ADVANCED COMMUNICATIONS

Fire Burglary Instruments, Inc.

100 Engineers Road, Hauppauge, New York 11788

NEW YORK (516) 582-6161 ☎ OUT OF STATE (800) 645-5430

JULY 87

COMPUTER PART NO. I-2340

ADVANCED COMMUNICATION MANUAL

This manual explains the programming of the XL1218, XL1219, OMNI 1000, OMNI 2000, XL1236 and OMNI 3000 EXTENDED FORMAT and 4+2. Both of these formats are considered advanced dialer communications and are NOT MANDATORY for proper operation of these systems. Both provide a means by which these systems can transmit MORE THAN 10 CODES TO THE CENTRAL OFFICE. Both formats MUST be transmitted ONLY to digital alarm receivers which are capable of handling them.

EXTENDED FORMAT

Most Digital Communicators and Receivers in todays industry adhere to a form of communicating data back and forth called STANDARD FORMAT.This format is comprised of FOUR numbers.The first three numbers represent what is called the SUBSCRIBERS ACCOUNT CODE.The fourth number is called the ALARM CODE (EXAMPLE:123,4).In the example above the subs code is 123 and the alarm code is a code 4. Almost every receiver and central station had the same or similar meanings for each of codes 0-9 .Those codes and their meanings are as follows.

0 = misc.
1 = fire
2 = panic
3 = burglary
4 = medical or auxiliary
5 = trouble
6 = closing
7 = opening
8 = low battery
9 = restore

For purposes of simplicity in our following explanations this instruction manual will call these codes the UNIVERSAL CODES.
The folowing example is an actual transmission of DATA which would be received if EXTENDED FORMAT was used to indicate BURGLARY ON ZONE 2,SUBSCRIBER ACCOUNT NUMBER 124.

124 3
124 3
333 2
333 2

The receiver in this example actually accepted two(2) distinct blocks of FOUR DIGITS,124 3 AND 333 2.
Both blocks of information are sent twice to accomodate the receivers needs for verification.
This transmission would be interpreted as follows:

124 = subscriber account code
3 = universal burglary code
333 = filler
2 = zone 2

124 is the subscriber account number. Code 3 is the central stations number that **universally** represented BURGLARY. 333 is called a FILLER in this explanation because it is actually only sent to the receiver to accomodate its electronic NEEDS. 333 is sent as a repeat of the universal code just to fill the receiver gap. The final number in this transmission is the code 2 which represents zone 2 on the transmitter.

EXTENDED FORMAT is nothing more than an EXTENSION of STANDARD FORMAT.
ALL THE UNIVERSAL CODES CAN BE SENT IN EXTENDED FORMAT.

The following example depicts the actual transmission of a RESTORE ON ZONE 2, TROUBLE ON ZONE 6, AND CLOSING BY USER 9 with the example universal codes.

```
124  9
124  9    124 RESTORE ZONE 2
999  2
999  2
```

```
124  5
124  5    124 TROUBLE ZONE 6
555  6
555  6
```

```
124  6
124  6    124 CLOSING USER 9
666  9
666  9
```

At this point there should be good understanding of EXTENDED FORMAT. This instruction manual will procede with a step by step procedure to program this format in these systems.

STEP 1: Select a digit in QUAD 1, AF FIELD, LOCATION L2 which includes the option EXTENDED FORMAT.

STEP 2: Program the DESIRED UNIVERSAL BYPASS CODE in QUAD 2, OP FIELD, LOCATIONS L4-L9 for all zones desired to report EXTENDED FORMAT for bypass.

STEP 3: Program the DESIRED UNIVERSAL RESTORE CODE in QUAD 2, 1P FIELD, LOCATIONS L1-L7 for all zones desired to report EXTENDED FORMAT for restore.

STEP 4: Program the DESIRED UNIVERSAL BURGLARY CODE in QUAD 1,AL FIELD,LOCATIONS L5-L10 for all zones desired to report EXTENDED FORMAT for burglary.

STEP 5: Program a digit in QUAD 2,AF FIELD,LOCATION L1 which contains the option called QUAD SWITCHING.

STEP 6: Program a digit in QUAD 2,AF FIELD,LOCATION L2 which contains the option called EXTENDED FORMAT OPEN/CLOSING BY USER.

STEP 7: Program in QUAD 3,OP FIELD,LOCATIONS L5-L10 a DIFFERENT ZONE CODE for each of the zones. The suggested programming in these locations is as follows:

ZONE 1 = 1
ZONE 2 = 2
ZONE 3 = 3

The numbers which are programmed in these locations will be the ZONE IDENTIFIERS for each of these zones.
EXAMPLE:

124 3
124 3 **12A BURGLARY ZONE 2**
333 2
333 2

The two(2) which is trailing 333 is the ZONE IDENTIFIER which indicates zone 2 has been tripped on this system.

STEP 8: If OPEN/CLOSINGS BY USER is NOT desired on this installation the REMAINDER OF LOCATIONS IN ALL FIELDS IN QUAD 3 MUST BE PROGRAMMED (F).
FURTHERMORE ALL LOCATIONS OF ALL FIELDS IN QUADRANT FOUR MUST BE PROGRAMMED (F).

STEP 9: If OPEN/CLOSE BY USER **is** desired on an installation program the SUBSCRIBER ACCOUNT CODE in QUAD 3,AC FIELD (same account code as quad 1,ac field).
THIS IS THE CLOSING ACCOUNT CODE.

ALL OTHER LOCATIONS IN QUAD 3,1P,2P,3P,AF,FF,AND AL MUST BE PROGRAMMED (F).

STEP 10: Program the desired UNIVERSAL CLOSING CODE in QUAD 4,OP FIELD,ALL LOCATIONS that apply to all users desired to report to the c.o.
NOTE: USER 0 CAN NOT BE PROGRAMMED IF AMBUSH IS USED ON THIS SYSTEM.

STEP 11: Program USER CODES (NUMBERS) in QUAD 4,1P FIELD,ALL LOCATIONS that apply to all users desired to report to the c.o.(example user 1 =1,user 2 = 2,etc.)
NOTE: USER 0 CAN NOT BE PROGRAMMED IF AMBUSH IS BEING USED ON THIS SYSTEM.
THE NUMBERS (CODES) IN THESE LOCATIONS ARE THE USER IDENTIFIERS.

STEP 12: Program the desired UNIVERSAL OPENING CODE in QUAD 4,2P FIELD, ALL LOCATIONS that apply to all users desired to report to the c.o.
NOTE: USER 0 CAN NOT BE PROGRAMMED IF AMBUSH IS BEING USED ON THIS SYSTEM.

STEP 13: Program USER CODES (NUMBERS) in QUAD 4,3P FIELD,ALL LOCATIONS that apply to all users desired to report to the c.o.(example user 1 =1,user 2 = 2,etc.)

NOTE: USER 0 CAN NOT BE PROGRAMMED IF AMBUSH IS BEING USED ON THIS SYSTEM.
THE NUMBERS (CODES) IN THESE LOCATIONS ARE THE USER IDENTIFIERS.

STEP 14: Program the same SUBSCRIBER ACCOUNT CODE in QUAD 4,AC FIELD.
This is the OPENING ACCOUNT NUMBER.

ALL OTHER LOCATIONS IN QUAD 4,AF,FF,AND AL FIELDS MUST BE PROGRAMMED (F).

NOTE: There are some receivers such as the RADIONICS 6000 MACHINE which actually have 15 UNIVERSAL CODES.These codes are 0-9,B,C,D,E,F.
This receiver has dedicated meanings for the UNIVERSAL CODES B,C,D,E,F as follows:

B = OPENING
C = CLOSING
D = ABORT (CANCEL)
E = RESTORE
F = TROUBLE

When the RADIONICS RECEIVER receives a standard transmission which has an alarm code B,C,D,E,F it will automatically printout the ENGLISH LANGUAGE meaning for that transmission.
EXAMPLE:124 E PRINTOUT= 124 RESTORE

The RADIONICS RECEIVER **CAN** accept EXTENDED FORMAT,however it can do so ONLY if the UNIVERSAL CODE is a letter B,C,D,E,or F.
EXAMPLE:

124 E
124 E 124 RESTORE ZONE 5
EEE 5
EEE 5

The RADIONICS RECEIVER interprets and prints out this EXAMPLE transmission as 124 RESTORE ZONE 5.
This DEVICE CANNOT accept EXTENDED FORMAT if the UNIVERSAL CODE is a NUMBER.....THEREFORE.....

To program these Control Panels for EXTENDED FORMAT into this receiver follow STEPS 1 THROUGH 14 excluding STEPS 4 AND 7 then proceed as follows:

Program a different ZONE CODE in QUAD 1,AL FIELD,LOCATIONS L5-L10 for each of these zones(example:zone 1=1,zone 2=2,etc.).The codes programmed in this field are the ZONE IDENTIFIERS in this program.

4+2 FORMAT

4+2 FORMAT is comprised of a FOUR DIGIT SUBSCRIBER ACCOUNT CODE and TWO DIGIT ALARM CODES.Most receivers which can handle this format will accept alarm codes 00-99.Some of the newer receivers such as the F.B.I. CP220 accept two digit alarm codes 00-FF.

The following information is a step by step procedure to program these systems for this format.
NOTE:ALL OF THE ALARM CODES PROGRAMMED MUST BE TWO DIGITS.

STEP 1:Program a digit in QUAD 1,AF FIELD,LOCATION L2 which does **NOT** include the option EXTENDED FORMAT.

STEP 2:Program a FOUR DIGIT SUBSCRIBER ACCOUNT CODE in QUAD 1,AC FIELD,LOCATIONS L1-L4.

STEP 3:Program in QUAD 1,AL FIELD, LOCATIONS L1-L10,the desired FIRST DIGIT of the TWO DIGIT ZONE ALARM CODES.

STEP 4: Program in QUAD 3, OP FIELD, LOCATIONS L1-L10, the desired SECOND DIGIT of the ZONE ALARM CODES.

STEP 5: Program in QUAD 2, OP FIELD, LOCATIONS L1-L10, the desired FIRST DIGIT of the TWO DIGIT ZONE BYPASS CODES.

STEP 6: Program in QUAD 3, 1P FIELD, LOCATIONS L1-L10, the desired SECOND DIGIT of the ZONE BYPASS CODES.

STEP 7: Program in QUAD 2, 1P FIELD, LOCATIONS L1 - L8, the desired FIRST DIGIT of the TWO DIGIT RESTORE CODES.

STEP 8: Program in QUAD 3, 2P FIELD, LOCATIONS L1 - L8, the desired SECOND DIGIT of the ZONE RESORE CODES.

STEP 9: Program in QUAD 2, AF FIELD, LOCATION L1 a digit which **includes** the option QUAD SWITCHING.

STEP 10: Program in QUAD 2, AF FIELD, LOCATION L2 a digit which does **NOT** include the option called EXTENDED FORMAT OPEN/CLOSING BY USER.

STEP 11: If OPENING/CLOSING CODES BY USER in this format IS NOT desired ALL REMAINING LOCATIONS IN QUAD 3, 3P, AF, FF, AC, AL MUST BE PROGRAMMED (F).
FURTHEREMORE IN QUAD 4 ALL LOCATIONS IN ALL FIELDS MUST BE PROGRAMMED (F).

STEP 12: If OPENING/CLOSING BY USER IS desired program in QUAD 3, AC FIELD the FOUR DIGIT SUBSCRIBER ACCOUNT NUMBER. (same code that is programmed in quad 1, ac field)
This is the CLOSING ACCOUNT NUMBER.

STEP 13: Program in QUAD 4, OP FIELD, ALL LOCATIONS, the FIRST DIGIT of the TWO DIGIT USER CLOSING CODES.
NOTE: USER 0 CANNOT BE PROGRAMMED IF AMBUSH IS USED.

STEP 14: Program in QUAD 4, 1P FIELD, ALL LOCATIONS, the SECOND DIGIT of the USER CLOSING CODES.
NOTE: USER 0 CANNOT BE PROGRAMMED IF AMBUSH IS USED.

STEP 15: Program in QUAD 4, 2P FIELD, ALL LOCATIONS, the FIRST DIGIT of the TWO DIGIT USER OPENING CODES.
NOTE: USER 0 CANNOT BE PROGRAMMED IF AMBUSH IS USED.

STEP 16: Program in QUAD 4, 3P FIELD, ALL LOCATIONS, the SECOND DIGIT of the USER OPENING CODES.
NOTE: USER 0 CANNOT BE PROGRAMMED IF AMBUSH IS USED.

STEP 17: Program in QUAD 4, AC FIELD, THE FOUR DIGIT SUBSCRIBER ACCOUNT CODE (same code that is programmed in quad 1, ac field).

STEP 18: The final step in this procedure is to program ALL REMAINING LOCATIONS IN QUAD 4, AF, FF, AL FIELDS (F).