EasyGate Pro & Lift1 multiconnection

2N® EasyGate Pro with multiple 2N® Lift1

Product description

Version 1.0

www.2n.cz
1.1 EasyGate PRO multiconnection to Lift1

Functional description

EasyGate PRO together with 2N® Single Talk Line Switch (ordering number 913655SF) can be connected up to three Lift1 communication units. The EasyGate PRO must be equipped with the special license for this purpose, which can be bought from 2N under ordering number 5013902LE.

The principle of the function is following:
The outgoing call from Lift1 is handled by Line Switch to the EasyGate, the call is connected the same way as for single user configuration. When the call is in progress, other connected Lift1 units can’t be used. This is managed by Line Switch.
The incoming call is picked up by the EasyGate, the EasyGate gives the confirmation tone and waits for 10 seconds for DTMF signal (1, 2 or 3) to select which of the Lift1 units should be connected. When the signal is not received, unit 1 will be connected.
The selection of the Lift1 unit is done by ring pattern. The communicator Lift1 must be set to accept ring pattern according to the position:

<table>
<thead>
<tr>
<th>Position</th>
<th>Ring Pattern</th>
<th>L1 settings of par.952 (Min. ring tone long space time)</th>
<th>L1 settings of par.953 (Max. ring tone long space time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 s ring, 4 s space</td>
<td>3500 ms</td>
<td>4500 ms</td>
</tr>
<tr>
<td>2</td>
<td>1 s ring, 2 s space</td>
<td>1500 ms</td>
<td>2500 ms</td>
</tr>
<tr>
<td>3</td>
<td>1 s ring, 3 s space</td>
<td>2500 ms</td>
<td>3500 ms</td>
</tr>
</tbody>
</table>

EasyGate PRO settings

The license number has 8 characters unique for each gateway, which must be supplied by 2N. The license can be loaded to the EasyGate by SMS or by DTMF programming. The parameter for License loading is 66.
The function can be switched ON or OFF by parameter 966. At the moment this parameter is not accessible by EasyGate PRO programming tool for PC (PCManager UNI). The settings must be done by SMS or by DTMF programming.
The default value for the programming keyword is 12345. For instance let’s expect that license number is 98765432. Than the SMS for loading license and enabling multiconnection will look like:

EG CNF 12345 66=98765432 966=1
The response will be:

EG.CNF OK  
command confirmation
SN:xx-xxxx-xxxx  
serial number
FW:18.7.15  
FW version
LIC:Y  
License loaded – new value
IMEI:xxxxxxxxxxxxxxx  
IMEI
IMSI:xxxxxxxxxxxxxxx  
IMSI
LAI:230;01;Home;2G  
Network number, home network, technology 2G
RSSI:-65dBm  
Strength of signal
PWR:On  
Power present
BATT:OK  
Battery status

The presence of the license can be tested by SMS:

EG INF 12345
The response will be the same

The local DTMF setting will be done by this setup:

12345*66*98765432*966*1*

### Lift1 settings

The values for ring pattern of Lift1 to select the position of Lift1 (1/2/3) can be done manually according the table above (parameters 952 and 953) or automatically by EasyGate and SMS programming. There is a new command for Lift1 programming “RNG“. This command sets the parameters 952 and 953 from the default value 952=100 and 953=6000. The Lift1 number 1 must be set as the last one, which is sensitive to the standard ring signal (1s/4s). The recommended proceeding is:

1. Connect unit 3 and send SMS: L1.3 RNG12345 (Lift1 will be set to 952=2500, 953=3500)
2. Add unit 2 and send SMS: L1.2 RNG12345 (Lift1 will be set to 952=1500, 953=2500)
3. Add unit 1 and send SMS: L1.1 RNG12345 (Lift1 will be set to 952=3500, 953=4500)

After this setting the incoming call to EasyGate can be directed to the Lift1 by DTMF 1, 2 or 3 as described in the beginning.

With this setting the SMS programming of Lift1 over EasyGate can be done by selecting Lift1 in SMS by selector dot and 1,2,3 in the beginning of the SMS. The SMS programming is described in the chapter 1.3 Lift1 SMS Programming over EasyGate PRO. For example the settings of parameter 974 – Intercom identification number - to value 5555, default password 12345, Lift1 position 2 will be done by SMS:

L1.2 CNF 12345 974=5555

The Lift1 can be set back to the standard ring pattern, only one Lift1 must be connected to the EasyGate. The command L1 RNG 12345 will try all ring cadencies till the Lift1 picks up the line, than it is programmed to default values (952=1000, 953=6000).
1.2 EasyGate PRO SMS programming

**SMS format for EasyGate PRO**

The SMS format for EasyGate PRO setting is:

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG CNF</td>
<td>Parameter configuration</td>
</tr>
<tr>
<td>password</td>
<td>parameter 1=value1 parameter 2=value2</td>
</tr>
<tr>
<td>EG DEF</td>
<td>Factory default setting</td>
</tr>
<tr>
<td>password</td>
<td></td>
</tr>
<tr>
<td>EG RST</td>
<td>Restart</td>
</tr>
<tr>
<td>password</td>
<td></td>
</tr>
<tr>
<td>EG INF</td>
<td>Send back information SMS only</td>
</tr>
<tr>
<td>password</td>
<td></td>
</tr>
</tbody>
</table>

The separation characters are space.
The maximal length of SMS is 160 characters for 7-bit SMS, 140 characters for 8bit SMS.
Multiple SMS are not permitted.
Any number of parameters can be programmed in one SMS, the maximal length of SMS must be kept.
Different functions (CNF, DEF, RST, INF) can´t be combined in one SMS
Parameters 603 (SMS) and 706 (APN) must be in apostrophes (’)

- **password** The programming menu password for EasyGate, factory default is 12345
- **parameter** Parameter number to be changed
- **value** New value of the parameter

**EasyGate PRO responses**

Possible responses are:

<table>
<thead>
<tr>
<th>Response</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG CNF OK</td>
<td>correct setting</td>
</tr>
<tr>
<td>information data</td>
<td></td>
</tr>
<tr>
<td>EG DEF OK</td>
<td>correct default setting</td>
</tr>
<tr>
<td>information data</td>
<td></td>
</tr>
<tr>
<td>EG RST OK</td>
<td>correct reset</td>
</tr>
<tr>
<td>information data</td>
<td></td>
</tr>
<tr>
<td>EG INF</td>
<td>information SMS</td>
</tr>
<tr>
<td>information data</td>
<td></td>
</tr>
<tr>
<td>EG ERR Invalid Message</td>
<td>incorrect header EG</td>
</tr>
<tr>
<td>EG ERR Unknown Command</td>
<td>incorrect function CNF, DEF, RST, INF</td>
</tr>
<tr>
<td>EG ERR Invalid Password</td>
<td>incorrect password for EasyGate</td>
</tr>
<tr>
<td>EG ERR Invalid Parameters</td>
<td>incorrect parameter number</td>
</tr>
<tr>
<td>EG ERR Invalid Syntax</td>
<td>incorrect characters space or =, additional characters</td>
</tr>
</tbody>
</table>
**Information data structure**

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SN:xx-xxxx-xxxx</td>
<td>serial number</td>
</tr>
<tr>
<td>FW:18.7.15</td>
<td>FW version</td>
</tr>
<tr>
<td>LIC:Y</td>
<td>Multi L1 license loaded</td>
</tr>
<tr>
<td>IMEI:xxxxxxxxxxxxxxx</td>
<td>IMEI</td>
</tr>
<tr>
<td>IMSI:xxxxxxxxxxxxxxx</td>
<td>IMSI</td>
</tr>
<tr>
<td>LAI:230;01;Home;2G</td>
<td>Network number, home network, technology 2G</td>
</tr>
<tr>
<td>RSSI:-65dBm</td>
<td>Strength of signal</td>
</tr>
<tr>
<td>PWR:On</td>
<td>Power present</td>
</tr>
<tr>
<td>BATT:OK</td>
<td>Battery status</td>
</tr>
</tbody>
</table>

**Examples**

**Example 1:**
Setting of parameter 702 – Roaming enable, default password 12345
L1 CNF 12345 702=1

**Example 2:**
Selecting parameter 603 – SMS text, default password 12345
L1 CNF 12345 603=’Text for SMS’
1.3 Lift1 SMS programming over EasyGate PRO

SMS format for Lift1 programming

The SMS format for Lift1 setting is:

- **L1 CNF** password parameter1=value1 parameter2=value2  Parameter configuration
- **L1 DEF** password  Factory default setting (profile1)
- **L1 SET** password n  Select profile number n
- **L1 RST** password  Restart

The separation characters are space.

The maximal length of SMS is 160 characters for 7-bit SMS, 140 characters for 8-bit SMS.

Multiple SMS are not permitted.

Any number of parameters can be programmed in one SMS, the maximal length of SMS must be kept.

Different functions (CNF, DEF, SET, RST) can’t be combined in one SMS.

password  The programming menu password for Lift1, factory default is 12345
parameter  Parameter number to be changed
value  New value of the parameter
n  Number of profile, the highest value depends on number of programmed profiles, the highest possible profile number is 9

Possible responses are:

- **L1 CNF OK**  correct setting
- **L1 ERR Invalid Message**  incorrect header L1
- **L1 ERR Unknown Command**  incorrect function CNF, DEF, SET, RST
- **L1 ERR Invalid Password**  incorrect password for Lift1
- **L1 ERR Invalid Parameters**  incorrect parameter number
- **L1 ERR Invalid Syntax**  incorrect characters space or =, additional characters
- **L1 ERR Does not Respond**  Lift1 didn’t hook off the configuration call for 60 s of ringing
  - Lift1 didn’t accept CPC programming mode
  - Lift1 handled the CPC procedures with error
  - Lift1 hooked on during programming
Example 1:
Setting of parameter 974 – Intercom identification number to value 5555, default password 12345
L1 CNF 12345 974=5555

Example 2:
Selecting profile 2, default password 12345
L1 SET 12345 2

Additional commands for FW version 2.0.0 and higher

Function INFO, SMS format is:
L1 INF password
password The programming menu password for Lift1, factory default is 12345

Possible responses are:
L1 INF Serial_number HW_verze Custom_modification Bootloader_version FW_version VM_info
L1 ERR Unknown Command – EasyGate old version, command not supported
L1 INF N/A 1.x.x.x.x N/A N/A N/A – Lift1 old version, command not supported

The Lift1 version 2 has some differences in parameters, than is necessary to be able to find version of the communicator prior to programming procedure

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