



## ... Preface

The TGR10B is a GSM remote controller specially designed as stand-alone unit or in the combination with other video surveillance or alarm equipment. Built-in GSM module with different interfaces enable simple and easy control and management of electrical, electronic and other equipment through GSM mobile phone. Built-in relay enables remote control of household and other devices as are air-conditioning and heating. The connections with other alarm equipment and additional sensors enable remote intruder and fire surveillance and temperature measuring and management.

The control of the unit is possible by the help of SMS text messages. Alarming is possible by receiving the SMS text messages or by alarm calls or by the combination of both of them. Programming is possible by the help of SMS text messages.

This GSM remote control unit comes in three versions, Basic, Advance and Reference, every model is available also with GPS receiver.

## ...: Features

- built-in GSM module with SIM interface
- SMS control (alarms, relays, etc)
- alarm sensor management
- accumulator connection
- standard casing for EN 60715 TH35 DIN rails

## ...: Precautions

- The remote control unit has to be installed and used in accordance with the instructions of this manual only.
- The power supply has to be disconnected before installation.
- Avoid using the remote control unit under the presence of appliances generating strong magnetic fields like radar, weather station and in places subject to direct sunlight.
- Do turn power off immediately and refer servicing to qualified service personnel if the remote control unit does not operate normally following the operating instructions.

## ... Controls and connectors

### 1. DC

Terminal block to connect DC power supply.

### 2. ACCU

Terminal block to connect Accumulator power supply.

### 3. Relay\*

Terminal block to connect different devices.

### 4. Digital In

Terminal block to connect 2 different sensors.

### 5. GSM Network LED

LED to show the status of GSM module. LED blinks fast when no network is searched, LED blinks slow when full service is registered. When the call is active LED permanently lights.

### 6. Operation mode LED

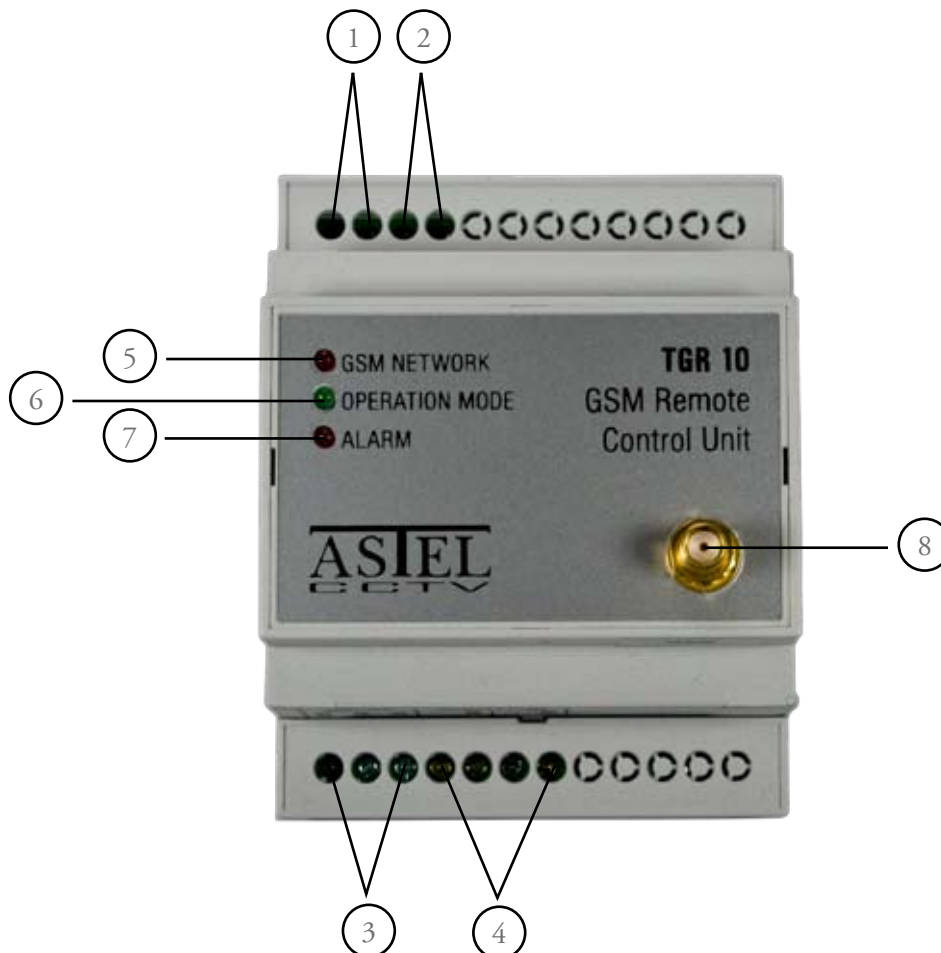
LED to show the status of the device, blinks in normal operation.

### 7. Alarm LED

LED to show the alarm status, lights when alarm occurs.

### 8. GSM antenna

SMA connector to connect GSM antenna.



## ... Installation

All the diagrams in this manual show the installation of the GSM Remote Control Unit, model TGR10B.

*Note:*

- The main DC power supply has to be switched off before installation.
- Also refer to the instruction manual of the equipment to be connected.
- The total power consumption of all sensors, relays and other devices supplied from the unit has not exceed 500mA.

Avoid the installation in extremely hot and cold places and near appliances generating strong magnetic fields. The installation have to be realize by a qualified personel.

*Note:*

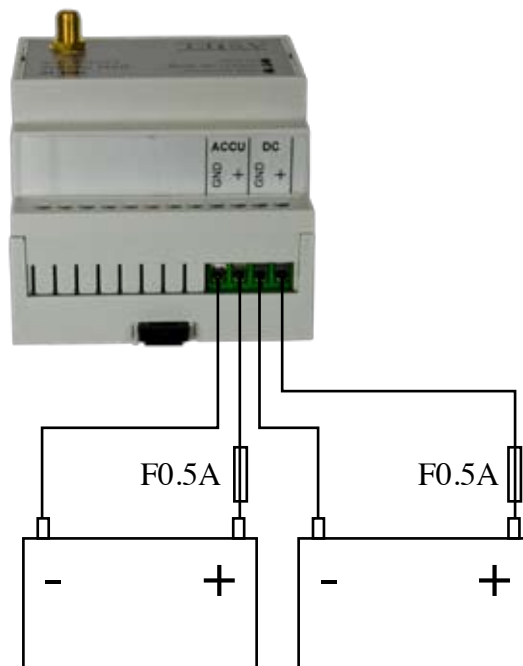
- The GSM antenna have to be connected before the unit is switched-on.
- The SIM card have to be inserted before the unit is switched-on. The SIM location 3 (password) has to be empty. The PIN code request have to be disabled.

### DC power supply and Accumulator connection

The power supply have to be connected to the DC terminal block connector with right polarity and protected with a fuse (not included). The power supply voltage have to be from 12VDC. The back-up accumulator have to be connected to the ACCU terminal block connector with right polarity and also protected with a fuse (not included).

*Note:*

- The declared accumulator voltage have to be the same as the DC power supply voltage.



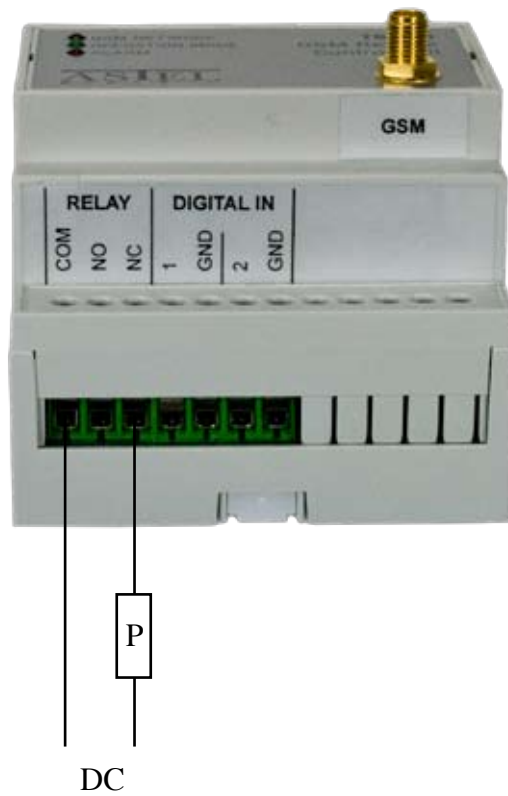
## ... Control connections

### Relays connection

The relay control outputs are suitable to control different household and other devices as are airconditioning and heating, connected directly or through external relays. The relay has NO and NC contacts.

*Note:*

- The total DC current consumption of connected equipment to each relay must not exceed 1A when the equipment are controlled directly from the unit. The maximum voltage connected to the relays must not exceed 30V.



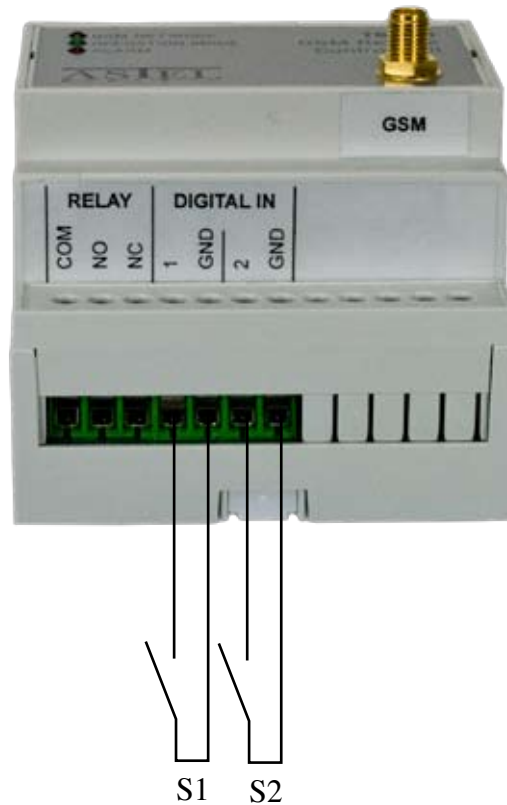
## ... Alarm connections

### Digital inputs connection

The digital inputs are suitable to connect two or four\* different sensors like IR intruder sensors, smoke sensors, water inlet sensors (floating switches) with NO or NC contacts. The sensors can be supplied directly from the unit and connected to one of +ACCU terminal block.

*Note:*

- The total power consumption of each sensor supplied from the unit must not exceed 100mA.



## ...: Instructions

### Login

The default setting of password is 1234.

#### To send the password

PWDxxxx x=1..9

*PWD1234* (if the password is 1234)

(PWD instruction should be uppercase, other instructions uppercase or lowercase)

*PWD1234\_instr1\_instr2\_instr3*

(first should be sent the password then space and then instructions)

#### To change the password

NPWxxxx x=1..9

*NPW2222* (if the new password is 2222)

## Controls

#### To receive a status of relays:

REL

Received SMS:

*NAME*

*REL1:REL1:ON*

#### To switch-on the relay:

RELxON x=1

*REL1ON* (to switch-on the relay 1)

#### To switch-off the relay:

RELxOFF x=1

*REL1OFF* (to switch-off the relay 1)

#### To switch-on the relay for selected time duration:

RELxONhh.mm.ss x=1

hh=0..24

mm=0..60

ss=0..59

*REL1ON12.10.00* (to switch-on the relay for 12 hours, 10 minutes)

**To switch-on the relay when alarm occurs:**

RELxALMhh.mm.ss                    x=1  
    hh=0..24  
    mm=0..59  
    ss=0..59

*REL2ALM00.10.30* (switching-on the relay 2 for 10 minutes, 30 seconds)

**To confirm the alarm by switching-off the relay**

RELxALM                                    x=1

*REL1ALM* (temporary switching-off the relay)

**To switch-on audio or other indication when alarming is enabled/disabled:**

RELxREM                                    x=1

*REL2REM* (to switch-on audio or other indication on the relay)

**Alarms**

**To receive alarm status on digital inputs:**

ADS

Received SMS:

*NAME*

*ALM:*

*D1:IN1:REM*

*D2:IN2:REM*

*D3:IN3:ON\**

*D4:IN4:OFF\**

(when switching-on/off of alarming is enabled by the help of the digital inputs D1 in D2)

**To enable alarms on digital inputs:**

ADSxxxx                                    x=1 or 0

*ADS0010* (to enable alarm on digital input 3)

**To receive alarm triggering on digital inputs:**

ADT

Received SMS:

*NAME*

*TRG:*

*D1:REM*

*D2:REM*

*D3:HIGH\**

*D4:LOW\**

(when switching-on/off of alarming is enabled by the help of the digital inputs D1 in D2)





**To write the name to the location on the SIM card**

PBW*s*&&n                   s=location on the SIM card  
                                   n=name

*PBW55*&&*kiko* (to write the name KIKO on the location 55)

**To write the name and number to the location on the SIM card**

PBW*s*&&x&&n               s=location on the SIM card  
                                   x=number  
                                   n=name

*PBW55*&&*0038641123456*&&*kiko*

(to write the number 0038641123456 and name KIKO on the location 55)

**To delete the contents on the location on the SIM card**

PBW*s*&&                   s=location on the SIM card

*PBW55*&& (to delete the contents on the location 55)

**To receive the contents on the location on the SIM card**

PBR*s*                   s=location on the SIM card

*PBR55* (to receive the contents on the location 55)

## ... SIM card locations

s&x&n                      s=location on the SIM card  
                                   x=number  
                                   n=name

### Location (s):

- 1 &location of the first call number& &0& - no call\*\*
- 2 &location of the last call number&\*\*
- 3 password (4 digits)
- 4 reserved
- 5 reserved
- 6 reserved
- 7 reserved
- 8 &location of the first SMS number& &0& - no SMS
- 9 &location of the last SMS number&
- 10 reserved
- 11 &&IN1
- 12 &&IN2
- 13 &&IN3
- 14 &&IN4
- 15 reserved
- 16 reserved
- 17 reserved
- 18 reserved
- 19 &&REL1
- 20 reserved
- 21 reserved
- 22 reserved
- 23 &&OC1\*
- 24 reserved
- 25 reserved
- 26 reserved
- 27 &&TEMP1\*
- 28 reserved
- 29 reserved
- 30 &&NAME
- 31 reserved
- 32 reserved
- 33 reserved
- 34 reserved
- 35 reserved
- 36 &&ACCU
- 37 &&DC
- 38 reserved
- 39 reserved

- 40 reserved
- 41 reserved
- 42 reserved
- 43 &&SMS number 1&
- 44 &&SMS number 2&
- 45 &&SMS number 3&
- 46 &&SMS number 4&
- 47 &&SMS number 5&
- 48 &&SMS number 6&
- 49 &&SMS number 7&
- 50 &&SMS number 8&
- 51 &&SMS number 9&
- 52 &&SMS number 10&
- 53 reserved
- 54 reserved
- 55 &&POS1\*\*\*
- 56 reserved
- 57 &&POS2\*\*\*
- 58 reserved
- 59 &&POS3\*\*\*
- 60 reserved
- 61 &&POS4\*\*\*
- ... reserved
- 90 &&call number 1&\*
- 91 &&call number 2&\*
- 92 &&call number 3&\*
- 93 &&call number 4&\*
- 94 &&call number 5&\*
- 95 &&call number 6&\*
- 96 &&call number 7&\*
- 97 &&call number 8&\*
- 98 &&call number 9&\*
- 99 &&call number 10&\*

**...: Technical specifications**

Power supply	12 Vdc
Accumulator (option)	1, the same voltage as power supply
Relays	1 x NO/NC/COM
Digital inputs	2, NO, 12V
Casing	EN 60715 TH35 for DIN rails
Dimensions	70x90x70mm
Weight	160 g

**GSM module**

Quad-band	E-GSM-900, GSM-850, DCS-1800, PCS-1900
SIM card interface	3V
Antenna connector	SMA