

# **AGM** Advanced **GSM/GPRS** Module



**BUS Full Version** 

**Installation and Programming Instructions** 

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### 1. Introduction

RISCO Group's GSM/GPRS BUS Module is a cellular communication module for use with RISCO Group security panels.

Reporting to the MS/ARC can be performed using the GSM Voice channel, or via SMS or GPRS using with RISCO Group's IP/GSM receiver at the MS/ARC site.

Reporting to the user can be performed using Voice messaging, SMS or E-mail (using the GPRS).

In addition, the GSM/GPRS BUS Module enables:

- The user to remote control the system using SMS or DTMF commands.
- Programming the system using the Upload/Download software via the GSM data channel at 9600 baud rate.

The BUS communication with the security panel is established through wired BUS RS485.

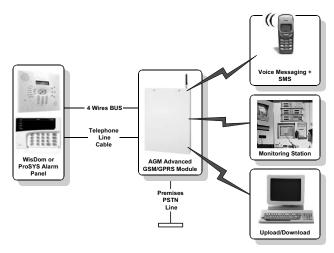


Figure 1. GSM /GPRS BUS Module (Full Version) - Architecture

# 1.1 Glossary/Abbreviations

AGM	Advanced GSM/GPRS Module
ARC	Alarm Receiving Centre
MS	Monitoring Station

#### Note:

The programming quick keys in this manual apply for the WisDom Universal version. Programming locations detailed in Appendix A and Appendix B apply for the WisDom UK and ProSYS panels.

#### 2. Main Features

- Full PSTN line simulation
- Primary or backup GSM/GPRS MS/ARC Communication
- Fully supervised accessory installed on the RS485 bus of the system
- Encrypted SMS and GPRS event reporting to RISCO Group's IP/GSM Receiver (see Note) in the MS/ARC
- Selective events reporting to Follow Me (private) numbers using voice messages, SMS or E-mail.
- Advanced remote system control by the user using SMS and/or DTMF telephones for: Arm/Set, Disarm/Unset, Output activation, bypassing/Omitting zones, check credit level (SMS only) and more.
- Remote system programming using Upload /Download software using the GSM data channel (CSD-9600bps)
- Pre-alarm state begins at entry delay countdown and reports communication loss if WisDom is vandalized during entry delay
- GSM signal supervision and level measurement
- Backup battery charger
- Quad Band GSM 850/900/1800/1900MHz
- Wall and cover tamper protection
- Output signaling for telephone line and cellular line failure



RISCO Group IP/ GSM Receiver is Windows based software, designed to receive events reporting from RISCO Group panels to the MS/ARC via TCP/IP protocol. The software receives the encrypted protocol and translates the events to standard protocols used by MS/ARC applications (for example: Contact ID)

# 3. GSM/GPRS BUS Module Components

A detailed description of the GSM/GPRS BUS Module components (when installed in metal box) is shown in Figure 2 and in Table 1.

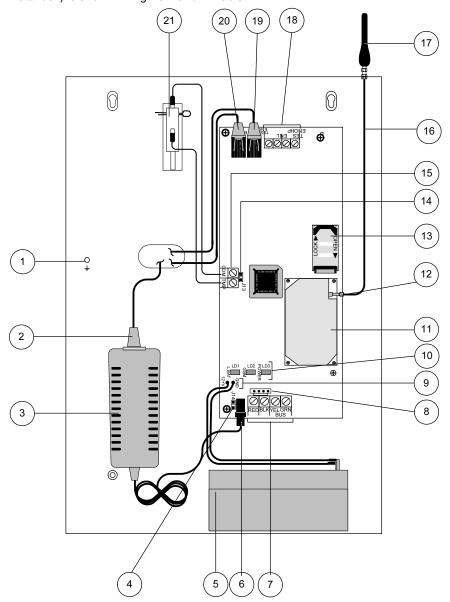


Figure 2. GSM /GPRS BUS Module - Components

**Table 1: Component Description** 

	le 1: Component Description				
Item	Description Operator to a second description				
(1)	Ground (from mains to metal casing)				
2	Power cable from ma	ains to Power transformer			
3	Power Transformer	+12VDC/1.2A)			
4	Battery Protection Circuit Jumper (J14)	On - Circuit not acti	vated OFF (Default) - Circuit activated		
5	Backup Battery				
6	+12 VDC Power soc	ket (from Transformer)			
7	GSM Power/BUS ter	minals			
8	Power/BUS Connec	or (GSM/GPRS BUS Mod	ıle)		
9	Battery Wires (+12 V	DC)(GND)			
10	GSM status LEDs: (I	POWER, GSM, L.BAT)			
11)	GSM Radio Device				
12	GSM antenna connector				
13	SIM card socket				
14	Tamper Jumper (J13)	On - Tamper is not used	Off (Default) - Tamper is used		
15	Tamper terminal				
16	GSM antenna cable				
17	GSM antenna				
18		Line connection terminals			
19	Telephone Line connectors.*				
20	From wall outlet  Note: For GPRS version the PSTN line should be connected directly to the security panel.				
	Set** To sec	urity panel			
21	Tamper Switch (NC)				

<sup>\*\*</sup> Applicable only for full version

# 3.1 LED Indications

LED	State	Description	
	Indicates BUS co	ommunication between the GSM /GPRS BUS	
Power	Module and the Control panel		
(Green)	On	On powering up - Power OK	
(Green)	Flashing	BUS Communication failure	
	Off	Power not present	
	Indicates the GS	M network status	
GSM	On	Network not available	
	Flashing	GSM communication OK, connected to the network	
(Yellow)		status	
	Off	Power not present	
L.BAT	Indicates the GS	SM backup battery status	
(Low	On	Low Battery (bellow 11VDC)	
Battery) Off Battery OK		Battery OK	
(Red)			

#### 4. Installation

#### **4.1 Preliminary Considerations**

- The GSM /GPRS BUS Module should be located in a safe and dry place, away from radio and electromagnetic transmitting devices.
- ♦ Select a mounting location near a 110/220VAC electrical power supply.

# 4.2 Installing the GSM/GPRS BUS Module

#### 4.2.1. SIM Card Installation

 Before inserting the SIM card in the GSM/GPRS BUS Module, perform steps A to D if a PIN number is required:



#### Important:

Do not install SIM card while power is applied to the GSM/GPRS BUS Module. Do not touch SIM Card connectors! If doing so, you may release an electrical discharge that could damage the SIM card.

A. Insert the SIM card into a standard GSM mobile phone. Upon power-up, the display will ask for a PIN number.



# Cautions:

Ensure that you have the PIN code. Be aware that after three wrong attempts (recognized by the SIM card) to enter a PIN number, the SIM card will lock.
You will have to contact your local cellular provider to unlock the SIM card.

- B. If required, disable the PIN number by accessing the phone security menu and selecting PIN OFF. Once done, re-test by switching the phone OFF, then switching ON. The PIN code should not be requested again.
- C. Using a standard GSM mobile phone, ensure that the SIM card is operating and that a call can be conducted.
- D. Before deciding on the final location of the GSM/GPRS BUS Module, test the signal strength with the standard mobile phone.
- SMS center address (number) Program the SMS center address into the SIM card using a standard GSM mobile phone. The SMS center address is required in order to send text messages.
- 3. Place the SIM card in the GSM/GPRS BUS Module, following the steps defined in Figure 3.

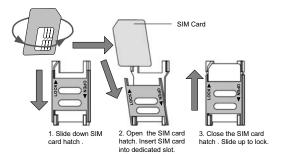


Figure 3. SIM Card Insertion

# 4.2.2. Wall Mounting (Metal Box Installation)

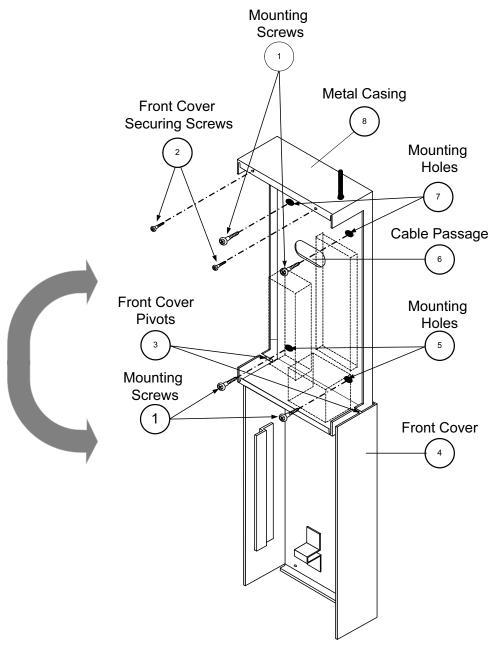


Figure 4. GSM/GPRS module – Installation

#### S No

When installing, please be aware of the fact that the maximum BUS run permitted is 300 meters (1000 feet).

- 1. Remove the two screws securing the GSM/GPRS BUS Module front cover (2, Figure 4).
- 2. Tilt and rotate the front cover downwards until it locks vertically to the casing (alternately lift up to remove the cover).
- 3. Use the metal casing as a template for marking the installation holes (mark through the mounting holes, see 5 and 7, Figure 4).
- 4. Drill the four installation holes in the wall and insert anchors (if necessary).
- 5. Insert external cables (GND, power, and phone lines) through the cable passage (6, Figure 4).
- 6. Align the GSM/GPRS BUS Module with the mounting holes and fasten it firmly to the wall with all four supplied screws (1, Figure 4).
- 7. Connect the PSTN line to the Line jack (19, Figure 2) on the GSM/GPRS BUS Module (wired configuration).
- 8. Connect the Line jack from the security panel to the Set jack on the GSM/GPRS BUS Module (20, Figure 2).
- 9. Connect the BUS Terminals from the GSM/GPRS module to BUS terminals on the security panel (terminal to terminal) as follows: (see item 13, Figure 2).

	EXPANSION BUS TERMINALS  COM BUS BUS		
Color	BLK (Black)	YEL (Yellow)	GRN (Green)



#### Important:

Do **NOT** make any connection to the **RED** Power terminal from the security panel.

- 10. Attach the GSM/GPRS BUS Module antenna (1, Figure 2).
- Connect the GSM/GPRS BUS Module backup battery cables to the backup battery.
- 12. Connect the GSM/GPRS BUS Module to mains.
- 13. Install the front cover in its place (in a reverse sequence of the removal (see Figure 4).

# 4.3 Automatic GSM Signal Level Measurement

After powering up the GSM with the SIM card inside, the module performs an automatic signal level test.

For the first 30 seconds after powering up, the Green GSM Power LED will flash between 0-5 times in cycles, (with a delay of 5 seconds between each cycle), indicating the RSSI level (0= No network connection, 5= Very High).

If the signal level is not satisfactory or poor, consider installing the GSM unit in a better signal receiving location.

<b>GSM Network Signal level</b>	Flashes
5 - Very High	5
4 - High	4
3 - Medium	3
2 - Low	2
1 - Very Low	1
0 - No network connection	0

#### 5. Operational Functions

#### 5.1 Line Simulation

The GSM/GPRS BUS Module can be configured (by the control panel software) as the primary or the back up line. The default primary line is PSTN.

The line simulation operates as follows: The module constantly checks the availability of the PSTN and the GSM lines. During regular operation mode, all calls and data transmission are carried out using the primary line. In the case of trouble in the main line, the line is routed to the backup line.

At the end of a call, the availability of the main line is checked again.

If the line is not restored, the system stays on the back up line until the main line is restored.

#### 5.2 PSTN/GSM Phone numbers conversion

When phone calls are executed through the voice channel, the GSM/GPRS BUS Module performs certain adjustments to the dialed telephone numbers according to the communication channel (PSTN or GSM).

The method of the telephone number conversion permits the GSM/GPRS BUS Module to be installed directly on the PSTN telephone line or on the PBX (public exchange telephone line).

When the control panel dials the number, the GSM/GPRS BUS Module checks the first digits of the telephone number. The conversion is performed according to the steps described on page 23.



#### Note:

Line simulation and Phone numbers conversion are applicable only for full version.

#### 6. Monitoring Station Reporting

The GSM/GPRS communication module enables the security panel to report events to the monitoring station via three different channels: Voice, SMS, or GPRS.

The security level achieved varies from one technology to another, as described below.

#### 6.1 Voice channel (PSTN simulation)

Upon PSTN line failure or when the GSM voice channel is chosen as the primary reporting channel. The GSM/GPRS BUS Module will simulate the PSTN line and switch the report to the MS/ARC through the GSM voice channel.

The performance of this reporting channel depends on the cellular network signal level.

A low signal level may adversely affect reporting performance. For best performance, ensure a high signal level.



#### Note:

Reporting to MS/ARC through the GSM voice channel is applicable only for full version.

#### 6.2 SMS Channel (using the IP/GSM Receiver at the MS/ARC site)

Events are sent to the monitoring station using encrypted SMS messages (128 BIT AES encryption).

Each event message contains information including the account number, report code, communication format, time of event and more.

The event messages are received by RISCO Group's IP/GSM Receiver Software located at the MS/ARC site. The IP/GSM Receiver translates the SMS messages to standard protocols used by the monitoring station applications (For example; Contact ID).

### 6.3 GPRS Channel (using the IP/GSM Receiver at the MS/ARC site)

Encrypted events are sent to the monitoring station over the GPRS network using TCP/IP protocol. 128 BIT AES encryption is used.

RISCO Group's IP/GSM Receiver Software located at the MS/ARC site receives the messages and translates them to standard protocols used by the monitoring station applications (For example; Contact ID).



#### Note:

To enable GPRS communication the SIM card has to support GPRS channel.

# 7. Remote Upload/Download Programming

Remote Upload/Download can be performed using the GSM data channel at 9600 bps. Two Upload/Download options are available:

- When a SIM card with a data telephone number is installed at the customer site, the MS/ARC or the Installer/Engineer can use any type of modem to perform Upload/Download programming, using the Data telephone number.
- 2. When a regular or a prepaid SIM card is installed at the customer site, the MS/ARC or the Installer have to use a GSM modem from the same network provider to perform Upload/Download programming, using the Voice telephone number.

# a

#### Notes:

- 1. Programming the GSM/GPRS Module can be established with Upload/Download software 4.xx and above.
- 2. The WisDom dialer control parameter **UD GSM Enable [5][6][15]** should be enabled (See page 20).
- 3. In the Upload / Download software, you should select the GSM modem in the Dialer screen.

#### 8. User Communication

### 8.1 Event Messaging using the Follow Me Channel

Using the GSM/GPRS BUS Module, event messaging to Follow Me can be performed by using one of the following three options:

- ♦ Voice messaging
- ◆ SMS
- E-mail via the GPRS network

The installer defines the events and the method of sending the events to Follow Me destinations.

#### 8.1.1. Voice Messaging

Upon failure of the PSTN line, or when the GSM channel has been chosen as the primary connection mode, the GSM/GPRS BUS Module enables to transfer audible information over the GSM network, by playing a pre-recorded event announcement message, regarding the status of the security system to remote Follow Me telephone numbers.



#### Note:

Voice messaging is applicable to RISCO Group security panels with integrated voice capabilities

Voice messaging through GSM is applicable only for full version.

#### 8.1.2. SMS Messaging

The GSM/GPRS BUS Module can send predefined SMS event messages to a remote Follow Me (FM) telephone number, informing the status of the security system.

The SMS message can contain up to 70 characters, in the following format:

"System Name: Date, Event, Partition Label, Zone Label"

#### Example:

Security System: 30/11/2005 10:10, Intruder alarm, Partition 1 Entrance

### 8.1.3. E-mail Messaging (Using GPRS)

The GSM/GPRS BUS Module can e-mail event messages to predefined e-mail addresses using the GSM GPRS capabilities.

#### Example:

FOLLOW ME MESSAGE 13/12/2005 00:15

SYSTEM: Security System

EVENT: Bell trbl.

### **8.2 Remote Control Functions**

The GSM/GPRS BUS module enables to remotely control the security system using SMS commands in addition to the already existing DTMF control.

For higher security, the SMS remote control operations can be restricted to predefined telephone numbers by using the Caller ID feature of the GSM module (see page 27).

#### 8.2.1. DTMF Remote Control

The user can remotely control the security panel using any remote touch phone (DTMF). The control can be performed through the PSTN line or GSM network, depending on the communication type.

The remote operations include arming/setting or disarming / unsetting the system, bypassing/omitting zones, changing FM numbers, perform listening and talking into your property, activating outputs (e.g. home appliances) and more.



#### Note

DTMF remote control is applicable to RISCO Group security panels with integrated voice capabilities.

DTMF control through the GSM is applicable only for full version.

#### 8.2.2. SMS Remote Control

The following section describes the SMS commands and the response of the system to these commands.

### **SMS Control General Rules:**

SMS commands can be sent from any mobile phone or from an SMS website.

Command words are not case sensitive (they can contain both capital, small or mixed letters).

A separator between command words is not required, although it is accepted.

List of SMS commands: Operation Arm/Set all partitions of a user code	Message Structure [Code] A	<b>UK Message Structure</b> [Code] <i>S</i>
Disarm/Unset all partitions of a user code	[Code] <b>D</b>	[Code] <i>US</i>
Arm/Set by partition Disarm/Unset by Partition Bypass/Omit a zone Un-bypass/Un-omit a zone	[Code] <b>A</b> [Partition No.] [Code] <b>D</b> [Partition No.] [Code] <b>B</b> [zone number] [Code] <b>UB</b> [zone No.]	[Code] <b>S</b> [Partition No.] [Code] <b>US</b> [Partition No.] [Code] <b>OM</b> [zone number] [Code] <b>UNOM</b> [zone No.]
Activate output Deactivate Output Change FM number	[Code] <i>UOO</i> N [UO No.] [Code] <i>UOOFF</i> [UO No.] [Code] <i>FMPHONE</i> [FM serial number] <i>NEW</i> [New Phone No.)	[Code] <b>POON</b> [PO No.] [Code] <b>POOFF</b> [PO No.] [Code] <b>FMPHONE</b> [FM serial number] <b>NEW</b> [New Phone number]
Get system status Get last alarm memory Get SIM credit level (for prepaid cards)	[Code] ST [Code] AL [Code] CR	[Code] ST [Code] AL [Code] CR

• Default User code is 1234

#### **SMS Confirmation Message**

A confirmation message following a SMS operation is sent to the user, upon request, by adding the letters "RP" at the end of the SMS messages listed below.

#### **Example**

**1234** *A RP* - A confirmation message following an arming operation will be sent to the user.

The following table describes the information that will be sent upon a confirmation request, if the operation is commanded:

Operation Acknowledgement Message

Arm / Set Partition Status
Disarm / Unset Partition Status
Omit / Bypass- Unbypass/Un-omit Zone Status
Output operation Output Status

Changing FM Numbers New FM number in memory

## **SMS Messages Following a Failed Operation**

The following table describes the information that will be sent upon a confirmation request, after a failed operation.

Fail messages Meaning

Wrong Command No authorization to perform the required

operation

Wrong code Entered code is wrong

Wrong ID General message for wrong operation request

**Example:** The request is to set Partition 4 but only 3 partitions are defined in the system

#### 9. GSM Installer Programming

This chapter describes the WisDom's installer programming options and functions, as well as all Quick Key shortcuts that relate for the programming of the GSM BUS module.



#### Note

Programming the GSM/GPRS BUS module parameters from the ProSYS is similar to the WisDom with the exception of several menu locations. Please refer to Appendix 1 and 2 for details.

## 9.1 Upload/Download Telephone Numbers

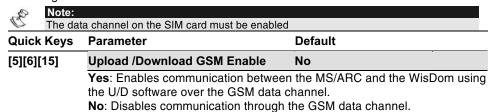
The phone numbers to which the monitoring station equipped with the U/D software is connected. Two types of connections, using two different phone numbers are available:

- 1. Using the regular phone line (PSTN)
- 2. Using the GSM channel

Quick Keys	Parameter	Default
[5][4][1]	Upload /Download Telephone # 1	
	Telephone number for regular PSTN	connection
[5][4][2]	Upload /Download Telephone # 2	
	Telephone number used Only for GS and area codes.	M connection. Include dialing prefixes

# 9.2 GSM Upload/Download Authorization

This option allows performing remote Uploading /Downloading using the GSM module through the data channel.



#### 9.3 Allocation

The GSM/GPRS module requires introduction to the WisDom:

- 1. From the main installer menu press [9] to access the "More Devices" menu.
- 2. Press [1] for GSM

Press [1] for the Add/Del GSM menu

Quick Keys	Parameter
[9][1][1]	Add/Delete GSM
	Press on the or on the Key to select the GSM option.  TYPE=NONE: GSM deactivated  TYPE=GSM: GSM activated.

#### 9.4 BUS Communication Test

After allocating the GSM/GPRS BUS Module, it is recommended to perform a communication test in order to verify the BUS communication quality between the GSM/GPRS BUS Module and the WisDom.

# Quick Keys Parameter

### [9][1][2]

#### **Communication Test**

Press the key to activate the **GSM Comm. TEST.** The quality of the communication is displayed in percentage as described below:

BUS COM QUALITY
GSM :01 =100%

A result of less than 100% means that there is a BUS connection problem (for example poor wiring or cabling located in harsh electrical environment).

#### 9.5 Parameters

# 9.5.1. Operation Modes

# **Quick Keys**

# **Parameters**

# [9][1][3][1]

#### **GSM Mode**

Configures the GSM module modes of operation (voice channel).

- GSM Back Up the outgoing calls are executed through the PSTN line. When the PSTN line is not available for the time defined in PSTN Lost (Quick key [9][1][3][2][1]), the outgoing calls will be executed using the GSM network.
- GSM Only the outgoing calls are executed through the GSM voice channel only. Use this option for installations where no PSTN line is available.
- GSM Main (PSTN Backup) the outgoing calls are executed through the GSM voice channel. When the GSM network is not available for the time defined in GSM Lost (Quick key [9][1][3][2][2]), the outgoing calls will be executed using the PSTN line.

#### Note

This parameter is relevant only for GSM/GPRS full version module

#### 9.5.2. Times

Quick Keys	Parameter	Default	Range
[9][1][3][2][1]	PSTN Lost	10 seconds	010-255 seconds

The time after which the module will switch over to the GSM network upon PSTN lost. (PSTN is connected to the GSM/GPRS module).

#### Note

This parameter is relevant only for GSM/GPRS full version module

Quick Keys	Parameter	Default	Range	
[9][1][3][2][2]	GSM Lost	10 minutes	001-255 minutes	
	The time after which the module will switch over to the PSTN line upon GSM network lost.			
	Notes:			
	1) Network loss is defined as RSSI level below the level defined in the minimum RSSI LEVEL parameter (Quick key [9][1][3][8]), page 27.			
	<ol><li>This parameter is relevant only for GSM/GPRS full version module.</li></ol>			
[9][1][3][2][3]	<b>[3][2][3] SIM Expire Time</b> 00 00-36 Mor			
	A Pre-paid SIM card has a defined life length defined by the provider. After each charging of the SIM, the user will have to manually reset the			

A Pre-paid SIM card has a defined life length defined by the provider. After each charging of the SIM, the user will have to manually reset the expiration time of the SIM card. 30 days before the expiring date, a notification will be displayed on the WisDom's LCD panel. Set the SIM expiring date (in months) using the numeric keys, according to the time given by the provider.

#### 9.5.3. Prefix Number Definition

The following parameters are used for the prefix conversion, performed when dialing through the voice channel only. A description of the methodology is detailed below. For better understanding the procedure, use the examples on page 24.

#### Note:

The Prefix Numbers Conversion is relevant only for GSM/GPRS full version module.

# **Conversion Methodology**

 If the dialed number begins with an outgoing line number (when the module is connected to the PBX and not directly to the PSTN line), the outgoing line number will be deleted.

# Go to step 2

2. If the dialed number begins with a prefix, (Constant prefix) recognized by the GSM/GPRS BUS Module, the module will not change the number.

# Go to step 5 else go to step 3

3. If the dialed number begins with a prefix that needs to be removed (Prefix to remove), the module will delete the Prefix number.

# Go to step 5 else go to step 4

4. If the dialed number has no prefixes known to the GSM/GPRS BUS Module, the module will add a Prefix (Prefix to add) defined in the security panel (usually used for the local area code of the PSTN).

# Go to step 5

5. Dial the number.

Quick Keys	Parameter	
[9][1][3][3] [1][2]	PBX Prefix	
	A number dialed to access an outgoing line when the module is connected to a Private Branch Exchange (PBX) and not directly to a PSTN line. The WisDom enables to program two PBX numbers.  Each PBX number can contain up to 6 numeric characters.	
[9][1][3][3] [3][8]	Prefix Constant	
	A number that is not to be corrected by the algorithm when calling from the GSM network, for example cellular telephone prefixes. The WisDom enables to program up to 6 Prefix constants.	
[9][1][3][3] [9]		
	A number that will be deleted before dialing the number.	
[9][1][3][3] [0]	Add Prefix	
	A Number that is to be added at the beginning of the dialed number, for instance an area code added to a local number, when calling from the GSM network.	
	Note: All the parameters and the prefixes mentioned below are programmed in the control panel (see Page 24).	

#### **Examples of programming the Numbers and Prefixes**

#### Note:

Prefixes are used for voice calls only.

#### Example 1:

The GSM/GPRS BUS Module is connected directly to a PSTN line, in area code – 03. The outgoing calls through the GSM/GPRS BUS Module are defined to the following telephone numbers:

03-910-5555 – owner's residence telephone number

052 366-4444 - owner's cellular telephone number

054 366-5555 - owner's spouse cellular telephone number

Due to the fact that the security control panel is connected to the subscriber line through the GSM/GPRS BUS Module, the listed numbers should be programmed in the control panel as if the GSM/GPRS BUS Module is not present.

The telephone numbers for messaging should be:

"910-5555", "0523664444", "0543665555"

Configuring the module for such an operation requires programming the numbers and prefixes as described below:

PBX prefix: None

Prefix Constant: "052", "054" (or "05" only)

Prefix to remove: None Prefix to add: "03"

Telephone numbers dialed by the GSM module:

"039105555", "0523664444", "0543665555"

#### Example 2:

24

The module is connected to PBX (Private Branch Exchange), which has a PSTN line in area code 03 after dialing the "access number" 9.

The outgoing calls through the GSM module are allowed to the following telephone numbers:

03 910-5555 - owner's residence

052 366-4444 - owner's cellular

054 366-5555 - owner's spouse cellular

The telephone numbers definition in the panel should be:

"99105555", "90523664444", "90543665555"

Configuring the module for such an operation requires programming the numbers and prefixes as described below:

PBX prefix: "9"

Prefix Constant: "052", "054" (or "05" only)

Prefix to remove: None Prefix to add: "03"

Telephone numbers dialed the by GSM module:

"039105555", "0523664444", "0543665555"

# **Quick Keys Parameter**

# [9][1][3][4] PIN code

The PIN (Personal Identity Number) code is a four-digit number giving you access to the GSM provider network.

Enter the required PIN code followed by





You can cancel the PIN code request function by inserting the SIM card into a regular mobile phone and according to the phone settings, disable this function.

# 9.5.5. GPRS Parameters

The following menu defines parameters needed when using the GPRS communication channel.

Before programming these parameters, you should gather the required network settings information and enable the GPRS channel (for more information, contact the cellular provider).

Quick Keys	Parameter
[9][1][3][5] [1]	APN code
	To establish a connection to the GPRS network an APN (Access Point Name) code is required. The APN code differs from country to country and from one provider to another (the APN code is provided by your cellular provider).  The WisDom supports an APN code field of up to 30 alphanumeric
	characters and symbols (!, &, ? etc).
[9][1][3][5] [2]	GPRS User name
	Enter user name for the GPRS network (if required). The User name is provided by your provider.
	The WisDom supports a user name field of up to 20 alphanumeric characters and symbols (!, &, ? etc).
[9][1][3][5] [3]	GPRS User password
	The password to the GPRS network as provided by your provider (if required).  The WisDom supports a user name field of up to 20 alphanumeric characters and symbols.

### 9.5.6. E-mail Parameters

The following programming parameters are used to enable sending Follow Me event messages by e-mail through GPRS.



- Notes:
  1. To enable e-mail messaging, the GPRS parameters have to be defined (see Quick Key [9][1][3][5]).
- 2. Sending e-mails is possible only through servers that do not require user authentication.

Quick Keys	Parameter
[9][1][3][6] [1]	SMTP IP address
	The IP address of the SMTP mail server Default: 000.000.000.000
[9][1][3][6] [2]	SMTP port
	The port address of the SMTP mail server Range: 00000-65535 Default: 00000
[9][1][3][6] [3]	SMTP User name
	A name identifying the user to the SMTP mail server The user name field can include up to 10 alphanumeric characters and symbols (!, &, ? etc). Provision for future functionality.
[9][1][3][6] [4]	SMTP Password
	The password authenticating the user to the SMTP mail server The password can include up to 10 alphanumeric characters and symbols (!, &, ? etc). Provision for future functionality
[9][1][3][6] [5]	SMTP E-mail prefix
	The GSM e-mail address prefix. Up to 16 characters can be used to define the e-mail prefix. For example, in the GSM@riscogroup.com e-mail address, the prefix name is "GSM").
[9][1][3][6] [6]	SMTP E-mail domain
	The GSM e-mail address domain name. Up to 33 characters can be used to define the e-mail domain. For example, in the e-mail address GSM@riscogroup.com, the domain name is riscogroup.com.
	Note: Do not enter the @ sign.

# 9.5.7. Caller ID

The Caller ID function enables the GSM module to restrict SMS remote control operations to predefined phone numbers (Follow Me numbers).

Once the GSM receives an SMS message it will check the telephone number that the SMS message was sent from. If this phone is recognized as one of the Follow Me numbers defined in the system, the operation will be executed.

Quick Keys Parameter		Default	Range
[9][1][3][7]	GSM Caller ID	00	0-10 digits

The Caller ID function is performed according to the following:

The module checks the last digits (defined number of digits) of the telephone number from which the SMS was sent from, and compares them, to the last digits of the Follow Me telephone numbers defined in the WisDom. If the digits coincide, the number is recognized as one of the Follow Me numbers and the operation will be executed.

#### Note

00 indicates that Caller ID feature is disabled.

Set the number of digits to be checked by the module.

#### 9.5.8. Setting GSM Signal Level Threshold

The GSM Signal Level (RSSI) depends on the location in which the GSM/GPRS BUS Module is installed. This option allows you to set the lowest acceptable GSM Signal level.

Quick Keys Parameter		Default	Range
[9][1][3][8]	GSM RSSI level	2	0-5

Set the minimum acceptable RSSI level using the numeric keys (0= No network connection, 5=High). Please be aware of the fact that this feature is used for trouble shooting purpose only.

#### 9.6 Controls

### 9.6.1. Disable Incoming Call

Quick Keys	Parameter	Default
[9][1][4][1]	Disable Incoming Call	No
This parameter is used to disable all incoming calls trying to covia the GSM voice channel.		ble all incoming calls trying to come in

Notoci

- 1. Only SMS or Upload/Download incoming calls are allowed.
- 2. This parameter is relevant only for GSM/GPRS full version module.

# 9.7 GSM Reporting to MS/ARC

In addition to report events through the voice channel, the GSM/GPRS BUS Module enables encrypted reporting events to the monitoring station by SMS or through the GPRS network (RISCO Group's IP/GSM receiver at MS/ARC site).

Three MS/ARC link-ups are possible, to send MS/ARC reports via PSTN, SMS or GPRS.

Quick Keys	Parameter
[5][1][1]	MS #1 Link-Up
	* ARC #1 Link-Up
	Defines the connection type to MS 1/ARC 1(Voice, SMS or GPRS).
[5][1][1][1]	PSTN/Voice
	The WisDom will report to the MS/ARC over the voice channel (PSTN or GSM). Enter the MS/ARC phone number.
[5][1][1][2]	SMS
	The WisDom will report to the MS/ARC via SMS. Enter the MS/ARC phone number with prefix included.
	Note: RISCO Group's IP/GSM receiver has to be used at the MS/ARC site.
[5][1][1][3]	GPRS
	The WisDom will report to the MS/ARC via the GPRS network.
	Notes: To enable GPRS communication, the GPRS channel should be defined by your local provider. Remember to define the GPRS parameters using quick key [9][1][3][5] RISCO Group's IP/GSM receiver should be used at the MS/ARC site. The following parameters should be defined for GPRS connectivity: IP Address: The MS/ARC IP address that identifies the receiver on the network

IP Port: The MS/ARC port address of the receiver on the network

# 9.8 GSM Follow Me

The GSM/GPRS BUS Module expands the capabilities of the WisDom Follow Me features by enabling to report events using SMS or e-mails in addition to the standard voice messages.

# 9.8.1. Follow Me Communication Type

Quick Keys	Parameter	
[5][9] [Follow Me#14][1][3]	Type	
	This option allows you to configure the format of the message sent to the	
	Follow Me destination, in an occurrence of an event. Press the key to toggle until the required option is received.	
[5][9][1][3][1]	Voice	
	Events are reported to the Follow Me number by voice messages.	
[5][9][1][3][2]	SMS	
	Events are reported to the Follow Me number in SMS format.	
[5][9][1][3][3]	GSM e-mail	
	Events are reported to the Follow Me destination by E-mail using the GPRS network.	
	Note: Remember to define the GPRS parameters using quick key [9][1][4][3]	

### 9.8.2. New Follow Me Events

The following table describes new events in the WisDom that can be reported to follow me numbers only as SMS or E-mail.



All other events can be reported in voice, SMS or e-mail

Quick Keys		Default
[5][9][1][1]	Events	
	19) Provider Message: An automatic SMS SIM Credit message	Э
	received from the provider phone can be transferred to a follow number.	me <b>N</b>
	20) Phone trouble: PSTN lost event	N
	21) GSM low battery	N
	22) <b>GSM trouble</b> : General GSM trouble (SIM card trouble Network availability, Network Quality, PIN code error Module communication, GPRS password, GPRS IP trouble, GPRS Connection, PUK code trouble)	N
	23) Siren low battery: Low battery in a wireless siren	N
	24) Siren lost	N
	25) <b>SIM expire</b> : The message will be sent 30 days before the expire time of the SIM card, as defined in quick key [9][1][3][9]	N
[5][9][1][2]	Restore Events	
	10) Phone trouble restore	N
	11) GSM low battery restore	N
	12) GSM trouble: Restore of all GSM module troubles	N
	13) Siren low battery restore	N
	14) Siren lost restore	N
0.0.004	Outrot	

## 9.9 GSM Outputs

New outputs types that relate to the GSM module have been added to the WisDom under the **UO: Follow System** Events.

# **Quick Keys Parameter**

# [3][1][UO][1] GSM Error [10]

Activates the utility output in the following cases:

- There is no SIM card in the GSM/GPRS BUS Module or SIM is faulty
- ◆ GSM RSSI signal level is low
- ◆ GSM network trouble

# **Quick Keys Parameter**

# [3][1][UO][1] GSM: PSTN Loss

[11]

Activates following a loss of PSTN line (connected to the GSM)

This parameter is relevant only for GSM/GPRS full version module.

# [3][1][UO][1] GSM Low Battery [12]

Activates the utility output when the GSM back up battery voltage drops below 11VDC.



#### Note:

When the GSM module is connected to the WisDom, the No Telephone Line output [3][1][UO][1][02] (see WisDom Installer Manual) is activated when there is a loss of phone line simulation connection between the GSM Module and the WisDom (meaning there is both GSM and PSTN loss).

#### 9.10 GSM Pre Alarm Feature

This GSM/GPRS BUS Module incorporates a pre alarm feature that enhances the security of the system, by enabling a report to the MS/ARC from the GSM module in case of the WisDom is sabotaged.

Quick Keys	Parameter	Default
[1][2][34]	GSM Pre Alarm Indication	No

Specifies if the WisDom will send a pre alarm message to the GSM when an entry delay starts.

Yes: The WisDom will send the GSM a pre alarm signal at the beginning of the entry delay. If the GSM does not receive a cancellation signal from the WisDom at the end of the entry time, it will send an intruder message report to the MS/ARC.

No: No pre alarm indication is initiated to the GSM

# 9.11 GSM Report Codes

The following table describes the new report codes options added to the WisDom that relate to the  $\mbox{\rm GSM}$  /  $\mbox{\rm GPRS}$  module.

Quick Keys	Parameter	Default
[6][2][9][1]	GSM Codes	•
	The GSM report codes menu.	
[6][2][9][1][1]	Tamper	00
	Report Code of GSM box tamper alarm condition.	
[6][2][9][1][2]	Tamper Restore	00
	Code to restore the GSM box tamper alarm condition	
[6][2][9] [1][3]	Communication Trouble	00
	Report Code of Communication Trouble between the GSM mc WisDom.	odule and the
[6][2][9][1][4]	Communication Restore	00
	Code to report the restore of Communication Trouble between module and the WisDom.	the GSM
[6][2][9][1][5]	Mains trouble	00
	Report Code of loss of main power to the GSM module	
[6][2][9][1][6]	Mains Restore	00
	Code to restore the main power to the GSM module	
[6][2][9][1][7]	Low Battery	00
	Report code for low battery condition	
[6][2][9][1][8]	Low Battery Restore	00
	Report Code for correction of low battery condition	
[6][2][9][1][9]	Pre alarm	00
	Report Code for restoring the pre alarm condition	
[6][2][9][1][0]	More	
	Additional GSM report codes	
[6][2][9][1][0] [1]	Trouble (Faults)	00
	Report code for general GSM trouble that can result from: SIM Network availability, Network Quality, PIN code error, Module communication, GPRS password, GPRS IP trouble, GPRS CoPUK code trouble	
[6][2][9][1][0] [2]	Trouble restore (Fault restore)	00
	Report code that indicates that there are no troubles related to	the GSM

module.

# 9.12 GSM Event log Messages

The following table provides descriptions of the Event log Messages related to the  ${\sf GSM/GPRS}$  BUS Module.

Event Messages	Description
GSM:Low battery	GSM back up battery power is low
GSM: Battery OK	GSM back up battery power OK
GSM:IP Trouble	IP connection trouble
GSM:IP OK	IP connection OK
GSM:No Mains	Main Power is lost
GSM: Mains OK	Main Power restored
GSM:Module comm	Communication between the GSM/GPRS BUS Module and the WisDom is not available
GSM:Mdl comm.OK	Communication between the GSM/GPRS BUS Module and the WisDom is OK
GSM:NET avail	GSM Network is not available
GSM:NET avail. OK	GSM Network is available
GSM:NET quality	GSM Network quality is poor (low RSSI level)
GSM:NET qual. OK	GSM Network quality is acceptable
GSM:No comm. GSM	No communication through the GSM channel
GSM:Comm. OK GSM	Communication through the GSM channel is restored
GSM:No PSTN	PSTN line (regular telephone) is not available
GSM:PSTN OK	PSTN line (regular telephone) line is available
GSM:GPRS PW err	GPRS Password to GSM provider is wrong
GSM:GPRS PW OK	GPRS Password to GSM provider is correct
GSM:PIN code err	Wrong PIN code
GSM:PIN code OK	PIN code is correct
GSM:PUK Code err	PUK Code required
GSM:PUK Code OK	PUK Code entered is correct
	Note: The PUK code is used to unlock the SIM card when it is locked if incorrect PIN code is keyed in, three times in a row.
GSM:SIM trouble	SIM Card misplaced or faulty
GSM:SIM OK	SIM Card in place
GSM:MS/*ARC Trouble	No connectivity to the MS/ARC
GSM:MS/*ARC OK	Connectivity to the MS/ARC is established
GSM:Tamper	GSM box tamper alarm
GSM:Tamper OK	GSM box tamper is restored

#### 10. GSM User Programming

The following section describes the new parameters and changes added to the WisDom User Programming menu due to the integration of the GSM/GPRS Module into the WisDom.



### Note:

Programming the GSM/GPRS BUS module parameters from the ProSYS is similar to the WisDom with the exception of several menu locations.

Please refer to ProSYS - GSM Quick Key Programming List for details.

#### 10.1 Follow Me Report

Quick Keys	Parameter
[2][2]	Follow me
	This option enables you to define the Follow Me destination to which messages are sent. The messages can be sent in Voice, SMS or E-mail, according to the Follow Me channel type (consult your installer.)
[2][2][1]	Define FM

The Follow Me definitions and programming options depend on the type of messaging defined for the Follow Me number by the installer.

After entering the security code (default [1234]) followed by be able to edit or program a new Follow Me destination.

#### Follow Me defined as Voice

If the Follow Me channel is defined as Voice, the call is executed through the predefined line (PSTN or GSM). Enter the telephone number as if it is dialed from a PSTN line.

After entering the phone number, you will be asked if to allow **Remote Programming** and/or **Remote Listening** for this specific Follow Me number.

# Follow Me defined as SMS

If the Follow Me channel is defined as SMS, the SMS is sent through the GSM network. Enter the telephone number, with a prefix and according to your local provider.

After entering the phone number you will be asked if to allow **Remote SMS Commands** for this specific Follow Me number.

# Follow Me defined as E-mail

If the Follow Me channel is defined as **E-mail**, the message is executed through the GPRS service. Using the numeric keys, enter a valid e-mail address up to 32 alphanumeric characters and symbols (enter @ by using the 6 key to toggle through the available symbols), for example, name@risco.com.

#### Note:

The e-mail option allows reporting only.

#### 10.2 Pre-Paid SIM Cards

### 10.2.1. SIM Credit Definitions

When using Pre-paid SIM cards, these options are used to receive information regarding the SIM card credit level.

Two options can be used to receive the information:

- Automatically When the credit of the SIM reaches the level defined by the provider, an automatic message is sent to the user.
- Manually The user initiates a request to the GSM provider by voice or by

To be able to receive the SIM Credit status the following has to be programmed in the system:

Quick Keys	Parameter	
[*][4][Code] [6][3][1]	SMS message	
	When performing manual Credit Level check this message will be sent to the provider in order to receive the SIM card credit. The message is predefined (for example "BILL") by your service provider.	
[*][4][Code] [6][3][2]	SMS send phone	
	The provider's phone number to which the credit level SMS message will be sent to, when performing manual credit level check.	
[*][4][Code] [6][3][3]	SMS receiving phone	
	The provider's telephone number from which an automatic SMS credit status message will be sent from. This telephone number has to be defined; else incoming SMS credit status message will be blocked.	
10.2.2. Manual SIM Credit Level Request		

Quick Keys	Parameter	
[*][2][7] [Code]	Check credit (By SMS)	

Use this function to receive information by SMS.

When pressing on the [\*] 2] [7] [code] followed by the WisDom will send SMS Credit Level Request message (User menu: Quick Key [4][6][3][1]) to the provider's phone (User menu: Quick Key [4][6][3][2]). Once the SMS is received by the provider, the SIM's credit level is sent back and displayed on the WisDom LCD display or sent to the Follow Me number (if defined).

### Quick Keys Parameter

# [\*][2][8] [Code]

#### **User Call**

This option is used to receive the SIM credit level using the voice channel.

When keying in [\*] [2] [8] [code] followed by # a dialing tone is received and the WisDom keypad functions as a GSM telephone. You can dial and listen to messages as with a regular telephone.

To end the call press on the



#### Notes:

- 1. The outgoing call will always be executed trough the GSM channel.
- 2. Talking is not optional during the call
- 3. This option can be used to get any provider information. The call can be established to any phone number
- 4. When using this feature on a non full GSM/GPRS version module the outgoing call will be executed through the PSTN line (if connected to the panel)

# 10.2.3. Reset SIM Expiring Time

# Quick Keys Parameter

# [\*][2][9][Code]Reset SIM

After charging a prepaid SIM card the user has to reset the SIM Expire Time manually. The time duration for expiration is defined by your installer.

## 10.3 GSM Trouble Messages (Faults)

The following table describes the troubles messages initiated by the GSM/GPRS BUS Module that can be displayed during the view trouble operation. (User menu: Quick key[3][1])

Troubles	Description
GSM:Tamper	GSM box tamper condition
GSM:Battery trbl	Loss of main power from the back up battery to the GSM(below 11VDC)
GSM:No comm	No communication between the GSM/GPRS BUS
	Module and the security panel
GSM:Mdl comm err	Internal GSM/GPRS BUS Module trouble
GSM:IP trouble	IP address is incorrect
GSM:Mains trouble	No Power from mains
GSM:NET avail	GSM Network is not available
GSM:NET quality	The GSM RSSI level is low
GSM:PSTN loss	No PSTN line (regular telephone line is not available)
GSM:Password err	Authentication password is incorrect.
GSM:PIN code err	PIN code entered is incorrect
GSM:PUK Code err	PUK Code required
GSM:SIM trouble	SIM Card missing or not properly sited
GSM:MS/*ARC Trouble	Connectivity to the MS/ARC is lost

### 10.4 GSM Diagnostics

The diagnostics menu enables to test parameters that reflect the operation of the GSM/GPRS module.



### lotes

- 1. The diagnostics feature can be accessed only with the installer code.
- The diagnostic features can be also performed from Upload/Download software, locally or remotely

# Quick Keys Parameter [4][Installer Code][6][1] RSSI level (0-5): Displays the signal level measured by the GSM module. (0=No signal, 5= Very high signal) Main power (12VDC-15VDC): The GSM incoming power supply. Batteries voltage (11-14.5 VDC): Tests the GSM battery voltage. Below 11VDC, a low battery indication will be displayed.

### 10.5 GSM Version

Quick Keys	Parameter
[4][Installer Code][6][2]	GSM Version
	This menu displays information regarding the GSM version:
	GSM part number
	GSM software version
	GSM software date
	GSM software checksum

# 11. Technical Specifications

<b>Electrical Characteristics</b>	
Voltage	13.8VDC ±10%
Current Consumption	During Communication - 300mA
	During Standby - 70mA
Battery (not supplied):	12VDC/1.2Ah
Battery Type:	Lead Acid (rechargeable).
GSM Industrial Module	Quad Band GSM 850/900/1800/1900MHz
BUS Connection	RS-485 Serial Link
Operating Temperature	0°C to 55°C (32°F to 131°F)
Physical characteristics	
Dimensions (metal casing)	185 x 275 x 65 mm (7.2" x 10.8" x 2.6")
Width x Height x Depth	With antenna installed:
	185 x 355 x 65 mm (7.2" x 14" x 2.6")
Weight (with battery)	2.1kg (4.6lbs)

# 12. Ordering Part Numbers

P/N	Description	
RP128GSXM00A	Bus Full Version (Voice/SMS/GPRS/Data) in Metal box	
RP128GSMM00A	Bus GPRS Version(SMS/GPRS/Data) in Metal box	

### 13. Appendix A: Adapted GSM Quick Keys Programming List for WisDom UK

The following tables describe in ascending order the entire GSM Installer and User programming Options (Quick Keys) for both WisDom and WisDom UK security panels with traceability to the relevant page in this manual.

### Note:

Parameters marked with an asterisk are applicable for WisDom UK security panels.

Table 1. WisDom/WisDom UK - GSM Installer programming options

Quick Key		Label	Default	Page
WisDom	WisDom UK			
System→Control			•	•
[1][2][34]	[1][2][43]	GSM Pre -Alarm	Yes	31
Outputs →Define-	→UO→System≎Sy	stem Event		
[3][1][UO][1][10]	[3][1][PO][1][10]	GSM Error		30
[3][1][UO][1][11]	[3][1][PO][1][11]	GSM:PSTN Loss		31
[3][1][UO][1][12]	[3][1][PO][1][12]	GSM Low Battery		31
Dialer  Ms Link-	Digicom→ARC			
up	Link-up			
[5][1][1][3]	[5][1][1][3]	MS/ARC # 1-3 Link Up		28
[5][1][1][1]	[5][1][1][1]	PSTN / Voice		28
[5][1][1][2]	[5][1][1][2]	SMS		28
[5][1][1][3]	[5][1][1][3]	GPRS		28
<b>Dialer</b> →Control	<b>Dialer</b> → <b>Control</b>			
[5][4][1]	[5][4][1]	Upload /Download Telephone # 1		20
[5][4][2]	[5][4][2]	Upload /Download Telephone # 2		20
[5][6][15]	[5][6][15]	Upload /Download GSM Enable		20
Dialer→Follow Me	•			
[5][9][1][1]	[5][9][1][1]	Events (New SMS events)	No	30
[5][9][1][2]	[5][9][1][2]	Restore Events (New SMS events)	No	30
[5][9][1][3]	[5][9][1][3]	Туре		29
[5][9][1][3][1]	[5][9][1][3][1]	Voice		29
[5][9][1][3][2]	[5][9][1][3][2]	SMS		29
[5][9][1][3][3]	[5][9][1][3][3]	GSM e-mail		29
Report Codes→M	anual→Devices			
[6][2][9][1]	[6][2][9][1]	GSM Codes		32
[6][2][9][1][1]	[6][2][9][1][1]	Tamper	00	32
[6][2][9][1][2]	[6][2][9][1][2]	Tamper Restore	00	32
[6][2][9][1][3]	[6][2][9][1][3]	Communication Trouble	00	32
[6][2][9][1][4]	[6][2][9][1][4]	Communication Restore	00	32
[6][2][9][1][5]	[6][2][9][1][5]	Mains trouble	00	32
[6][2][9][1][6]	[6][2][9][1][6]	Mains Restore	00	32
[6][2][9][1][7]	[6][2][9][1][7]	Low Battery	00	32
[6][2][9][1][8]	[6][2][9][1][8]	Low Battery Restore	00	32
[6][2][9][1][9]	[6][2][9][1][9]	Pre alarm	00	32
[6][2][9][1][0]	[6][2][9][1][0]	More	00	32
[6][2][9][1][0][1]	[6][2][9][1][0][1]	Trouble	00	32
[6][2][9][1][0][2]	[6][2][9][1][0][2]	Trouble Restore	00	32
More Devices→G				
[9][1][1]	[9][1][1]	Add/Delete GSM		20
[9][1][2]	[9][1][2]	Communication Test		21

9  1  3  1  1   9  1  3  1  1   GSM Back up	Quick Key		Label	Default	Page
9 [1  3  1    9  1  3  1    GSM Mode   GSM Back up   21    9  1  3  1  1    9  1  3  1  1    GSM Back up	WisDom	WisDom UK			
9  1  3  1  1   9  1  3  1  1   GSM Back up	More Devices→G	SM→GSM Parame	ters≎ GSM Mode	•	
9  1  3  1  2   9  1  3  1  2  GSM Only	[9][1][3][1]	[9][1][3][1]	GSM Mode	GSM Back up	21
9  1  3  1  3    9  1  3  1  3    GSM Main	[9][1][3][1][1]	[9][1][3][1][1]	GSM Back up		21
More Devices→GSM→GSM Parameters→Times   9 [1  3  2    9  1  3  2    GSM Times   21   9  1  3  2    9  1  3  2    PSTN Lost   10 Seconds   21   9  1  3  2  2   9  1  3  2  2   GSM Lost   10 Minutes   22   9  1  3  2  3   SIM Expire Date   00   22   More Devices→GSM→GSM Parameters→Prefix   9  1  3  3    9  1  3  3    Prefix   23   9  1  3  3  3    9  1  3  3  3    Prefix   23   9  1  3  3  3  8   9  1  3  3  3  8   Prefix   23   9  1  3  3  8   9  1  3  3  8   Prefix   23   9  1  3  3  9   Prefix   24   25   PSK Prefix   24   25   PSK Prefix   25   PSK Prefix   26   PSK Prefix   27   PSK Prefix   28   PSK Prefix   29   PSK PREFIX   2	[9][1][3][1][2]	[9][1][3][1][2]	GSM Only		21
9  1  3  2    9  1  3  2    GSM Times   21    9  1  3  2  1   9  1  3  2  1   PSTN Lost   10 Seconds   21    9  1  3  2  2   9  1  3  2  2   GSM Lost   10 Minutes   22    9  1  3  2  3   9  1  3  2  3   SIM Expire Date   00   22    9  1  3  2  3   9  1  3  2  3   SIM Expire Date   00   22    9  1  3  3  3   9  1  3  3  3   Prefix   23    9  1  3  3  4   9  1  3  3  9   Remove Prefix   23    9  1  3  4   9  1  3  4   PIN code   25    9  1  3  4   9  1  3  5   GPRS   25    9  1  3  5   9  1  3  5   GPRS   25    9  1  3  5   9  1  3  5   User name   25    9  1  3  5   9  1  3  5   User password   25    More Devices→GSM→GSM Parameters→GSM E-Mail    9  1  3  6   9  1  3  6   E-Mail   26    9  1  3  6   9  1  3  6   E-Mail   26    9  1  3  6   9  1 3  6   E-Mail   26    9  1  3  6   9  1 3  6   E-mail prefix   26    9  1  3  6   9  1 3  6   E-mail domain   26    9  1  3  6   9  1 3  6   E-mail domain   26    9  1 3  6   9  1 3  6   E-mail domain   26    9  1 3  6   9  1 3  6   E-mail domain   26    9  1 3  6   9  1 3  6   E-mail domain   26    9  1 3  6   9  1 3  6   E-mail domain   26    9  1 3  6   9  1 3  6   E-mail domain   26    9  1 3  8   9  1 3  8   GSM RSSI Level   2   27    More Devices→GSM→GSM Parameters→Caller ID    9  1  3  8   9  1  3  8   GSM RSSI Level   2   27	[9][1][3][1][3]	[9][1][3][1][3]	GSM Main		21
9 [1  3  2  1]   9  1  3  2  1]   PSTN Lost   10 Seconds   21   9  1  3  2  2]   9  1  3  2  2]   GSM Lost   10 Minutes   22   9  1  3  2  2]   9  1  3  2  2]   GSM Lost   10 Minutes   22   9  1  3  2  2]   9  1  3  2  2]   SIM Expire Date   00   22   22   22   9  1  3  2  2]   9  1  3  2  2]   PRIX PRIX   00   22   23   9  1  3  3  3  3  3  3  3  3  3  3  3  3	More Devices→G		ters→Times		
9  1  3  2  2    9  1  3  2  2    GSM Lost   10 Minutes   22   9  1  3  2  3    9  1  3  2  3    SIM Expire Date   00   22   22   23   9  1  3  3  3    9  1  3  3  3    Prefix   23   9  1  3  3  3  3  3  3  3  3  3  3  3  3	[9][1][3][2]	[9][1][3][2]	GSM Times		21
9  1  3  2  3   9  1  3  2  3   SIM Expire Date   00   22	[9][1][3][2][1]	[9][1][3][2][1]	PSTN Lost	10 Seconds	21
More Devices→GSM→GSM Parameters→Prefix           [9][1][3][3]         [9][1][3][3]         Prefix         23           [9][1][3][3][1].[2]         [9][1][3][3][1].[2]         PBX Prefix         23           [9][1][3][3][9]         [9][1][3][3][9]         Remove Prefix         23           [9][1][3][3][9]         [9][1][3][9]         Remove Prefix         23           [9][1][3][9]         [9][1][3][9]         Add Prefix         23           [9][1][3][4]         [9][1][3][4]         PIN code         25           [9][1][3][4]         [9][1][3][4]         PIN code         25           [9][1][3][5]         [9][1][3][5]         GPRS         25           [9][1][3][5]         [9][1][3][5]         GPRS         25           [9][1][3][5]         [9][1][3][5][2]         User name         25           [9][1][3][6]         [9][1][3][6]         E-Mail           [9][1][3][6]         [9][1][3][6][1         SMTP IP         26           [9][1][3][6][2]         [9][1][3][6][2         SMTP port         26           [9][1][3][6][3]         [9][1][3][6][4         Password         26           [9][1][3][6][4]         Password         26           [9][1][3][6][6]         [9][1][3][6][6         E	[9][1][3][2][2]	[9][1][3][2][2]	GSM Lost	10 Minutes	22
9  1  3  3     9  1  3  3	[9][1][3][2][3]	[9][1][3][2][3]	SIM Expire Date	00	22
9  1  3  3  1 2    9  1  3  3  1 2    PBX Prefix	More Devices→G	SM→GSM Parame			
9  1  3  3  3  3  8    9  1  3  3  3  3  3  3  3  3  3  3  3  3	[9][1][3][3]	[9][1][3][3]	Prefix		23
9  1  3  3  9   9  1  3  3  9   Remove Prefix	[9][1][3][3][1][2]	[9][1][3][3][1][2]	PBX Prefix		23
9  1  3  3  0    9  1  3  3  0    Add Prefix	[9][1][3][3][8]	[9][1][3][3][8]			23
More Devices→GSM→GSM Parameters→PIN code         [9][1][3][4]       [9][1][3][4]       PIN code	[9][1][3][3][9]	[9][1][3][3][9]	Remove Prefix		23
9  1  3  4    9  1  3  4    PIN code	[9][1][3][3][0]	[9][1][3][3][0]	Add Prefix		23
More Devices◊ GSM→GSM Parameters→GPRS           [9][1][3][5]         [9][1][3][5]         GPRS         25           [9][1][3][5][1]         [9][1][3][5][2]         User name         25           [9][1][3][5][2]         [9][1][3][5][2]         User password         25           [9][1][3][5][3]         [9][1][3][5][3]         User password         25           More Devices→GSM→GSM Parameters→GSM E-Mail         26         29           [9][1][3][6][1]         [9][1][3][6][1]         SMTP IP         26           [9][1][3][6][2]         [9][1][3][6][2]         SMTP port         26           [9][1][3][6][3]         [9][1][3][6][3]         User name         26           [9][1][3][6][3]         [9][1][3][6][4]         Password         26           [9][1][3][6][4]         [9][1][3][6][5]         E-mail prefix         26           [9][1][3][6][5]         [9][1][3][6][6]         E-mail domain         26           [9][1][3][6][6]         [9][1][3][7]         GSM Caller ID         6         27           More Devices→GSM→GSM Parameters→RSSI Level         [9][1][3][8]         GSM RSSI Level         2         2           [9][1][3][8]         GSM RSSI Level         2         27	More Devices→G	SM→ GSM Parame			
9  1  3  5    9  1  3  5    GPRS	[9][1][3][4]	[9][1][3][4]	PIN code		25
9  1  3  5  1   9  1  3  5  1   APN code	More Devices◊ GS	SM→GSM Paramet	ers->GPRS		
9  1  3  5  2   9  1  3  5  2   User name	[9][1][3][5]	[9][1][3][5]	GPRS		25
9  1  3  5  3   9  1  3  5  3   User password	[9][1][3][5][1]	[9][1][3][5][1]	APN code		25
More Devices→GSM→GSM Parameters→GSM E-Mail           [9][1][3][6]         [9][1][3][6]         E-Mail         26           [9][1][3][6][1]         [9][1][3][6][1]         SMTP IP         26           [9][1][3][6][2]         [9][1][3][6][2]         SMTP port         26           [9][1][3][6][3]         User name         26           [9][1][3][6][4]         [9][1][3][6][4]         Password         26           [9][1][3][6][5]         [9][1][3][6][5]         E-mail prefix         26           [9][1][3][6][6]         [9][1][3][6][6]         E-mail domain         26           More Devices→GSM→GSM Parameters→Caller ID         6         27           More Devices→GSM→GSM Parameters→RSSI Level         2         27           More Devices→GSM→GSM control         2         27	[9][1][3][5][2]	[9][1][3][5][2]	User name		25
9   1   3   6   9   1   3   6   E-Mail   26   9   1   3   6   1   SMTP IP   26   9   1   3   6   2   SMTP port   26   9   1   3   6   2   SMTP port   26   9   1   3   6   2   SMTP port   26   9   1   3   6   3   User name   26   9   1   3   6   4   Password   26   9   1   3   6   5   E-mail prefix   26   9   1   3   6   6   E-mail domain   26   9   1   3   7   SM Caller ID   6   27   More Devices→GSM→GSM Parameters→RSSI Level   9   1   3   8   9   1   3   8   GSM RSSI Level   2   27   More Devices→GSM→GSM control   26   More Devices→GSM→GSM control   27   More Devices→GSM→GSM control   27   More Devices→GSM→GSM control   28   CSM Control   29   20   27   27   28   CSM Control   28   CSM Control   28   CSM Control   28   CSM Control   29   CSM Control   20   CSM Control	[9][1][3][5][3]	[9][1][3][5][3]	User password		25
9  1  3  6  1   9  1  3  6  1   SMTP IP	More Devices→G	SM→GSM Parame	ters→GSM E-Mail		
9  1  3  6  2   9  1  3  6  2   SMTP port	[9][1][3][6]	[9][1][3][6]	E-Mail		26
9  1  3  6  3   9  1  3  6  3  User name	[9][1][3][6][1]	[9][1][3][6][1]			26
9  1  3  6  4   9  1  3  6  4   Password   26   9  1  3  6  5   E-mail prefix   26   9  1  3  6  5   E-mail domain   26   9  1  3  6  6   E-mail domain   26   More Devices→ GSM→ GSM Parameters→Caller ID   9  1  3  7   GSM Caller ID   6   27   More Devices→GSM→GSM Parameters→RSSI Level   9  1  3  8   GSM RSSI Level   2   27   More Devices→GSM→GSM control	[9][1][3][6][2]	[9][1][3][6][2]	SMTP port		26
9  1  3  6  5   9  1  3  6  5   E-mail prefix	[9][1][3][6][3]	[9][1][3][6][3]	User name		26
9  1  3  6  6     9  1  3  6  6  E-mail domain	[9][1][3][6][4]	[9][1][3][6][4]			26
More Devices→ GSM→ GSM Parameters→Caller ID           [9][1][3][7]         [9][1][3][7]         6         27           More Devices→GSM→GSM Parameters→RSSI Level         9         2         27           More Devices→GSM→GSM control         2         27	[9][1][3][6][5]	[9][1][3][6][5]	E-mail prefix		26
[9][1][3][7]         [9][1][3][7]         GSM Caller ID         6         27           More Devices→GSM→GSM Parameters→RSSI Level         [9][1][3][8]         [9][1][3][8]         GSM RSSI Level         2         27           More Devices→GSM→GSM control	[9][1][3][6][6]	[9][1][3][6][6]	E-mail domain		26
More Devices→GSM→GSM Parameters→RSSI Level           [9][1][3][8]         [9][1][3][8]         2         27           More Devices→GSM→GSM control         2         27	More Devices→ G	SM→ GSM Param			
[9][1][3][8] [9][1][3][8] GSM RSSI Level 2 27  More Devices→GSM→GSM control	[9][1][3][7]	[9][1][3][7]	GSM Caller ID	6	27
More Devices→GSM→GSM control	More Devices→G		ters→RSSI Level		
	[9][1][3][8]	[9][1][3][8]	GSM RSSI Level	2	27
[9][1][4][1]	More Devices→G	SM→GSM control			
[O][T][T][T] [O][T][T][T] Disable incoming Can NO Zi	[9][1][4][1]	[9][1][4][1]	Disable Incoming Call	No	27

Table 2. WisDom/WisDom UK - GSM User programming options

Quick Key		Label	Default	Page
WisDom	WisDom UK			
Activities→Follow me	<u>'</u>		•	•
[ <b>*</b> ][2][2]	[ <b>*</b> ][2][2]	Follow me		34
[ <b>*</b> ][2][2][1]	[ <b>*</b> ][2][2][1]	Define FM		34
Activities→Check Cre	dit			
[ <b>*</b> ][2][7][Code]	[ <b>*</b> ][2][9][Code]	Check credit (By SMS)		35
[ <b>*</b> ][2][8][Code]	[ <b>*</b> ][2][0][1][Code]	User Call		36
[ <b>*</b> ][2][9][Code]	[ <b>*</b> ][2][0][2][Code]	Reset SIM		36
Maintenance→GSM			-	
[ <b>*</b> ] [4][Code][6][1]	[ <b>*</b> ] [4][ Code][6][1]	Diagnostics		37
[ <b>*</b> ] [4][Code][6][2]	[ <b>*</b> ] [4][ Code][6][2]	GSM Version		37
[ <b>*</b> ][4][Code][6][3]	[ <b>*</b> ][4][ Code][6][3]	Prepaid SIM		35
[ <b>*</b> ][4][Code][6][3][1]	[ <b>*</b> ][4][ Code][6][3][1]	SMS message		35
[ <b>*</b> ][4][Code][6][3][2]	[ <b>*</b> ][4][Code][6][3][2]	SMS send phone		35
[ <b>*</b> ][4][Code][6][3][3]	[ <b>*</b> ][4][Code][6][3][3]	SMS receiving phone		35

# 14. Appendix B: Adapted GSM Quick Keys Programming List for ProSYS/ProSYS

The following tables describe in ascending order the entire GSM Installer and User programming Options (Quick Keys) for both ProSYS and ProSYS UK security panels.

### Note:

Parameters marked with an asterisk are applicable for ProSYS UK security panels.

**Table 1. GSM Installer programming options** 

Quick Key		Label	Default	Page
ProSYS	ProSYS UK			
System→Control	System→Parameters	5	•	•
[1][2][39]	[1][2][58]	GSM Pre -Alarm	No	31
	JO→System≎System	Event	•	•
[3][UO][1][1][15]	[3][PO][1][1][15]	GSM Error		30
[3][UO][1][1][16]	[3][PO][1][1][16]	GSM:PSTN Loss		31
[3][UO][1][1][17]	[3][PO][1]][1][17]	GSM Low Battery		31
Dialer→Link Up	Digicom→Link Up			
[5][1][1][1][3]	[5][1][1][1][1][3]	MS/*ARC 1- 3 Link Up		28
[5][1][1][1][1]	[5][1][1][1]	PSTN / Voice		28
[5][1][1][1][2]	[5][1][1][1][2]	IP		28
[5][1][1][1][3]	[5][1][1][1][3]	SMS		28
[5][1][1][4]	[5][1][1][4]	GPRS		28
[5][1][2][1]	[5][1][2][1]	Upload/Download Telephone 1		20
[5][1][2][2]	[5][1][2][2]	Upload/Download Telephone 2		20
<b>Dialer</b> →Control	*Digicom→Control			
[5][5][15]	[5][5][14]	Upload/Download GSM enable	No	20
Dialer→Report	Digicom →Report Sp	olit		
Split				
[5][7][4][FM No]	[5][7][4][FM No]	Follow Me		30
[5][7][4][FM][1]	[5][7][4][FM][1]	Follow Me Type		29
[5][7][4][FM][1][1]	[5][7][4][FM][1][1]	Voice		29
[5][7][4][FM] [1][2]	[5][7][4][FM][1][2]	SMS		29
[5][7][4] [FM][1][3]	[5][7][4][FM][1][3]	GSM Mail		29
[5][7][4][FM][3]	[5][7][4][FM][3]	Events (New SMS Events)		30
[5][7][4][FM][3][21]	[5][7][4][FM][3][21]	GSM Low Battery	No	30
[5][7][4][FM][3][22]	[5][7][4][FM][3][22]	GSM Trouble	No	30
[5][7][4][FM] [3][24]	[5][7][4][FM][3][24]	SIM Expire	No	30
[5][7][4][FM][4]	[5][7][4][FM][4]	Restore Events		30
		(New SMS events)		
[5][7][4][FM][4][11]	[5][7][4][FM][4][11]	GSM Low Battery	No	30
		Restore		
[5][7][4][FM][4][12]	[5][7][4][FM][4][12]	GSM Trouble	No	30
	essoires Codes→GS		T	
[6][0][6]	[6][0][6]	GSM		32
[6][0][6][1]	[6][0][6][1]	Trouble (Fault)		32
[6][0][6][1][1]	[6][0][6][1][1]	Tamper	00	32
[6][0][6][1][2]	[6][0][6][1][2]	Communication Trouble	00	32
[6][0][6][1][3]	[6][0][6][1][3]	Mains trouble	00	32
[6][0][6][1][4]	[6][0][6][1][4]	Low Battery	00	32
[6][0][6][1][5]	[6][0][6][1][5]	Trouble		32
[6][0][6][1][6]	[6][0][6][1][6]	Pre alarm	00	32

Quick Key		Label	Default	Page
ProSYS	ProSYS UK			
[6][0][6][2]	[6][0][6][2]	Trouble Restore (Fault restore)		32
[6][0][6][2][1]	[6][0][6][2][1]	Tamper Restore	00	32
[6][0][6][2][2]	[6][0][6][2][2]	Communication Restore	00	32
[6][0][6][2][3]	[6][0][6][2][3]	Mains Restore	00	32
[6][0][6][2][4]	[6][0][6][2][4]	Low Battery Restore	00	32
[6][0][6][2][5]	[6][0][6][2][5]	Trouble Restore	00	32
Accessories		•		
[7][1][9][6]	[7][1][9][1]	Add / Delete GSM		20
Miscellaneous→G	SM	•	•	
[8][3][1]	[8][2][1]	GSM Parameters		
[8][3][1][1]	[8][2][1][1]	GSM Mode	GSM Back Up	21
[8][3][1][1][1]	[8][2][1][1][1]	GSM Back Up		21
[8][3][1][1][2]	[8][2][1][1][2]	GSM Only		21
[8][3][1][1][3]	[8][2][1][1][3]	GSM Main (Primary)		21
[8][3][1][2]	[8][2][1][2]	GSM Times		21
[8][3][1][2][1]	[8][2][1][2][1]	PSTN Lost	10 Seconds	22
[8][3][1][2][2]	[8][2][1][2][2]	GSM Lost	10 minutes	22
[8][3][1][2][3]	[8][2][1][2][3]	SIM Expire Time	00	22
[8][3][1][3]	[8][2][1][3]	Prefix		23
[8][3][1][3][1][2]	[8][2][1][3][1][2]	PBX prefix		23
[8][3][1][3][3][8]	[8][2][1][3][3][8]	Prefix Constant		23
[8][3][1][3][9]	[8][2][1][3][9]	Remove Prefix		23
[8][3][1][3][0]	[8][2][1][3][0]	Add Prefix		23
[8][3][1][4]	[8][2][1][4]	PIN Code		25
[8][3][1][5]	[8][2][1][5]	GPRS		25
[8][3][1][5][1]	[8][2][1][5][1]	APN Code		25
[8][3][1][5][2]	[8][2][1][5][2]	User Name		25
[8][3][1][5][3]	[8][2][1][5][3]	User Password		25
[8][3][1][6]	[8][2][1][6]	E-Mail		26
[8][3][1][6][2]	[8][2][1][6][1]	SMTP IP		26
[8][3][1][6][2]	[8][2][1][6][2]	SMTP port		26
[8][3][1][6][3]	[8][2][1][6][3]	User name		26
[8][3][1][6][4]	[8][2][1][6][4]	Password		26
[8][3][1][6][5]	[8][2][1][6][5]	E-mail prefix		26
[8][3][1][6][6]	[8][2][1][6][6]	E-mail domain		26
[8][3][1][7]	[8][2][1][7]	Caller ID	00	27
[8][3][1][8]	[8][2][1][8]	RSSI Level	02	27
[8][3][2]	[8][2][2]	GSM Control		27
[8][3][2][1]	[8][2][2][1]	Disable Incoming Call	No	27

Table 2. ProSYS - GSM User programming options

Quic	k Key	Default Pa		Page
ProSYS	ProSYS UK	Label		
Activities→Follow me				
[ <b>*</b> ][2][7][Code]	[ <b>*</b> ][2][7]	Follow Me definition		34
Activities→Check Cre	dit			
[ <b>*</b> ][2][0][3][Code]	[ <b>*</b> ][2][0][6][Code]	Check credit (By SMS)		35
[ <b>*</b> ][2][0][4][Code]	[ <b>*</b> ][2][0][7][Code]	Reset SIM		36
Maintenance→GSM				•
[ <b>*</b> ] [4][Installer Code][9][4]	[ <b>*</b> ] [4][Installer Code][9][4]	Diagnostics		37
[ <b>*</b> ] [4][Installer Code][0][2][5]	[ <b>*</b> ] [4][Installer Code][0][2][4]	GSM Version		37
[ <b>*</b> ][4][ Code][0][4]	[ <b>*</b> ] [4][Code][0][4]	Pre-Paid SIM		35
[ <b>*</b> ][4][ Code][0][4][1]	[ <b>*</b> ] [4][Code][0][4][1]	SMS message		35
	[ <b>*</b> ] [4][ Code][0][4][2]	SMS send phone		35
	[ <b>*</b> ] [4][ Code][0][4][3]	SMS receiving phone		35

Notes:

Notes:
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### **RISCO Group Warranty**

RISCO Group and its subsidiaries and affiliates ("Seller") warrants its products to be free from defects in materials and workmanship under normal use for 24 months from the date of production. Because Seller does not install or connect the product and because the product may be used in conjunction with products not manufactured by the Seller, Seller cannot guarantee the performance of the security system which uses this product. Seller's obligation and liability under this warranty is expressly limited to repairing and replacing, at Seller's option, within a reasonable time after the date of delivery, any product not meeting the specifications. Seller makes no other warranty, expressed or implied, and makes no warranty of merchantability or of fitness for any particular purpose.

In no case shall seller be liable for any consequential or incidental damages for breach of this or any other warranty, expressed or implied, or upon any other basis of liability whatsoever.

Seller's obligation under this warranty shall not include any transportation charges or costs of installation or any liability for direct, indirect, or consequential damages or delay. Seller does not represent that its product may not be compromised or circumvented; that the product will prevent any persona; injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. Buyer understands that a properly installed and maintained alarm may only reduce the risk of burglary, robbery or fire without warning, but is not insurance or a guaranty that such will not occur or that there will be no personal injury or property loss as a result. Consequently seller shall have no liability for any personal injury, property damage or loss based on a claim that the product fails to give warning. However, if seller is held liable, whether directly or indirectly, for any loss or damage arising from under this limited warranty or otherwise, regardless of cause or origin, sellers maximum liability shall not exceed the purchase price of the product, which shall be complete and exclusive remedy against seller.

No employee or representative of Seller is authorized to change this warranty in any way or grant any other warranty.

WARNING: This product should be tested at least once a week.

### **Contacting RISCO Group**

RISCO Group is committed to customer service and product support. You can contact us through our website (www.riscogroup.com, www.riscogroup.co.uk) or as follows:

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