GD-06 *ALLEGRO* GSM Dialer

The GD-06 *ALLEGRO* is a universal GSM dialer and controller. It can be used for both home and industrial automation purposes, for security applications or any remote data transfer project. Triggering of any of the inputs will cause the sending of a reporting SMS message to preprogrammed phone numbers or a direct call to a telephone number. By using specific text messages, you can switch on or off the remote controlled outputs. In the basic setting, the GD-06 provides 4 inputs and 3 outputs.

The device can be programmed using programming SMS messages or via the Internet using Jablotron's GSMLink web page.

The Expert mode enables full programming of all inputs and outputs, trigeering a listening-in mode, GPRS data communication and analogue data transmission.

1. Specification

Power supply voltage	8 - 15 V DC
Current consumption	20 mA (stand-by), 500 mA (maximum)
GSM band	E-GSM/GPRS 900/1800MHz (2 W @ GSM900, 1 W @ GSM1800)
Terminals (P1 - P6):	Input mode - triggered when connected to GND (200 ms filter is used)
Output mode - transistor output (max. 100 mA), switches to GND	
Relay output	over-switching contact (NC-C-NO), max. 2A / 24V
Dimensions	76 x 110 x 33 mm (antenna - 125 mm)
Complies with	EN 60950, EN 301489-7, ETSI EN 301489-7, EN55022, EN 50130-4, EN 301511

CE

Hereby, Jablotron Ltd., declares that this GD-06 complies with the essential requirements and other relevant provisions of Directive 1999/5/EC. Original conformity assessment can be found at the web page www.jablotron.cz, section Technical support.

2. Installation

The GD-06 *ALLEGRO* is designed for indoor use only. Check the GSM signal strength before installing the product (e.g. with a GSM phone using a SIM card for the same operator).

1) Insert a SIM card into a GSM phone and disable its PIN. If you cannot disable it, set it to 1234.
2) Insert the SIM card into the GD-06.
3) Connect the power supply.
4) The LED will start flashing until the SIM card registers into the GSM operator's network (max. 1 minute).
5) Standby mode is then indicated by short flashes of the LED (apr. once every 2 sec). If the LED is lit permanently, GSM communication is in progress.

Terminals' description:

	Terminal	Mode	Telephone numbers
Power supply	+U GND	Terminals for connecting 8-15 V DC power supply voltage	-
Inputs	P1 P2 P3 P4	Connecting or disconnecting to GDN will trigger sending SMS information to all telephone numbers TEL1 – TEL6. *Example: "P1 On" or "P2 Off"*	**TEL1, TEL2, TEL3, TEL4, TEL5, TEL6**
Outputs	P5 P6	SMS instruction sent from TEL1-TEL8 telephones controls the outputs. *Example: "ON P5" or "OFF P6"*	**TEL1, TEL2, TEL3, TEL4, TEL5, TEL6, TEL7, TEL8**
	NC C NO	Relay switches over (on/off/on…) whenever a phone call from TEL1 or TEL2 is detected.	**TEL1, TEL2**

Wire outputs of your triggering devices (e.g. sensors, alarm systems…) to corresponding input terminals of GD-06. Wire the appliances which you want to control remotely to the output terminals of the GD-06.

Note: After the installation, all telephone numbers are erased from the memory and access codes are set to MASTER and USER.

3. Basic setting

3.1. Reset

Reset the GD-06 communicator to the factory default settings with English communication by sending the instruction
"***MASTER RESET EN***' to the dialer.

3.2. Telephone numbers setting

Store the telephone numbers TEL1 to TEL8 using the programming SMS instruction sent from a GSM phone:

*MASTER TEL*X YYY ZZZZZZZZZZZ

Parameter	Value	Description
X	1,2,3,4,5,6,7,8	Memory position for TEL1 to TEL8
YYY	**SMS**	Instruction to send SMS to this number
	SMS+	Instruction to send SMS to this number first and then to call this number
ZZZZZZZZZZ		Telephone number (max 20 digits) , "+" prefix can be used for international calls

Example: "MASTER TEL1 SMS 00420483559911"

You will then receive a confirmation message from the GD-06 to your mobile phone.

Notes:
- There must be spaces between the parameters. The SMS instruction is case insensitive.
- For telephone numbers TEL7 and TEL8, which are used for remote control only, you can use any YYY parameter.
- To delete the telephone number, send the SMS instruction "***MASTER TEL*X DEL",** for example "MASTER TEL3 DEL".
- If the confirmation message is not in English, reset the GD-06 as described in the paragraph 3.3.

3.3. Customization of SMS texts and access codes

The default texts of reporting SMS and incoming SMS instruction can be modified using the following programming SMS:

> ***MASTER TXT** index, text*

> **index** index number according to the following table

> **text** new text, which will be used in SMS messages

Basic SMS reports' texts

Index	Default	Description
10	**P1**	Description of P1 input terminal
11	**On**	P1 input terminal is triggered
20	**P2**	Description of P2 input terminal
21	**On**	P2 input terminal is triggered
30	**P3**	Description of P3 input terminal
31	**On**	P3 input terminal is triggered
40	**P4**	Description of P4 input terminal
41	**On**	P4 input terminal is triggered

Basic SMS instructions' texts

Index	Default	Description
50	**P5**	Description of P5 output terminal
60	**P6**	Description of P6 output terminal
70	**RELAY**	Description of the relay output
100	**ON**	Instruction to switch on an output
101	**OFF**	Instruction to switch off an output
109	**USER**	User access code
110	**MASTER**	Master access code

You can send multiple texts separated by commas and blank spaces in one programming SMS.

Examples:
   a) *"MASTER TXT 10, Security system, 11, armed"* will customize the input P1 setting to indicate a security system's status. If a corresponding alarm system output triggers the P1 when arming, then SMS report "Security system armed" is sent.
   b) *"MASTER TXT 71, Heating"* will modify the remote SMS instruction to switch on a heating system connected with the relay output to "Heating on".
   c) *"MASTER TXT 110, Big elephant"* will change the master access code to "Big elephant"

4. Operation

After installation of the GD-06 *ALLEGRO* and programming of the telephone numbers, the GD-06 is ready for operation.
- Triggering of any input P1 to P4 will cause the sending of a SMS report to the telephones registered in the positions TEL1 to TEL6.
- From a GSM phone, you can send an SMS instruction to switch on or off the P5 and P6 outputs.
- You can also switch the relay on or off by making a phone call to the GD-06 from a phone registered to TEL1 or TEL2 memory positions. The GD-06 *ALLEGRO* doesn't answer this call, so you don't pay any telecommunication fee for this remote control.

Notes:
1. You can remotely control the GD-06 from any phone: not only from the ones stored in the memory TEL1-TEL6. You just have to add the master (default MASTER) or user (default USER) access code in front of the instruction.
   Example: "MASTER ON P5"
2. The SMS instructions texts are case insensitive. It means that instruction *"ON P5"* is equal to *"on p5"*.

5. Advanced programming

More detailed programming can be accomplished from Internet using the web page www.gsmlink.cz. Follow the product registration instructions to get access to a secure web page. Use the registration code printed on the warranty certificate (the code has a form xxxx-xxxxx-xxxx and it is unique for each system). From the GSMLink, you can program your GD-06 ALLEGRO easily regardless of where in the world you are located. The best performance will be obtained if your SIM card enables GPRS data transmission. Form the GSMLink server you can:

- Check the current status of all inputs and outputs
- Control the outputs
- Program the GD-06
- Change the SMS tetxts (only when GPRS data connection is enabled)

If you don't have Internet access, you can also use SMS for the advanced programming. You can find all details in the Expert programming manual.