EPIC SAFETY

surf-km & surf-k

LTE Alarm System Communicators

Installation Guide

Contents

1.Overview

1.1. Description

Surf-km and Surf-k are primary alarm communicators that use cellular (LTE) technology. They use line capture to monitor any alarm system that uses SIA and CID format. They can also connect to the DSC power series keybus to monitor these systems and provide users the ability to access their systems remotely from anywhere via our Aryo Cloud platform and iOS and Android smartphones. Surf-km and Surf-k use 3 zones to monitor legacy systems for generic burglary, fire, and panic alarms. Surf-km and Surf-k use zone 1 and

PGM 1 fort keyswitch arming and disarming. PGM 2 is used to trigger a supervisory zone on the panel for Surf-km and Surf-k troubles.

1.2. In the box

- Surf-k or Surf-km
- Quick installation guide
- Antenna (75cm)

1.3. Identifying the Parts
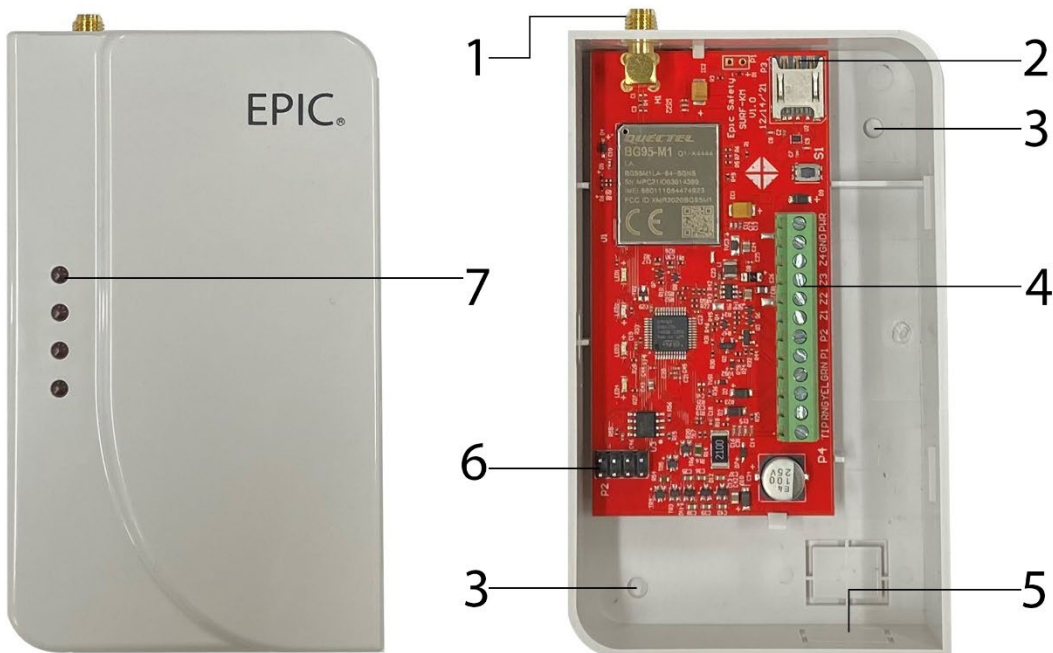
1) Antenna connector

2) SIM card

3) Mounting holes

4) Terminal block

5) Wire entrance

6) RF Expansion port

7) LED indicators

2. Introduction

2.1. Features

- The use of **LTE, NB-IoT** by Surf-K and **LTE, CAT-M1** by Surf-KM, makes them capable of covering a wide area using low power cellular technology.
- **Line capture** allows Surf-K and Surf-KM to detect and capture **CID and SIA** events and monitor any alarm system that uses these formats.
- **Keybus** allows Surf-K and Surf-KM to communicate with the Keypad in a faster way. Also giving the possibility of having troubles showing on the Dashboard in case of any unforeseen event.
- In case the panel doesn't support Keybus, Surf-K and Surf-KM can use 3 input zones to **monitor generic alarm** outputs of the panels by providing generic Burglary, Fire, and Panic inputs to monitor these systems.
- In case a panel doesn't support Keybus, Surf-K and Surf-KM could also use Tip/Ring – **Key Switch Arming** to arm and disarm your system.
- Surf-K and Surf-KM display **Full Event Reporting** when connected to Aryo Cloud.
- **Zone & Partition** Status are shown on the platform, assigned by the Dealer.
- **OTA Firmware Updates** are provided in real time, keeping your system up to date.
- Connected to Aryo Cloud, Surf-K & Surf-KM will provide **Automatic Status Detection**, disclosing in real time the status of the connection, network, voltage, etc.

2.2. Surf codes

Surf-K and Surf-KM uses one master code (for main user) and 40 user codes to arm and disarm the host control panel when keyswitch arming is used or If Keybus connection is not used or available. These Codes are different from the host control panel Master and User Codes. If SURF-K or Surf-KM master code is lost, it can be reprogrammed by the Dealer.

2.3. Monitoring options

2.3.1. Tip/Ring monitoring– Is used to connect to panel **TIP** and **RING** terminals for detection and capture of CID and SIA format events. These signals are sent to Aryo cloud and the monitoring center.

2.3.2. Keybus monitoring – is used to connect to DSC power series keybus **Yellow** and **Green** terminals to fully interact with panel keybus communication. The events and status signals are sent to Aryo cloud and the monitoring center.

2.3.3. Keybus and Tip/Ring monitoring - Are used to connect to panel **TIP** and **RING** terminals for detection and capture of CID and SIA format events and to connect to DSC power series keybus **Yellow** and **Green** terminals to fully interact with panel

keybus communication. The events and status signals are sent to Aryo cloud and the monitoring center.

2.3.4. Generic panel monitoring - Surf-km and Surf-k use 3 input zones to monitor alarm outputs of the panels for **Burglary, Fire, and Panic** when CID and SIA formats are not used.

3. Pre-Installation Recommendations

- Explore a placement test to find a suitable location with best LTE signal.
- Wiring can only be done when both Surf and the alarm panel are powered down.
- Do not route any wire over the alarm panel or Surf circuit boards.
- Install and program your alarm panel before connecting it to Surf-K/ Surf-KM.
- Install and operate Surf within its specified temperature ranges to prevent any possible damages.
  Do NOT install the unit close to heating source, direct sunlight or in a damp location.
- Do NOT connect Surf-k and Surf-km to a phone line. This will damage Surf.
- Always connect Surf to approved power source and battery backup.

- To remotely Arm Away a panel that has a configurable Auto Stay option, this feature should be disabled.

3.1. Antenna Installation

- Surf-K and Surf-KM use full-band LTE magnetic antenna. The antenna can be connected to Surf-K and Surf-KM antenna connector as shown in section 1.3.
- Antenna should be placed high in an open area within the building and far from any interference, metals, pipes, and concrete.
- DO NOT install the antenna in a metal enclosure.

3.2. Cable length

For suitable location to install Surf-K and Surf-KM, they can be installed up to 1000 feet away from the control panel. The distance would increase if you use higher guage wire.

4. Performance Guide

4.1. Signal level

The signal level is reported using RSSI (received signal strength indicator) method which can be converted to dBm (decibel-milliwatts). The RSSI and corresponding signal strength bar can be seen in the table below:

RSSI	Signal level (dBm)	Service Level
0 - 2	-113 ~ -109	No service
3 - 9	-108 ~ -95	Poor – will trigger signal strength trouble event

10 -14	-93 ~ -85	Acceptable
15 - 19	-83 ~ -75	Good
20 - 31	-73 ~ -51	Excellent

4.2. Temperature

For correct operation, the unit must be in the operating range for temperature level. The different temperature levels and their corresponding interpretations are listed below. The temperature for the unit can be viewed on the cloud.

SURF-K/KM (°C)	Interpretation
< -5 °C	Low – Surf will trigger low temperature trouble event.
-5 °C to 50 °C	Normal
> 51 °C	High – Surf will trigger high temperature trouble event.

4.3. Voltage

For proper operation, both alarm panel and SURF-K/KM should be powered by approved power source within the recommended range. Different voltage levels and corresponding interpretations for the alarm panel are listed below.

Panel Voltage (VDC)	Interpretation
< 9	Low voltage - Surf will trigger low voltage trouble event.
10.1 – 13	Acceptable
13.1 – 14.5	Good
> 14.5	High voltage - Surf will trigger high voltage trouble event.

4.4. Button Functions

Surf button is used for a few functions according to the table below:

Button press Time(sec)	Function Name	Function Use	Duration time	LED indicators
5 sec<	Self-Test	To send device info (HW & FW versions, signal level, power, temperature) to our cloud	Immediate	Blink once
5 sec	Signal level Mode	To select the best location for mounting Surf by obtaining signal level of Surf for each location: Led 1 Blink 0 ~ 9	20 sec	Slow blink

		Led 1 On	10 ~ 12			
		Led 2 Blink	13 ~ 16			
		Led 2 On	17 ~ 19			
		Led 3 Blink	20 ~ 22			
		Led 3 On	23 ~ 25			
		Led 4 Blink	26 ~ 28			
		Led 4 On	29 ~ 31			
10 sec	Reboot Device	If required based on troubleshooting guide		Immediately		Fast blinking
15 sec	Reset SSL	When Surf is reused for a new client or moved to a new location.		Immediately		Alter blinking

4.5. LED indications

Condition	Status	LED	Color	On	Off	Fast Blink	1 Flash	2 Flash	3 Flash
Power	DC power on	1	Red	X					
	DC power off	1	Red		X				
	Device not Registered with cloud	1	Red				X		
	SURF-K/KM Trouble (POWER, Signal, Temperature, Keybus, Communication)	1	Red			X			
Cellular Network	Surf can not find the cellular network	2	Green			X			
	Poor Signal	2	Green				X		
	Acceptable Signal	2	Green					X	
	Good Signal	2	Green						X
	Strong Signal	2	Green	X					
Server Network	Connecting to server	3	Green				X		
	Disconnected from server	3	Green		X				
	Communicating with server	3	Green			X			
	Connected to server, but not communicating	3	Green	X					

Panel Communication	Connected to the Tip/Ring	4	Green				X			
	Connected to the Keybus					X				
	Connected to Tip/Ring and Keybus	4	Green	X						
	Generic panel type				X					
FW Update	Firmware update in progress	4	Green							Alternate blinking

4.6. Terminal Connections
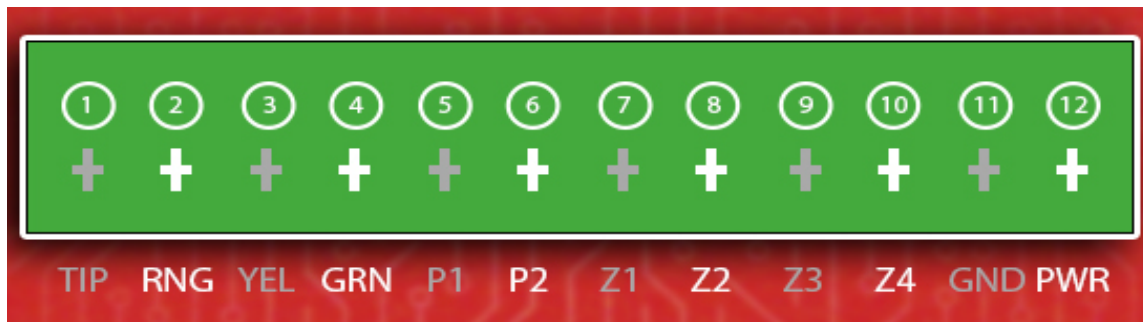
SURF-K / Surf-KM terminals description

Terminal Name	Connections
Tip (T)	Connection to panel phone TIP terminal for detection and capture of CID and SIA events to be sent to Aryo cloud and the monitoring center
Ring ®	Connection to panel phone RING terminal for detection and capture of CID and SIA events to be sent to Aryo cloud and the monitoring center
Keybus Yellow (Y)	To be connected to DSC power series keybus Yellow terminal to fully interact with keybus communication
Keybus Green (G)	To be connected to DSC power series keybus Green terminal to fully interact with keybus communication

PGM 1 (P1)	To trigger a keyswitch zone of the panel for arming / disarming
PGM 2 (P2)	Connects a supervisory zone on the host panel to trigger trouble events when SURF-K / Surf-KM trouble occurs. For Surf-K/KM troubles, please see **Section 6.**
Zone 1 (Z1) (Dry Contact only)	To provide arm/disarm status of the panel when connected to arm status PGM of the host panel
Zone 2 (Z2) (Dry Contact only)	Common **Burglary** Input used to monitor burglary alarm signal received from the output of any control panel. (For DSC panels, this zone can be used for both fire and burglary detection when connected to the siren output)
Zone 3 (Z3) (Dry Contact only)	Common **Fire** Input used to monitor fire alarm signal received from the output of any control panel
Zone 4 (Z4) (Dry Contact only)	Common **Panic** Input used to monitor panic alarm signal received from the output of any control panel
Ground (GND)	Ground
Power (PWR)	12-14 VDC

Other Hardware:
- RF expansion port is for future addition of more wireless capabilities to Surf-K and Surf-KM.
- Antenna connector is for connecting our full frequency LTE antenna.

4.7. Connections description

4.7.1. Power

SURF-K / Surf-KM could be powered by host control panel auxiliary 12-14 VDC power. External auxiliary power source with back up battery can be used if they use common ground. These devices can still operate with power range of 5 to 20 VDC. SURF-K / Surf-KM always monitor panel voltage and will generate power trouble when voltage drops below 9VDC.

4.7.2. Keybus

SURF-K/KM supports DSC power series Keybus interface. Yellow (Y) and Green (G) terminals can be connected to Surf to allow interaction with DSC power series panels to monitor events and provide status of the host alarm panel.

They can also provide users the ability to access their systems remotely from anywhere via our Aryo Cloud platform and iOS and Android Apps

4.7.3. Tip/Ring
SURF-K/KM connect to Tip/Ring interface of any alarm panel that uses CID or SIA formats to capture all generated signals and send them to our Aryo cloud and then monitoring centers.

4.7.4. Zones
SURF-K / Surf-KM provide 4 zone inputs. Zone 1 is used for arm status in keyswitch arming and 3 zones are used to monitor generic alarm panels that do not use CID/SIA formats. Zones 2, 3 and 4 zones would be used for generic burglary, fire, and panic alarms as per section 1.4`s table.

4.7.5. PGMs
SURF-K/KM has two PGM outputs are for keyswitch arming and Surf troubles as per section 1.4`s table.

5. Installation & Programming
5.1. DSC Power Series Panels
5.1.1. Wiring Diagram

Surf-K/KM

TIP
RING
TIP
RING
YEL
Z2
GRN
Z1
P1
PGM1
P2
GRN
Z1
YEL
Z2
+
Z3
-
Z4
GND
PWR
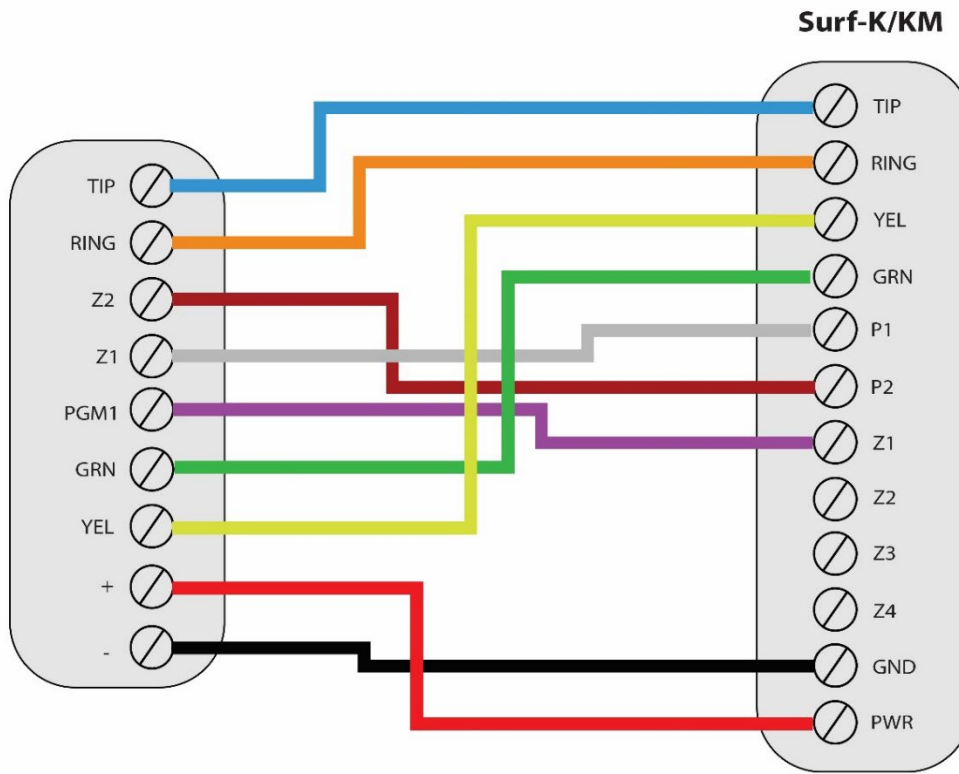
Colours are for demonstration purposes only

5.2. Programming recommendations

5.2.1.   1616/1832/1864

Section	Description
015	Turn options 4 on and options 7 and 8 off
301	Enter any phone number
310	Enter a system account number
311-318	If system has multiple partitions, enter an account number for each partition if any format other than SIA is used. 311 for partition 1, 312 for partition 2, and so on.
350	Enter 03 for CID or 04 for SIA reporting
351-358	Turn option 1 on for each partition alarm/restore reporting. 351 is for

	partition 1, 352 is for partition 2, and so on.
367-374	Turn option 1 on for each partition open/close reporting. 367 is for partition 1, 368 is for partition 2, and so on.
380	Turn option 1 on to enable communicator for digital monitoring. Options 3 and 4 must be off for DTMF dialing. Note: If Keybus monitoring reporting is selected, option 1 must be off.
381	Options 3 and 7 must be off for automatic SIA and CID reporting

To enable keyswitch arming/disarming and make it work properly, program the following sections:

Section	Entry/Description
001	Program a zone as type 22 for momentary keyswitch arm
009	Program a PGM as 05 for system arm status
021	Turn on option 6 for Keyswitch arming/disarming at any time
023	Turn on option 8 for Keyswitch to arm in Away mode

5.2.2. PC 5020

Sections	Programing Description
015	Turn options 4 on and options 7 and 8 off
301	Enter a phone number
310	Enter a system account number
311-317	If system has multiple partitions, enter an account number for each partition if any format other than SIA is used. 311 for partition 1, 312 for partition 2, and so on.
350	Enter 03 for CID or 04 for SIA reporting
351-358	Turn option 1 on for each partition alarm/restore reporting. 351 is for partition 1, 352 is for partition 2, and so on.
367-374	Turn option 1 on for each partition open/close reporting. 367 is for partition 1, 368 is for partition 2, and so on.
380	Turn option 1 on to enable communicator for digital monitoring. Options 3 and 4 must be off for DTMF dialing. Note: If Keybus monitoring reporting is selected, option 1 must be off.

381	Options 3 and 7 must be off for automatic SIA and CID reporting

To enable keyswitch arming/disarming and make it work properly, program the following sections:

Section	Entry/Description
001	Program a zone as type 22 for momentary keyswitch arm
009	Program a PGM as 05 for system arm status

5.2.3. PC 5010

Sections	Programing Description
015	Turn options 4 on and options 7 and 8 off
301	Enter any phone number
310	Enter an account number for each partition
360	Enter 03 for CID or 04 for SIA reporting
361-362	Turn option 1 on for each partition alarm/restore reporting. 361 is for partition 1, 362 is for partition 2.
365-366	Turn option 1 on for each partition open/close reporting. 365 is for partition 1, 366 is for partition 2.
380	Turn option 1 on to enable communicator for digital monitoring option. Options 3 and 4 must be off. Note: If Keybus monitoring reporting is selected, option 1 must be off.
381	Options 3 must be off for automatic SIA reporting. All CID codes from section 320 to 353 must be manually entered when CID reporting is used.

To enable keyswitch arming/disarming, program the following sections:

Section	Entry/Description
001	Program a zone as type 22 for momentary keyswitch arm
009	Program a PGM as 05 for system arm status

5.2.4. PC580, PC585, PC 1555

Sections	Programing Description

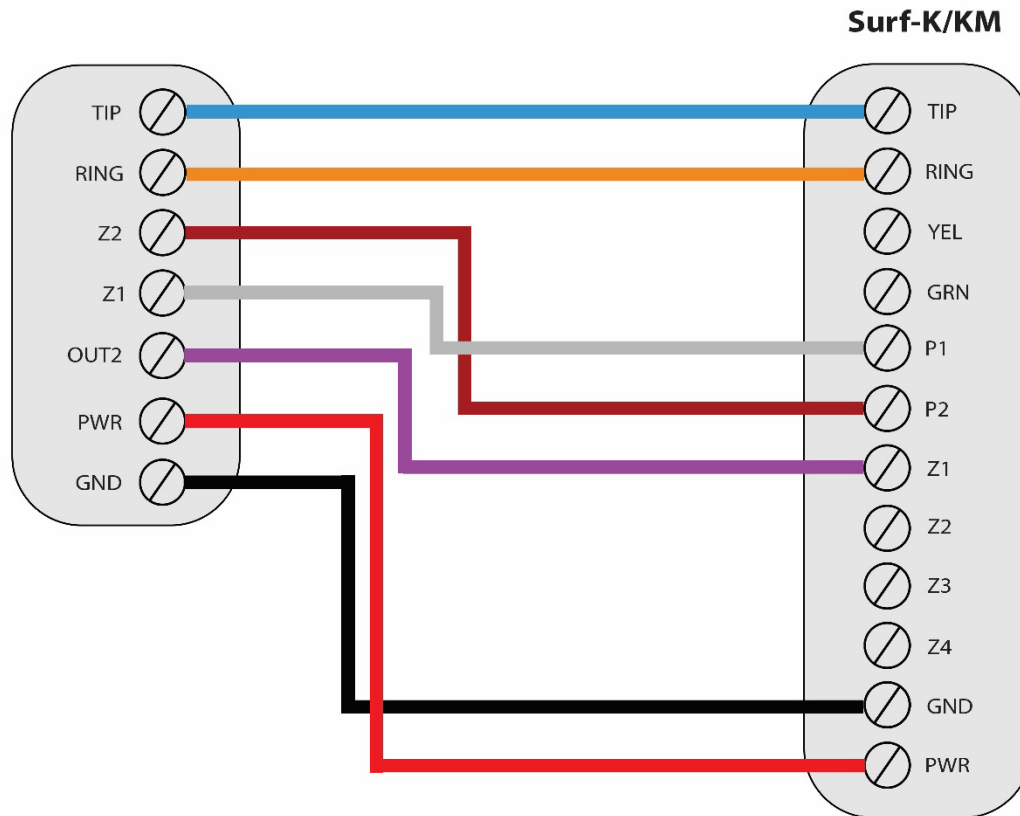|	
015	Turn options 4 on and options 7 and 8 off
301	Enter any phone number
310	Enter account number
360	Enter 03 for CID reporting or 04 for SIA reporting
361	Turn option 1 on for alarm/restore reporting.
365	Turn option 1 on for open/close reporting.
380	Turn option 1 on to enable communicator for digital monitoring. Options 3 and 4 must be off. Note: If Keybus monitoring reporting is selected, option 1 must be off.
381	Options 3 and 7 must be off for automatic SIA and CID reporting

To enable keyswitch arming/disarming, program the following sections:

Section	Entry/Description
001	Program a zone as type 22 for momentary keyswitch arm
09	Program a PGM as 05 for system arm status

5.2 Interlogix Panels (GE)

5.2.1 GE Concord

5.2.1.1 Wiring Diagram

Surf-K/KM

GE Concord	Surf-K/KM
TIP	TIP
RING	RING
Z2	YEL
Z1	GRN
OUT2	P1
PWR	P2
GND	Z1
	Z2
	Z3
	Z4
	GND
	PWR

Colours are for demonstration purposes only

5.3 Paradox Panels

5.3.1 Espirit 728, 728 Express, 738, 738 Express

5.3.1.1 Wiring Diagram

Surf-K/KM

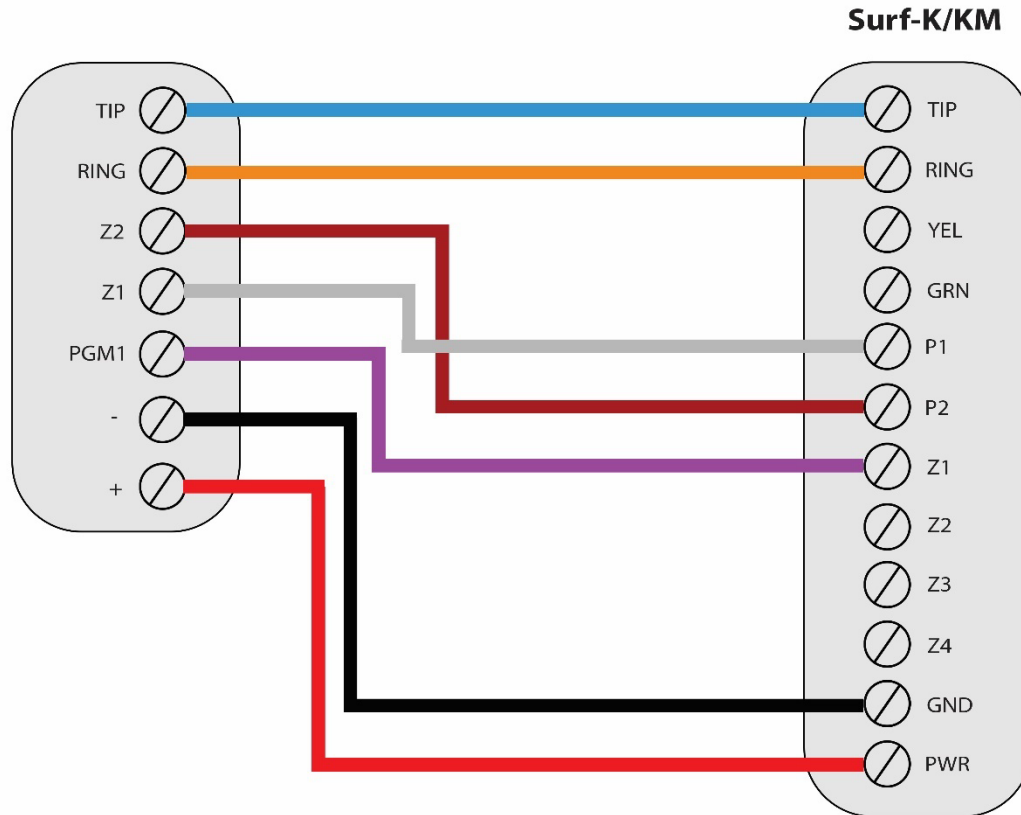|			
TIP			TIP
RNG			RING
Z2			YEL
Z1			GRN
+			P1
-			P2
PGM			Z1
			Z2
			Z3
			Z4
			GND
			PWR
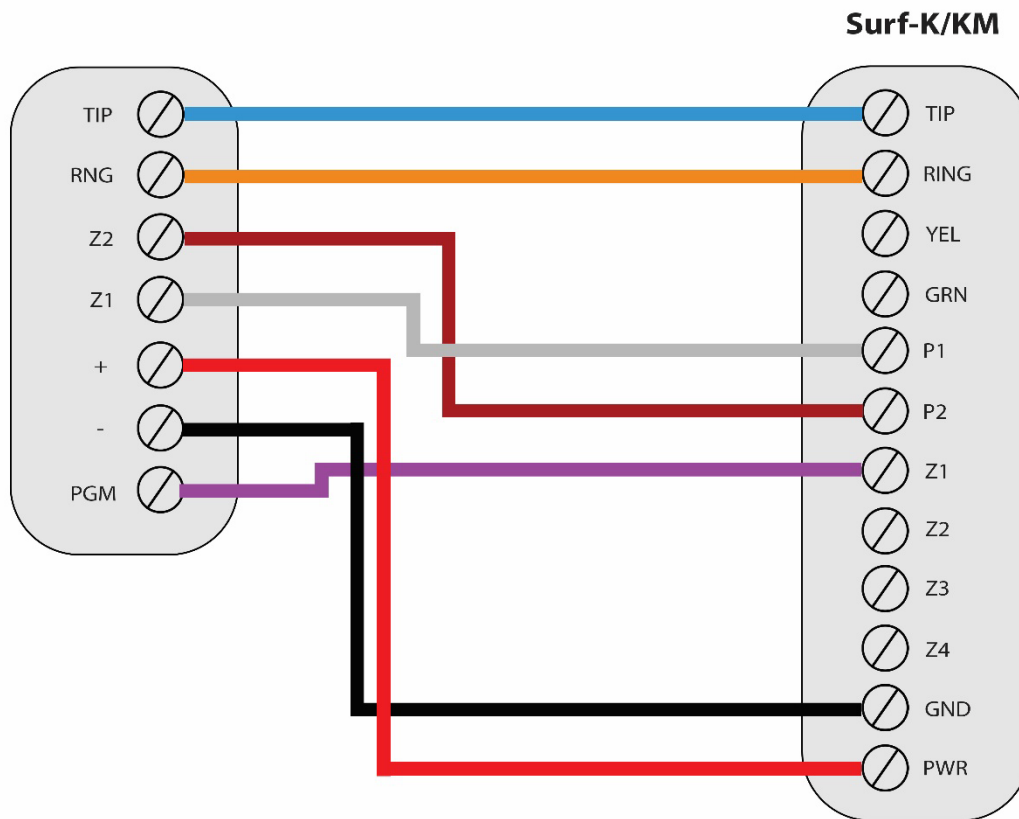
Colours are for demonstration purposes only

5.3.2   Paradox SP6000, SP 5500, SP7000, SP 4000

5.3.2.1 Wiring Diagram

Colours are for demonstration purposes only

5.4 Generic Panels

5.4.1   Wiring Diagram
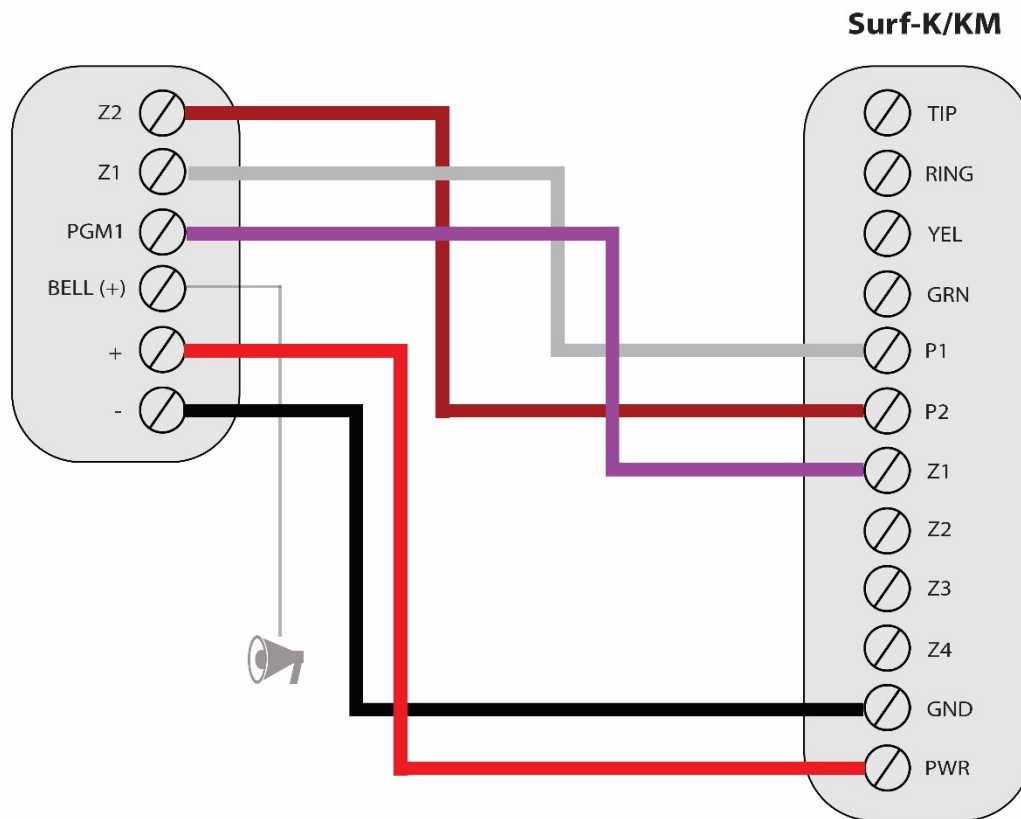
Surf-K/KM

Colours are for demonstration purposes only

6. Trouble Conditions

6.1 Primary Power Failure

If panel power fails below 9V, SURF-K/KM will trigger a trouble event on the host panel and send the signal to our cloud server and CMS.

6.2 Network Signal

If radio signal falls below 9, Surf-K/Surf-KM will trigger a trouble event on the host panel and send the signal to our cloud server and CMS.

6.3 No Cellular Service

If Surf-K/Surf-KM cannot contact to the cellular tower (RSSI is 0 or 99), Surf-K/Surf-KM will trigger a trouble event on the host panel and send the signal to our cloud server and CMS.

6.4 Tip & Ring Communication Status

During normal operation, if Tip & Ring signal is not detected, Surf-K/Surf-KM will trigger a trouble event on the host panel and send the signal to our cloud server and CMS.

6.5 SIM Card Error

If there is a SIM Card Error, Surf-K/Surf-KM will trigger a trouble event on the host panel and send the signal to our cloud server and CMS.

6.6 Keybus Communication Failure

When connected to a DSC alarm panel keybus, Surf-K/Surf-KM continuously supervises the keybus communication path for normal operation. If Surf-K/Surf-KM stops receiving data from the keybus line, Surf-K/Surf-KM will trigger a trouble event on the host panel and send the signal to our cloud server and CMS.

6.7 Aryo Communication Failure

If there is any error or failure in our communication with our cloud, Surf-K/Surf-KM will trigger a trouble event on the host panel and send the signal to our cloud server and CMS.

6.8 High/Low Temperature

If temperature goes above 50 degrees Celsius or falls below -5 degree Celsius, Surf-K/Surf-KM will trigger a trouble event on the host panel and send the signal to our cloud server and CMS.

Surf-K/KM also monitors some important parameters such as panel power, temperature, communication of Keybus and Tip/Ring of the host panel for proper functionality and would report these conditions to Aryo Cloud and the central station.

CID and SIA codes for troubles

Peripheral Tamper	341
Peripheral Trouble (Supervisory)	330
Peripheral Low Battery	338
Peripheral AC Fail	342
Comm Test Fail	358
Expansion Module Failure	333 (0-ethernet, 1-wifi, 2-wifi soft AP, 3-cellular)

7. Troubleshooting

Trouble	Indication	Solution
Primary Power Failure	**First LED fast blinking.**	Check the AC power of the alarm panel. Check if the battery of the alarm panel is operating normally.
Network Signal	**1. First LED blinking quickly.** **2. Second LED blinking slowly**	Move the antenna or SURF device to a place where the LTE signal is well received.
Cellular Network	**1. First LED blinking quickly.** **2. Second LED blinking quickly**	1. Check that the SIM card is properly installed in the device 2. Check that the device is properly registered with cloud server. 3. Move the antenna and device location to a location where the signal can be received well
Antenna use	**1. First LED blinking quickly.** **2. Second LED blinking slowly or quickly**	Check if the antenna is connected
SIM Card Error	**1. First LED blinking quickly.** **2. Second LED blinking quickly**	1. Check that the SIM card is properly installed in the device 2. Check that the device is properly registered with cloud server.
Keybus Communication Failure	**1. First LED blinking quickly.** **2. The 4th LED blinks slowly or is off.**	Check if the keybus line (Yellow, Green) connected to the alarm panel and the SURF device is well connected.

Aryo Communication Failure	1. First LED blinking quickly. 2. Second LED blinking quickly 3 Third LED blinks slowly or is off.	If it does not operate normally even after waiting for a while, check the following. 1. Check that the SIM card is properly installed 2. Check that the cloud server is properly registered. 3. Check if the antenna is properly connected
High/Low Temperature	1. First LED blinking quickly.	Check the ambient temperature, identify the cause of the temperature abnormality, and eliminate the cause.
Tip & Ring Communication Status	1. First LED blinking quickly. 2. The 4th LED blinks quickly or is off.	1. Check if the Tip & Ring line connected to the alarm panel and the SURF device is well connected 2. Check the settings of the alarm panel (CID or SIA).

8. Specifications

HARDWARE	Surf-K, Surf-KM
Dimensions	115mm*37.5mm*14.75mm
Weight	53.5g
Operating temperature	32°F to 120°F (0°C to 48.9°C)
Humidity	86%
Input voltage	9-14 VDC
Operating voltage	5-20 VDC
Mounting	2 screw holes
Current Draw	ma
Operating Power	5-20 VDC

Keybus (DSC)	Y
Tip/Ring	Y
Input Zone	4
PGMs	2
Status LEDs	4
RF Expansion Port	1
Trouble reporting	Refer to section 6 above
Antenna Length	75 cm
Antenna frequency	LTE Full band
Communication	LTE
Certification	PTCRB, AT&T, FCC, IC

9. Repair under warranty

All the warranty claims must be accompanied by a Return Merchandise Authorization (RMA) number which must be obtained before merchandise can be returned for any warranty replacement or repair. To request an RMA number, the customer can contact Epic's Technical Support Center via telephone. The Technical Support Center will provide troubleshooting assistance and if they find the product to be defective, will issue an RMA number. The RMA number must be displayed on the outside packing of the returned item. Transportation charge, if any, incurred in connection with the return of a defective item to Epic shall be borne by the customer. Any collect shipments returned to Epic will be refused. Epic shall fix the goods without extra costs under warranty period.

Epic shall pay any transportation charge incurred with the redelivery of a repaired or replacement item or ship the warranty item with customer's next order. If, however, Epic reasonably determines that the item can function, the customer shall pay all the transportation charges. If Epic determines, at its sole discretion, that the allegedly defective item is not covered by the terms of the warranty provided hereunder or that a warranty claim is made after the warranty period, the cost of repair by Epic, including all shipping fees, shall be paid by the customer.

Claim for damaged products or shortages when shipment arrived must be made by the customer immediately. If any goods are damaged on shipment arrival, it must be noted on the carrier's waybill prior to signing. Failure to note the shortages or damages on the carrier's

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These Terms and Conditions shall be governed by and construed in accordance with the laws of Canada. All disputes shall be subject to the exclusive jurisdiction of the courts of Canada.

11. Product Warranty

Subject to the limitations set forth herein, Epic Safety Inc. (Epic) warrants that the Products sold by it to its authorized Distributors shall be free, under normal use and service, from defects in material and workmanship for a period of twelve months (12) months from the date of purchase. The Products manufactured and sold by Epic are date stamped at the time of production. Epic does not warrant Products that do not have a serial number and a manufacturing date. This warranty shall be void if a Product is altered, serviced or repaired by anyone other than Epic or its authorized Distributors. This warranty shall also be void if there is a failure to maintain the Products and the systems in which they operate in proper working conditions.

During the warranty periods, Epic shall, at its option, repair or replace any defective product upon return of the product to its factory, at no charge for labor and materials. Any replacement and/or repaired parts are warranted for the remainder of the original warranty or ninety (90) days, whichever is longer. The original purchaser must promptly notify Epic that there is a defect, in material or workmanship, such written notice to be received in all events prior to expiration of the warranty period. The Customer assumes all responsibility for the proper selection, installation, operation and maintenance of any products purchased from

Epic. Custom products are only warranted to the extent that they do not function upon delivery. In such cases, Epic can repair, replace or credit as its option.

This warranty is for the original owner only and is therefore non-transferable, non-assignable and is voided when the Warranted Product is transferred to another party.

This warranty gives you specific legal rights and is only valid in the United States and Canada. You may also have other rights which vary from state to state or province to province.

EPIC MAKES NO FURTHER WARRANTIES, AND DISCLAIMS ANY AND ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE PRODUCTS, TRADEMARKS, PROGRAMS AND SERVICES RENDERED BY EPIC INCLUDING WITHOUT LIMITATION, INFRINGEMENT, TITLE, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE. EPIC SHALL NOT BE LIABLE FOR ANY PERSONAL INJURY OR DEATH WHICH MAY ARISE IN THE COURSE OF, OR AS A RESULT OF, PERSONAL, COMMERCIAL OR INDUSTRIAL USES OF ITS PRODUCTS.

No increase or alteration, written or verbal, of the obligation of this warranty is authorized. Epic does not represent that its products will prevent any loss by fire or otherwise.

12. Limitation of Warranty

This limited warranty applies only to the original purchases of the Warranted Products from a Distributor or a Reseller; this warranty will not extend to any person that acquires a Warranted Product on a used basis. Epic shall replace or repair, at its sole discretion, each product returned by its authorized Distributor and acknowledged by Epic to be defective, provided that such product shall have been returned to Epic with all charges prepaid and the authorized Distributor has followed Epic's Return Policy. The replacement product shall come from Epic's stock and may be new or refurbished.

This limited warranty does not cover any defects, damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use, tampering or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, use not in accordance with the Warranted Product documentation, fire, improper packing, shipping and handling, (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product.

Without limiting any other exclusion herein, Epic does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.