

GSM module
for intercoms

DiTeL GSM - Apartment
(DiTeL GSM - Apartment C)

USER MANUAL



# USER MANUAL GSM module for intercoms DiTeL GSM - Apartment (DiTeL GSM - Apartment C)

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### 1.GENERAL DESCRIPTION

GSM module for intercom DiTeL GSM - Apartment - One of the newest developments DIGITALas Company with unique capabilities. GSM module for intercom DiTeL GSM - Apartment (hereinafter - DiTeL GSM - Apartment or module) - one of the GSM line modules DITEL GSM remote control, the award-winning "Innovation of the Year 2015" in the field of technological solutions.



DiTeL GSM - Apartment - GSM is an electronic controller (remote intercom system, GSM remote control and intercom door lock), which is designed for remote management of digital intercoms and locks entrance doors stairwells of apartment buildings without the use of subscriber handset intercom. With DiTeL GSM - Apartment you will be able to remotely control lock entrance door and talk to the incoming through the internal intercom system being far from home (from anywhere), and with nothing but a mobile (cell)

phone. The module operates on a GSM network, so you can use any mobile (cell) phone (the availability of the Internet connection is not required) for the control module.

The principle of operation of the device

GSM module for intercom DiTeL GSM - Apartment is connected to the intercom and takes over the management of the electronic lock. Typing on the outside panel apartment number, the module automatically routes the call to the write-in memory of the mobile phone. You will have the opportunity to speak, and by clicking on the phone keypad, unlock the doors.

By clicking on the entry panel room apartment DiTeL GSM - Apartment makes a telephone call from the memory number 1 (Phone1 base) (see section 4.2...). If the subscriber is busy or does not respond within the specified time (call basis) (see. P. 4.4.), The dials of the memory 2 (phone2 base) (see. P. 4.2.). If a successful connection is made voice. Opening the door lock when you press the # key on the phone, and to exit OUT1 - \* key.

## **Advantages**

- 1. **Convenient.** Your mobile phone is always with you, at the time when the intercom handset subscription may not be at hand, or is not available.
- 2. **Practical.** You can refuse the installation of wires and tubes intercom subscriber thus avoiding potential costs for equipment and repairs.
- 3. **Economically**. You do not need to purchase a subscription handset intercom, intercom and control remain simple but with new features.
- 4. **Simple to operate.** It is easy to make new users, delete users, or change the settings by editing the "text" file on the microSD memory card or via SMS.

# **Opportunities**

- with easy and convenient configuration module settings (databases) through the configuration "text" files stored on the microSD memory card without using the phone or any additional software
- opportunity to room database management through SMS
- the ability to talk to the incoming through an internal intercom system using mobile (cell) phone
- access to control the outputs OUT1 and OUT2 by sending an SMS or phone call from the module
- temporarily disable the module from the intercom by sending an SMS
- latency answer phone control
- control levels of conversational signals
- time configuration trigger outputs (0 to 999 sec. or monostable position)
- set of subscriber numbers from the corresponding type on the keyboard. Each of the two databases can contain up to 255 numbers
- dispatch fixed form SMS messages to all numbers made to the base of the phone numbers at the input is activated IN1 (eg fire alarm) (DiTeL GSM version Apartment
- sending information by SMS to all numbers of any form made to the database of phone numbers (version DiTeL GSM Apartment C)
- the possibility of integration into various systems of digital intercoms (DD-5100 or similar)
- the ability to install individually (for one apartment) or for all apartments in the stairwell (used intercom DD-5100 type)
- the ability to install without using the intercom subscriber handset intercom.

## 2. SPECIFICATIONS

- dimensions: 65 \* 40 \* 25 mm
- Power Voltage: 12-14V DC, the use of a backup battery 12B
- current consumption: up to 70mA (standby) to 150mA (operation), the source should provide a short-term peak current up to 3 A
- Support 4 Frequency: GSM 850/900/1800/1900 MHz
- number of inputs: 1 pcs. (For connection of the intercom) and 1 pc. for connecting external devices (DiTeL GSM version Apartment C)
- Number of outputs: 2 pcs. (Open collector output and relay changeover)

- Open collector output: 1 pc., is controlled by sending SMS or in case of a phone call from the module
- Output relay switching: 1pc, controlled by sending SMS or in case of a phone call from the module
- the number dialed numbers: two bases for 255 rooms
- Display: 2 LEDs
- antenna connection (connector type): SMA
- User Memory: microSD (up to 16 Gb)
- module configuration settings is carried out by configuration "text" files on the microSD card or by sending an SMS.

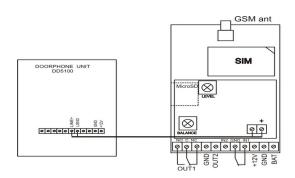
# 3. CONNECTION (GETTING STARTED)

Insert the SIM card with a PIN code previously disconnected the device. Guided by this manual (see. Section 4), change the settings in the configuration files located on the attached microSD memory card. Insert the microSD card into the device. Observing polarity, connect the antenna to the board, external input / output devices and power supply, as shown in Figure 1. After that, apply power to the module.

ATTENTION! Connecting cards, as well as connection to the PCB antenna or external devices with the power supply can cause damage to the device!

ATTENTION! Do not connect the supply voltage to the module with antenna disconnected.

FIG.1



Designa-	Appointment
tion	
Door-	intercom module
2001	intercont module
phone unit	
GSM ant	GSM antenna with SMA connector
SIM	GSM SIM card with pre disabled PIN, 4 frequency GSM 850/900/1800/1900
211/1	MHz. network operators should be supported by broadcast time
	wittz. hetwork operators should be supported by broadcast time
MicroSD	Up to 16 GB, a pre-formatted in the FAT32 file system
LEVEL	Control the volume level
BAL-	Level control echo suppression
ANCE	
+	Contact connection intercom module
BAT	backup power supply (12V battery)
GND	Main contact
+12V	Main (mains). Supply voltage 11-14V DC. Current consumption up to 70mA
	(standby) 150mA (operation). The source should provide a short-term peak current up

	to 3 A.
IN1	Input 1 (only in the version DiTeL GSM - Apartment C). When triggered (eg fire alarm) module sends SMS text registered in the base of alarm all the numbers made to the database of phone numbers phone1 ir phone2 (see. Nr.1 table)
GND	Main contact
IN2	Input 2. Not used
OUT2	Open collector output for external devices. 100mA, 12V, controlled by sending SMS (see. Table Nr.2)
GND	Main contact
OUT1	Output relay switching is controlled by sending SMS (see. Table Nr.2)
NC	Contact relay output OUT1: normally closed
С	Contact relay output OUT1: general
NO	Contact relay output OUT1: normally open

After power briefly lights up red LED "STATUS", after about 3 seconds the module will check the memory card. In case of an error (fault or absence of the card in the slot), the red LED will start to blink constantly. In case of successful test, after about 10-20 seconds after the successful registration in the network, the module will signal solid green LED. Then, the red LED will blink three times. After another 20 seconds, if the GSM signal level exceeds 30%, the red LED signal lights steadily. The module automatically synchronizes the time over the GSM network and is ready for operation.

## 4. PROGRAMMING AND SETUP

(Table Nr.1)

Module configuration is managed through "text" files placed on a pre-formatted in FAT32 microSD memory card file system.

The file structure on the card microSD memory is as follows (see Table Nr.1.): A folder (directory, directory), the LOG (not used) and SET folder. The SET posted the directory configuration files: admin, phone1, phone2, remote1, remote2, alarm, sms, call, volume, temp. All configuration files required format originally created on the memory card with the default settings.

#### **IMPORTANT!**

- 1. While editing, creating, and restoring the database, make sure that the configuration file name extension,, text "Document ,, TXT", a file name matches exactly with the name spelled out in this document (including letter case).
- 2. All records (rows) in the configuration files should be made strictly following the data entry format prescribed in this manual and the official end newline sign ,, ENTER ".
- 3. Configuration files must be in the SET folder.

## 4.1. File "admin"

A password (a password) through which access to the management database of phone numbers **phone1 and phone2** (see. P. 4.2.) Through SMS. Control module control is carried out by means of SMS with the transaction information obtained on the telephone number registered in the base of the "admin.txt".

To create the database, create a password file (if not created) a text file «admin.txt». database format is one string with parameters:

- five characters any letters (large and small) of the Latin alphabet and numbers
- separator "semicolon"

Example entries: admin;+372454899988

IMPORTANT! The passwords in the databases managed by SMS messages (admin, remote1, remote2 and sms) to be different!

ATTENTION! Password is the password supervisor, allowing to carry out the service SMS service module. The telephone number registered in the password database admin user is not a number, and the module does not control the outputs. *The default password - " admin "* 

- the phone number in international format .:

Record sensitive.

The record length is limited to a limited number.

# 4.2. File "phone1" and "phone2"

Base phone numbers that are written phone numbers corresponding to the set (a set of keys) on the keyboard. Each of the two databases can contain up to 255 numbers. By clicking on the entry panel room apartment unit will make a phone call to a number in the **phone1** base. If the subscriber is busy or does not respond within the time specified in the call database (see. P. 4.4.), Then there is a set of corresponding numbers from the phone2 rooms (see. P. 4.2.).

To create a database of phone numbers, create a file (if not created) text files **«phone1.txt»** and **«phone2.txt»**. database format is a string with the following parameters:

- the serial number of the record (001-255)

- separation sign "colon"
- the phone number in international format

1. The number of entries in each of the databases 001 to 255.

2. Serial number of the record (cell) must be submitted in the form of a three-digit, respectively, with one or two insignificant zeros.

4.3. File "remote1" and "remote2"

A password with which to access to control the outputs OUT1 and OUT2 by sending an SMS to the module number. To control the OUT1 or OUT2 from any number should be sent to the device phone number SMS message (see. Table Nr.2), consisting of five characters for the password registered in **REMOTE1** (to control the output OUT1) or **REMOTE2** (to control the output OUT2). Controlling outputs OUT1 and OUT2 from any phone number, carried out from any phone number, send an SMS with a password assigned to the database. triggering a corresponding output time (with the right password) as prescribed in this database.

Create (if not created) text files **«remote1.txt»** and **«remote2.txt»** To create the database password files, database format is a single line with the following parameters:

- Five characters any letters (large and small), and the Latin alphabet (or) numbers
- Separating sign "colon"

Example entries: 12345:005

Example entries: 001:+37055512354 059:+37166655589 254:+95022233333

- Three numbers the response time OUT1 or OUT2 in seconds from 1 to 999 (with the correct password).
- 1. Record sensitive.
- 2. The record length in each of the databases is restricted by one password.
- 3. The response time of OUT1 or OUT2 (in seconds) should be submitted in the form of a three-digit, respectively, with one or two insignificant zeros (for example: 005).
- 4. The value of 000 translates corresponding output in monostable state, which is a key operation (opening and closing) for each event, ie, opening and closing when receiving SMS.
  - 3. The number of control rooms is not limited.

## 4.4. File "alarm"

ATTENTION! The database is only used in DiTeL GSM - Apartment C version. Using the input IN1 (self-connection) to the other versions of the device can cause damage to the device - a device warranty.

The configuration file is a text message is sent when IN1 input is triggered (eg fire alarm) (see. Figure 1). In this configuration file registers SMS text messages (up to 140 Latin characters and (or) figures), which module will send all the numbers made to the database of phone numbers **phone1** and **phone2** (see. 4.2.) When IN1 input is triggered.

To create a text message, create a configuration file (if not created) a text file «alarm.txt». The file

write text messages (up to 140 Latin characters and (or) numbers), which will be sent to the module when IN1 input is triggered.

Example entries:

Attention. Fire. Urgently go to the exit Nr.1

SMS text entered characters of the Latin alphabet (uppercase and (or) capital and (or) numbers. The length of the message is limited to 140 characters.

The record length in the database is limited to a single SMS message.

#### 4.5. File "sms"

ATTENTION! The database is only used in DiTeL GSM - Apartment C version.

A password (a password) with the aid of which the circular distribution of information by SMS of any shape (see. P. 5.10.) All numbers made to the database of phone numbers **phone1** and **phone2** (see. P. 4.2.). This password is inscribed in the beginning of the SMS message you want to send, it allows to send SMS to all numbers made to the database of phone numbers.

To create the database, create a password file (if not created) a text file «sms.txt». database format is one string with parameters:

five characters - any letters (large and small), and the Latin alphabet (or) figures.

Example entries: 77777

IMPORTANT! The passwords in the databases managed by SMS messages (admin, remote 1, remote 2 and sms) to be different!

Record sensitive.

The record length is limited to a single password.

Password entered in the expelling SMS message recipients are not displayed SMS.

# 4.6. File "call"

Base settings timeout call is answered. In this basis, prescribed time (in seconds from 5 to 30 s) during which the module will wait for a response from the subscriber is registered in the base **Phone1** (see. 4.2.). At the expiration of the set time, the unit will produce a set of numbers from **phone2** base.

Create (if not created) a text file **«call.txt»** To create a base configuration file timeout response subscriber. database format is a string with the following parameters:

- two digits (waiting time, in seconds from 5 to 30)

Example entries: 15

If the value is up to 10 seconds, then it must be present in the form of a two-digit one insignificant zero (eg 05 or 09)

IMPORTANT! Duration (time) a call (connection) with the limited party software. Installed maximum call duration is 59 seconds. This time setting can not be changed by the user. After 59 sec. communication module (intercom) with the subscriber (telephone number is registered in the base **phone1 or phone2** (see. 4.2.)) will automatically end.

## 4.7. File "volume"

Base level settings conversational signals. In this basis, the relative values of prescribed levels of loudness microphone intercom and intercom speaker.

IMPORTANT! echo cancellation and signal level is also set using the sound volume control on the module (see. Fig. 1).

To create a base configuration file level conversational signals create (if not created) a text file **«volume.txt»**. The format database consists of two rows with the following parameters:

- first line: two digits (intercom microphone level from 10 to 99)
- second row: two digits (intercom speaker level from 01 to 15)

Example entries:

25 09

If the value is up to 10 units, it must be present in the form of a two-digit one insignificant zero (eg 05 or 09).

# 4.8. File "temp"

Temporary data base. Entries in the base system (module) is automatically created. Users to edit entries in this database is not required.

## 5. REMOTE CONTROL. COMMAND.

(Table Nr.2)

## 5.1. SMS command ADD

**ADD** command adds the numbers in a database of phone numbers phone1 (base A) and phone2 (base B) (see. Table Nr.1). Rooms are added one by one. To add to the database of phone numbers the new managing phone number is required to send SMS to the unit number set format. The format is sent to the SMS module is a string with the data:

Example entries: admin;ADD;099B+37155566667 admin;ADD;001A+37155566668 IMPORTANT! 1. Write command is case-sensitive. For correct operation of SMS commands must be enabled in receiving an SMS notification only in Latin letters.

- 2. Remote control by using password protection prescribed in the database admin from any phone number, ie It can be executed from any phone number.
- 3. After sending the wrong SMS (command or password) to the module, the module sends an SMS to the sender with information about the error.
  - password registered in the base admin (see. p. 4.1.)
  - Separator "semicolon"
  - ADD command
  - Separator "semicolon"
  - Serial number of the record (001-255) (see section 4.2...)
  - Base code (A for phone1 or B for phone2) which produced a record
  - Phone number in international format.

After the command module sends an SMS about the operation produced.

IMPORTANT! When adding phone numbers, make sure that the recording made by a serial number (the corresponding cell) is not occupied by another phone number. To do this, use the INF command (see. P. 5.3.)

#### 5.2. SMS command DEL

**DEL** command removes the number from the database phone1 (base A) and phone2 (base B) (see. Table Nr.1). Rooms are removed one by one. The format is sent to the SMS module is a row with data similar to the ADD command (see. P. 5.1.), Without prescribing the phone

number in the deleted record (cell). After the command module sends an SMS about the operation produced.

Example entries: admin;DEL;020A

# 5.3. SMS command INF

Command **INF** request information inscribed in the memory (base **phone1** telephone numbers (Index **A**) and **phone2** (**B** index)) (see. Table Nr.1) telephone network control room. The format is sent to the SMS module is a string with the data:

- password registered in the base admin (see. p. 4.1.)

Example entries: admin;INF;113A

- separator "semicolon"
- INF command
- separator "semicolon"
- the serial number of the record (001-255) (see. p. 4.2.)
- the index of the requested base (A for phone1 or B for phone2)

In response, the module to the phone number of the admin database will send an SMS message to the phone number corresponding to the serial number entry (cell) (001-255) in the two databases (Index A - for phone1 and the index B - for phone2) (see section 4.2...), as well as information about the level of GSM signal.

#### 5.4. SMS command DIS

DIS Command carries off temporary software module from the intercom control. After the command module will not make calls to the numbers prescribed in the module memory. This mode allows remote control of the unit, in addition to the remote control door lock, and the output OUT1 by a phone call from the module (see. P. 5.6.-5.7.).

The format is sent to the SMS module is a string with the data:

- password registered in the base admin (see. p. 4.1.)
- separator "semicolon"
- DIS command

Example entries: admin;DIS

Example entries:

admin;ENA

After the command module sends an SMS about the operation produced. The module will continue to operate in this mode until it receives a command SMS ENA (see. P. 5.5.).

#### 5.5. SMS command ENA

ENA command includes full remote control intercom (disables temporarily disable the software module from the intercom control).

The format is sent to the SMS module is a string with the data:

- password registered in the base admin (see. p. 4.1.)
- separator "semicolon"
- ENA command

In response to the module telephone number from the database admin (see. Nr.1 table) will send an SMS message. After the command module returns to normal operation (standby).

# 5.6. lock doors Control through a phone call from the module

By clicking on the entry panel room apartment module generates a telephone call numbers (Phone1 base, an entry (see. P. 4.2.)). If the subscriber is busy or does not respond within the time set in the time-based call setup (see. Nr.1 table), the dials of the corresponding cell phone 2base (see. P. 4.2.). If a successful connection is made voice. And when you press the # key on the phone initiates activation (opening) door lock.

## 5.7. OUT1 output control via a telephone call to the module

By clicking on the entry panel room apartment module generates a telephone call numbers (Phone1 base, an entry (see. P. 4.2.)). If the subscriber is busy or does not respond within the time set in the time-based call setup (see. Nr.1 table), the dials of the corresponding cell phone2 base (see. P. 4.2.). If a successful connection is made voice. And when you press the \* key on the phone triggers the relay switching output **OUT1** (see. Fig. 1) for **2 seconds**.

## 5.8. OUT2 output control via a telephone call to the module

By clicking on the entry panel room apartment module generates a telephone call numbers (Phone1 base, an entry (see. P. 4.2.)). If the subscriber is busy or does not respond within the time set in the time-based call setup (see. Nr.1 table), the dials of the corresponding cell phone2 base (see. P. 4.2.). If a successful connection is made voice. And when you press the "0" key on the phone triggers the Open collector output switching **OUT2** (see. Fig. 1) for **2 seconds**.

# 5.9. OUT1 output management by sending an SMS to the module number

SMS with a password to register in based remote1 (see. P. 4.3.) From any phone number triggers the output relay switching OUT1 (see. Fig. 1) at the time prescribed in the database remote1 (see. Table Nr.1). To control OUT1 should be sent to the SMS device phone number (see. Table Nr.2), consisting of five marks registered in a password-based Example entries: REMOTE1. After the command module sends an SMS about the operation.

12345

# 5.10. OUT2 output management by sending an SMS to the module number

SMS with a password to register in based **remote2** (see. P. 4.3.) From any phone number initiates the **OUT2** output operation (see. Fig. 1) at the time prescribed in the database **remote2** (see. Table Nr.1). To control **OUT2** should be sent to the device phone number SMS message (see. Table Nr.2), consisting of five characters for the password registered in the base **remote2**. The module receiving the correct password, the Open collector output for connecting external devices (OUT2) will give a constant current 100mA, 12V (see. Figure 1). After the

Example entries: 54321

## 5.11. Circular sending SMS messages to all numbers all made to the database of phone numbers

ATTENTION! Command used only DiTeL GSM - Apartment C version.

News SMS freeform all numbers made to the database of phone numbers and **phone1 and phone2** (see. P. 4.2.) Can be sent (sent) **from any phone number**, send an SMS to the subscriber number of the module with a password (see. Table Nr.2). The broadcast information by SMS is carried out by means of incorporating in the beginning (before the text) SMS message you want to send, the password is registered in passwords the-based **sms**(see. P. 4.5.).

SMS messages sent in this format (no password), all subscribers will receive a prescription in the databases of telephone numbers **phone1 and phone2** (see. Table Nr.1).

command module sends an SMS about the operation.

Example entries:

77777meeting of tenants will be today.

#### **IMPORTANT!**

- 1. SMS password must be entered without spaces in compliance with the letter case.
- 2. SMS password entered in the beginning, before the text is sent to the SMS module messages are not sent to final recipients.
  - 3. The maximum length of an SMS message is limited to a mobile operator.

# **EQUIPMENT AND WARRANTY**

**Packaging unit:** GSM module for intercoms DiTeL GSM - Apartment (without power supply and intercom), GSM antenna, microSD memory card (4GB).

**GSM** module for intercom DiTeL GSM - Apartment is a product of CJSC DIGITALas® JSC DIGITALas this product provides a guarantee for 24 months.

ATTENTION! When using the unit for other purposes, as well as non-compliance with this instruction manual, warranty does not cover.

**Table Nr.1 System Configuration. Configuration files.** 

The file in the memory card	Format	Appointment	Record format	Example of a record	Note
SET	folder	The main folder for configuration files (settings) admin, phone1, phone2, remote 1, remote2, alarm, sms, call, volume, temp	Pre-create a folder in the root directory	SET	All configuration files previously created in the "text" file format (.txt extension)
LOG	folder	Folder for storing logs (history) event	Pre-create a folder in the root directory	LOG	Not used
admin	TXT Format file database of password s	A password (a password) through which access to the management database of phone numbers <b>phone1</b> and <b>phone2</b> (see. P. 4.2.) Through SMS. Control module control is carried out by means of SMS with the transaction information obtained on the telephone number registered in the given base.  IMPORTANT! The passwords in the databases managed by SMS messages (admin, remote1, remote2 and sms) to be DIFFERENT!	and small) of the Latin alphabet and numbers ( <i>default - ,, admin ''</i> )		Password is the password supervisor, allowing to carry out the service SMS service module.  The record length is limited to a limited number.  Record sensitive.
phone1	TXT Format file database of phone numbers	First base of telephone numbers which are written phone numbers corresponding to the keys typing (phone numbers <b>dialed first</b> when you press the intercom button). By clicking on the entry panel room apartment unit will make a phone call to a number in the <b>phone1</b> base. If the subscriber is busy or does not respond within the time specified in the <b>call</b> database (see. P. 4.4.), Then there is a set of corresponding numbers from the <b>phone2</b> rooms (see. P. 4.2.).	<ul><li>Separating sign "colon"</li><li>Phone number in international format</li></ul>	54	Number of records from 001 to 255 (Base may contain may contain up to 255 rooms). The sequence number of the record (cell) must be submitted in the form of a three-digit, respectively, with one or two insignificant zeros.
phone2	TXT Format file database of phone numbers	Second base of telephone numbers which are written phone numbers corresponding to the keys typing (phone numbers dialed module by pressing the intercom button if the subscriber does not answer from phone1). Features and purpose: see the information on the basis of phone1.	phone1	look. information on the basis of phone1	
remote1	TXT Format file database of password	A password with which to access to management OUT1 output by sending an SMS to the module number. For OUT1 control any number should be sent to (see. Table Nr.2) SMS device phone number, consisting of five characters for the password registered in this database. The response time of OUT1 output (with the right password) as prescribed in this	small), and the Latin alphabet (or) numbers - Separating sign "colon" - Three numbers - OUT1 response time	12345:005	The record length is limited to a single password.  The response time of OUT1 (in seconds) should be submitted in the form of a three-digit, respectively, with one or two insignificant zeros.

	S	database. Control output OUT1 is the number of independent, carried out from any phone number, send an SMS with a password. The number of control rooms is not limited. IMPORTANT! The passwords in the databases managed by SMS messages (admin, remote1, remote2 and sms) to be DIFFERENT!	password)		The value of 000 translates corresponding output in mono stable state, that causes the key actuation (opening and closing) for each event, ie, opening and closing when receiving SMS.
remote2	TXT Format file database of password s	A password with which to access to management OUT2 output by sending an SMS to the module number.  The number of passwords and purpose: see the information on the basis of remote1  IMPORTANT! The passwords in the databases managed by SMS messages (admin, remote1, remote2 and sms) to be DIFFERENT!	iı	ooking nformation based on <b>remote1</b>	looking information based on <b>remote</b> 1
alarm	TXT Format file SMS Configura tion File	SMS configuration file is sent to all the numbers made to the database of phone numbers <b>phone1</b> and <b>phone2</b> (see. 4.2.) When IN1 input is triggered (see. Figure 1). In this basis, prescribed text SMS messages.  ATTENTION! The database is only used in DiTeL GSM - Apartment C version. Using the input IN1 (self-connection) to the other versions of the device can cause damage to the device - a device warranty.	characters of the Latin alphabet U	Urgently go to	The record length is limited to one SMS message to 140 characters.
volume	TXT Format file	Base level settings conversational signals. In this basis, the relative values of prescribed levels of loudness microphone intercom and intercom speaker.  IMPORTANT! The signal level and echo cancellation as set using the sound volume control on the module (see. Fig. 1).	microphone level from 10 to 99) - Second line: two digits (intercom	9 (Second line)	If the value is up to 10 units, it must be present in the form of a two-digit one insignificant zero (eg 05 or 09)
sms	TXT Format file database of password s	A password (a password) with the aid of which the circular sending SMS arbitrary shape (see. Table Nr.2) all numbers made to the database of phone numbers <b>phone1</b> and <b>phone2</b> (see. P. 4.2.). This password is inscribed in the beginning of the SMS message you want to send, it allows to send SMS to all numbers made to the database of phone numbers.  ATTENTION! The database is only used in DiTeL GSM - Apartment C version.  IMPORTANT! The passwords in the databases managed by SMS	small), and the Latin alphabet (or)		The record length is limited to a single password.  Password entered in the expelling SMS message recipients are not displayed SMS.

		messages (admin, remote1, remote2 and sms) to be DIFFERENT!		
call	TXT Format file database time settings	Base settings timeout call is answered. In this basis, prescribed time (in seconds from 5 to 30 s) during which the module will wait for a response from the subscriber is registered in the base <b>Phone1</b> (see. 4.2.). At the expiration of the set time, the unit will produce a set of numbers from <b>phone2</b> base.  IMPORTANT! Duration (time) a call (connection) with the limited party software. Installed maximum call duration is 59 seconds. This time setting can not be changed by the user. After 59 sec. communication module (intercom) with the subscriber (telephone number is registered in the base or phone1 <b>phone2</b> (see. 4.2.)) will automatically end.	from 5 to 30)Users to edit entries in this database is not required.	If the value is up to 10 seconds, then it must be present in the form of a two-digit one insignificant zero (eg 05 or 09)
temp	Time Data Base	Temporary data base.	Users to edit entries in this database is not required.	Entries in the base system (module) is automatically created.

# **Important!**

- 1. All the configuration files are originally created on the memory card.
- 2. When editing, creating, and restoring the database, make sure that the configuration file name extension, text "Document ,, TXT", and the names correspond exactly spelled out in the following table (including letter case).
- 3. All the records (rows) in the configuration files should be made strictly following the data entry format prescribed in this manual and the official end newline sign "ENTER". Entries in the configuration files are case-sensitive.
- 4. Configuration files must be in the **SET** folder.

Table Nr.2. Remote control. commands.

$Command^1 \\$	Appointment	Record format <sup>2</sup>	Example entries	Note
ADD	Adds the numbers in the database of telephone numbers <b>phone1</b> (base A) and <b>phone2</b> (base B) (see. Table Nr.1).  A - base index <b>phone1</b> B - base index <b>phone2</b> Important! When adding phone numbers, make sure that the recording made by a serial number (the corresponding cell) is not occupied by another phone number. To do this, use the <b>INF</b> command (see. P. 5.3.)	<ul> <li>4.1)</li> <li>Separator "semicolon"</li> <li>ADD command</li> <li>Separator "semicolon"</li> <li>Serial number of the record (001-255) (see section 4.2)</li> <li>Base code (A - for phone1 or B - for phone2)</li> </ul>	6667 admin;ADD;001A+3715556 6668	SMS in this format will be sent <b>to any phone number</b> (see. Point 4.1.) On the module number. Rooms are added one by one. After the command module sends an SMS about the operation produced.
DEL	Removes a number from <b>phone1</b> database (database A) and <b>phone2</b> (base B) (see. Nr.1 table)  A - base index <b>phone1</b> B - base index <b>phone2</b>			Rooms are removed one by one. After the command module sends an SMS about the operation produced.
INF	Information request about the command entered in the memory (database of phone numbers and <b>phone1 phone2</b> ) (see. Table Nr.1) telephone network control room.  A - base index <b>phone1</b> B - base index <b>phone2</b>	section 4.1)		In response to the module telephone number from the database <b>admin</b> (see. Table Nr.1) will send an SMS message to the phone number corresponding to the serial number entry (cell) (001-255) in the two databases (see. P. 4.2.), As well same information about the level of GSM signal.  - Serial number of the record (001-255) (see section 4.2.)
DIS	Provides temporary shutdown software module from the intercom control. After the command module will not make calls to the numbers prescribed in the module memory. This mode	section 4.1) - Separator "semicolon"	admin;DIS	In response to the module telephone number from the database <b>admin</b> (see. Nr.1 table) will send an SMS message generated by the operation

Recording commands sensitive to letter case.
 Follow the correct procedure for entering characters. All characters are required.

	allows remote control of the unit, in addition to the remote control door lock, and the output OUT1 by a phone call from the module (see. P. 5.65.7.)			The module will continue to operate in this mode until it receives a command SMS ENA (see. P. 5.5.).
ENA	<b>ENA</b> command includes full remote control intercom (disables temporarily disable the software module from the intercom control).	- Password registered in the base admin (see section 4.1) - Separator "semicolon" - ENA command	admin;ENA	In response to the module telephone number from the database <b>admin</b> (see. Nr.1 table) will send an SMS message generated by the operation .
lock doors Control through a phone call from the module	lock doors Control through a phone call from the module: during communication by pressing # on the control handset.  Time (duration) Response software is installed in the intercom.	panel room apartment) to control phone number - during communication by pressing # on the	handset	By clicking on the entry panel room apartment module generates a telephone call numbers ( <b>Phone1</b> base, an entry (see. P. 4.2.)). If the subscriber is busy or does not respond within the time set in the time-based <b>call</b> setup (see. Table Nr.1), the dials of the corresponding cell <b>phone2</b> base. If a successful connection is made voice. And when you press the # key on the phone initiates activation (opening) door lock.
phone call	Management first relay switching output <b>OUT</b> 1 (see Figure 1) By means of a telephone call <b>from the module</b> : during communication by pressing * on the host phone.  Time (duration) Operating software installed and is 2 seconds.	panel room apartment) to control phone number - during communication by pressing * on the host phone	handset	By clicking on the entry panel room apartment module generates a telephone call numbers ( <b>Phone1</b> base, an entry (see. P. 4.2.)). If the subscriber is busy or does not respond within the time set in the time-based <b>call</b> setup (see. Nr.1 table), the dials of the corresponding cell <b>phone2</b> base (see. P. 4.2.). If a successful connection is made voice. And when you press the *key on the phone initiates a switching operation of the relay output <b>OUT1</b> .
OUT1 output managemen t by sending an SMS to the module number	Management first relay switching output <b>OUT1</b> (see. Fig. 1) by sending an <b>SMS to the module number.</b> To control the output OUT1 should be sent to the device phone number SMS message consisting of a five-character password registered in the base <b>remote1</b> (see. Table Nr.1).	- Password registered in the base <b>remote1</b> (5 characters, case sensitive) (see Table Nr.1.) Sent from any phone number	12345	SMS with a password to register in based <b>remote1</b> (see. P. 4.3.) From <b>any phone number</b> triggers the output relay switching <b>OUT1</b> (see. Fig. 1) at the time prescribed in the database remote1 (see. Table Nr.1). After the command module sends an SMS about the operation produced.

phone call	Management first relay switching output <b>OUT2</b> (see Figure 1) By means of a telephone call <b>from the module</b> : during communication by pressing <b>0</b> on the host phone.  Time (duration) Operating software installed and is 2 seconds.	panel room apartment) to control phone number	handset	By clicking on the entry panel room apartment module generates a telephone call numbers ( <b>Phone1</b> base, an entry (see. P. 4.2.)). If the subscriber is busy or does not respond within the time set in the time-based <b>call</b> setup (see. Nr.1 table), the dials of the corresponding cell <b>phone2</b> base (see. P. 4.2.). If a successful connection is made voice. And when you press the <b>0</b> key on the phone initiates a switching operation of the output <b>OUT2</b>
OUT2 output managemen t by sending an SMS to the module number	to the device phone number SMS message consisting of a five-character password registered	characters, case sensitive) (see Table Nr.1.) Sent from any phone number		SMS with a password to register in based <b>remote2</b> (see. P. 4.3.) From <b>any phone number</b> initiates the OUT2 output operation (see. Fig. 1) at the time prescribed in the database <b>remote2</b> (see. Table Nr.1).  After the command module sends an SMS about the operation produced.
The broadcast SMS message	Circular sending SMS information to all forms of arbitrary numbers made to the database of phone numbers <b>phone1</b> and <b>phone2</b> (see. Table Nr.1). SMS Distribution is carried out by means of incorporating in the beginning (before the text) are sent SMS messages, password, prescribed in the database sms password (see. P. 4.5.). ATTENTION! This command is used only in the version DiTeL GSM - Apartment C. Important! SMS password entered in the beginning, before the text is sent to the SMS module messages are not sent to final recipients.	- Password registered in the base sms (5 characters, with no spaces in compliance with the letter case) - SMS message of any form (the maximum length of an SMS message is limited to the mobile operator)	tenants will be 5 hours.	SMS can be sent (sent) from any phone number, send the number to the subscriber module SMS with a password.  SMS messages sent in this format (no password), all subscribers will receive a prescription in the databases of telephone numbers phone1 and phone2 (see. Table Nr.1).

# Important! 1. Write command is case-sensitive.

- 2. Ensure that the command is entered in the prescribed format.
- 3. For correct operation of SMS commands must be enabled in receiving an SMS notification only in Latin letters.
- 4. Remote control by using password protection prescribed in the database admin from any phone number. It can be executed from any phone number.
- 5. After sending the wrong SMS (command or password) to the module, the module sends an SMS to the sender with information about the error.

#### PROGRAMMING AND SETTINGS

(Table No.1)

The module settings are stored in the configuration, in text files on MicroSD card.

MicroSD card must be formatted with the FAT32 file system.

MicroSD memory card is (made up by the manufacturer) this file structure (see Table No.1) folders (directories) PROGRAM SET LOG module configuration program DiTeL GSM executable file identification and file TXT representing the GSM module type.

SET folder to place the module settings, configuration files, and LOG folder – the module automaticaly creates events database (if provided) (see. Appendix No3. Manual Configuration). Applications folder stored DiTeLGSM programs create files: Instruction Module settings backup, the user's phone book.

CAUTION! 1. All the configuration files with the default settings are pre-create the folder on the memory card SET.

- 2. All of the program files to the default settings are pre-create folder on the memory card PROGRAM.
- 3. Module ID file, TXT format is pre-created on the memory card and meets the configurable module type.

# 4.1. Configuration program help

To configure the module settings Insert the supplied MicroSD card into the PC card slot and the card run the module configuration program DiTeLGSM (hereinafter - program). The program is structured so that the user consistent steps and not difficult to configure all the settings of the module in order to explore the full capabilities of the device. Each step of the configuration changes made to verify the correctness of the program and will alert you if you enter data does not match the format. This avoids errors and the module will work without problems.

IMPORTANT! 1. Modue configuration program DiTeLGSM only works in the Windows environment.

- 2. Only the MicroSD card running a program works directly with the MicroSD card with the configuration file to be used in management module.
- 3. When configuring the module settings with special attention to the program lobular messages and data entry marked in red.
- 4. The red-marked fields (records), whitch data is entered incorrectly, the wrong format or excess (insufficient), so they will not scan module and the corresponding module will not function properly.

In the absence of access to DiTeLGSM program, use your computer (phone or tablet) in-line text file editor, follow these instructions Supplement No.3 accordance with the procedure (see. Appendix No.3. Manual Configuration)

Opens the program window, select the program language. The program primary window also have ability to directly select (create) the phone adress book, view the module triggers (events), history (if provided), check the version of the program, and view the manufacturer's contact information. After selecting the name of configurable module (module automatically determines the type of program), you get into your module configuration environment.

In the initial step, provided the work with module settings reserve copies (can be saved (restored) on a computer), the factory settings of the device description (instruction). Clicking "Configure" takes you to the admin (see. Table No.1) setup configuration step, while pushing "forward" button to consistently create your module settings. Program steps names of the SET folder configuration files (databases). (Refer to Table 1) Steps windows of the brief information about the edited data in the database. Each step of program will check the format of entires and if unauthorized format – will inform the user. The configuration at the end of the fall "summary" window, where you can see all the module configuration data (erroneus data will be highlighted in red font). Pressing "Save" the program once again boils down to check the data and save the settings. Saving settings, the program automatically creates a backup copy of them.

Erred appropriate steps to have the ability to restore the edited database settings. You can skip the configuration steps, but missed steps in the data will not be checked. You can also go directly to the "Synthesis" the manual editing mode (set "check mark next to corresponding descriptions), but this way, you will not see the database descriptions, and only the data in the format in whitch they are stored on the device.

IMPORTANT!: When configuring the module DiTeLGSM program can help to deal with the three levels of importance of the program reports:

**Information** – information on data affecting the management module.

**Warning** – warnings on the incorrect data format or incompatible data – the module will not scan (scans correctly) and the corresponding module will not function properly.

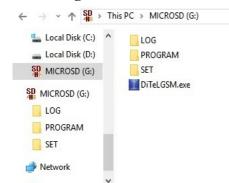
**Error** – critical error affecting the operation of the module and may dabage the device. The program will not go to the next step without error aside.

Pressing "Save" program saves files in the configuration module in the proper format and will report on the success of the operation. Module configuration is complete. Remove the card from the computer and connect the module. (see instructions section3.).

# 4.2. Emergency reset (MicroSD card contents reversal)

If the MicroSD card or the data on the damage (erased) or become unreadable pick up new or old the MicroSD card to the FAT32 file system. Download site format from http://www.digitalas.lt/en/product-category/gsm-controls/ditel-gsm-control-unit/ archived DiTeLGSM program, save to your computer and extract the MicroSD card (unarchived program must be root card, see Figure. 2).

Figure.2



Insert the MicroSD card into the module and turn on the unit by following these instructions. (See instructions Section 3), module, tetects card error and the module will automatically create an identification file.

Turn oof the device, insert the MicroSD card in to PC card slot and the card run the module configuration program DiTeLGSM.

The initia step in the program (see. 4.1.p) restore saved in the computer module configuration backup copy or, if you do not have a backup, do the configuration by following these instructions.

CAUTION! Module ID "TXT" format module creates (check) automatically after connecting module (see. 3.p. Instructions) and turning on power source.





