I L T 2

Installation manual

GEGA Electronique
1 rue saint Eloi
FR – 71300 MONTCEAU-LES-MINES

33 (3) 85674000
33 (3) 85580028

web site : www.gega-electronique.fr

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1- BASIC USER & VISITOR OPERATION

Visitors
Visitors simply press either Call Button N° 1 or N° 2 in the normal way. The panel will speed dial the relevant pre-programmed telephone or extension number and the handset will ring for a maximum of 99 seconds (default setting = 25 seconds). If there is no answer or, the line is busy, the panel will revert to standby mode.
If your answering machine or BT call-minder answers the call, your visitor can leave you a message.
Pressing the call-button again whilst the panel is dialling will cancel the call.
Pressing the call-button whilst in communication will end the call.

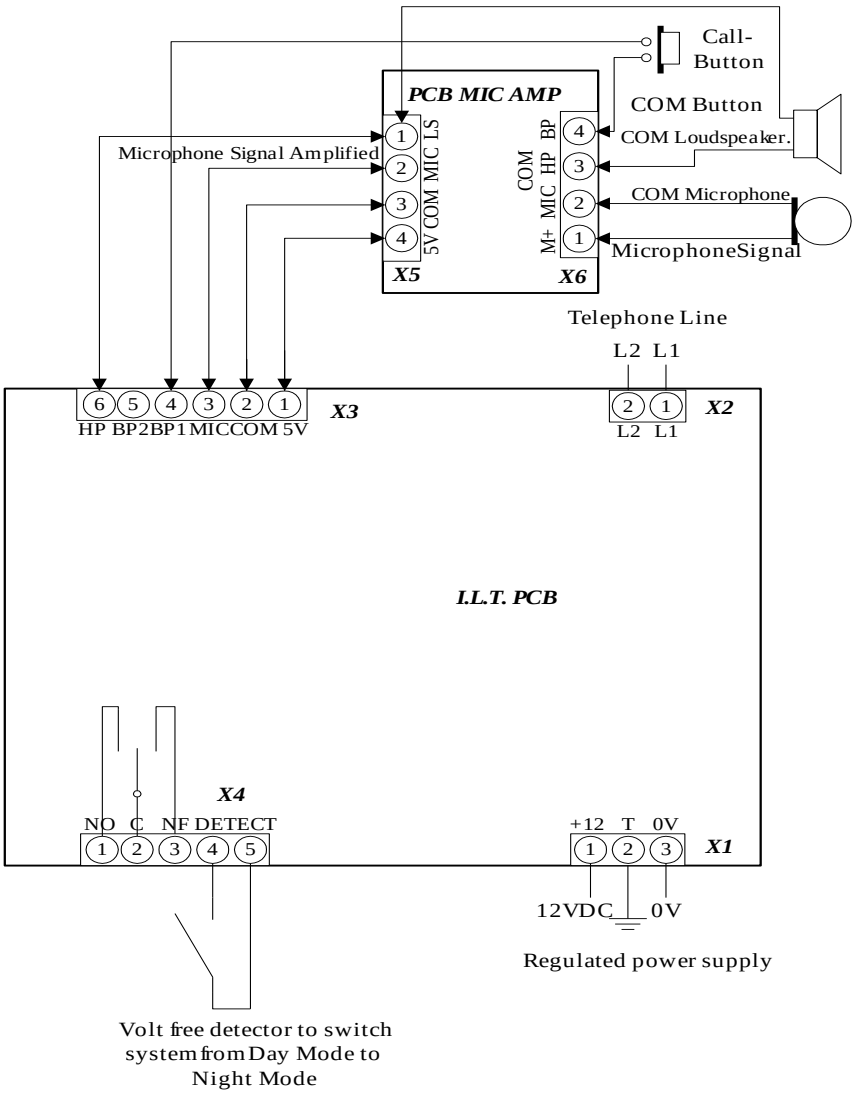
How do I know the call is from the door ?
Every time you answer a call from the panel you will hear 3 short beeps.

Opening the door from the handset
You can use any touch-tone (DTMF) phone - fixed, cordless or mobile to answer a call from the panel. To open the door/gate (activate the relay), simply press and immediately release the **0** on your handset. You will hear 3 short beeps to confirm that you have successfully opened the door. If you hear 2 long beeps it means that you pressed the wrong button.

Secrecy of lock
You can only open the door by pressing the 0 on your handset whilst you are in communication with the visitor at the door.

What if I do not want to let the visitor in?
Don't press the 0 button and put the phone down.

2- I.L.T. PCB


Call-
Button
PCB MIC AMP
COM Button
COM Loudspeaker.
Microphone Signal Amplified
1 2 3 4
5V COM MIC LS
COM
BP HP MIC M+
4 3 2 1
COM Microphone
MicrophoneSignal
X5
X6
Telephone Line
L2 L1
6 5 4 3 2 1
HP BP2BP1MICCOM 5V
X3
2 1
L2 L1
X2
I.L.T. PCB
X4
NO C NF DETECT
1 2 3 4 5
+12 T 0V
1 2 3
X1
12VDC
0V
Regulated power supply
Volt free detector to switch
system from Day Mode to
Night Mode

3- BASIC SYSTEM

The panel can have 1 – 2 call buttons.
It comprises of a 12VDC powered kit that enables the interface of the loudspeaker and microphone of a hardwired audio entry system onto either a BT telephone line or, analogue extension socket off a PABX telephone system. The panel can call any number, whether an internal extension number or external telephone number.

Equipment:

- Din rail mounted PCB kit, requiring 12VDC regulated supply installed inside building or weatherproof cabinet.
- Microphone amplifier PCB onto which the call-button(s), loudspeaker and microphone connect which is normally fitted in the external panel.

4- BASIC PROGRAMMING

The panel is programmed remotely via a touch-tone (DTMF) telephone. Using a standard touch-tone (DTMF) telephone, dial the telephone number of the panel.
The panel confirms the connection by emitting 3 short beeps.

Notes:

- Correct programming inputs of function numbers are acknowledged by: 1 long beep.
- Correct programming inputs of parameters are acknowledged by: 3 short beeps.
- Incorrect programming inputs are acknowledged by: 2 long beeps.
- A maximum of 10 seconds are allowed for each programming input - if exceeded, the panel reverts to standby mode.
- No programming entries are possible when the panel is emitting acknowledgement beeps.
- Enter **00** to exit from programming mode.

4.1- Dialling In from Remote Handset.

Any DTMF (touch tone) telephone handset can call a panel simply by dialling :

- The telephone number of the line it is connected to or,
- The extension number if it is connected to a PABX extension socket.

The panel does not ring and answers the call automatically in “FULL COMMUNICATION” mode which allows the caller to immediately talk to the visitor and, if required, open the door.

4.2- Day / Night mode – Function 28

The panel offers a Day / Night feature ie the call-button will dial a different telephone number at night to the one it dialled during the day.

There are two settings:

- Switching from Day to Night mode via the pressing of an external switch that is hardwired to terminals 4 & 5 of X4 on the equipment ie sends a voltfree pulse.

or

- Switching from Day to Night mode via dialling into the panel from a remote handset and pressing a sequence of buttons.

Programming of setting:

***2000 # (3 short beeps) 28 (long beep) 0 = Switch Day/Night via remote handset.**

***2000 # (3 short beeps) 28 (long beep) 1 = Switch Day/Night via external switch.**

4.3- Switching between Day / Night mode from a remote handset after dialling in:

Dial into the panel. The panel confirms the connection by emitting 3 short beeps.
Enter on your handset:

- # * 0 to switch to Night mode.
- # * 1 to switch to Day mode.

4.4- Programming Day Telephone numbers – Function 20

Example for Call Button N°1 :
***2001 # (3 short beeps) 20 (long beep) 02072349830 # (long beep) 30 (3 short beeps)**
If telephone number is less than 16 digits, press # to validate.
Handset to ring for 30 seconds (min 10, max 99).

Example for Call Button N° 2 :
***2002 # (3 short beeps) 20 (long beep) 0* 02072780130 # (long beep) 60 (3 short beeps)**
If telephone number is less than 16 digits, press # to validate.
Handset to ring for 60 seconds (min 10, max 99)
** = Pause in Telephone number*

4.5- Programming Night Telephone numbers – Function 21

Example for Call Button N° 1 :
***2001 # (3 short beeps) 21 (long beep) 02077987488 # (long beep) 30 (3 short beeps)**
If telephone number is less than 16 digits, press # to validate.
Handset to ring for 30 seconds (min 10, max 99).

Example for Call Button N° 2 :
***2002 # (3 short beeps) 21 (long beep) 9* 02073439190 # (long beep) 60 (3 short beeps)**
If telephone number is less than 16 digits, press # to validate.
Handset to ring for 60 seconds (min 10, max 99)
** = Pause in Telephone number*

4.6- Disabling Call-Buttons

*** 2001 # (3 short beeps) # (3 short beeps) = Disabling Call Button N° 1**

*** 2002 # (3 short beeps) # (3 short beeps) = Disabling Call Button N° 2**

4.7- Reactivating Call-Buttons.

*** 2001 # (3 short beeps) * (3 short beeps) = Reactivating Call Button N° 1**

*** 2002 # (3 short beeps) * (3 short beeps) = Reactivating Call Button N° 2**

4.8- Loudspeaker Volume – Function 12

Default setting is 8.
Volume range 00-15.

*** 2000 # (3 short beeps) 12 (long beep) 00 (3 short beeps) = Maximum**

*** 2000 # (3 short beeps) 12 (long beep) 08 (3 short beeps) = Medium (default)**

*** 2000 # (3 short beeps) 12 (long beep) 15 (3 short beeps) = Minimum**

4.9- Press Duration of Call-Buttons – Function 14

Default setting is 0 = Immediate.
Options are: 1 = 100 ms, 2 = 200 ms, 3 = 300 ms, 4 = 400 ms, 5 = 500 ms, 6 = 600 ms, 7 = 700 ms, 8 = 800 ms, 9 = 900 ms.

*** 2000 # (3 short beeps) 14 (long beep) 1 (3 short beeps) = 100 ms**

*** 2000 # (3 short beeps) 14 (long beep) 9 (3 short beeps) = 900 ms**

I.E. How long does the button have to be pressed before it is acknowledged ?

4.10- Programming DTMF Code for activating the relay – Function 25

Default door release code = 0
From the handset called ie to activate the relay, the person answering the call must enter a 1 or 2 digit code on the keypad of the handset.
Default DTMF code = 0.

*** 2000 # (3 short beeps) 25 (long beep) 9 # (3 short beeps) = DTMF 9**

*** 2000 # (3 short beeps) 25 (long beep) 26 (3 short beeps) = DTMF 26**
Note:
If DTMF code is only 1 digit, enter # after number (digit) chosen.

To disable the DTMF remote opening function:
*** 2000 # (3 short beeps) 25 (long beep) # (3 short beeps) = DTMF OFF**

4.11- Programming Operating Time for the relay – Function 31

Default setting = 05 seconds
For how many seconds is the relay to operate when activated.
Minimum 01 seconds, maximum 99 seconds.

*** 2000 # (3 short beeps) 31 (long beep) 10 (3 short beeps) = 10 seconds**

4.12- Programming Communication Time – Function 26

Default = 1 minute
Communication time between the panel and the handset called can be from 1 - 9 minutes or, of unlimited duration.

*** 2000 # (3 short beeps) 26 (long beep) 1 (3 short beeps) = 1 minute (default)**

*** 2000 # (3 short beeps) 26 (long beep) 0 (3 short beeps) = Unlimited (not recommended)**

*** 2000 # (3 short beeps) 26 (long beep) 3 (3 short beeps) = 3 minutes**

4.13- Communication ends after activation of relay – Function 35

Default = Yes

*** 2000 # (3 short beeps) 35 (long beep) 0 (3 short beeps) = NO**

*** 2000 # (3 short beeps) 35 (long beep) 1 (3 short beeps) = YES (default)**

4.14- Disconnect after silence of or, continuous signal of X seconds- Function 97

I.L.T will hang-up if (default settings):

- No voice or DTMF is detected for 10 seconds.
- There is a continuous tone for 10 seconds.

Range: 1 = 5 seconds, 2 = 10 seconds, 3 = 15 seconds…….9 = 45 seconds.

*** 2000 # (3 short beeps) 97 (long beep) 0 = OFF (not recommended)**

*** 2000 # (3 short beeps) 97 (long beep) 3 = Disconnects after 15 seconds.**

4.15- Automatic Pause prior to dialling – Function 98

Default setting = 2 seconds

The panel can be programmed to pause from 1-6 seconds before dialling the telephone or extension number.

*** 2000 # (3 short beeps) 98 (long beep) 1 (3 short beeps) = 1 second pause.**

*** 2000 # (3 short beeps) 98 (long beep) 6 (3 short beeps) = 6 seconds pause.**

4.16- Changing General Parameters Programming Code 2000 – Function 90

Default Programming Code = 2000.

The programming code must be 4 digits in length.

To change the code:
*** 2000 # (3 short beeps) 90 (long beep) 8402 (3 short beeps) = New programming code 8402.**

4.17– Changing Call-Button Programming Codes – Function 91

Call-Button N°1 =Default 2001
Call-Button N°2 =Default 2002

The programming code must be 4 digits in length. To change the code for a particular Call-Button:

*** 2001 # (3 short beeps) 91 (long beep) 1200 (3 short beeps)**
= New programming code for Call-Button N°1 is 1200.

*** 2002 # (3 short beeps) 91 (long beep) 1201 (3 short beeps**
= New programming code for Call-Button N°2 is 1201.

Example: In the future, to program Call-Button N°1 you will need to enter:
*** 1200 # (3 short beeps) 20 (long beep) 02084579898 # (long beep) etc..**

4.18. Call Progress Audio Reassurance – Function 17

Default setting is Audio ON.
Visitor can hear the progress of call to correspondent ie dial tone, dialling of telephone / extension number, ringing etc.

*** 2000 # (3 short beeps) 17 (long beep) 1 (3 short beeps) = Call Progress Audio OFF**

*** 2000 # (3 short beeps) 17 (long beep) 0 (3 short beeps) = Call Progress Audio ON (default)**

4.19. ON Call-up, Panel to Ring for X Seconds Before Answering Call from Remote Handset – Function 59

Default setting is 0 seconds.

*** 2000 # (3 short beeps) 59 (long beep) XX (3 short beeps)**
With XX = 00 fpr immediate answer to 99 for 99 seconds.

4.20. Dialling Modes – Function 38

Default setting is Mode # 1.

Three Modes are available when pushing the call-button:

1) **Direct dialling of the call-number**: the unit will hang up and dial directly the pre-programmed call-number.
2) **Flashing is sent previous to the call-number**: the unit will hang up and before dialling, flashing code will be sent on the telephone line.
3) **DTMF Code "*" is sent prior dialling**: the unit will hang up and before dialling, "*" DTMF code will be sent on the telephone line.

*** 2000 # (3 short beeps) 38 (long beep) 0 (3 short beeps) = Mode #1**

*** 2000 # (3 short beeps) 38 (long beep) 1 (long beep) XXX (long beep) Y (3 short beeps) = Mode # 2**
With:
XXX = flashing duration (i.e. 270 = 270 ms)
Y = 0 for no delay between flashing and dialling, 1 for a delay of 0.5 seconds, 2 for a delay of 1 second and 3 for a delay of 1.5 seconds.

*** 2000 # (3 short beeps) 38 (long beep) 2 (long beep) Y (3 short beeps) = Mode # 3**
With Y = 0 for no delay between "*" and dialling, 1 for a delay of 0.5 seconds, 2 for a delay of 1 second and 3 for a delay of 1.5 seconds.

4.21– Tones detections

When a phone number is dialed, the only way to know if the correspondent answers the call or is busy or cut the communication is to recognize the tones sending by the telephone operator.

Three tones must be recognized :

- ringing tone : this tone is received when the telephone set of the correspondent is ringing,
- busy tone : this tone is received when the correspondent is still in communication and sometimes also when the correspondent cut the communication,
- end of communication (EOC): this tone is sometime sent when the correspondent cut the communication.

A tone is made up by sequences of sounds and silences. The tones can be different from Telephone Operator and Pabx.

The values of these tones must be programmed inside the system.
This programming can be done automatically when connected behind a Pabx.
This programming can be done manually when connected behind a Pabx or on a public telephone line.

4.21.1– Programming the tones automatically – Function 92

This procedure is only available when connected on an analog port of a Pabx.

To use this procedure, a non busy telephone set is required.

It is necessary first to program in the system :

- the call number of that free telephone set by code 20 (number of the 1st call day).
- The call number of the system (that will be the busy correspondent) by code 21 (number of the 1st call night).

Then, start the automatic procedure by selection of **CODE 92**.

➔ The system will hang up.

Be sure the telephone set is totally free (hung up).

The system will unhook and then will dial the first day number which will ring. At this time the system will automatically measure the ringing tone and will record the values of that tone.
Don't unhook the telephone set which is ringing.

The telephone set will stop ringing. The system will now call the 1st night number and will receive the busy tone. Automatically the system will measure the busy tone and will record the values of this tone.

Last part of the procedure is the measurement of the end of communication tone.
The system will call again the telephone set which must be free. When ringing, pick up the handset and after receiving 3 short beeps, hang up.
Automatically the system will measure the end of communication (EOC) tone and will record the values of this tone.

When finished, the system will send 3 short beeps and will hang up.

CAUTION ! if the system send only 2 short beeps it means that the automatic measurement is not possible. It is necessary to program manualy the values of the tones.

4.21.2– Programming the tones manually – Function 92

Better to know the values of the tones of the Pabx or of the Public central office (see manual of the Pabx or ask installator).

The values are always programmed with 3 to 4 digits, in milliseconds.
(i.e. : 0.8 seconds will be 800, 1.5 seconds will be 1 500)

➔ enter **CODE 99**,

➔ after receiving a long beep,enter **the tone type value of the ringing tone (1 = simple, 2 = double),**
➔ after receiving a long beep,enter **the minimum value of the ON signal of the ringing tone,**
➔ after receiving a long beep,enter **the maximum value of the ON signal of the ringing tone,**
➔ after receiving a long beep,enter **the minimum value of the OFF signal of the ringing tone,**
➔ after receiving a long beep,enter **the maximum value of the OFF signal of the ringing tone,**

➔ after receiving a long beep,enter **the tone type value of the busy tone (1 = simple, 2 = double),**
➔ after receiving a long beep,enter **the minimum value of the ON signal of the busy tone,**
➔ after receiving a long beep,enter **the maximum value of the ON signal of the busy tone,**
➔ after receiving a long beep,enter **the minimum value of the OFF signal of the busy tone,**
➔ after receiving a long beep,enter **the maximum value of the OFF signal of the busy tone,**

➔ after receiving a long beep,enter **the tone type value of the EOC tone (1 = simple, 2 = double),**
➔ after receiving a long beep,enter **the minimum value of the ON signal of the EOC tone,**
➔ after receiving a long beep,enter **the maximum value of the ON signal of the EOC tone,**
➔ after receiving a long beep,enter **the minimum value of the OFF signal of the EOC tone,**
➔ after receiving a long beep,enter **the maximum value of the OFF signal of the EOC tone,**

An example of programming of tones :

TONES	VALUES +/- LIMITS	MINIMUM MAXIMUM	VALUES TO PROGRAMM	BASIC VALUES (*)
ON SIGNAL Ringing tone	1s +/-200ms	800 1200	080 120	135 165
OFF SIGNAL Ringing tone	3s +/-200ms	2800 3200	280 320	315 385
ON SIGNAL Busy tone	200ms +/-50ms	150 250	015 025	045 055
OFF SIGNAL Busy tone	400ms +/-50ms	350 450	035 045	045 055
ON SIGNAL EOC tone	- 200 ms 500ms + 50 ms	300 550	030 055	045 055
OFF SIGNAL EOC tone	- 200 ms 500ms + 50 ms	300 550	030 055	045 055

(*) these values are basically programmed into the system and can be find again when doing a RESET.

IMPORTANT : if there is no EOC tone or if the EOC tone is continuous (no OFF signal), enter 000 for the 4 values of this tone.

5- TECHNICAL DATA

Connections:	(1) Public switch on analog line (a/b) within 50 metres of I.L.T..
	or
	(2) PABX extension of the internal telecommunications network of a company. Socket to be analogue type (2 wire non digital) or digital with analogue simulation.
Telephones:	(1) Standard analogue DTMF "Touch Tone" (2) Mobile telephone (3) Cordless telephone
Power Supply:	12V DC REGULATED
Power Consumption:	Standby 30mA, Maximum 150mA
CE Norms:	EN60950 EN55022 Edition 98 Class B EN55024 Edition 98 Class B
Telecommunications Norms:	CTR21
Number of Relays:	1
Relay Timer:	1- 99 secs
Relay Contact Ratings:	2 Amps at 12V DC 1 Amp at 24V DC
Request to Exit:	0
Programming:	Remotely via a Touch-tone (DTMF) telephone.
System Capacity:	1 - 2 Call - Buttons
Non - Volatile memory	Yes

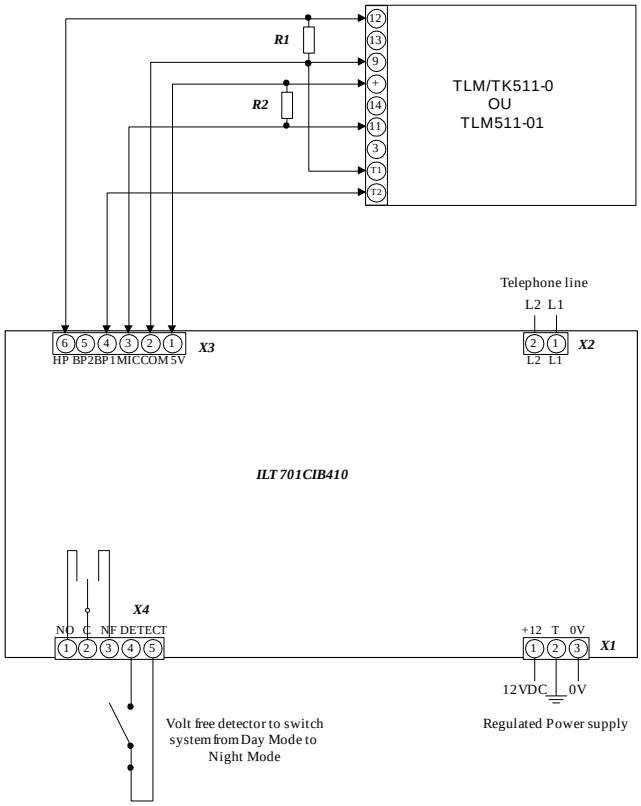
6- DEFAULT PARAMETERS – FACTORY SETTINGS

Relay activated by:	
Telephone handset code	0
Operational time (seconds)	5
Communication time	1 minute
Handset rings for (seconds)	25
Ring tones	Country settings
Busy tones	Country settings

7- ADAPTATION FOR SOME EXISTING AUDIO MODULES :

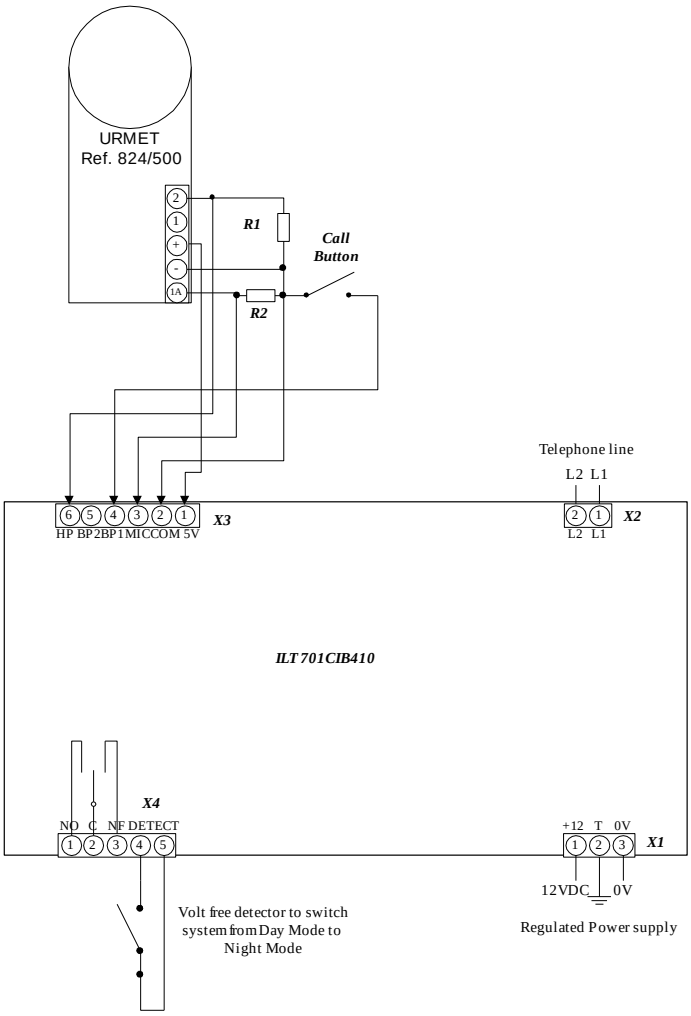
Modules **SIEDLE** : TLM511-01
TLM/TK511-0

Add R1 & R2 =1 k Ohms



Module **URMET DOMUS** Ref. 824/500

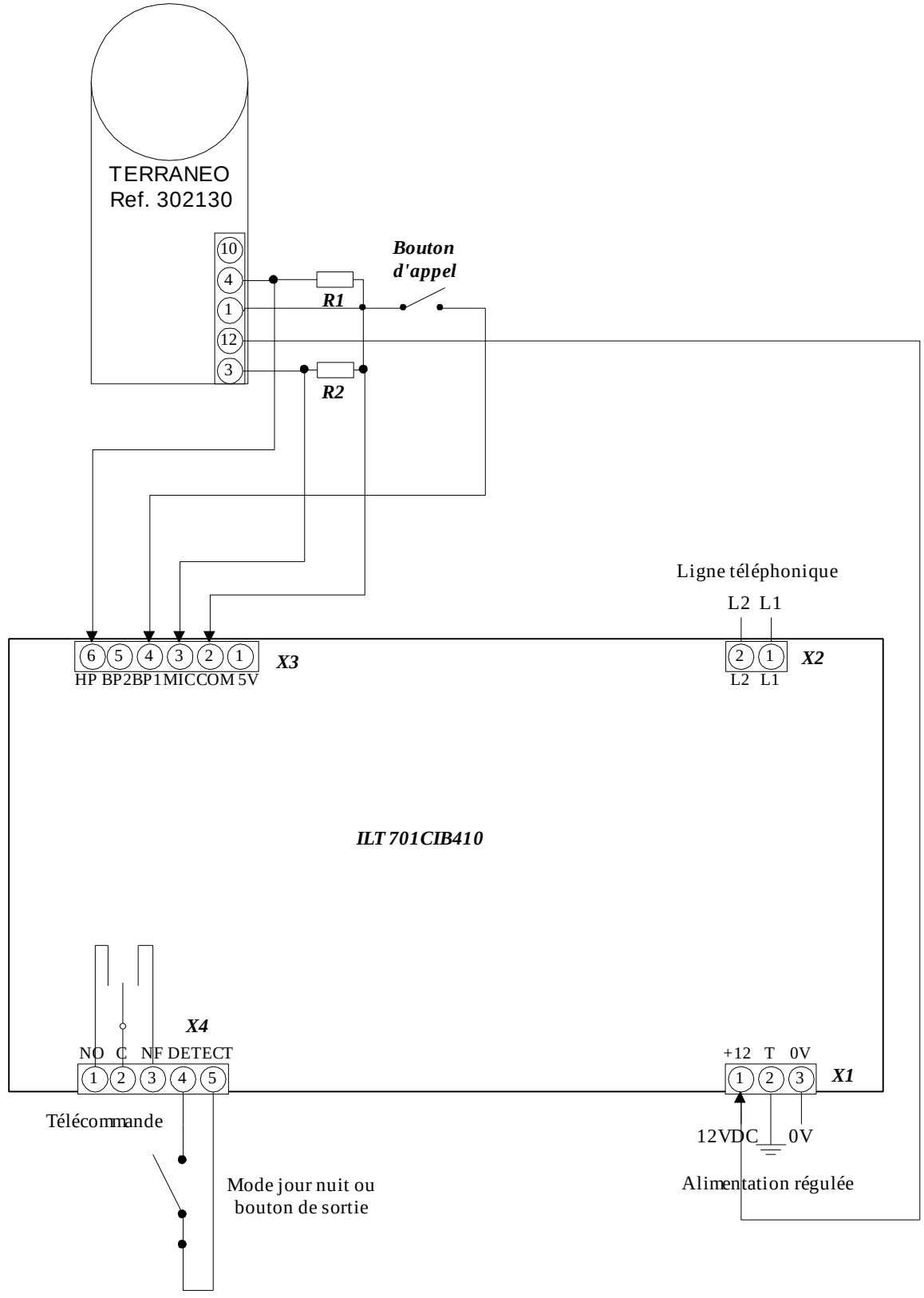
Add R1 & R2 =1 k Ohms



On **NORALSY** module XMIHP6 R1 and R2 remain with their nominales values

Module **TERRANEO** Ref. 302130

Add R1 & R2 = 220 Ohms / 0.5 W.



Module **COMELIT 1600**
Add R1 = 10 Ohms & R2 = 100 Ohms (1/4W)

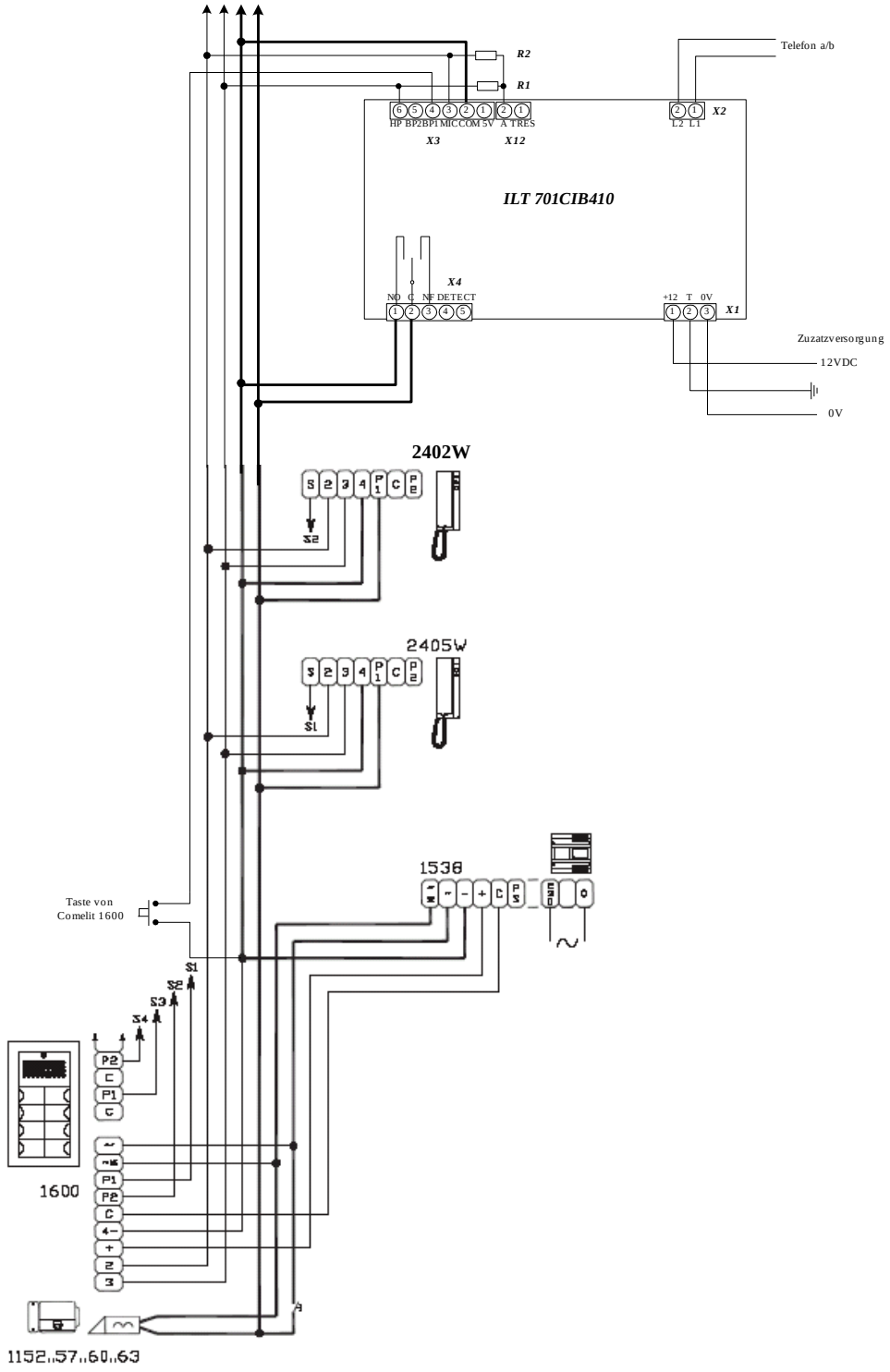
Programming:

a) Camera ON

***2000 # (3 short beeps) 33(long beep) 1 (3 short beeps)**

b) Audio level:

***2000 # (3 short beeps) 12(long beep) 15 (3 short beeps)**



Module **VIDEX Art.4837**
Add R1 = R2 = 330 Ohms (1/4W)

Programming:

a) Camera ON

***2000 # (3 short beeps) 33(long beep) 1 (3 short beeps)**

b) Audio level:

***2000 # (3 short beeps) 12(long beep) 15 (3 short beeps)**