SCS-VR™

VIRTUAL RECEIVER

REFERENCE GUIDE: PANEL MESSAGES

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OVERVIEW

DMP panels send messages to SCS-VRs that are displayed in the **Message Log** tab. Messages are received and displayed in Serial 3 format. The following guide provides reference information to help you read panel messages that are sent to an SCS-VR.

MESSAGE FORMAT

Each message sent to an SCS-VR is comprised of several fields that are separated with backslashes. All messages contain fields ordered as follows: Definition of the event, length of the message, the type of event, and details about the event. System Messages do not contain event details following the event type. For more information, refer to "System Messages".

All messages begin with Z and end with a carriage return. Strings of text characters are denoted with one double quote (") and terminate with a backslash (\). The event type field always begins with t to denote type, followed by the event code. Multiple event details can be appended to a message and are separated with backslashes.

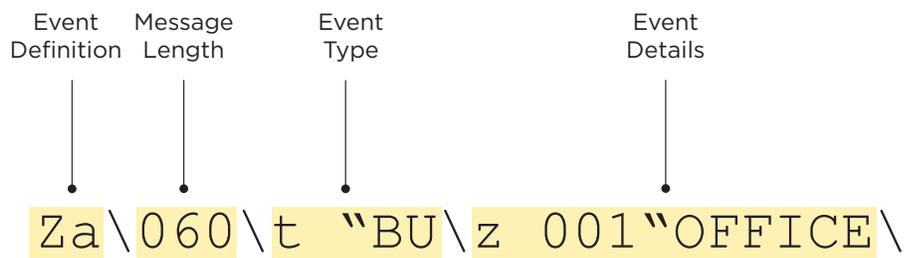For more information about message format, refer to Figure 1.

Figure 1: Message fields

EVENT DEFINITION

The event definition field provides context for the message fields that follow it. The codes listed in the following table define panel event messages. For information about the location of the event definition in Serial 3 messages, refer to Figure 2.

Event
Definition

```
Za\060\t "BU\z 001"OFFICE\
```
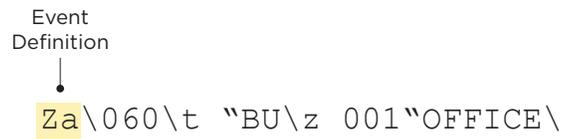
Figure 2: Event Definition

Za	Zone Alarm
Zb	Zone Force Arm
Zc	Real-Time Status
Zd	Wireless Zone Low Battery (LOBAT)
Ze	Equipment (hardware receivers)
Zf	Zone Fail
Zg	Holidays
Zh	Wireless Zone Missing
Zi	Zone Tamper
Zj	Door Access
Zk	Walk Test Zone Verify
Zl	Schedules
Zm	Service Code
Zp	Zone Trip Count
Zq	Arming Status
Zr	Zone Restore
Zs	System Message
Zt	Zone Trouble
Zu	User Codes
Zw	Zone Fault
Zx	Zone Bypass
Zy	Zone Reset
Zz	Reserved Type (System use only)

EVENT TYPE

The following tables list of event type codes and their meanings. For information about the location of the event type in Serial 3 messages, refer to Figure 3.
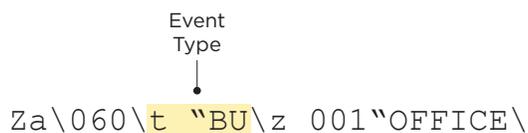
Event
Type

```
Za\060\t "BU\z 001"OFFICE\
```

Figure 3: Event Type

ZONE EVENTS

BL	Blank
FI	Fire
BU	Burglary
SV	Supervisory
PN	Panic
EM	Emergency
A1	Auxiliary 1
A2	Auxiliary 2
CO	Carbon Monoxide
VA	Video Alarm
HU	Holdup

ARMING EVENTS

OP	Disarmed (Opened) Area
CL	Armed (Closed) Area
LA	Area Late to Arm

USER CODE EVENTS

AD	Added User Code
CH	Changed User Code
DE	Deleted User Code
IN	Inactive User Code

SCHEDULE EVENTS

PE	Permanent Schedule
TE	Temporary Schedule
PR	Primary Schedule
SE	Secondary Schedule
S1	Shift One
S2	Shift Two
S3	Shift Three
S4	Shift Four
00-99	Numeric Schedule

HOLIDAYS (SCHEDULES)

HA	Holiday A
HB	Holiday B
HC	Holiday C

ACCESS EVENTS

DA	Door: Access Granted
AA	Armed Area: Access Denied
IA	Invalid Area: Access Denied
IT	Invalid Time: Access Denied
AP	Anti-passback: Access Denied
IC	Invalid Code: Access Denied
IL	Invalid Level: Access Denied
WP	Wrong Pin: Access Denied
IN	Inactive User: Access Denied

REAL-TIME STATUS (ENTRÉ)

DO	Door: Open
DC	Door: Closed
HO	Door: Held Open
FO	Door: Forced Open
ON	Output: On
OF	Output: Off
PL	Output: Pulse
TP	Output: Temporal
MO	Output: Momentary

EQUIPMENT EVENTS

RP	Repair
RL	Replace
AD	Add
RM	Remove
AJ	Adjust
TS	Test
SO	System Options: EEPROM
PR	Printer: EEPROM
LC	Line Card: EEPROM
H1	Host Port 1: EEPROM
H2	Host Port 2: EEPROM
SP	Serial Port: EEPROM
LG	Log
EE	Entire EEPROM
CD	Contact ID

SERVICE USER EVENTS

ST	Start Service User
SP	Stop Service User

QUALIFIER EVENTS

DT	Service
AC	All Areas Armed
LC	Local Alarm/Restore

SYSTEM MESSAGES

000-999	See System Messages

EVENT DETAILS

The following tables list event detail types, their identifiers, qualifiers, and message information. For information about the location of the event details in Serial 3 messages, refer to Figure 4.
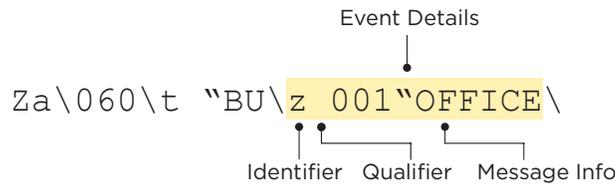
```
                              Event Details
                                    |
      Za\060\t  "BU\z 001"OFFICE\
                      |    |      |
              Identifier Qualifier Message Info
```

Figure 4: Event Details

Zone

Identifier	z	
Qualifier	␣	(space) None
Message Info		Zone number, Video camera ID number
		Zone name

Area

Identifier	a	
Qualifier	␣	(space) None
Message Info		Area number, Video recorder ID number
		Area name

Device

Identifier	v	
Qualifiers	␣	(space) None
	d	None
Message Info		Device address
		Device name

Schedule Name

Identifier	n	
Qualifier	␣	(space) None
Message Info		Schedule name

Event Qualifier

Identifier	e	
Qualifiers	␣	Dirty smoke detector (`DT`), Area Closing: ll areas armed (`AC`)
	e	Encrypted—Rijndael (`RI`), 256-bit (`RH`), Not encrypted (`NO`)
	s	Sequence number (`0-250`)
	t	Automatic recall number of hours (`0001-1440`)
	c	Traffic Count—number of zone trips
	f	Cellular communication trouble (`1-7`)
	n	Negative acknowledgements (NAKs) from host—number received
	p	Protocol (`DS`)
	o	Previous MAC (Control panel substitution)
	m	Current MAC (Control panel substitution)
	u	Unrecognized Card (Access)
	l	Lockdown State—In lockdown (`ON`), Not in lockdown (`OFF`)
	r	Remote initiation
	v	Video alarm
Message Info		Event ID (`0-65535`), Event identifier

Holiday

Identifier	h	
Qualifier	␣	(space) None
Message Info		Holiday number

Time/Day

Identifier	i	
Qualifiers	o	Open time (24-hour)
	c	Close time (24-hour)
Message Info		Time (HH:MM)
		Day (ddd, Hol, H-A, H-B, or H-C)

Date

Identifier	d	
Qualifier	␣	None (space)
Message Info		Date (mm-dd)

User Code

Identifier	u	
Qualifiers	␣	(space) User performed action
	m	Action performed on user
	a	Panel audit, no user
	s	Two man rule
Message Info		User number
		User name

Service Code

Identifier	s	
Qualifiers	␣	(space) None
	Y	None
	N	None
Message Info		Service code ID (0–65535)

Equipment ID

Identifier	g	
Qualifier	␣	None (space)
Message Info		Equipment ID number

Programming

Identifier	p	
Qualifier	n	Network
Message Info		Primary communication type—Net (7), DD (8)
		Secondary line type—None (0), Cell (6), Net (7), DD (8), B (D2)
		Network backup—Yes (Y), No (N)
		Sub code—Yes (Y), No (N)
		Retry time (03–15)
		Check-in time (001–240)
		Fail time (001–240)
		TCP enabled—Yes (Y), No (N)
		Supervised backup—Yes (Y), No (N)

Path (Communication) Information

Identifier	c	
Qualifiers	␣	(space) Message communicated on path
	f	Event occurred on path
Message Info		Path number (01-08)
		Communication type—DD (D), Network (N), CID (C), Cell (L), Wi-Fi (W)
		Path type—Primary (P), Backup (B)

Call Information

Identifier	n	
Qualifiers	a	ANI/DNIS
	c	Caller ID
Message Info		ANI/DNIS information (a) or Phone number (c)

Signal Strength

Identifier	b	
Qualifier	c	Cell
Message Info		Numeric value of signal strength in dBm without minus sign

SYSTEM MESSAGES

The following table lists system messages, sometimes referred to as "s messages" like "s15". For message descriptions, refer to the [SCS-150 Host Output Spec](#).

000	AC power restored
001	Standby battery restored
002	Communication line level restored
003	Panel tamper restored
004	Backup communication line restored
005	Panel ground restored
006	Late to close
007	Automatic recall test OK
008	WARNING: AC power failure
009	WARNING: Low standby battery
010	WARNING: Low communication line level
011	WARNING: Panel tamper
012	WARNING: Panel backup communication fail
013	WARNING: Panel ground fault
014	WARNING: Non-alarm message overflow
015	* * AMBUSH * *
016	WARNING: Panel not responding
017	Panel response restored
018	ALARM: Zone alarm overflow
019	WARNING: New panel on line
020	Call xxxxxxxxxx
021	Automation not responding
022	Automation restored
023	Panel test signal received
024	Undefined
025	Undefined
026	WARNING: Auxiliary fuse trouble
027	Auxiliary fuse restored
028	WARNING: Telephone line 1 trouble
029	Telephone line 1 restored
030	WARNING: Telephone line 2 trouble
031	Telephone line 2 restored
032	ALARM: Supervised wireless interference
033	ALARM: Early morning ambush

034	WARNING: Alarm bell silenced
035	Alarm bell returned to normal
036	Time and date set by operator
037	Undefined
038	WARNING: Bell circuit trouble
039	Bell circuit restored
040	ALARM: Fire zone alarm overflow
041	ALARM: Panic zone alarm overflow
042	ALARM: Burglary zone alarm overflow
043	WARNING: Bell fuse trouble
044	WARNING: Fire-burglary trouble overflow
045	Abort signal received
046	Zone swinger automatically bypassed
047	Zone swinger automatically reset
048	WARNING: Low battery cutoff—LAST MESSAGE
049	CANCEL signal received
050	WARNING: Supervised wireless trouble
051	WARNING: Remote programming
052	Undefined
053	Bell fuse restored
054	WARNING: Unsuccessful remote attempt
055	Request for alarm receiver key
056	Undefined
057	Undefined
058	ALARM: Control panel substitution
059	WARNING: Substitution/Checkin overflow
060	WARNING: Invalid panel message format
061–065	Undefined
066	System TEST mode begin
067	System TEST mode end
068	Printer fail
069	Printer restore
070	End of history buffer
071	Date time requested from control
072	WARNING: Network or communication path trouble
073	Network or communication path restored
074	ALARM: Tamper during armed state
075	ALERT: Early to close

076	ALERT: Late to open
077	ALERT: Unauthorized entry
078	ALERT: System recently armed
079	ALERT: Signal during opened period
080	ALERT: Exit error
081	WARNING: Network card trouble—Card c
082	Network card restored—Card c
083	Remote programming complete
084	Remote command received
085	Undefined
086	WARNING: Local programming in progress
087	WARNING: Transmit failed—Messages not sent
088	Automatic recall OK—Unrestored system
089	Supervised wireless restored
090	WARNING: Unrecognized message
091	ALERT: Service request
092	WARNING: No arm/disarm activity
093	ALARM: User activity not detected
094	ALERT: Activity check enabled
095	ALERT: Activity check disabled
096	ALARM: Verify signal received
097	Network communication test OK
098	SCS1 memory full
099	15 minute system check
100	Automation rejected a message
101	Device missing
102	Device restored
103–108	Undefined
109	Panel restart
110	Auxiliary power fail
111	Auxiliary power restore
112	DC power fail
113	DC power restore
114–115	Undefined
116	On-demand monitoring started
117	On-demand monitoring stopped
118	System On-Test
119	System Off-Test

120	Undefined
121	ALERT: Cell data communication excessive
122	WARNING: Cell data non-alarm suppress
123	ALARM: Cell data fire alarm suppress
124	ALARM: Cell data non-fire alarm suppress
125	Cell data communication restored
126	ALERT: Cell rate plan exceeded
127–129	Undefined
130	WARNING: Cell communicator bus failed
131	ALARM: Cell communicator bus failed
132	Cell communicator bus restored
133	WARNING: Cell communicator DC failed
134	Cell communicator DC restored
135	WARNING: Cell communicator low battery
136	Cell communicator battery restored
137	WARNING: Cell communicator tamper
138	ALARM: Cell communicator tamper
139	Cell communicator tamper restored
140	TROUBLE OVERRIDE
141–150	Undefined
151	WARNING: Memory usage
152	Undefined
153	WARNING: Communication trouble
154	WARNING: Database failure (Line card failure for hardware receivers)
155	WARNING: Comm line
156–160	Undefined
172	Undefined
173	Undefined

EXAMPLES

The following examples demonstrate Serial 3 message outputs for a zone alarm, arming status, user code, and system message.
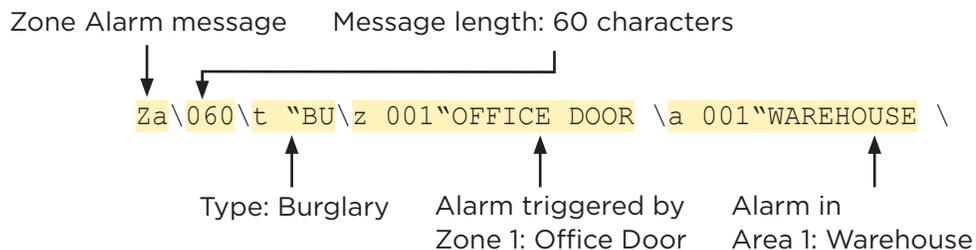
Zone Alarm message   Message length: 60 characters

`Za\060\t "BU\z 001"OFFICE DOOR \a 001"WAREHOUSE \`

Type: Burglary   Alarm triggered by   Alarm in
                      Zone 1: Office Door   Area 1: Warehouse

Figure 5: Burglary alarm in the warehouse triggered by the office door

Arming Status message   Message length: 59 characters

`Zq\059\t "OP\u 00001"LINDA SANCHEZ \a 001"OFFICE \`

Type: Opening   Action performed by   Action performed in
(Disarm)   User 1: Linda Sanchez   Area 1: Office
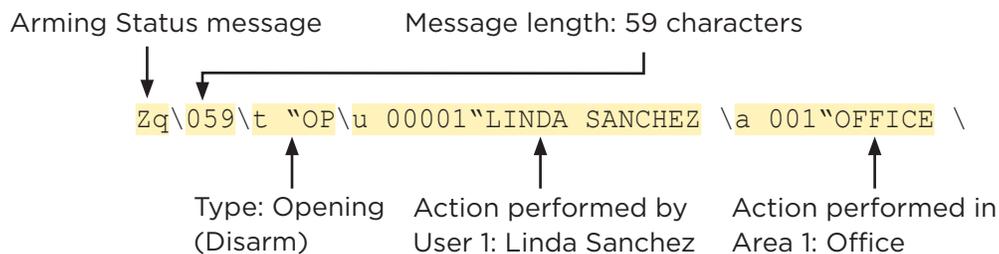
Figure 6: Linda Sanchez disarmed the office

User Code message   Message length: 64 characters

`Zu\064\t "AD\um00002"TOM JONES \u 00001"JORDAN JONES \`

Type: Add   Action performed on   Action performed by
                 User 2: Tom Jones   User 1: Jordan Jones
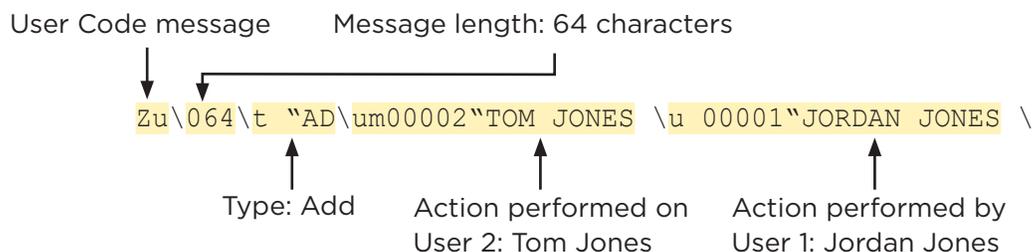
Figure 7: Jordan Jones created a new user, Tom Jones

System message   Message length: 14 characters

Zs\014\t 017

Type: 17 (Panel response restored)
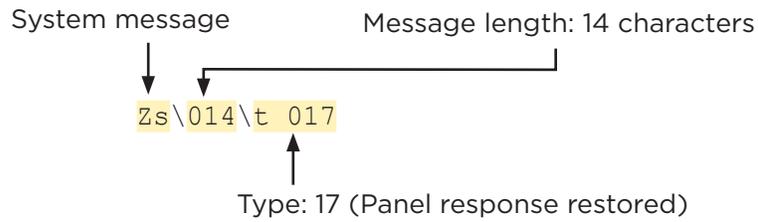
Figure 8: Power or communication restored to panel

Zone Alarm message   Message length: 32 characters

Za\032\t "VA\z 001\a 002\ev333\

Type:
Video Alarm

Camera ID: 1

Recorder ID: 2

Event #333
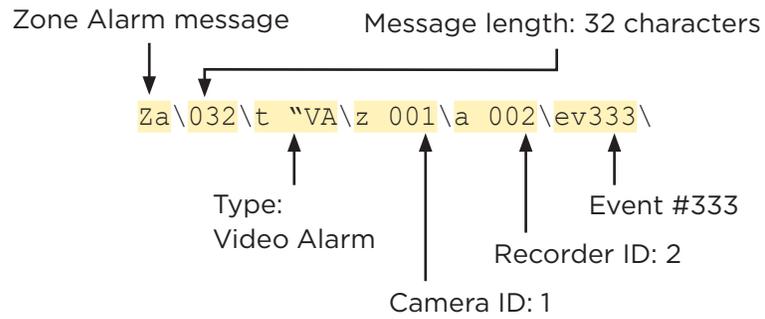
Figure 9: Video Alarm Message