

iCE-Entry-R

COMPACT GSM DOOR ENTRY UNIT



INSTALLATION MANUAL

Transmitter  **SOLUTIONS**®

Contents

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1 FOR YOUR SAFETY

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete user guide for further information.

SWITCH ON SAFELY

Do not switch the unit on when use of wireless phone is prohibited or when it may cause interference or danger.

INTERFERENCE

All wireless phones and units may be susceptible to interference, which could affect performance.

SWITCH OFF IN HOSPITALS

Follow any restrictions. Switch the unit off near medical equipment.

SWITCH OFF IN AIRCRAFT

Follow any restrictions. Wireless devices can cause interference in aircraft.

SWITCH OFF WHEN REFUELING

Do not use the unit at a refueling point. Do not use near fuel or chemicals.

SWITCH OFF NEAR BLASTING

Follow any restrictions. Do not use the unit where blasting is in progress.

USE SENSIBLY

Use only in the normal position as explained in the product documentation. Do not touch the antenna unnecessarily.

2 INTRODUCTION

ICE-ENTRY-R is a simple GSM intercom communication system that is designed to ensure low-cost, reliable and single box solution for intercom application. It is designed for unlimited range, wire free GSM intercom and CLIP support.

In addition ICE-ENTRY-R supports alarm detection, stay-alive messages, credit detection etc...

3 FEATURES AND APPLICATIONS

Features:

- ⇒ Built-in 4 band GSM module
- ⇒ Up-to 4 buttons call support
- ⇒ 2 alarm inputs, 2 additional on extension connector
- ⇒ 2 outputs (relay supported)
- ⇒ Up to 100 telephone numbers for CLIP support
- ⇒ Programming by USB cable
- ⇒ Programming by SMS commands
- ⇒ Anti-tampering input

Applications:

- ⇒ Single box, wire free intercom solution
- ⇒ Remote gate opener (CLIP)
- ⇒ Simple alarm support

4 START UP

**VERY
IMPORTANT**

USE A MICRO SIM CARD (micro-SIM, see the picture-) WITH MEMORY FOR UP TO 250 CONTACTS!



⇒ Insert SIM card to be used for ICE-ENTRY-R in your personal mobile phone.

IMPORTANT

ERASE THE PIN CODE!

- ⇒ Insert SIM card in ICE-ENTRY-R device. The unit must be switched OFF when you insert the SIM!
- ⇒ Connect inputs and outputs to ICE-ENTRY-R.
- ⇒ Connect the antenna to antenna connector.
- ⇒ Connect power cable to ICE-ENTRY-R device
- ⇒ Connect device to source power supply voltage.
- ⇒ Wait until LED3 display is turned ON (green) and LED1 (blue) starts flashing. This is set in around 1 minute.
- ⇒ ICE-ENTRY-R unit is now ready to operate.

IMPORTANT

Before sending any SMS commands to ICE-ENTRY-R device, ICE-ENTRY-R must be in normal operation!

NOTE

ICE-ENTRY-R device will “beep” in 15s interval until the device is not in normal operation.

5 LED DISPLAY

GREEN LED (LED1)

- Indicates the level of the GSM signal from 1 to 5 LED flashes (1 is weak signal, 5 is excellent signal)

Red LED (LED2)

- When LED 2 is ON the unit has a problem with a GSM network connection or the GSM part of the unit is out of order. In this case immediately call the service!

Yellow LED (LED3)

- Short flashing indicates that the GSM module is ON, but it is not yet connected on the GSM network. After connection, yellow led is flashing with short pulse ON and a long pulse OFF.

6 CLEAR ALL PROGRAMMED DATA FROM SIM

This is highly recommended when a SIM card you are going to use for the ICE-ENTRY-R is not new and it already has some data stored in the phone book memory.

By sending this SMS to ICE-ENTRY-R all programmed parameters and numbers are cleared:

;SDCLR;

After sending SMS you should wait at least 60 second for the command to be executed!

NOTE

By sending this command to the ICE-ENTRY-R all programmed data are erased from the SIM card, including SMS messages! After the device will start it will be configured with factory defaults.

7 CONNECTION DIAGRAM

Before connection the ICE-ENTRY-R please take a look at connection diagram.

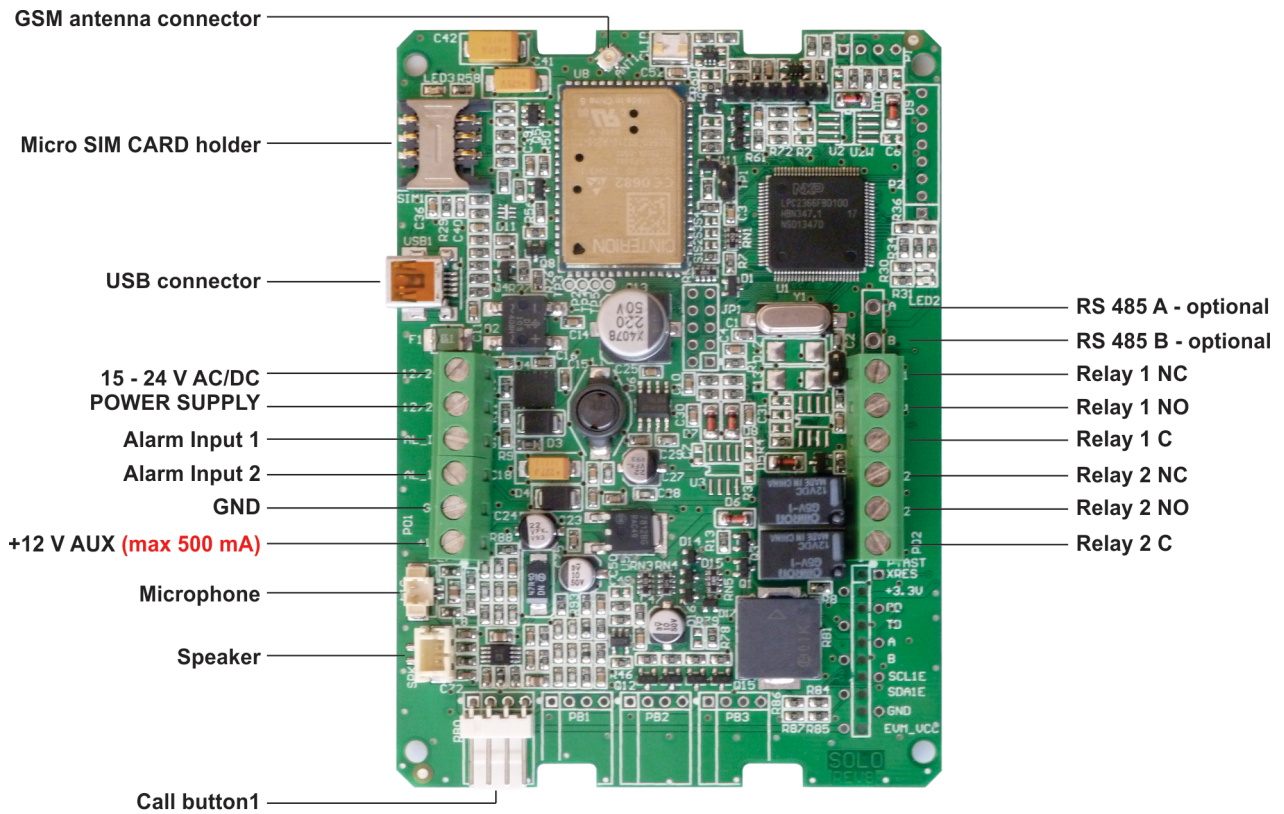


Figure 1: ICE-ENTRY-R Connection diagram

8 PROGRAMMING ICE-ENTRY-R

ICE-ENTRY-R device supports different types of programming:

- ⇒ To program ICE-ENTRY-R parameters put the SIM card into your personal GSM phone. Add programming parameters in **SIM Card “Phone Book”**.
- ⇒ You can program ICE-ENTRY-R remotely by SMS command.
- ⇒ You can program ICE-ENTRY-R with USB key and SIM manager.
- ⇒ You can program ICE-ENTRY-R with direct USB connection, with the use of configuration software running on PC

NOTE

To receive configuration software for PC please contact your local distributor.

9 THE ICE-ENTRY-R PARAMETERS

To support versatile functionality of ICE-ENTRY-R different parameters are used. The parameters are divided in logical sections and are described in the following chapters.

9.1 ALARM SUPPORT

Alarm reporting is supported by group of different parameters. First section is used to define the relations needed for alarm to be triggered. The second section is used to report alarm.

9.1.1 ALARM TRIGGERING

Parameters are used to control (filter) the triggering of the alarm inputs.

9.1.1.1 IN parameter

Alarm input can be on only used as normal open (N.O.) triggered with GND. When you need the input feedback information it is possible to receive SMS when input returns from alarm to normal position. To receive the return SMS use IN setting 4.

- ⇒ IN = 0 – Normal Open – triggered with negative voltage (GND)
- ⇒ IN = 4 = IN = 0 + input reset SMS

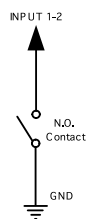


Figure 2: Input Connection diagram.

9.1.1.2 ID parameter

ID parameter determines time period of the pulse length to trigger the alarm. The pulse time can be from 0,5 seconds to 9999 seconds. The default time is 0,5 seconds when the parameter value is 0.

9.1.1.3 DD parameter

This parameter is used to define the delay between the time that alarm input is triggered and the time that alarm is reported.

9.1.1.4 Table of parameters

| Name | Comment |
|------|---|
| IN1 | Mode of operation for input 1 |
| IN2 | Mode of operation for input 2 |
| IN3 | Mode of operation for input 3 |
| IN4 | Mode of operation for input 4 |
| ID1 | Input time integration delay on input 1 |
| ID2 | Input time integration delay on input 2 |
| ID3 | Input time integration delay on input 3 |
| ID4 | Input time integration delay on input 4 |
| DD1 | Time delay for alarm reporting on input 1 |
| DD2 | Time delay for alarm reporting on input 2 |
| DD3 | Time delay for alarm reporting on input 3 |
| DD4 | Time delay for alarm reporting on input 4 |

Table 1: IN, ID and DD parameters

Example:

◆ Direct programming on the SIM card

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|--------|---|
| SIM CARD PHONE BOOK | | |
| Name | Number | Description |
| IN1 | 0 | Alarm activated by connecting to GND |
| IN2 | 4 | Alarm activated by connecting to GND + RST SMS |
| ID1 | 10 | Input 1 has to be valid for 10 second to trigger the alarm |
| ID2 | 0 | Input 2 has to be valid for 0,5 second to trigger the alarm |

| | | |
|-----|----|---|
| DD1 | 0 | Reporting of the alarm on input 1 is delayed by 0s |
| DD2 | 15 | Reporting of the alarm on input 1 is delayed by 15s |

Table 2: IN, ID, DD parameters example

- ◆ Remote programming by SMS
;IN1=0;IN2=4;ID1=10;ID2=0;DD1=0;DD2=15;

9.1.2 REMOTE REPORTING ALARM EVENTS

Parameters used to define the way to report the alarm event.

| | |
|-------------|--|
| NOTE | ICE-ENTRY-R device send SMS messages for reporting alarm events. |
|-------------|--|

9.1.2.1 TN parameter

Telephone numbers for remote alarm reporting are listed as TN parameters. Remote alarm reporting on ICE-ENTRY-R is done via SMS messages.

9.1.2.2 LN parameter

This parameter is used to link alarm event from inputs or any other source to the telephone numbers from TN list.

9.1.2.3 LOT parameter

LOT parameter is used to define the time control for voice calls. The start of voice connection starts the LOT timer. If the voice connection is still ON when the LOT timer expires ICE-ENTRY-R disconnects voice connection.

9.1.2.4 Table of parameters

| Name | Comment |
|------|---------|
|------|---------|

| | |
|-----|---|
| TN1 | 1 st telephone number |
| TN2 | 2 nd telephone number |
| TN3 | 3 rd telephone number |
| TN4 | 4 th telephone number |
| TN5 | 5 th telephone number |
| LN1 | Input & telephone No. linking for 1 st alarm input (TN1 – TN5) |
| LN2 | Input & telephone No. linking for 2 nd alarm input (TN1 – TN5) |
| LN3 | Input & telephone No. linking for 3 rd alarm input (TN1 – TN5) |
| LN4 | Input & telephone No. linking for 3 rd alarm input (TN1 – TN5) |
| LN5 | Periodic test SMS. No. linking (TN1 – TN5) |
| LN6 | SIM card refill. No. linking (TN1 – TN5) |
| LN7 | NAC list. No. linking (TN1 – TN5) (see note) |
| LN8 | Log status. No. linking (TN1 – TN5) |
| LOT | Time out for GSM connection. |

Table 3: Remote alarm reporting parameters

NOTE

When telephone number (calling or messaging ICE-ENTRY-R) is not on the CLIP list, not acknowledge event occurs (NAC). The telephone number responsible for this event can be send to TN user for notification.

Example:

◆ Direct programming on the SIM card

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|-----------|--|
| SIM CARD PHONE BOOK | | |
| Name | Number | Description |
| TN1 | 042376678 | 1st telephone number |
| LN1 | 13 | Input 1 reports alarm to TN1 & TN3 |
| LN2 | 1234 | Input 2 reports alarm to TN1 & TN2 & TN3 & TN4 |
| LN7 | 1 | NAC event sent to TN1 |
| LOT | 60 | Voice connection stay valid for max of 60s, |

| | | |
|--|--|--|
| | | after this time Voice connection breaks |
|--|--|--|

Table 4: Remote alarm reporting example

- ◆ **Remote programming by SMS**
;TN1=042376678;LN1=13;LN2=1234;LN7=1;LOT=60;

9.1.3 CONTROLLING OUTPUTS WITH DTMF

ICE-ENTRY-R can control the outputs with the use of DTMF. This is very useful function in the intercom application.

To control the outputs the user must press the combination of 2 digits. First digit is used to select the output (1 to 2), the second digit is used to activate (1) or deactivate (0) the output. There is a special case when the user can select for first digit (output selection) number 0. In this case all outputs control by the same time.

Combination must be pressed in 2s interval, and must be 3s apart to be valid.

NOTE

ICE-ENTRY-R must be in voice connection to support DTMF output control!

Example:

| DTMF combination | Description |
|------------------|------------------------|
| 00 | Deactivate ALL outputs |
| 01 | Activate ALL outputs |
| 11 | Activate output 1 |
| 20 | Deactivate output 2 |

Table 5: DTMF control example

9.2 OUTPUT MANAGEMENT

ICE-ENTRY-R supports the possibility to report alarms from inputs and any other events locally via 2 outputs. The behavior is defined using next parameters

9.2.1 OS parameter

ICE-ENTRY-R device has 2 dedicated relay supported outputs. Outputs can be configured to different behavior:

- ⇒ OS = 0 - Disabled
- ⇒ OS = 1 - Bi-stable toggle mode
- ⇒ OS = xxx - Mono-stable pulse mode (duration in seconds)

Typical connection for the output:

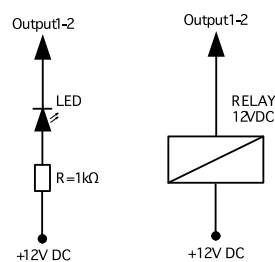


Figure 3: Output Connection diagram

9.2.2 OD parameter

OD parameter is used to link the alarm event directly to output.

9.2.3 OP1, OP2 parameters

Parameters are used to invert the polarity of the outputs.

- ⇒ 0 - normal
- ⇒ 1 - inverted

9.2.4 Table of parameters

| Name | Comment |
|------|--------------------------------|
| OS1 | Mode of operation for output 1 |
| OS2 | Mode of operation for output 2 |
| OD1 | Input 1 direct link to outputs |
| OD2 | Input 2 direct link to outputs |
| OD3 | Input 3 direct link to outputs |
| OD4 | Input 4 direct link to outputs |
| OD5 | NAC direct link to outputs |
| OP1 | Invert control for output 1 |
| OP2 | Invert control for output 2 |

Table 6: Output management parameters

Example:

◆ Direct programming on the SIM card

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|--------|-----------------------------------|
| SIM CARD PHONE BOOK | | |
| Name | Number | Description |
| OS1 | 1 | Bistable toggle mode |
| OS2 | 14 | Monostable pulse mode (14s pulse) |
| OD1 | 1 | Input 1 activates output 1 |
| OD4 | 2 | Input 2 activates output 2 |
| OP1 | 1 | Output 1 inverted |

Table 7: Output management parameters example

◆ Remote programming by SMS

;OS1=1;OS2=14;OD1=1;OD4=2;OP1=1;

9.3 SECURITY LEVEL - SL

SL parameter from 0 to 5 defines which telephone number stored in the phone book from TN1 – TN5 can enter into programming and remote control of the ICE-ENTRY-R (dialing the ICE-ENTRY-R phone number or sending the SMS).

NOTE

When the SL level is 0, an access to the ICE-ENTRY-R is possible from any phone!

IMPORTANT

Before any SL number is programmed the ICE-ENTRY-R can accept ALL CALLS. Remote SMS programming and remote controlling is possible from any phone!

| Name / value | Comment |
|--------------|--|
| SL = 0 | All calls and SMS are accepted |
| SL = 1 | Only number stored under parameter TN1 has access to unit |
| SL = 2 | Numbers stored under parameters TN1 to TN2 have access to unit |
| SL = 3 | Numbers stored under parameters TN1 to TN3 have access to unit |
| SL = 4 | Numbers stored under parameters TN1 to TN4 have access to unit |
| SL = 5 | Numbers stored under parameters TN1 to TN5 have access to unit |

Table 8: SL parameter

Example:

◆ Direct programming on the SIM card

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|--------|--|
| SIM CARD PHONE BOOK | | |
| Name | Number | Description |
| SL | 3 | Numbers stored under parameters TN1 to TN3 have access to unit |

Table 9: SL example

- ◆ Remote programming by SMS
;SL=3;

9.4 PREPAID CARD CREDIT AND VALIDITY INFORMATION

ICE-ENTRY-R can be used with prepaid SIM cards and its limitations. To be able to overcome this limitation of the prepaid SIM cards, ICE-ENTRY-R offers the possibility of automatic checking mechanism for credit and time expiration.

NOTE

ICE-ENTRY-R automatically sends warning SMS when the credit reaches low level defined by LCV parameter or SIM card validity is near to expiration.

NOTE

For support of different GSM providers contact support.

9.4.1 Programming prepaid card credit and validity string

To be able to support credit and time validity checking different parameters are used.

9.4.1.1 LCV and SCV parameter

LCV is used to set the limit for low credit event. If the credit on prepaid SIM cards falls below this limit SMS is send.

SCV the period of valid operating time varies with different GSM network providers. The value can be programmed from 1 to 360 days. The default value does not presume any kind of expiry warning.

For example in Slovenia SCV are 90 and in Italy 360 days

9.4.1.2 CC1, CC2 and CC3 parameters

Number used to check low credit value. They are provided from the GSM providers.

- ⇒ CC1 - This method can be used by any GSM provider that supports Unstructured Supplementary Service Data
- ⇒ CC2 - This method is dedicated to Italian TIM mobile provider
- ⇒ CC3 - This method is dedicated to Italian Vodafone mobile provider

9.4.1.3 CREF, CTIM, CVODA parameters

Parameters are used to find the credit value of the prepaid SIM card. Strings under these parameters are used to parse the replay message from the GSM provider.

- ⇒ CREF - Pars string for the replays received from CC1 number
- ⇒ CVODA - Pars string for the replays received from CC2 number
- ⇒ CTIM - Pars string for the replays received from CC3 number

9.4.1.4 Table of parameters

| Name | Comment |
|-------|---|
| LCV | Low credit value, bottom limit for low credit event. |
| SCV | Sim card validity time (in days) |
| CC1 | Credit number for credit check universally used |
| CC2 | Credit number for credit check dedicated for Italian TIM mobile provider |
| CC3 | Credit number for credit check dedicated for Italian Vodafone mobile provider |
| CREF | String for parsing replay message from CC1 number |
| CVODA | String for parsing replay message from CC2 number |
| CTIM | String for parsing replay message from CC3 number |

Table 10: Prepaid card validity parameters

Example:

◆ Direct programming on the SIM card

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|--------|--|
| SIM CARD PHONE BOOK | | |
| Name | Number | Description |
| CC1 | *448# | Simobil |
| CC2 | 4916 | TIM Italy |
| CC3 | 404 | Vodafone Italy |
| LCV | 4 | Low credit message will be send bellow 4 |

Table 11: Credit example

- ◆ **Remote programming by SMS**
;CC1=*448#;CC2=4916;CC3=404;LCV=4;

9.5 SET-UP PARAMETERS

Different parameters are used to support versatile functionality of ICE-ENTRY-R.

9.5.1 HTN parameter

Hidden telephone number is a parameter used in order to conceal the telephone number of the ICE-ENTRY-R device. The default value is set to “1” which means that the number is displayed.

9.5.2 ESC parameter

Parameter is used to define the input used to cancel the outgoing call from the ICE-ENTRY-R device.

9.5.3 UDC parameter

Parameter is used to synchronise ICE-ENTRY-R clock to GSM network clock. User must enter here the number of the ICE-ENTRY-R SIM card (Telephone number of ICE-ENTRY-R device).

9.5.4 RAN parameter

Parameter is used to provide support for auto-answer options for ICE-ENTRY-R device. The number defines the numbers of rings needed for ICE-ENTRY-R device to answer the incoming call. The incoming number must be on the TN list for ICE-ENTRY-R device to answer.

9.5.5 TST parameter

A test SMS is sent periodically. ICE-ENTRY-R can send the test message in the interval ranging from 1 hour to 240 hours.

Example:

To send test SMS TST value is set to 12, the numbers linked to “LN5” receive a test message every 12 hours.

9.5.6 TSTT parameter

TSTT parameter is used to define reference point for sending test message. If this parameter is set than after restart of the SOLO NX first test SMS will be send out at time defined with TSTT parameter.

Parameter value is defined in hours.

Example:

To receive first test SMS at 20.00h TSTT value must be set to 20

NOTE

By setting TSTT=0 this function is disabled

9.5.7 MNF parameter

When it is necessary to fix the GSM network to one provider the user can use the MNF parameter. The MNF parameter switches automatic network searching to manual.

Example:

MCC/MNC code for Simobil is 29340, Mobitel is 29341, TIM is 22201, and Vodafone

Italy is 22210.

More information about national MCC/MNC codes can be acquired at:

<http://www.activexperts.com/activsms/networkcodes/>

9.5.8 MIC parameter

MIC parameter enables you to change the sound level on microphone

9.5.9 SPK parameter

SPK parameter enables you to change the speaker sound level.

9.5.10 MUT parameter

MUT parameter enables you mutate the speaker sound while initiating voice connection.

9.5.11 ARST parameter

ARST parameter defines periodic of auto restart time (in hours) of the ICE-ENTRY-R device.

9.5.12 ADF parameter

Parameter is used to define voice refresh function, to prevent blocking of SIM in some networks.

9.5.13 LNG parameter

LNG parameter switches between the preprogrammed languages:

- ⇒ 0 - English
- ⇒ 1 - Italian
- ⇒ 2 - Slovenian
- ⇒ 3 - Croatian
- ⇒ 4 - Dutch
- ⇒ 5 - German
- ⇒ 6 - Spanish

9.5.14 BUZ parameter

Parameter is used to control buzzer functionality on ICE-ENTRY-R. Buzzer is used to audio support some events on ICE-ENTRY-R device.

9.5.15 Table of parameters

| Name | Comment |
|------|---------|
|------|---------|

| | |
|------|---|
| UDC | Tel. number of ICE-ENTRY-R device |
| ESC | Input used as cancel button |
| RAN | Auto answer ring number |
| HTN | Hidden telephone number |
| TST | SMS test time out |
| TSTT | Periodic test SMS start time |
| MNF | Manual GSM provider selection |
| MIC | Microphone volume control |
| SPK | Speaker volume control |
| ARST | Time out control for automatic system restart |
| ADF | Auto dial functionality (Call TN1) |
| LNG | Language selection |
| BUZ | Buzzer control |

Table 12: Set-up parameters.

Example:

◆ Direct programming on the SIM card

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|--------|---|
| SIM CARD PHONE BOOK | | |
| Name | Number | Description |
| HTN | 0 | Hidden telephone number of the ICE-ENTRY-R device |
| MNF | 29340 | Manual fixing of the GSM provider (Simobil) |
| LNG | 1 | Switch on Italian language |
| MIC | 2 | Microphone volume level |
| SPK | 20 | Speaker volume level |
| TST | 24 | 24 hours periodic test SMS |
| BUZ | 0 | Mute buzzer |
| ESC | 2 | Input 2 is used as cancel button |

Table 13: Set-up parameters example.

- ◆ **Remote programming by SMS**
;HTN=0;MFN=29340;LNG=1;MIC=2;SPK=20;TST=24; BUZ=0;ESC=2;

9.6 SMS MESSAGES EDITOR

You can write and send a short SMS message for each alarm input. The default message is English, but it is possible to change language with LNG parameter. Each message is built from 3 parts and user can write the first (User Location) and the second (alarm event) part of the message. Unit adds the third part (alarm event description) automatically. Language of the 3rd part may be changed by LNG parameter. The message is stored in the SIM phone book so you should add any number for correct operation.

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| # | 0 | U | S | E | R | | L | O | C | A | T | I | O | N | |
| # | 1 | I | N | P | U | T | | 1 | | | | | | | |
| # | 2 | I | N | P | U | T | | 2 | | | | | | | |
| # | 3 | I | N | P | U | T | | 3 | | | | | | | |
| # | 4 | I | N | P | U | T | | 4 | | | | | | | |

NOTE

Message should not be longer than 14 characters! Space is also counted as one character!

9.6.1 Table of parameters

| Name | Comment |
|------|--|
| #0 | User location, same for all alarm messages |
| #1 | Input 1, second part of message |
| #2 | Input 2, second part of message |
| #3 | Input 3, second part of message |
| #4 | Input 4, second part of message |

Table 14: Message parameters.

Example:

- ◆ Direct programming on the SIM card

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|--------|-------------|
| SIM CARD PHONE BOOK | | |
| Name | Number | Description |

| | | |
|-----------|---|---------------------------------|
| #0House | 1 | Location definition |
| #1Kitchen | 1 | Alarm input is from the kitchen |

Table 15: Message parameters example.

- ◆ **Remote programming by SMS**
;#0HOUSE=1;#1KITCHEN=1;

9.7 INTERCOM

Intercom functionality is supported by a set of parameters, used to tweak the functionality to each user needs.

For each button ICE-ENTRY-R incorporates a group of parameters. There are up to 8 groups of parameters.

IMPORTANT

ICE-ENTRY-R is capable of supporting up-to 8 call buttons. The current version equipped with only 1 call button so only E GROUP is used and described in this manual.

9.7.1 xTN1 to xTN5 parameters

Parameters are the call numbers for intercom application.

9.7.2 RTNx parameter

Parameter defines the ring time time-out. RTNx timer is started when the call button is pressed. If the RTNx timer expires before the GSM voice connection is established then ICE-ENTRY-R device calls the next number in XTN1-XTN5 call list.

9.7.3 DTMF auto dial functionality

This function is used to provide a support for ICE-ENTRY-R device to be able select extended numbers via DTMF command.

9.7.3.1 SDNx parameter

Parameter is used to set the DTMF number in auto self-select function.

9.7.3.2 SDDx parameter

Parameter is used to set the delay (in sec.) for sending DTMF number in auto self-select function.

9.7.4 Time zone

Time zone support. When both time limits are sets (TZSx and TZEx) time zone functionality is ON. When the current time is in the limits of the time zone parameters the button event calls the number from xTN1 to xTN4, else button event calls xTN5.

9.7.4.1 TZSx parameter

Parameter is used to configure the start time for the time zone functionality - 24h time format.

9.7.4.2 TZEx parameter

Parameter is used to configure the end time for the time zone functionality - 24h time format.

9.7.5 Table of parameters

| Name | Comment |
|------|--|
| ATN1 | Button 1, Telephone number 1. |
| ATN2 | Button 1, Telephone number 2. |
| ATN3 | Button 1, Telephone number 3. |
| ATN4 | Button 1, Telephone number 4. |
| ATN5 | Button 1, Telephone number 5. |
| RTNA | Button 1, time out control for voice connection. |
| SDNA | Button 1, DTMF number to send. |
| SDDA | Button 1, delay for DTMF number to send. |
| TZSA | Button 1, time zone start period. |
| TZEA | Button 1, time zone end period. |

Table 16: Intercom parameters.

Example:

- ◆ Direct programming on the SIM card

| |
|-------------------------------|
| ICE-ENTRY-R PROGRAMMING TABLE |
|-------------------------------|

| SIM CARD PHONE BOOK | | |
|---------------------|--------------|--|
| Name | Number | Description |
| ATN1 | 040713470 | Button 1, Telephone number 1. |
| ATN2 | +38643364850 | Button 1, Telephone number 2. |
| RTNA | 30 | Button 1, time out control for voice connection. |

Table 17: Intercom parameters example.

- ◆ **Remote programming by SMS**
;ATN1=040713470;ATN2=+38643364850;RTNA=30;

9.8 CLIP

CLIP is used to provide the “free of charge” options to control the outputs.

9.8.1 CLPEN parameter

Parameter used to enable CLIP functionality.

9.8.2 CLPOU parameter

Parameter used to choose which output will be controlled by the CLIP functionality.

9.8.3 CLPI parameter

This parameter, if set, is a precondition for CLIP function to control the output.

9.8.4 CLP1 ... CLP100 parameter

Set of telephone number, which can control the output. The number not on CLP list is not able to control the output using clip functionality.

9.8.5 Table of parameters

| Name | Comment |
|--------|------------------------------------|
| CLPEN | Enable CLIP functionality |
| CLPOU | Control output pin when CLIP event |
| CLPI | CLIP input activation condition |
| CLP1 | CLIP number 1 |
| . | . |
| . | . |
| . | . |
| CLP100 | CLIP number 100 |

Table 18: CLIP parameters.

Example:

◆ **Direct programming on the SIM card**

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|-----------|-------------------------------|
| SIM CARD PHONE BOOK | | |
| Name | Number | Description |
| CLPEN | 1 | Enable CLIP functionality |
| CLPOU | 2 | CLIP control output 2 |
| CLPI | 0 | No input activation condition |
| CLP1 | 040414414 | CLIP number 1 |
| CLP2 | 042340880 | CLIP number 2 |

Table 19: CLIP parameters example.

◆ **Remote programming by SMS**

;CLPEN=1;CLPOU=2;CLPI=0;CLP1=040414414;CLP2=042340880;

9.9 EVENT LOGGING

ICE-ENTRY-R device support logging of specific events. ICE-ENTRY-R logs CLIP event and alarm input events.

Log event consist of event type, time and telephone number or input number.

9.9.1 LOGN parameter

Parameter is used for defining the number of events printed out on PLOG request.

9.9.2 LOGI parameter

Parameter is used to define the media used for logging of events on ICE-ENTRY-R. User can select between nonvolatile memory on ICE-ENTRY-R or select USB to transfer events directly via USB to PC.

- ⇒ LOGI=0 Logging is OFF
- ⇒ LOGI=1 Logging in internal memory
- ⇒ LOGI=2 Logging to USB interface

9.9.3 ALC parameter

Parameter is used to control behavior when log on ICE-ENTRY-R is full. User can select between auto log clear or manual clear of log.

- ⇒ ALC=0 Automatically delete buffer when memory is FULL
- ⇒ ALC=1 Memory buffer must be deleted manually when it is FULL

9.9.4 Table of parameters

| Name | Comment |
|------|---------------------------------------|
| LOGN | Number of log events for printing out |
| LOGI | Log interface |
| ALC | Automatic log clear |

Table 20: LOG parameters.

Example:

◆ **Direct programming on the SIM card**

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|--------|--|
| SIM CARD PHONE BOOK | | |
| Name | Number | Description |
| LOGN | 5 | 5 log events will be printed out on PLOG command |
| LOGI | 0 | Nonvolatile memory on ICE-ENTRY-R |
| ALC | 1 | Log is auto cleared when full |

Table 21: LOG parameters example.

◆ **Remote programming by SMS**
;LOGN=5;LOGI=0;ALC=1;

9.10 SPECIAL SMS COMMANDS

These commands can only be issued only over SMS message, and are used to control some special functions of ICE-ENTRY-R device.

9.10.1 ORC command

Command is used to control outputs directly via SMS message

9.10.2 SDCLR command

To clear all data on SIM card SDCLR command is used.

9.10.3 LCRL command

Command clears log on ICE-ENTRY-R device.

9.10.4 CLPCLR command

Command is used to delete all CLP numbers.

9.10.5 MRES command

Command is used to manually restart GSM module on ICE-ENTRY-R device.

9.10.6 SSRES command

Command is used to manually restart ICE-ENTRY-R device.

9.10.7 Table of parameters

| Name | Comment |
|-------|------------------------------------|
| ORC1 | Control of output 1 |
| ORC2 | Control of output 2 |
| SDCLR | Delete all SIM content |
| LCRL | Delete log on ICE-ENTRY-R device |
| MRES | Manual reset of GSM module |
| SSRES | Manual reset of ICE-ENTRY-R device |

Table 22: SMS commands.

Example:

◆ Remote programming by SMS

| SMS commad | Description |
|------------|------------------------------------|
| ;ORC1=1; | Activate output 1 |
| ;ORC2=0; | Deactivate output 2 |
| ;SDCLR; | Clear all data on SIM |
| ;LCLR; | Delete log on ICE-ENTRY-R device |
| ;MRES; | Manual reset of GSM module |
| ;SSRES; | Manual reset of ICE-ENTRY-R device |

Table 23: SMS commands example.

10 PRINT-OUT OF THE PARAMETERS

The user can check the settings of ALL parameters on the ICE-ENTRY-R.

10.1 RECEIVE ALL PARAMETERS (PALL)

By sending this command to ICE-ENTRY-R you receive SMS messages with all parameters that are currently programmed in the unit:

;PALL;

10.2 CHECK SW REVISION (PSW)

By sending this command to ICE-ENTRY-R you receive SMS messages with current SW version running on ICE-ENTRY-R device:

;PSW;

10.3 CHECK SIGNAL QUALITY (PSQ)

By sending this command to ICE-ENTRY-R you receive SMS messages with signal quality ICE-ENTRY-R device is connected to network:

;PSQ;

10.4 RECEIVE TELEPHONE NUMBERS (PTN)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed telephone numbers (TN1 – TN5):

;PTN;

10.5 RECEIVE LINKS (PLN)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed links (LN1 –LN8):

;PLN;

10.6 RECEIVE INPUT PARAMETERS (PIN)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed Input parameters (IN1 – IN4):

;PIN;

10.7 RECEIVE INPUT FILTER VALUE (PID)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed Input filters (ID1 – ID4):

;PID;

10.8 RECEIVE OUTPUT FILTER VALUE (POD)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed direct output links (OD1 – OD5):

;POD;

10.9 RECEIVE DELAY BEFORE DIAL VALUE (PDD)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed Input filters (DD1 – DD4):

;PDD;

10.10 RECEIVE ACCESS TELEPHONE NUMBERS (PSL)

By sending this command to ICE-ENTRY-R you receive SMS message with programmed SL level:

;PSL;

10.11 RECEIVE OUTPUT PARAMETERS (POS)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed Outputs parameters (OS1 – OS2):

;POS;

10.12 RECEIVE ALL PROGRAMMED SMS MESSAGES (P#)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed alarm SMS messages (#0 - #4):

;P#;

10.13 RECEIVE SET UP PARAMETERS VALUE (PPA)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed Setup parameters (TST, MNF...):

;PPA;

10.14 RECEIVE CREDIT PARS PARAMETERS (PCREF)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed credit parse parameters (CREF, CVODA...):

;PCREF;

10.15 RECEIVE ALL CLIP PARAMETERS (PCLP)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed CLIP functionality related parameters (CLPEN, CLPOU, CLPI, CLPx):

;PCLP;

NOTE

User can use ;PCLP=x,y; to limit the number of CLIP numbers to be printed.

x = start number

y = end number

Example

;PCLP=1,30; Prints first 30 CLIP numbers

10.16 RECEIVE INTERCOM BUTTON 1 PARAMATERS (PDEA)

By sending this command to ICE-ENTRY-R you receive SMS message with all currently programmed button 1 group parameters (ATN1, ATN2, ATN3, ATN4, ATN5, RTNA, SDNA, SDDA, TZSA, TZEA):

;PDEA;

10.17 STATE OF THE CREDIT FOR THE PREPAID CARD

By sending this command to ICE-ENTRY-R you receive SMS message with Credit amount on your prepaid SIM card:

;PCCX;

Where X is the number of programmed prepaid card provider.

10.18 STATE OF THE OUTPUTS (PORC)

By sending this command to ICE-ENTRY-R you receive SMS message with current outputs state.

;PORC;

10.19 MANUAL GSM MODULE RETARD (MRES)

By sending this command to ICE-ENTRY-R shuts down GSM module and after a few second it switches the power of the GSM module ON again. The unit reboots all parameters from the SIM card.

;MRES;

10.20 RECEIVE STATUS OF INPUTS (INS)

By sending this command to ICE-ENTRY-R you receive SMS message with current input state.

;INS;

10.21 RECEIVE ICE-ENTRY-R LOG

By sending this command to ICE-ENTRY-R you receive SMS message with log on ICE-ENTRY-R device.

;PLOG;

NOTE

User can use ;PLOG=x,y; to define the number of logs to be printed.

x = start event

y = end event

Example

;PLOG=1, 30; Prints first 30 log events

1 1 CHANGING PARAMETERS USING THE SMS COMMANDS

All programming parameters for ICE-ENTRY-R can also be sent by SMS command. Each SMS command should start and stop with semicolon. If the confirmation SMS is needed, put “+” at the beginning of the command SMS.

The first SMS is SMS with telephone numbers (TN1 – TN4). If you would like to check which telephone numbers are programmed in ICE-ENTRY-R please use the following command:

;PTN;

Return SMS is (example):

;TN1=0;TN2=0;

If you would like to enter telephone numbers in to ICE-ENTRY-R you can use the following example:

;TN1=040713470;TN2=+38643364850;

If you would like to receive confirmation SMS write “+” before SMS command:

++;TN1=040713470;TN2=+38643364850;

Return SMS from ICE-ENTRY-R is:

;TN1=040713470;TN2=+38643364850;

NOTE

You can use the same programming procedure for all parameters.

It is also possible to change different parameters with one SMS. Consider that the SMS message should not be longer than 160 characters (included space characters).

If you would like to change the following parameters TN1, IN1, IN2, OS1, OS2; ID1, LN1 and CRE and would like to receive confirmation SMS, try next example:
++;TN1=+38640713470;IN1=1;IN2=1;OS1=15;OS2=1;ID1=120;LN1=1;

Send SMS message to ICE-ENTRY-R telephone number and in a few seconds you receive SMS message from ICE-ENTRY-R. The sentence of the SMS must be the same as the one you have sent to ICE-ENTRY-R before.

12 DEFAULT SETTINGS ON ICE-ENTRY-R

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|-----------------|---|
| Name | Default Value | Short Description |
| TN1 | Empty | Telephone number 1 |
| TN2 | Empty | Telephone number 1 |
| TN3 | Empty | Telephone number 2 |
| TN4 | Empty | Telephone number 3 |
| TN5 | Empty | Telephone number 4 |
| IN1 | 0 | Input 1 control |
| IN2 | 0 | Input 2 control |
| IN3 | 0 | Input 3 control |
| IN4 | 0 | Input 4 control |
| OS1 | 5 | Output 1 mode |
| OS2 | 5 | Output 2 mode |
| OD1 | 1 | Input 1 direct output link |
| OD2 | 0 | Input 2 direct output link |
| OD3 | 0 | Input 3 direct output link |
| OD4 | 0 | Input 4 direct output link |
| OD5 | 0 | NAC direct output link |
| LN1 | Empty | Input 1, link to tel. numbers |
| LN2 | 1 | Input 2, link to tel. numbers |
| LN3 | Empty | Input 3, link to tel. numbers |
| LN4 | 1 | Input 4, link to tel. numbers |
| LN5 | Empty | Periodic SMS text, link to tel. numbers |
| LN6 | Empty | SIM card refill, link to tel. numbers |
| LN7 | Empty | NAC, link to tel. numbers |
| LN8 | Empty | LOG full, link to tel. numbers |
| ID1 | 1 | Input 1 delay filter on input |
| ID2 | 120 | Input 2 delay filter on input |
| ID3 | 1 | Input 3 delay filter on input |
| ID4 | 1 | Input 4 delay filter on input |
| DD1 | 0 | Input 1 delay before dialing |
| DD2 | 0 | Input 2 delay before dialing |
| DD3 | 0 | Input 3 delay before dialing |
| DD4 | 0 | Input 4 delay before dialing |
| SL | 0 | Security level |
| #0 | "User Location" | SMS main head text |
| #1 | "Input1" | SMS input 1 text |
| #2 | "Input2" | SMS input 2 text |
| #3 | "Input3" | SMS input 3 text |
| #4 | "Input4" | SMS input 4 text |
| CC1 | Empty | Check credit Num 1 |

| ICE-ENTRY-R PROGRAMMING TABLE | | |
|-------------------------------|---------------|---------------------------------------|
| Name | Default Value | Short Description |
| CC2 | Empty | Check credit, TIM Italy |
| CC3 | Empty | Check credit, Vodafone Italy |
| ESC | 0 | Input used as cancel button |
| UDC | Empty | Tel. number of ICE-ENTRY-R device |
| HTN | 1 | Hidden telephone number |
| RAN | 0 | Auto answer ring number |
| SCV | 0 | SIM card time validity |
| TST | 24 | Periodic test SMS timeout |
| TSTT | 0 | Periodic test SMS start time |
| MNF | 0 | Network connection type |
| MIC | 15 | Microphone volume setting (0 - 40) |
| MUT | 0 | Mute functionality |
| SPK | 10 | Speaker volume setting (0 - 20) |
| LCV | 4 | Low credit value |
| LNG | 0 | Language selection |
| LOT | 90 | Connection time out value |
| LOGN | 5 | Number of log events for printing out |
| LOGI | 0 | Log interface |
| ALC | 1 | Automatic log clear |
| ADF | 90 | Auto dial functionality (Call TN1) |
| ARST | 0 | Automatic reset timeout |
| CREF | "EUR" | Parse text (contact support) |
| CTIM | "EURO" | Parse text (contact support) |
| CVODA | "DISPON. E." | Parse text (contact support) |
| OP1 | 1 | Output invert 1 |
| OP2 | 1 | Output invert 2 |
| BUZ | 1 | Buzzer control |
| SPO | 1 | SIM card starting position |
| CLPEN | 1 | Enable CLIP functionality |
| CLPOU | 1 | Control output pin when CLIP event |
| CLPI | 0 | CLIP input activation condition |
| CLP1 | Empty | CLIP number 1 |
| . | . | |
| CLP100 | Empty | CLIP number 100 |
| ATN1 | Empty | Button 1, Telephone number 1 |
| ATN2 | Empty | Button 1, Telephone number 2 |
| ATN3 | Empty | Button 1, Telephone number 3 |
| ATN4 | Empty | Button 1, Telephone number 4 |
| ATN5 | Empty | Button 1, Telephone number 5 |
| RTNA | 25 | Ring time, Button 1 |
| SDNA | 0 | DTMF number to send |
| SDDA | 0 | Delay for DTMF to send |
| TZSA | 0 | Time zone start interval |
| TZEA | 0 | Time zone end interval |

Table 24: ICE-ENTRY-R default settings.

13 PARAMETERS PRINT-OUT COMMANDS

| ICE-ENTRY-R PROGRAMMING TABLE | |
|-------------------------------|--|
| Name | Short Description |
| PALL | Prints all parameters available on ICE-ENTRY-R. |
| PSW | Prints SW version of ICE-ENTRY-R. |
| PSQ | Prints GSM network signal quality of ICE-ENTRY-R. |
| PTN | Prints TNx numbers. |
| PLN | Prints LNx links. |
| PIN | Prints INx parameters. |
| PID | Prints IDx parameters. |
| POD | Prints ODx parameters. |
| PDD | Prints DDx parameters |
| PSL | Prints SL parameter. |
| POS | Prints OSx parameters. |
| P# | Prints #x parameters. |
| PPA | Prints various setup parameters. |
| PCLP | Prints CLIP parameters. |
| PLOG | Prints log of the ICE-ENTRY-R. |
| PCREF | Prints credit pars parameters. |
| PCN | Prints credit request numbers. |
| PCC1 | Prints credit for ICE-ENTRY-R (universal request). |
| PCC2 | Prints credit for ICE-ENTRY-R. (TIM Italy). |
| PCC3 | Prints credit for ICE-ENTRY-R. (VODAFONE Italy). |
| PWG | Prints Wiegand parameters. |
| INS | Prints status of the inputs. |
| PORC | Prints (controls) the status of outputs. |
| PDEA | Prints intercom button 1 parameters. |

Table 25: ICE-ENTRY-R parameters print out commands.

1 4 TECHNICAL SPECIFICATIONS

| Description | Value |
|---|--|
| Power Supply | 15 - 24V AC/DC |
| Current consumption - peak | 2A |
| Current consumption - transmitting mode | 250mA |
| Current consumption - idle mode | 40mA |
| Quad band GSM module | 850/900/1800/1900 MHz |
| PCB dimensions | 106 × 89 mm |
| Unit dimensions (1 button) | 156 x 116 x 61 (51) mm |
| Call buttons | Up to 4 (in larger enclosure: 290 × 116 × 56 mm) |
| External Antenna | 1 |
| Weight | 945 gr. |
| Alarm inputs | 2 |
| Alarm outputs (relay) | 2 |
| 12V DC Aux. Power Supply output | Y (max. 500 mA) |
| 15-24V AC/DC Power Supply input | Y |
| Anti-tamper protection | optional |

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The warranty period of this Transmitter Solutions product is twenty-four (24) months. This warranty shall begin on the date the product is manufactured. During the warranty period, the product will be repaired or replaced (at the sole discretion of Transmitter Solutions) if the product does not operate correctly due to a defective component. This warranty does not extend to (a) the product case, which can be damaged by conditions outside the control of Transmitter Solutions, or (b) battery life of the product. This warranty is further limited by the following disclaimer of warranty and liability:

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