputs. The C404 global fault output is **always** latching**.**

Programming C404 Slave Receivers

Program Points

Press ENTER to
← PROGRAM POINT→

Press **ENTER** to program or modify transmitter settings.
Press ← to go to **DELETE POINTS** menu option or → for **RECEIVER SETUP**.

POINT NUMBER:
ENTER #(1 to 4)

Enter point number from keypad. Press **ENTER**.

4-BUTTON TX:
← YES →

Is the transmitter a C100 Commander?
Arrow keys toggle between **YES** and **NO**.

THESE OPTIONS ARE SKIPPED IF 4-BUTTON TX = "YES"

EXT SWITCH TYPE
← NORM/OPEN →

Is the external switch loop normally open or closed?
Arrow keys toggle between **NORM/OPEN** and **NORM/CLOSED**.

END OF LINE
RESISTOR: ← NO →

Is a 2.2K end of line resistor being used to monitor the switch loop?
Arrow keys toggle between **NO** and **YES**.

USE INTERNAL
CONTACT: ← NO →

Is C200W widegap magnet contact being used? Arrow keys toggle between **NO** and **YES**.

CHECK-IN TIME
← 60 SECONDS →

How often should supervisory data be transmitted?
Arrow keys toggle between **UNSUPERVISED** and **10, 30,** or **60 SECONDS**.

ENTER TO PROGRAM
"A" to REVIEW

Press **ENTER** to proceed with transmitter programming,
or press **A** to go through transmitter options again.

RESET TX+CONNECT
OR PRESS "A"

Connect transmitter and press transmitter reset to program device, or press **A** to save point program and select a new point number.

POINT NUMBER nn
TX PROGRAMMED

Indicates successful transmitter programming sequence. Display remains for about 3 seconds, then returns to the point number selection screen.

Delete Points

Press ENTER to ← DELETE POINT →	Press **ENTER** to program a point or to modify settings. Press ← to go to **POINT STATUS** menu option or → to go to **PROGRAM POINT**.
POINT NUMBER: ENTER # (1 to 4)	Enter point number from keypad. Press **ENTER**.

At this point the programmer requests confirmation:

ARE YOU SURE? ← YES →	Arrow keys toggle between **YES** and **NO**.
POINT NUMBER: nn DELETED	Indicates successful point deletion. (Display remains for about 3 seconds, then returns to the point number selection screen.)

Note: Programming parameters are not erased from receiver memory. Transmitters may be re-programmed to the deleted point number.

Programming FA426 Receivers with the FA116 Executive Programmer

When the FA116 is first powered up, the display briefly shows software information, then shows the logo display, including receiver type.

DMP MODEL FA426 FREQUENCY AGILE

Clear Points

SYSTEM ID: nnn

Progammer requests System ID. **nnn** = 0 to 255 (decimal).

ENTER TO PROGRAM "A" TO CLEAR ALL

If a new System ID number is entered, the option is given to clear existing transmitters ("points") before proceeding to point programming.

Note: Transmitter information such as N/O, N/C, EOL and check-in interval is not stored in the FA426. The receiver retains only the point number of transmitters which have been programmed.

Warning: If a new System ID is entered, existing transmitters must be reprogrammed to acquire the new System ID. If not re-programmed, these transmitters will be reported inactive at the expiration of the first supervison window.

Delete Points

SYSTEM ID: nnn

Progammer requests System ID. **nnn** = 0 to 255 (decimal).

POINT nn: ENTER TO PGM / ENTER PT

By default **nn** = 02 or displays the first available unprogrammed point, but user may enter value from 01 to 16 (decimal).

ENTER TO PROGRAM "A" TO DELETE

If an existing point number is entered, the option is given to delete the displayed point before proceeding to transmitter porgramming options. Press "A" to delete point.

POINT NUMBER nn DELETED

Confirms deleted point.

Programming FA426 Receivers with the FA116 Executive Programmer (Continued)

Program Points

SYSTEM ID: nnn	Progammer requests System ID. nnn = 0 to 255 (decimal).
POINT nn: ENTER TO PGM / ENTER PT	By default **nn** = 02 or displays the first available unprogrammed point, but user may enter value from 01 to 16 (decimal). See note.
COMMAND TX? ← YES →	Asked only if **nn** = 01. If **YES**, next four options are skipped.
EXT SWITCH TYPE ← NORM/CLOSED →	Is the external switch loop normally open or closed? Arrow keys toggle between **NORM/CLOSED** and **NORM/OPEN**.
END OF LINE RESISTOR: ← YES →	Is a 2.2K end of line resistor being used to monitor the transmitter (FA200 or FA210)switch loop? Arrow keys toggle between **YES** and **NO**.
USE INTERNAL CONTACT: ← YES →	Is FA200W or FA210W widegap magnet contact being used? Arrow keys toggle between **YES** and **NO**.
CHECK-IN TIME ← 60 SECONDS →	How often should supervisory data be transmitted? Arrow keys toggle between **10, 30,** or **60** seconds or **5** minutes. **NONE** is shown when point **nn** = 01.
ENTER TO PROGRAM "A" to REVIEW	Press **ENTER** to proceed with transmitter programming, or press **A** to go through transmitter options again.
CONNECT TX+ RESET OR PRESS "A"	Connect transmitter and press transmitter reset to program device, or press **A** to save point program and return to the point number selection screen.
POINT NUMBER nn PROGRAMMED	Indicates successful transmitter programming sequence. Display remains for about 3 seconds, then returns to the point number selection screen.

Note: Point 01 must always be either a command transmitter or an unsupervised device.

Appendix A

FA416 Receiver Parameters

Output	Default Active on Condition	Programmable Options
1	Alarm	**ALARM / ALARM+TAMPER / TAMPER /**
2	Alarm	**LO BATT / INACTIVE / TAMP+LO BATT /**
3	Alarm	**TAMP+INACTIVE / LO BATT+INACTIVE /**
4	Alarm	**ANY TX FAULT / DISABLED**

Transmitter Condition	Default Mode	
Alarm	Follower	**FOLLOWER / MOMENTARY / LATCHING**
Inactive	Follower	
Tamper	Latching	
Low Batt	Latching	

Default Momentary Output time: 4 seconds 1 - 16 seconds

Default Receiver Parameters:

System ID:	(randomly assigned at factory)	0 - 255
Point supervision:	Yes	Yes / No
Supervision window:	4 hours	1 - 99 minutes, 1 - 99 hours
Access code:	3446	0000 - 9999
Vision Plus compatible:	No	Yes / No

To initialize the FA416 to default parameters refer to Page 3 or see the receiver user manual.

Default Transmitter Parameters

Point #	Contact	Output	Check-in
1	N/O	1	60 SEC
2	N/O	2	60 SEC
3	N/C	3	60 SEC
4	N/C	4	60 SEC
5	N/O	1	60 SEC
6	N/O	2	60 SEC
7	N/O	3	60 SEC
8	N/O	4	60 SEC
9	N/C	1	60 SEC
10	N/C	2	60 SEC
11	N/C	3	60 SEC
12	N/C	4	60 SEC
13	N/C	1	60 SEC
14	N/C	2	60 SEC
15	N/C	3	60 SEC
16	N/C	4	60 SEC

Appendix B

FA464 Receiver Parameters

Output	Default Active on Condition	Programmable Options
1	Alarm	**ALARM / ALARM+TAMPER / TAMPER /**
2	Alarm	**LO BATT / INACTIVE / TAMP+LO BATT /**
3	Alarm	**TAMP+INACTIVE / LO BATT+INACTIVE /**
4	Alarm	**ANY TX FAULT / DISABLED**
...		
...		
16	Alarm	

Transmitter Condition	Default Mode	
Alarm	Follower	**FOLLOWER / MOMENTARY / LATCHING**
Inactive	Follower	
Tamper	Latching	
Low Batt	Latching	

Default Momentary Output time: 4 seconds 1 - 16 seconds

Default Receiver Parameters:

System ID:	(randomly assigned at factory)	0 - 255
Point supervision:	Yes	Yes / No
Supervision window:	4 hours	1 - 99 minutes, 1 - 99 hours
Access code:	3446	0000 - 9999
Vision Plus compatible:	No	Yes / No

To initialize the FA464 to default parameters refer to Page 3 or see the receiver user manual.

Default FA464 Transmitter Parameters

Point#	Contact	Output	Check-In
1	N/O	1	60 SEC
2	N/O	2	60 SEC
3	N/C	3	60 SEC
4	N/C	4	60 SEC
5	N/O	1	60 SEC
6	N/O	2	60 SEC
7	N/O	3	60 SEC
8	N/O	4	60 SEC
9	N/C	1	60 SEC
10	N/C	2	60 SEC
11	N/C	3	60 SEC
12	N/C	4	60 SEC
13	N/C	1	60 SEC
14	N/C	2	60 SEC
15	N/C	3	60 SEC
16	N/C	4	60 SEC
17	N/C	5	60 SEC
18	N/C	5	60 SEC
19	N/C	5	60 SEC
20	N/C	5	60 SEC
21	N/C	6	60 SEC
22	N/C	6	60 SEC
23	N/C	6	60 SEC
24	N/C	6	60 SEC
25	N/C	7	60 SEC
26	N/C	7	60 SEC
27	N/C	7	60 SEC
28	N/C	7	60 SEC
29	N/C	8	60 SEC
30	N/C	8	60 SEC
31	N/C	8	60 SEC
32	N/C	8	60 SEC
33	N/C	9	60 SEC
34	N/C	9	60 SEC
35	N/C	9	60 SEC
36	N/C	9	60 SEC
37	N/C	10	60 SEC
38	N/C	10	60 SEC
39	N/C	10	60 SEC
40	N/O	10	60 SEC
41	N/O	11	60 SEC
42	N/O	11	60 SEC
43	N/O	11	60 SEC
44	N/O	11	60 SEC
45	N/O	12	60 SEC
46	N/O	12	60 SEC
47	N/O	12	60 SEC
48	N/O	12	60 SEC
49*	N/O	13	5 MIN
50	N/O	13	5 MIN
51	N/O	13	5 MIN
52	N/O	13	5 MIN
53	N/O	14	5 MIN
54	N/O	14	5 MIN
55	N/O	14	5 MIN
56	N/O	14	5 MIN
57	N/O	15	5 MIN
58	N/O	15	5 MIN
59	N/O	15	5 MIN
60	N/O	15	5 MIN
61**	N/O+INT	16	60 SEC
62	N/O+INT	16	60 SEC
63	N/O+INT	16	60 SEC
64	N/O+INT	16	60 SEC

*Note: Points 49-60 are programmed to check in every five minutes.This will extend battery life slightly depending on which transmitter is used.

**Note: Points 61 through 64: Normally Open plus Internal Contact = Yes.

Appendix C

C404 4-channel Slave Receiver Parameters

Output	Default Active on Condition	Programmable Options
1	Alarm	Not programmable
2	Alarm	"
3	Alarm	"
4	Alarm	"

Note: C404 outputs cannot be re-assigned to other points.

Transmitter Condition	Default Mode	
Alarm	Follower	**Follower / Momentary / Latching**
Global Fault	Latching (Not programmable)	Latching only

Default Momentary Output time: 2 seconds

Default Receiver Parameters:

System ID:	(randomly assigned at factory)	0 - 255
Point supervision:	Yes	Yes / No
Supervision window:	240 minutes	0 - 240 minutes
Access code:	0000	0000 - 9999

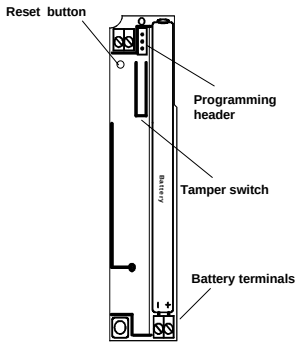
NOTE: The C404 cannot be reset to default conditions. It must be reprogrammed.

Default Transmitter Parameters

	Default	Programmable Options
Transmitter type	Standard	**STANDARD** **4-BUTTON TX (C100 REMOTE)**
Contacts	Point 1: N/O Point 2: N/O Point 3: N/C Point 4: N/C	**NORMALLY OPEN / NORMALLY CLOSED** **NORMALLY OPEN / NORMALLY CLOSED** **NORMALLY OPEN / NORMALLY CLOSED** **NORMALLY OPEN / NORMALLY CLOSED**
End of Line Resistor	No	**NO / YES**
Internal Contact (C200W widegap magnet loop)	No	**NO / YES**
Check-In period	60 Seconds	**60 SECONDS** **30 SECONDS** **10 SECONDS** **NONE**

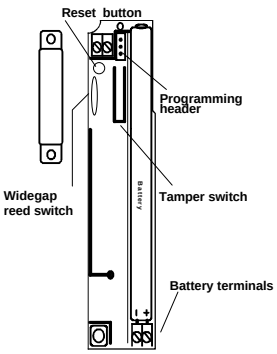
Appendix D: *Frequency Agile*™ Series Transmitters

FA200
Universal Transmitter



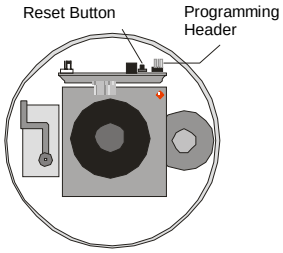
Program contacts:	N/O or N/C, as needed
EOL resistor:	as needed
Typical battery life:	3 years
Battery type:	4.5V alkaline battery pack
Switch trigger:	1.5 seconds, minimum
Dimensions:	1.25" x 6.00" x 0.750"

FA200W
Universal Widegap Transmitter



Program contacts:	N/O or N/C, as needed
EOL resistor:	as needed
Internal contact:	as needed
Typical battery life:	3 years
Battery type:	4.5V alkaline battery pack
Switch trigger:	1.5 seconds, minimum
Dimensions:	1.25" x 6.00" x 0.750"

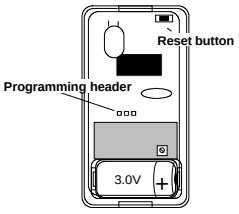
FA202
Smoke Detector



Program contacts:	N/C
Typical battery life:	1 year
Batteries (2):	3V lithium
Dimensions:	6.0" Diameter

Note: Remove jumper to program, replace jumper after programming.

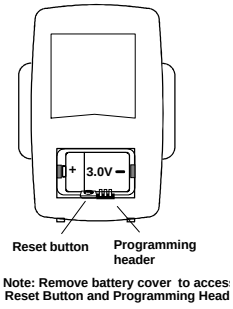
FA203
Pendant Transmitter



Check-in interval:	60 seconds* (suggested)
Program contacts:	N/O
Typical battery life:	3-5 years
Battery (or equivalent):	3.0V lithium Sanyo CR2
Dimensions:	3.10" x 1.62" x 0.750"

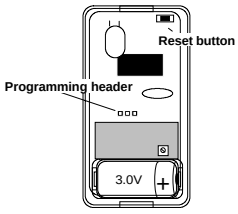
* To extend battery life, actual check-in is 2 to 3 times the programmed value.

FA204
Pendant Transmitter



Check-in interval:	60 seconds* (suggested)
Program contacts:	N/O
Typical battery life:	2 years
Battery	3.0V Sanyo LiMn CR14250
Dimensions:	2.8" x 1.7" x 0.83"

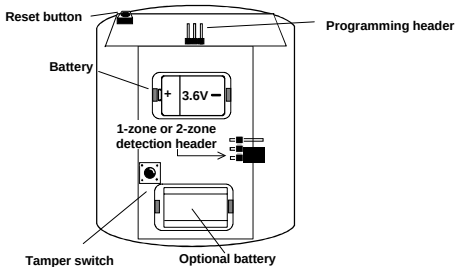
FA205
Beltclip Transmitter



Check-in interval:	60 seconds* (suggested)
Program contacts:	N/O
Typical battery life:	3-5 years
Battery (or equivalent):	3.0V lithium Sanyo CR2
Dimensions:	3.10" x 1.62" x 0.750"

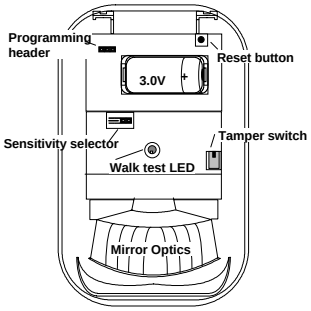
* To extend battery life, actual check-in is 2 to 3 times the programmed value.

FA206
PIR Motion Detector



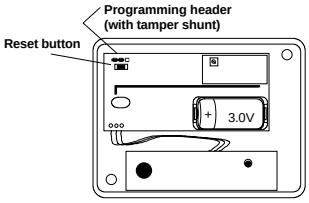
Program contacts:	N/C
Typical battery life:	2 years (with 2 batteries)
Battery:	3.6V lithium Tadiran TL2150
Sleep after trip:	90 seconds
Dimensions:	3.75" x 2.88" x 2.40"

FA206DS
PIR Motion Detector



Program contacts:	N/C
Typical battery life:	2 years
Battery:	3.0V lithium DL123A
Sleep after trip:	180 seconds
Dimensions:	3.75" x 5.75" x 2.50"

FA207
Glassbreak Detector

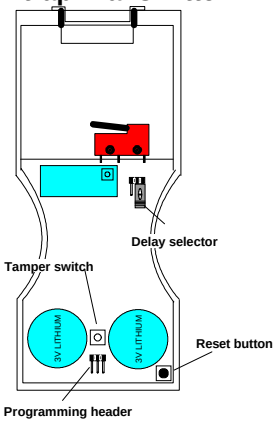


Program contacts:	N/O
Typical battery life:	2 years
Battery:	3.0V lithium DL123A
Dimensions:	4.25" x 3.12" x 1.63"

Note: Remove jumper to program. replace jumper after programming.

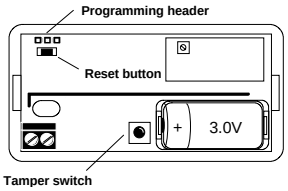
Note: Batteries are always supervised. Lithium batteries are capacity-tested at 18-hour intervals. The transmitter will deactivate 2 weeks after low battery is detected.

FA209
Billtrap Transmitter



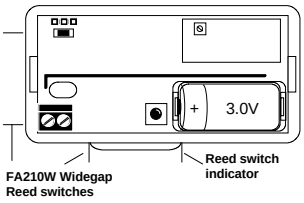
Program contacts:	N/O
EOL, internal contacts:	No
Typical battery life:	1-2 years @ 60s check-in
Battery type (Qty. 2):	3.0V lithium CR2450N
Dimensions:	2.63" x 6.19" x 0.750"

FA210
Reduced-size
Universal Transmitter



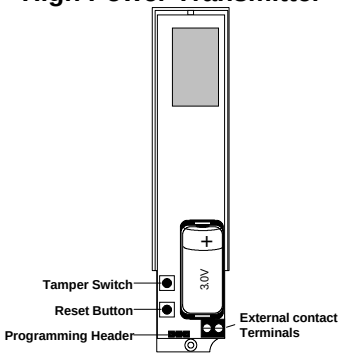
Program contacts:	N/O or N/C, as needed
EOL resistor:	as needed
Typical battery life:	4 years
Battery type:	3.0V lithium DL123A
Switch trigger:	1.5 seconds, minimum
Dimensions:	3.55" x 1.70" x 0.920"

FA210W
Reduced-size
Universal Widegap Transmitter



Program contacts:	N/O or N/C, as needed
EOL resistor:	as needed
Internal contact:	as needed
Typical battery life:	4 years
Battery type:	3.0V lithium DL123A
Switch trigger:	1.5 seconds, minimum
Dimensions:	3.55" x 1.70" x 0.920"

FA250
High Power Transmitter



Program contacts:	N/O or N/C, as needed
EOL resistor:	as needed
Typical battery life:	1-2 years
Battery type:	3.0V lithium DL123A
Switch trigger:	1.5 seconds, minimum
Dimensions:	1.25" x 6.00" x 0.750"

Note: Batteries are always supervised. Lithium batteries are capacity-tested at 18-hour intervals.
The transmitter will deactivate 2 weeks after low battery is detected.

Appendix E
Warranty & Disclaimer

Inovonics Corporation ("Inovonics") warrants its products ("Product" or "Products") to conform to its own specifications and to be free of defects in materials and workmanship under normal use for a period of twenty-four (24) months from the date of manufacture. Within the warranty period Inovonics Corporation will repair or replace, at its option, all or any part of the warrantied product. Inovonics will not be responsible for dismantling and/or reinstallation charges. To exercise the warranty, the User ("User", "Installer" or "Consumer") must be given a Return Material Authorization ("RMA") Number by Inovonics. Details of shipment will be arranged at that time.

This warranty does not apply in cases of improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident or tampering, and repair by anyone other than Inovonics.

This warranty is exclusive and expressly in lieu of all other warranties, obligations or liabilities, whether written, oral, express, or implied, including any warranty of merchantability or fitness for a particular purpose. Inovonics will not be liable to anyone for any consequential or incidental damages for breach of this warranty or any other warranties.

This warranty will not be modified, varied or extended. Inovonics does not authorize any person to act on its behalf to modify, vary or extend this warranty. This warranty will apply to Inovonics Products only. All other products, accessories or attachments used in conjunction with Inovonics equipment, including batteries, will be covered solely by their own warranty, if any. Inovonics will not be liable for any direct, incidental or consequential damage or loss whatsoever, caused by the malfunction of Product due to products, accessories, or attachments of other manufacturers, including batteries, used in conjunction with Inovonics Products.

This warranty does not warrant the replacement of batteries that are used to power Inovonics Products.

The User recognizes that a properly installed and maintained security system may only reduce the risk of events such as burglary, robbery, personal injury and fire. It does not insure or guarantee that there will be no death, personal damage and/or damage to property as a result. **Inovonics does not claim that the Product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection.**

Inovonics Corporation shall have no liability for any death, injury or damage, however incurred, based on a claim that Inovonics Products failed to function. However, if Inovonics is held liable, directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, Inovonics' maximum liability will not in any case exceed the purchase price of the Product, which will be fixed as liquidated damages and not as a penalty, and will be the complete and exclusive remedy against Inovonics.

Warning: **The User should follow all installation, operation and maintenance instructions.** The User is strongly advised to conduct Product and systems tests at least once each week. Changes in environmental conditions, electric or electronic disruptions and tampering, may cause the Product to not perform as expected.

Warning: Inovonics warrants its Product to the User. The User is responsible for exercising all due prudence and taking necessary precautions for the safety and protection of lives and property wherever Inovonics Products are installed. Inovonics strongly advises the User to program Products to be supervised whenever used in applications affecting life safety. Users are warned that unsupervised devices are subject to undetected failure due to malfunction, battery failure, tampering, or changes in environment.

Frequency Agile® Receivers compatible with the FA116 Executive Programmer

FA416	16-channel / 4-output
FA416D	16-channel / 4-output with display
FA426	DMP XR20 16-channel receiver
FA464DR	64-channel / 16-output

Inovonics C-series Receivers

C404	4-channel slave receiver

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