



GSM Switch

This manual details the installation and usage of Inventech's GSM Switch device.

The switch device has 2 digital inputs and 2 relay outputs. The digital inputs can be used to detect when a event occurs (for instance a gate is opened or a button is pressed) and the state information is transferred to our monitoring platform. A change in the state of the input (going open circuit or connecting to GND) can also cause an SMS to be sent to the ADMIN number for the device.

The 2 relay outputs can switch upto 10A and can be controlled by sending a SMS to the remote device. The device can also be enabled to Pulse Output 1 for 10 seconds when a call is received from a number that

USB and SMS commands

The device can be controlled and configured by entering commands via USB or SMS.

To prevent un authorised access to the device, the last 4 digits of the devices serial number serve as a password. i.e. if the serial number was 12AB-34CD the the command to Pulse output 1 would be PULSE 34CD 1

The SMS and USB commands are:

<i>Command</i>	<i>Description</i>	<i>Action</i>
CFGSERIAL?	Gets the device serial number	Prints the serial number on the console
CFGDEFAULT<serial>	Resets the device to factory configuration	Erased the admin number and missed call lists.
PULSE <serial> n	Pulses the output number given by the value n	PULSE 1 will pulse OUTPUT 1 for 1 second
DURATIONPULSE <serial> n m	Pulse the output number given by the value n for the number of minuters given by m	DURATIONPULSE 1 10 will switch OUTPUT 1 ON for 10 minutes
ON <serial> n	Switches On the output given by the value n	ON 2 will switch ON Output 2
OFF <serial> n	Switches Off the output given by value n	OFF 1 will switch OFF Output 1
TOGGLE <serial> n	Toggle the output given by the value n	TOGGLE 1 will cause the value of output 1 to change state i.e.

ON → OFF and OFF → ON

ADD <number>	Will add the number given by <number> to the call list. Only the ADMIN number or the USB command will update the call list	ADD +27821234567 will add the phone number given to the call list ¹ The device will confirm by this by updating the list on the monitoring server.
REMOVE <number>	Will remove the number given by <number> to the call list. Only the ADMIN number or the USB command will update the call list	REMOVE +27821234567 will remove the phone number given to the call list ¹ The device will confirm by this by updating the list on the monitoring server.
FACTORYRESET <serial>	Resets the device to factory configuration	Erased the admin number and missed call lists. Can only be received from the ADMIN number.
RESET <serial>	Resets/Restarts the device	Will restart or reboot the device, causing it to register and report its position to the monitoring server
SETOFFMSG <serial> n “msg”	Sets the message text (in quotation marks) which will be sent when input n goes off (or connects to ground)	SETOFFMSG 1234 1 “POWER FAILURE AT HOME” will set the SMS message that is sent when no voltage is detected on input 1
SETONMSG <serial> n “msg”	Sets the message text (in quotation marks) which will be sent when input n goes on (or positive voltage)	SETONMSG 1234 1 “POWER RESTORED AT HOME” will set the SMS message that is sent when voltage is detected on input 1
SMSREPORT <serial> <ON/OFF>	Enables or disables sending of SMS's. ON is is the default action	SMSREPORT 1234 ON Will enable the device to send SMSs, the messages and status are still uploaded to the monitoring server over GPRS
MISSEDCALL <serial> <ON/OFF>	Enable or disableds Output 1 when a incoming call from a matching number in the call list is received. ON is the default action.	MISSEDCALL 1234 ON Output 1 will switch “on” for 10 seconds when an incoming call from a number on the call list is received
SIGNALSTATUS	Will send the Signal streghth to the requesting number	SIGNALSTATUS will reply with a value between 0 and 31 0 -115dBm or less

- 1 -111dBm
- 2..30 -110...-54dBm
- 31 -52dBm or greater

The higher the value to stronger the signal

OUTPUTSTATUS <serial> <ON/OFF>	Will enable or disable the sending of a SMS confirmation message when either of the output changes state when requested by a SMS command or a missed call action. The default action is enabled	OUTPUTSTATUS 1234 ON Will enable the sending of a SMS to the requesting number when an output changes state.
MISSEDTOGGLE <serial> <ON/OFF>	Will change the action of the missed call from a Pulse to Toggle The default action is Pulse i.e. MISSEDTOGGLE is OFF	MISSEDTOGGLE 1234 ON Will toggle output when a incoming call from a number in the missed call list is detected. Missedcall needs to be ON for this to have any action on output 1

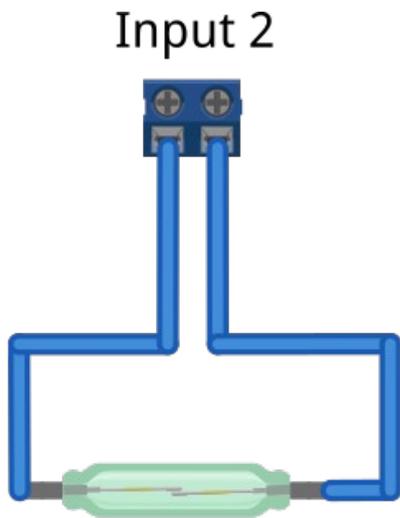
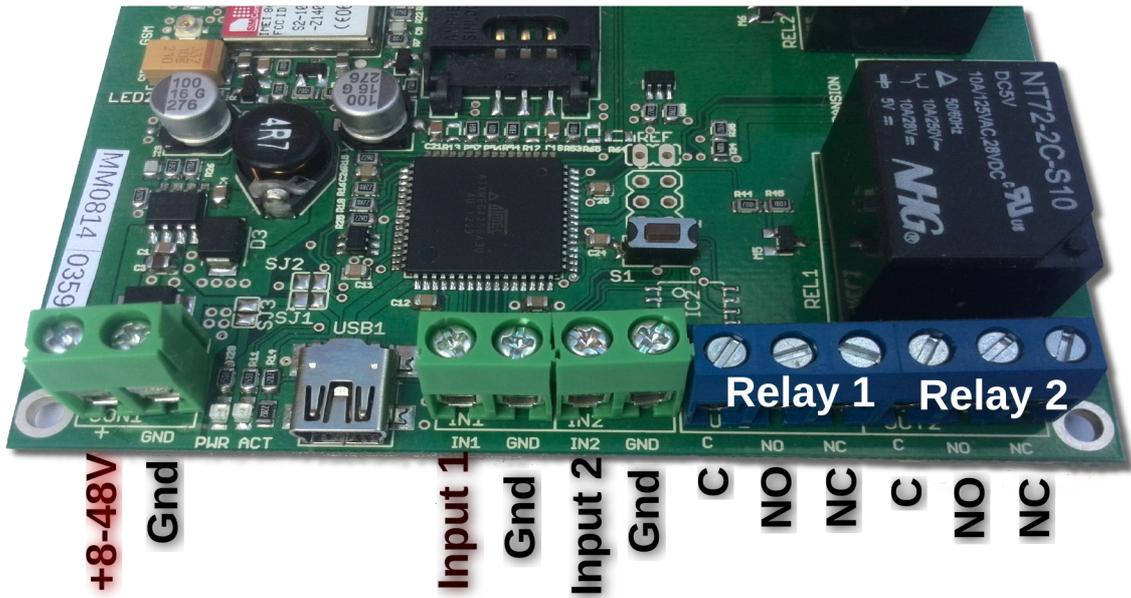
¹ The call list is a list of 10 numbers that will be SMS'ed when either the mains fails on Input 1 or the state of Input 2 changes. If enabled a call from a number in the call list will cause the OUTPUT 1 to PULSE for 1 second when a call is received by the GSM device. The call is not answered but terminated resulting in no charge. This function is useful to either restart a system or open a electronically controlled security gate.

ADMIN number, by default no ADMIN number is configured. The first incoming call will be registered as the ADMIN number for this device. The ADMIN number can be reset by sending the device a FACTORYRESET command.

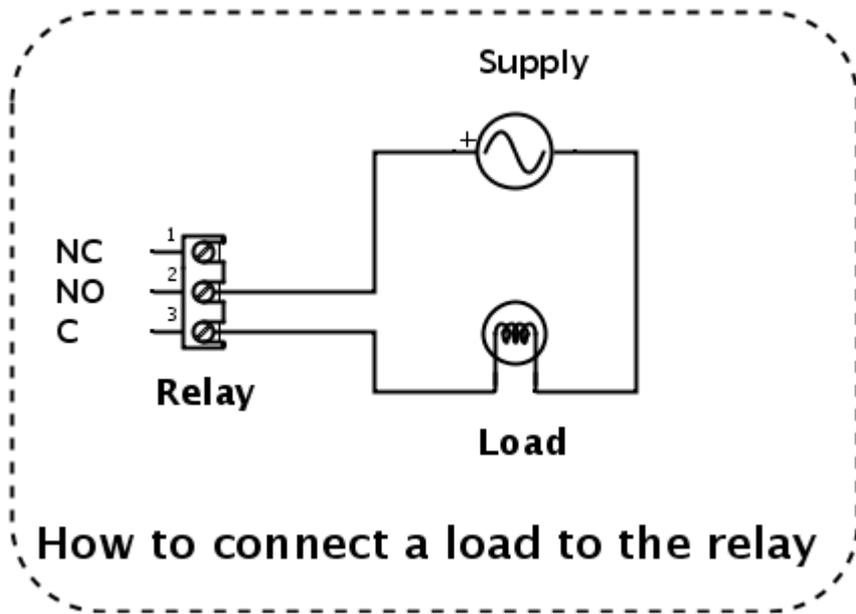
NOTES ABOUT NUMBER FORMAT

The device only accepts numbers in the international 10 digit format i.e. +27821234567

Connecting the Switching device.



Magnetic Door Sensor



How to connect a load to the relay