6.2 DTMF 4-1 and 4-2 Messages - Types 17 and 27

These messages will use the existing low speed English language printout logic currently in the 685.

7. Transmission of messages to Automation System

7.1 Contact ID message - type 18

7.1.1 Event message

The message will be sent to the computer as follows:

<LF>RG▒ACCT▒18▒E***▒GG▒C###▒<CR>
where

<LF> = ASCII Line feed Character (Hex 0A)
▒ = ASCII Space Character (Hex 20)
RG = Receiver # + Line card group #
ACCT = Account #
18 = The digits 1 and 8 (Message Type)
E= Letter "E"
***= Event code
GG = Group or Partition #
C= Letter "C" for Data Type of Contact ; Letter "U" for Data Type of User (see section 4)
###= Sensor #
<CR> = ASCII Carriage Return Character (Hex 0D)

7.1.2 Restore message

The message will be sent to the computer as follows:

<LF>RG␣ACCT␣18␣R***␣GG␣C###␣<CR>

where

<LF> = ASCII Line feed Character (Hex 0A)
␣ = ASCII Space Character (Hex 20)
RG = Receiver # + Line card group #
ACCT = Account #
18 = The digits 1 and 8 (Message Type)
R= Letter "R"
***= Event code
GG = Group or Partition #
C= Letter "C" for Data Type of Contact ; Letter "U" for Data Type of User (see section 4)
###= Sensor #
<CR> = ASCII Carriage Return Character (Hex 0D)

7.1.3 Previous event message (status report)

The message will be sent to the computer as follows:

<LF>RG␣ACCT␣18␣P***␣GG␣C###␣<CR>

where

<LF> = ASCII Line feed Character (Hex 0A)
␣ = ASCII Space Character (Hex 20)
RG = Receiver # + Line card group #
ACCT = Account #
18 = The digits 1 and 8 (Message Type)
P= Letter "P"
***= Event code
GG = Group or Partition #
C= Letter "C" for Data Type of Contact ; Letter "U" for Data Type of User (see section 4)
###= Sensor #
<CR> = ASCII Carriage Return Character (Hex 0D)

7.1.4 Opening message

The message will be sent to the computer as follows:

<LF>RG▒ACCT▒18▒E***▒GG▒U###▒<CR>
where

<LF> = ASCII Line feed Character (Hex 0A)
▒ = ASCII Space Character (Hex 20)
RG = Receiver # + Line card group #
ACCT = Account #
18 = The digits 1 and 8 (Message Type)
E= Letter "E"
***= Event code
GG = Group or Partition #
U= Letter "U"
###= User #
<CR> = ASCII Carriage Return Character (Hex 0D)

7.1.5 Closing message

The message will be sent to the computer as follows:

<LF>RG▒ACCT▒18▒R***▒GG▒U###▒<CR>

where

<LF> = ASCII Line feed Character (Hex 0A)
▒ = ASCII Space Character (Hex 20)
RG = Receiver # + Line card group #
ACCT = Account #
18 = The digits 1 and 8 (Message Type)
R= Letter "R"
***= Event code
GG = Group or Partition #
U= Letter "U"
###= User #
<CR> = ASCII Carriage Return Character (Hex 0D)

7.2 DTMF 4-1 and 4-2 Messages - Types 17 and 27

These messages will have their message types stripped off before transmission to the computer. The output to the computer will then be exactly the same as for existing 4-1 and 4-2 messages.

685 DIGITAL RECEIVER COMPUTER OUTPUT DATA

mco High Speed Format Communicators

EVENT	Rcvr Input	Output to Computer
Alarm	SSSS 5515 5555 7 (Zone 3 shown)	[NL][R#][L#]SP[SSSS]SP[5515]SP[5555]SP[7][CR]
Alarm Restore	SSSS 5535 5555 7 (Zone 3 shown)	[NL][R#][L#]SP[SSSS]SP[5535]SP[5555]SP[7][CR]
Zone Trouble	SSSS 5555 1555 5 (Zone 5 shown)	[NL][R#][L#]SP[SSSS]SP[5555]SP[1555]SP[5]SP[CR]
Zone Trouble Restore	SSSS 5555 3555 5 (Zone 5 shown)	[NL][R#][L#]SP[SSSS]SP[5555]SP[3555]SP[5][CR]
Zone Bypass	SSSS 5155 5555 3 (Zone 2 shown)	[NL][R#][L#]SP[SSSS]SP[5515]SP[5555]SP[3][CR]
Zone Bypass Restore	SSSS 5355 5555 3	[NL][R#][L#]SP[SSSS]SP[5355]SP[5555]SP[3][CR]
Duress Alarm	SSSS 1555 5555 1	[NL][R#][L#]SP[SSSS]SP[1555]SP[5555]SP[1][CR]
Opening	SSSS 5555 5525 7	[NL][R#][L#]SP[SSSS]SP[2222]SP[2222]SP[2][CR]
Opening by User	SSSS U222 2222 2	[NL][R#][L#]SP[SSSS]SP[U2222]SP[2222]SP[2][CR]
Closing	SSSS 5555 5545 7	[NL][R#][L#]SP[SSSS]SP[4444]SP[4444]SP[4][CR]
Closing by User	SSSS U444 4444 4	[NL][R#][L#]SP[SSSS]SP[U444]SP[4444]SP[4][CR]
Low Battery (old format)	SSSS 5555 5555 8	[NL][R#][L#]SP[SSSS]SP[5555]SP[5555]SP[8][CR]
:t	SSSS 5555 5555 9	[NL][R#][L#]SP[SSSS]SP[5555]SP[5555]SP[9][CR]
ss of AC	SSSS 1555 5555 6	[NL][R#][L#]SP[SSSS]SP[1555]SP[5555]SP[6][CR]
AC Restore	SSSS 3555 5555 6	[NL][R#][L#]SP[SSSS]SP[3555]SP[5555]SP[6][CR]
Low Battery (new format)	SSSS 5155 5555 6	[NL][R#][L#]SP[SSSS]SP[5155]SP[5555]SP[6][CR]
Low Battery Restore	SSSS 5355 5555 6	[NL][R#][L#]SP[SSSS]SP[5355]SP[5555]SP[6][CR]
Telco Line Fail	SSSS 5555 5155 6	[NL][R#][L#]SP[SSSS]SP[1555]SP[5155]SP[6][CR]
Telco Line Restore	SSSS 5555 5355 6	[NL][R#][L#]SP[SSSS]SP[1555]SP[5355]SP[6][CR]

Long Range Radio/Derived Channel Special Reports

Printer Fail	--------	[NL][R#][L#]SP[0000]SP[1555]SP[5555]SP[5][CR]
Printer Restore	--------	[NL][R#][L#]SP[0000]SP[3555]SP[5555]SP[5][CR]
Message Logged on Printer	--------	[NL][R#][L#]SP[0000]SP[5155]SP[5555]SP[5][CR]
Mstr/Host Communication Lost	--------	[NL][R#][L#]SP[0000]SP[5555]SP[5515]SP[5][CR]
Mstr/Host Communication Restore	--------	[NL][R#][L#]SP[0000]SP[5555]SP[5535]SP[5][CR]
Line Card munication ost	--------	[NL][R#][L#]SP[0000]SP[5555]SP[5551]SP[5][CR]
Line Card Communication	--------	[NL][R#][L#]SP[0000]SP[5555]SP[5553]SP[5][CR]

RF System Fail	--------	[NL][R#][L#]SP[SSSS]SP[5515]SP[5555]SP[6][CR]
RF System Restore	--------	[NL][R#][L#]SP[SSSS]SP[5535]SP[5555]SP[6][CR]
Power On Reset	--------	[NL][R#][L#]SP[SSSS]SP[5551]SP[5555]SP[6][CR]
Comm. Channel Fail	--------	[NL][R#][L#]SP[SSSS]SP[5555]SP[1555]SP[6][CR]
Comm. Channel estore	--------	[NL][R#][L#]SP[SSSS]SP[5555]SP[3555]SP[6][CR]

Where: The following codes are received in the eight status reporting channels:

1 = New Event
2 = Opening
3 = Restore
4 = Closing
5 = Normal
6 = Previously Reported Event

The definition of the data in the 8 status channels is provided by the following 9th Channel ID Codes:

1 = Duress
2 = Openings
3 = Bypasses
4 = Closings
5 = Zone Troubles
6 = System Troubles
7 = Alarms
8 = Alarms + Low Battery
9 = Alarms + Test

SSSS = Subscriber Account Number

Ademco Low Speed/SESCOA Format Communicators

1. Standard Reporting Mode

EVENT	Rcvr Input	Output to Computer
Alarm, Opening, Closing, Bypass, Trouble, Restore, Low Battery, Loss of AC, Test	SSSE	[NL][R#][L#]SP[SSSS]SP[E][CR]

Where: NL = New Line
R# = Receiver No.
L# = Line No.
SP = Space
SSSS = Subscriber ID padded with a leading zero if the subscriber ID is only 3 digits.
E = Event Code (0-9, B-F)
CR = Carriage Return

2. Expanded Reporting Mode

EVENT	Rcvr Input	Output to Computer
Opening by User	SSSE EEEU **where E must be "B"**	[NL][R#][L#]SP[SSSS]SP[U222]SP[2222]SP[2][CR]
Closing by User	SSSE EEEU **where E must be "C"**	[NL][R#][L#]SP[SSSS]SP[U444]SP[4444]SP[4][CR]

Bypass by Channel	SSSE EEE[CH]	(NONE)
Trouble by Channel	SSSE EEE[CH] where E must be "F"	[NL][R#][L#]SP[SSSS]SP[0555]SP[5555]SP[7][CR] (in the example shown, CH=Channel 1 reported for Zone ?)
Restore by Channel	SSSE EEE[CH] where E must be "E"	[NL][R#][L#]SP[SSSS]SP[5553]SP[5555]SP[7][CR] (in the example shown, CH=Channel 4 reported for the Event) Where: CH = Channel Report Code U = User ID No.

D. Radionics Slow/Superfast Format Communicators

1. Standard Reporting Mode

EVENT	Rcvr Input	Output to Computer
Alarm	SSSZ	[NL][R#][L#]SP[SSSS]SP[Z][CR]
Opening	SSSB	[NL][R#][L#]SP[SSSS]SP[B][CR]
Closing	SSSC	[NL][R#][L#]SP[SSSS]SP[C][CR]
Abort	SSSD	[NL][R#][L#]SP[SSSS]SP[D][CR]
Restore	SSSE	[NL][R#][L#]SP[SSSS]SP[E][CR]
Trouble	SSSF	[NL][R#][L#]SP[SSSS]SP[F][CR]
		Where Z = Zone No.

2. Expanded Reporting Mode

EVENT	Rcvr Input	Output to Computer
Opening by User	SSSB BBBU	[NL][R#][L#]SP[SSSS]SP[U222]SP[2222]SP[2][CR]
Closing by User	SSSC CCCU	[NL][R#][L#]SP[SSSS]SP[U444]SP[4444]SP[4][CR]
Restore by Zone	SSSE EEEZ	[NL][R#][L#]SP[SSSS]SP[5553]SP[5555]SP[7][CR] (Zone 4 shown)
Trouble by Zone	SSSF FFFZ	[NL][R#][L#]SP[SSSS]SP[5505]SP[5555]SP[7][CR] (Zone 3 shown)
Battery Trouble	SSSF FFF9	[NL][R#][L#]SP[SSSS]SP[5555]SP[5555]SP[8][CR]
Battery Restore	SSSE EEE9	[NL][R#][L#]SP[SSSS]SP[5555]SP[5555]SP[B][CR]

E. Radionics BFSK Format Communicators

Same as for B above plus

EVENT	Rcvr Input	Output to Computer
Status Report	All messages since last opening or closing	[NL][R#][L#]SP[SSSS]SP[S][CR] Where: S = ASCII S

Force Arming Report	[NL][R#][L#]SP[SSSS]SP[W][CR] Where: W = ASCII W
AC Power Fail Report	[NL][R#][L#]SP[SSSS]SP[1555]SP[5555]SP[6][CR] (The latter will be transmitted every time any message is received from a system that has lost AC power)
Telephone Line Fail Report	[NL][R#][L#]SP[SSSS]SP[5555]SP[5155]SP[6][CR]
Telephone Line Restoral	[NL][R#][L#]SP[SSSS]SP[5555]SP[5355]SP[6][CR]

F. 4+2 Format Communicators

EVENT	Rcvr Input	Output to Computer
Alarm, Opening, Closing, Bypass, Trouble, Restore, Low Battery, Loss of AC, Test	$SSSSE_1E_2$	[NL][R#][L#]SP[SSSS]SP[E_1E_2][CR] Where: E_1E_2 = 2 digit Event Code (0-9, B-F)

An alternate output format for the 4+2 input format events is also available (only one can be present in any one receiver at a time). The selection of one versus the other is in the 685's PROM.

$SSSE_1E_2$	[NL][R#][L#]SP[SSSS]SP[XYZ][A][CR] Where: A = ASCII A XYZ = 3 digit decimal conversion of E_1E_2 hexadecimal digits [example: hex 34 = (3 x 16) + (4x1) = 052

G. Wells Fargo Sentry Format Communicators

EVENT	Output to Computer
Zone 1 Alarm	[NL][R#][L#]SP[SSSS]SP[W][CR]
Zone 2 Alarm	[NL][R#][L#]SP[SSSS]SP[X][CR]
Zone 3 Alarm	[NL][R#][L#]SP[SSSS]SP[Z][CR]
Zone 4 Alarm	[NL][R#][L#]SP[SSSS]SP[Y][CR]
Restore	[NL][R#][L#]SP[SSSS]SP[R][CR]
Currently Undefined	[NL][R#][L#]SP[SSSS]SP[O][CR]
Currently Undefined	[NL][R#][L#]SP[SSSS]SP[P][CR]
Closing	[NL][R#][L#]SP[SSSS]SP[S][CR]
Test	[NL][R#][L#]SP[SSSS]SPSP[CR]
Transmission Error	[NL][R#][L#]SP[SSSS]SP[E][CR]
Listen-In Zone 1 or 3	[NL][R#][L#]SP[SSSS]SP[T][CR]
Listen-In Zone 2	[NL][R#][L#]SP[SSSS]SP[U][CR]
Listen-In Zone 4	[NL][R#][L#]SP[SSSS]SP[V][CR]

Where: W, X, Z, Y, R, O, P, S, E, T, U, V are ASCII Alpha characters.

SSSS 18 QXYZ GG CCC

where

SSSS= Four digit Subscriber ID

18= Uniquely identifies this format to the receiver and to an automation system, but is not displayed or printed.

Q= Event qualifier, which gives specific event information
1 = New Event or Opening
3 = New restore or Closing
6 = Previously reported off-normal event. (Status information) (Not currently sent by any controls).

XYZ = Event code (3 Hex digits)

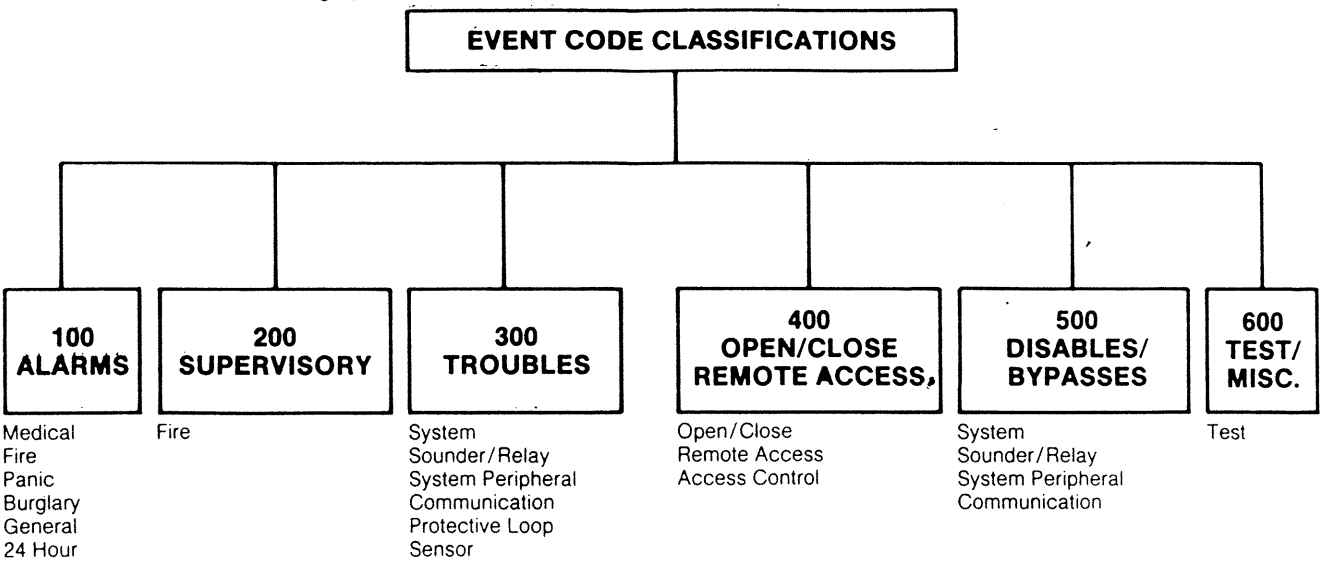
GG = Group number (physical or logical) (2 Hex digits)

CCC = Zone or Sensor number (3 Hex digits) (Event reports) User # (Open/Close reports)

Note: The GG and CCC fields contain 0 for a null (no information) field.

Event Code Classifications

The Event codes have been grouped according to the type of event, as illustrated below. The event code is fixed in the Ademco/Firelite/Notifier control/communicators' memory and does not need to be programmed. For example, an alarm on a sensor that is defined as a fire sensor automatically sends an event code for a Fire Alarm.



Specific Event Codes and English Language Messages Output to Printer of 685

IMPORTANT!!
The messages below have been pre-programmed into the 685's memory in anticipation of future product developments. Note that only a few of these messages may be sent by a given product.

1. When a pound sign (#) appears at the end of the message text, the sensor or user number sent by the control will be added to the end of the printout.
2. Unless otherwise noted, the message for a restoral will be the same as for the event, except that the leading word will be changed to RESTORE.
   For example, the text for event code 110 and its restoral would be:
   FIRE - Fire Alarm - #
   RESTORE - Fire Alarm - #
3. Brackets ([ ]) have been used to denote messages that will **not** be received either because the message will not be used in the near future or because the condition does not exist, e.g. Event code 305: [Restore not applicable].

EVENT	MESSAGE
Medical Alarms - 100	
100 Medical	*EMERG* - Personal Emergency - #
101 Pendant transmitter	*EMERG* - Personal Emergency - #
102 Fail to report in	*EMERG* - Fail to Check In - #
Fire Alarms - 110	
110 Fire alarm	*FIRE* - Fire Alarm - #
111 Smoke	*FIRE* - Smoke Detector - #
112 Combustion	*FIRE* - Combustion - #
113 Water flow	*FIRE* - Water Flow - #
114 Heat	*FIRE* - Heat Sensor - #
115 Pull station	*FIRE* - Pull Station - #
116 Duct	*FIRE* - Duct Sensor - #
117 Flame	*FIRE* - Flame Sensor - #
118 Near alarm	*FIRE* - Near Alarm - #
Panic Alarms - 120	
120 Panic alarm	*PANIC* - Panic - #
121 Duress	*PANIC* - Duress
122 Silent	*PANIC* - Silent Panic - #
123 Audible	*PANIC* - Audible Panic - #
Burglar Alarms - 130	
130 Burglary	*BURG* - Burglary - #
131 Perimeter	*BURG* - Perimeter - #
132 Interior	*BURG* - Interior - #
133 24 Hour	*BURG* - 24 Hour - #
134 Entry/Exit	*BURG* - Entry/Exit - #
135 Day/Night	*BURG* - Day/Night - #
136 Outdoor	*BURG* - Outdoor - #
137 Tamper	*BURG* - Tamper - #
138 Near alarm	*BURG* - Near Alarm - #
General Alarms - 140	
140 General alarm	*ALARM* - General Alarm - #
141 Polling loop open	*ALARM* - Polling Loop Open
142 Polling loop short	*ALARM* - Polling Loop Short
143 Expansion module failure	*ALARM* - Exp. Module Fail - #
144 Sensor tamper	*ALARM* - Sensor Tamper - #
145 Expansion module tamper	*ALARM* - Exp. Module Tamper
24 Hour Non-Burglary - 150 and 160	
150 24 Hour Non-Burg	*ALARM* - 24 Hr. Non-Burg - #
151 Gas detected	*ALARM* - Gas Detected - #
152 Refrigeration	*ALARM* - Refrigeration - #
153 Loss of heat	*ALARM* - Heating System - #
154 Water leakage	*ALARM* - Water Leakage - #
155 Foil break	*ALARM* - Foil Break - #
156 Day trouble	*ALARM* - Day Zone - #
157 Low bottled gas level	*ALARM* - Low Gas Level - #
158 High temp	*ALARM* - High Temperature - #
159 Low temp	*ALARM* - Low Temperature - #
161 Loss of air flow	*ALARM* - Air Flow - #
Fire Supervisory - 200 and 210	
200 Fire supervisory	SUPER - Fire Supervisory - #
201 Low water pressure	SUPER - Low Water Pressure - #
202 Low CO2	SUPER - Low CO2