Elvox 6220/A

Terminals

1	Data Line
2	Data Line
3	
6A	Outdoor Push Button
6B	Outdoor Push Button

IMPORTANT NOTE :

1) Before replacing the handset make note of the wires to each terminal on the existing unit (an easy way is to cut each core off leaving a piece of the insulation in place with colour visible) twist unused cores together (so you know they are not used, <u>do not</u> short them out).

2) Some older systems will have cable with one coloured core and a solid white core in this case mark each core with a marker or tape.

3) Some systems may have <u>loop on wiring</u>, you will have 2 cables into your handset (make sure any joins remain, as these may be serving other flats on the system).

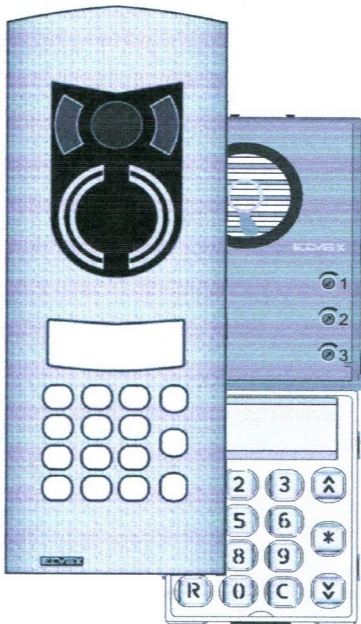© 2010 www.intercomsrus.com

ELVOX®

Communicating in style

DIGITAL 2-WIRE SYSTEM "Digit 2 Wires"
WITH ELECTRONIC UNIT Type 12B2
FOR SERIES 1200 PANEL WITH NUMERIC KEYPAD
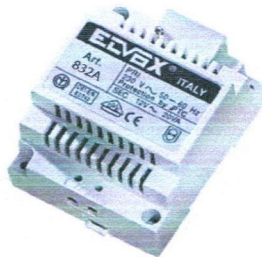
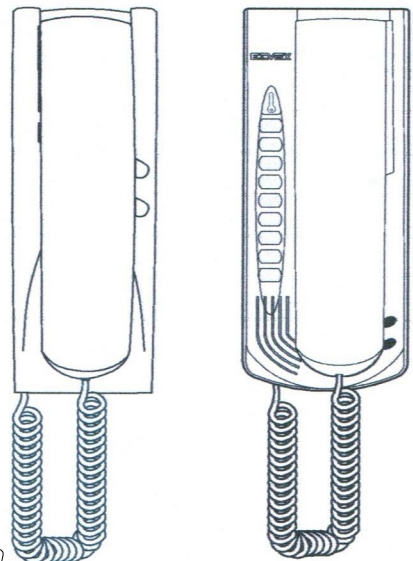### INSTALLATION AND CONNECTION MANUAL

GB

Digit2wires®

**ELECTRONIC UNIT
TYPE 12B2
FOR SERIES 1200
PANELS**

PHONES

POWER SUPPLY

OPERATION

With the entrance panel in standby (without any specific signals on the display) enter the number of the interphone to call and press key C to confirm or key R to re-enter the number. Once key C is pressed the engaged signal is transmitted to the entrance panels in parallel and the call is activated. The number of ringtones is programmable. If the handset is lifted between one ringtone and the next, the ringtones are interrupted and the voice circuit is activated immediately. If the door lock is released or a door call is made, the voice circuit is inhibited for approximately 2 seconds to prevent acoustic feedback on the entrance panel, after which it is reactivated. Before reactivating the voice circuit a check is carried out to ensure the user has not hung up the handset, in which case the conversation is terminated.

DESCRIPTION OF FUNCTIONS

Parallel engaged

With the entrance panel in standby, if another entrance panel in parallel makes a call, the LO line is set to low voltage level by the calling entrance panel. The entrance panel in standby indicates that the panel is engaged with a message on the display, and disables the keypad. In the case of a lock pulse from an interphone, if the "Lock Mode" parameter of the engaged panel is active and set to 2, the lock is opened. At the end of conversation on the active panel the LO line is returned to high voltage level and the panel in standby clears the "engaged" message from the display and re-enables the keypad.

Lock signal

The lock signal is activated from the interphone by means of a pushbutton. The following processes are performed.
1) The lock is activated for the set time
2) In the case of an active entrance panel, the interphone is disconnected to avoid acoustic feedback howl on the entrance panel, and then after approximately 2 seconds communication between interphone and entrance panel is restored.

Door lock release from an entrance panel

To release the lock directly from the entrance panel press keys R-1 simultaneously then enter the 8-digit password (from 1 to 99999999) previously programmed by accessing technical parameters with keys R-4. If the entrance panel is engaged it is anyway able to release the lock it controls, after which it returns to engaged status. To program door lock release codes perform the following procedure.

Press keys R-4, enter the password, then press key ⊻ (down arrow) to enter key programming mode. Press key C to display the various numbers. The position number is shown on the first line, while the second line shows the key code, which can be edited. Press key C both after editing the code and to scroll through the numbers. When programming is completed mode press key R. A maximum of 200 different door lock release codes con be programmed.

Hardware-software codification of numbers

The numbers to be entered to call an interphone can be edited. The hardware number is the number physically set on the interphone by means of the jumpers. The default software number is the same as the hardware number. The software number to be entered to make a call can be set to a different address from the physical hardware. The new number can have a maximum of 4 digits. To configure a different logic of the interphone numbers (for example, in a hotel rooms on the first floor may be assigned numbers starting with 1: 1001, 1002, ... numbers corresponding to interphones on the second floor can be assigned numbers starting with 2: 2001, 2002, ...). To perform this codification enter the programming function with the normal procedure (press R-4 and enter the password) then press key ⊼ (up arrow) to enter HW-SW numbers programming mode. Press key C to display the various numbers. The HW number is shown on the first line while the second line shows the editable SW number. Press key C after editing and to scroll between numbers.

When programming is terminated press key R. To enable this numbering instead of the direct system (number entered = interphone HW code number), enter parameters progamming mode and set the "Enable Software N." parameter to 1.

When the software numbers are modified the entrance panel will check whether the number entered exists already as both a hardware code and a software code and, if it finds any matches it will signal that the procedure cannot be performed.

For example, if you attempt to replace a software code with number 5, which is already present, the entrance panel will respond with:

NUMBER ALREADY IN THE MEMORY

ERR_N_HW= 005
ERR_N_SW= 0005

followed by the message:

when this message is displayed, change the software number.
The maximum number of interphones that can be encoded is 200.

ENTRANCE PANEL TECHNICAL PARAMETERS

Press R and 4 simultaneously on the entrance panel keypad to enter technical parameters programming mode. Then enter the password and press C. The message "PROGRAM" is displayed, Press C again to display the parameters as shown in the following table.

N.	Name	Default Value	Minimum value	Maximum value	Description
1	PASSWORD	123	1	99999999	Password to enter technical programming mode
2	------				Not used
3	LANGUAGE ENGLISH	0	0	1	Indicates the language used for technical parameters and messages on the display (Italian=0 English=1)
4	T LOCK	1	1	255	Lock activation time in seconds. **N.B.:** Increasing the activation time to a value of more than 5 seconds is only possible by installing an auxiliary relay Art. 170/001 and relative power supply transformer Art. 832/030.(Connection variant Ref. SI518).
5	LOCK MODE	1	1	2	This parameter is set to 1 by default (open only if the entrance panel is in conversation). If set to 2 an entrance panel engaged by another entrance panel can anyway release the lock (Art.8B62, 8B63 and 12B2 only)
6	CALLS No.	3	1	3	Indicates the number of calls to the interphone
7	CONVERSATION T	120	1	255	Conversation time in seconds
8	ANSWER T	30	1	255	Enables programmed numbering of interphones (by setting to 1). If set to 1 direct numbers are not enabled (if no SW number is found the direct call is not made)
9	ENABLE SW No.	0	0	1	Abilita la numerazione programmata dei citofoni (impostando a 1) Se si imposta a 1 i numeri diretti non sono abilitati (se non trova un numero SW non chiama il diretto)
10	TRANSFER RINGTONE TO ENTRANCE PANEL	1	0	1	If set to 1 the call tone can be heard on the entrance panel, otherwise the call tone is not transferred
11	ENABLE DEBUG	1	0	1	Enables messages

If you do not know the password to enter technical parameters programming mode, proceed as described below to change the password.

PROCEDURE TO RESTORE DEFAULT PARAMETERS AND PASSWORD

Press and release the reset button (under the panel, near the microphone), then hold down buttons ⊻, ✳, ⊼ until the message "Default Parameters" appears. This serves to restore standard technical parameters, resetting passwords and deleting software numbers.

INTERPHONES PROGRAMMING
The interphones must be programmed at the time of installation and connection.
Programming serves to distinguish between the interphones installed (from 1 to max. 200).
Physical programming of interphones
Interphones are programmed using the 8 jumpers located in the 8 locations (1, 2, 4, 8, 16, 32, 64, 128) in the interphones. Numbers from 1 to 200 can be entered by means of the jumpers. (See the tables on the following pages).

INTERPHONE NUMBERS PROGRAMMING TABLE

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Jumper not connected   Jumper connected

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INTERPHONE NUMBERS PROGRAMMING TABLE

N. 105	N. 113	N. 121	N. 129	N. 137	N. 145	N. 153	N. 161	N. 169	N. 177	N. 185	N. 193
N. 106	N. 114	N. 122	N. 130	N. 138	N. 146	N. 154	N. 162	N. 170	N. 178	N. 186	N. 194
N. 107	N. 115	N. 123	N. 131	N. 139	N. 147	N. 155	N. 163	N. 171	N. 179	N. 187	N. 195
N. 108	N. 116	N. 124	N. 132	N. 140	N. 148	N. 156	N. 164	N. 172	N. 180	N. 188	N. 196
N. 109	N. 117	N. 125	N. 133	N. 141	N. 149	N. 157	N. 165	N. 173	N. 181	N. 189	N. 197
N. 110	N. 118	N. 126	N. 134	N. 142	N. 150	N. 158	N. 166	N. 174	N. 182	N. 190	N. 198
N. 111	N. 119	N. 127	N. 135	N. 143	N. 151	N. 159	N. 167	N. 175	N. 183	N. 191	N. 199
N. 112	N. 120	N. 128	N. 136	N. 144	N. 152	N. 160	N. 168	N. 176	N. 184	N. 192	N. 200

Each block has jumpers labelled: 1, 2, 4, 8, 16, 32, 64, 128

Jumper not connected   Jumper connected

MINIMAL CONDUCTOR SECTION (mm²)

Conductors	Ø fino a 50 m	Ø fino a 100 m	Ø fino a 200 m
AC, AC, +S1, -S2	0,75 mm²	1 mm²	1.5 mm²
1 - 2 - L0	0,25 mm²	0,25 mm²	0,35 mm²

SINGLE CONDO AUDIO DOOR ENTRY SYSTEM WITH ONE ENTRANCE PANEL.

Ref. Diagram SI515.
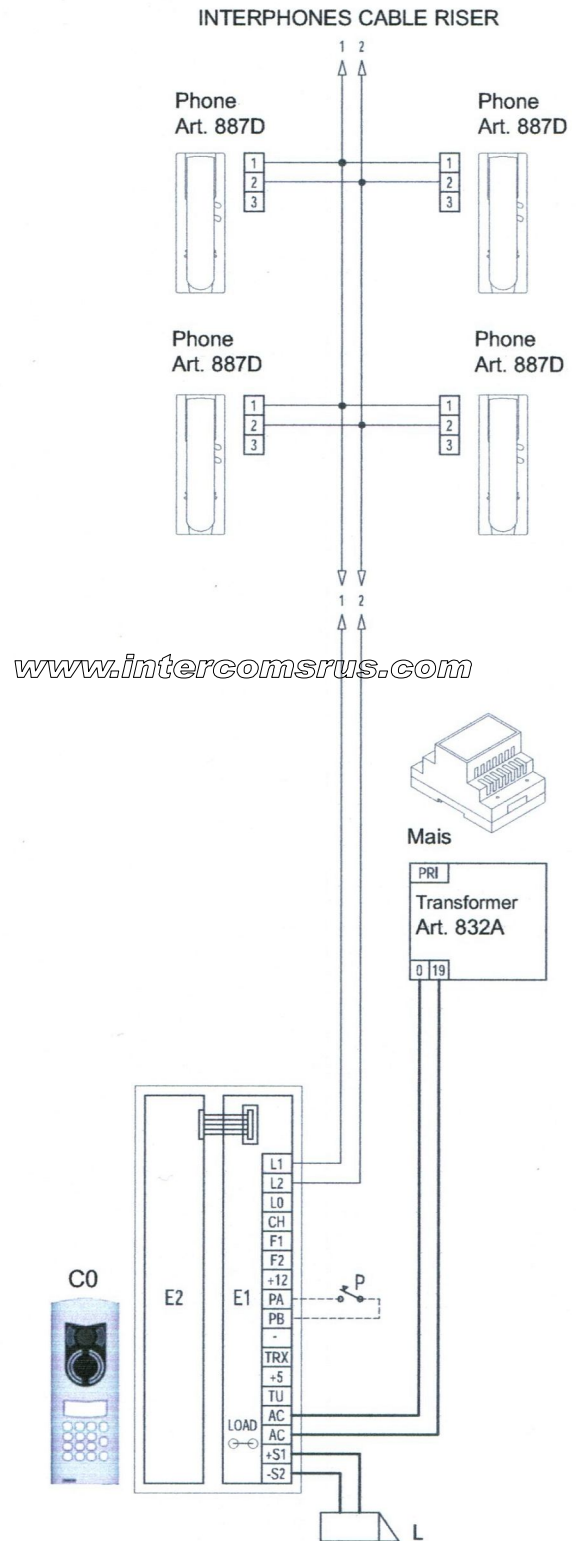
INTERPHONES CABLE RISER

Phone Art. 887D

Phone Art. 887D

Phone Art. 887D

Phone Art. 887D

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Mais

PRI

Transformer Art. 832A

0 19

C0

E2 E1

L1
L2
L0
CH
F1
F2
+12
PA
PB
-
TRX
+5
TU
AC
AC
+S1
-S2

P

LOAD

L

C0- External panel series 1200 with plate Art. 122D 123D
E1- Connection terminal block
E2- Electronic unit Art. 12B2
L- Electric lock 12V A.C.
P- Additional push-button for lock

CONDO SYSTEM WITH ONE ENTRANCE PANEL AND CABLE RISER FOR INTERPHONE WITH DOOR CALL PUSHBUTTONS. Ref. Diagram SI516.

INTERPHONES CABLE RISER

1 2 CH

Phone Art. 887D
1
2
3
K

Phone Art. 887D
1
2
3
K

Phone Art. 887D
1
2
3
K

Phone Art. 887D
1
2
3
K

1 2 CH

Mais

PRI
Transformer Art. 832A
0 19

C0   E2   E1

L1
L2
L0
CH
F1
F2
+12
PA
PB
-
TRX
+5
TU
AC
LOAD AC
+S1
-S2

P

L

C0- External panel series 1200 with plate Art. 122D 123D
E1- Connection terminal block
E2- Electronic unit Art. 12B2
K- Outdoor call push-button
L- Electric lock 12V A.C.
P- Additional push-button for lock

CONDO SYSTEM WITH ONE ENTRANCE PANEL, INTERPHONES ART. 6220/A AND ART. 887D/A AND DOOR CALL PUSHBUTTONS. Ref. Diagram SI521.
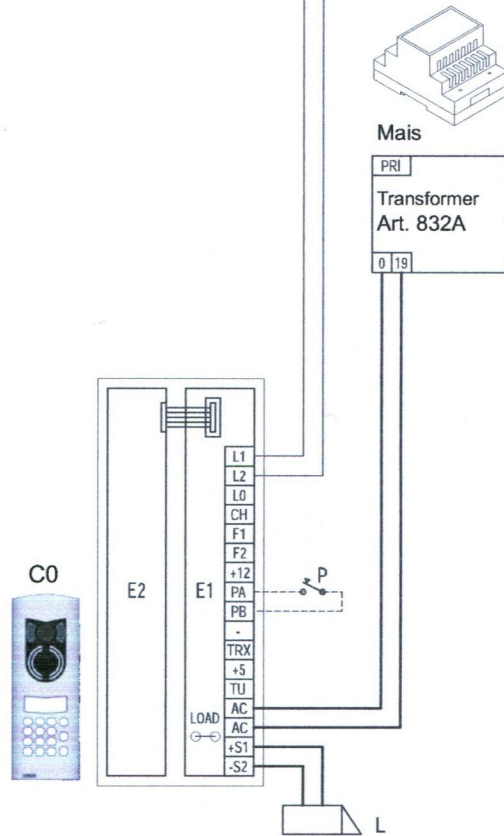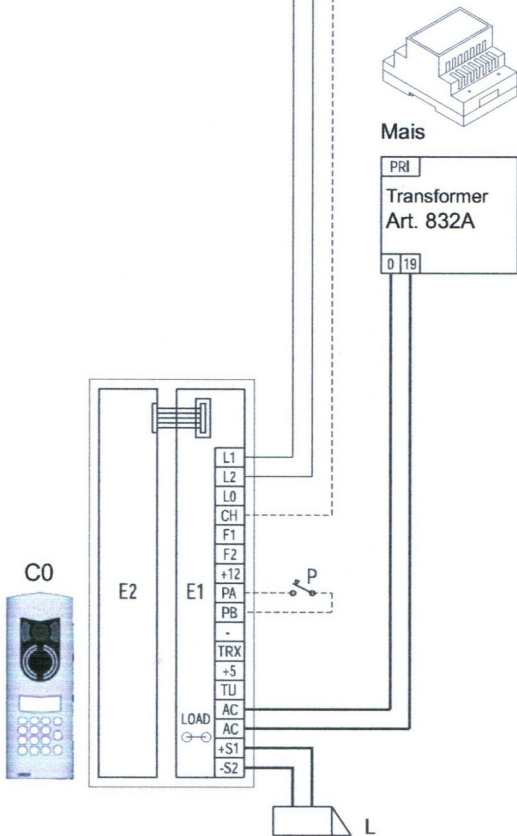
INTERPHONES CABLE RISER

1 2

Phone Art. 887D/A
1
2
3
6A
6B
K

Phone Art. 887D/A
1
2
3
6A
6B
K

Phone Art. 6220/A
1
2
3
6A
6B
K

Phone Art. 6220/A
1
2
3
6A
6B
K

1 2

Mais

PRI
Transformer Art. 832A
0 19

C0   E2   E1

L1
L2
L0
CH
F1
F2
+12
PA
PB
-
TRX
+5
TU
AC
LOAD AC
+S1
-S2

P

L

C0- External panel series 1200 with plate Art. 122D 123D
E1- Connection terminal block
E2- Electronic unit Art. 12B2
K- Outdoor call push-button
L- Electric lock 12V A.C.
P- Additional push-button for lock

11

CONDO SYSTEM WITH MORE THAN ONE ENTRANCE PANEL IN PARALLEL (MAXIMUM 3 PANELS).
Ref. Diagram SI517.

INTERPHONES
CABLE RISER

Phone
Art. 887D

Phone
Art. 887D

Phone
Art. 887D

Phone
Art. 887D

C0- External panel series 1200
 with plate Art. 122D 123D
E1- Connection terminal block
E2- Electronic unit Art. 12B2
L- Electric lock 12V A.C.
P- Additional push-button for lock

www.intercomsrus.com

Transformer
Art. 832A

Mais

Transformer
Art. 832A

Mais

Transformer
Art. 832A

Mais

www.intercomsrus.com

In the case of several entrance panels connected in parallel (up to three entrance panels) the "LOAD" jumper on the board of the connection terminal block must remain intact on one entrance panel while it must be severed on the others.

CONDO SYSTEM WITH MORE THAN ONE ENTRANCE PANEL IN PARALLEL (MAXIMUM 3 PANELS) AND CABLE RISER FOR INTERPHONE WITH DOOR CALL PUSHBUTTONS.
Ref. Diagram SI551.

INTERPHONES
CABLE RISER

1 2 CH

Phone
Art. 887D

Phone
Art. 887D

K   K

Phone
Art. 887D

Phone
Art. 887D

K   K

1 2 CH

C0- External panel series 1200
     with plate Art. 122D 123D
E1- Connection terminal block
E2- Electronic unit Art. 12B2
K- Outdoor call push-button
L- Electric lock 12V A.C.
P- Additional push-button for lock

Transformer
Art. 832A   Mais

PRI

0 19

Transformer
Art. 832A   Mais

PRI

0 19

Transformer
Art. 832A   Mais

PRI

0 19

C0	E2	E1
		L1
		L2
		L0
		CH
		F1
		F2
		+12
		PA
		PB
		-
		TRZ
		+5
		TU
LOAD		AC
		AC
		+S1
		-S2

P

L

P

L

P

L

In the case of several entrance panels connected in parallel (up to three entrance panels) the "LOAD" jumper on the board of the connection terminal block must remain intact on one entrance panel while it must be severed on the others.

Variant for connection of call repeater Art. 2/841 with interphones Art. 887D with or without door call.

Call repeater
Art. 2/841

2
3
5
6

Phone
Art. 887D

1
2
3
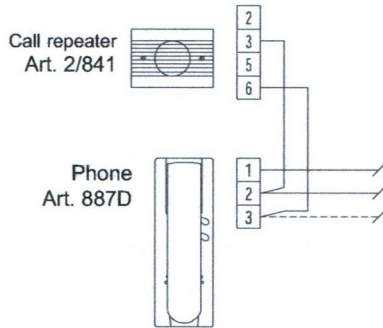
www.intercomsrus.com

Variant for connection of call repeater Art. 2/841 with interphones Art. 887D and Art. 6220/A with door call.

Relay
Art. 170/101

C 1 2 15   RC 3 4 5

Phone
Art. 887D

1
2
3

Additional
bell

Bell supply
(do not use the door
entry panel transformer)

Variant for connection of supplementary doorbell with interphones Art. 887D with or without door call.

Call repeater
Art. 2/841

2
3
5
6

Phone
Art. 887D/A

1
2
3
6A
6B

K

www.intercomsrus.com

Call repeater
Art. 2/841

2
3
5
6

Phone
Art. 6220/A

1
2
3
6A
6B

K

Variant for connection of supplementary doorbell with interphones Art. 887D/A and Art. 6220/A with door call.

Relay
Art. 170/101

C 1 2 15   RC 3 4 5

Phone
Art. 887D/A

1
2
3
6A
6B

K

Additional
bell

Bell supply
(do not use the door
entry panel transformer)

Relay
Art. 170/101

C 1 2 15   RC 3 4 5

Phone
Art. 6220/A

1
2
3
6A
6B

K

Additional
bell

Bell supply
(do not use the door
entry panel transformer)
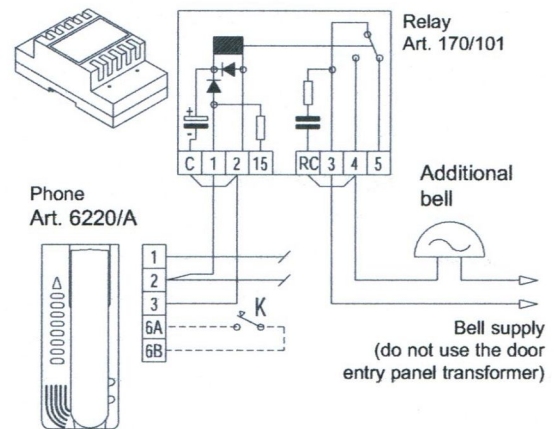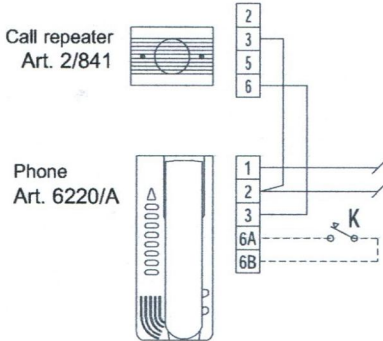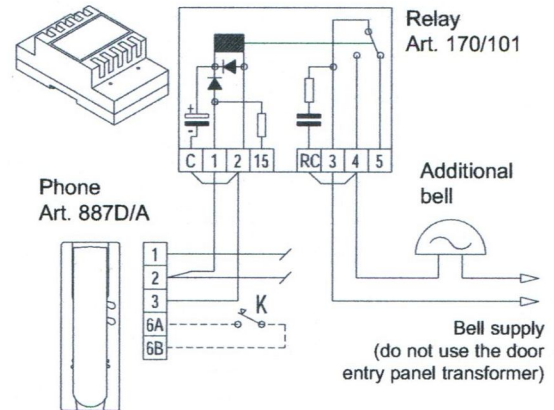
K- Outdoor push-button

K- Outdoor push-button

CONNECTION VARIANTS FOR SUPPLEMENTARY MODULES ART. 122N AND 123N (REF. SI519).
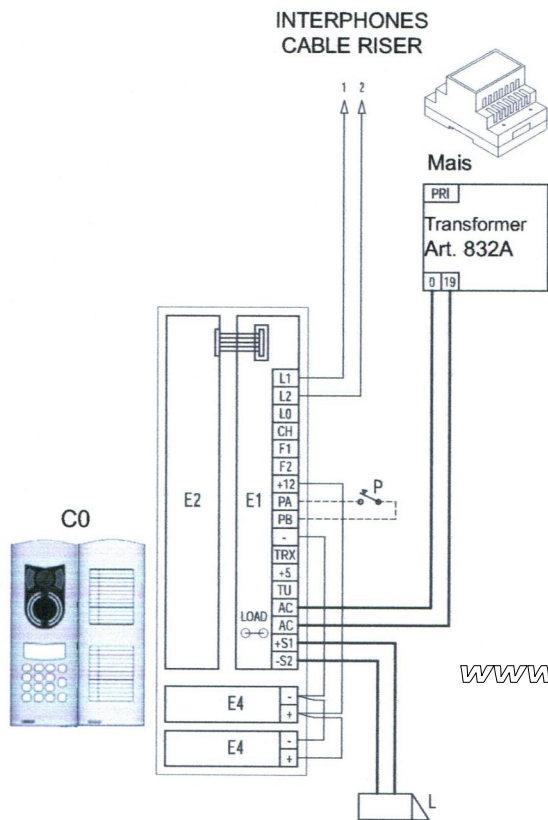
INTERPHONES
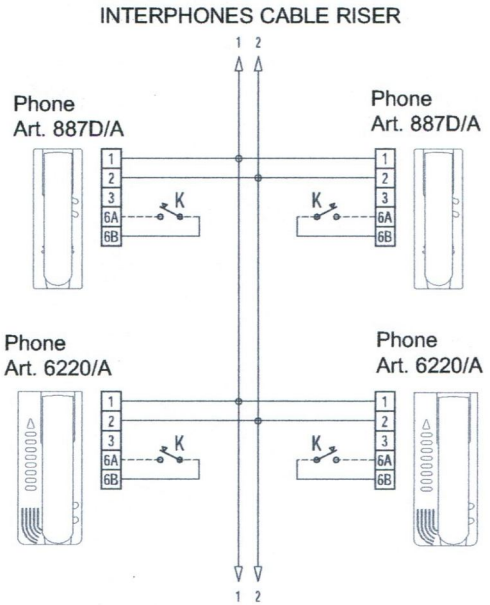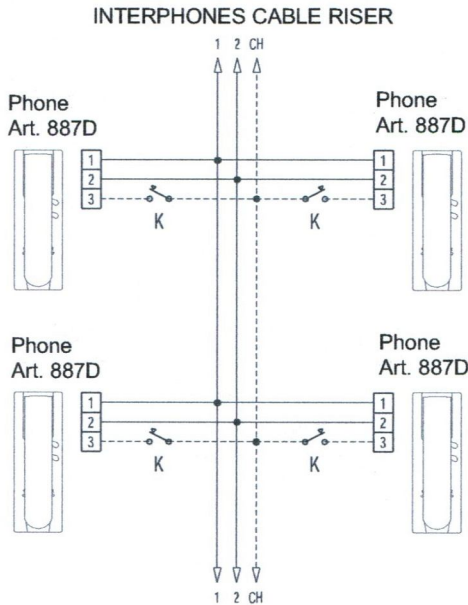CABLE RISER

1   2

Mais

PRI

Transformer
Art. 832A

0 19

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C0- External panel series 1200
    with plate Art. 122D 123D
E1- Connection terminal block
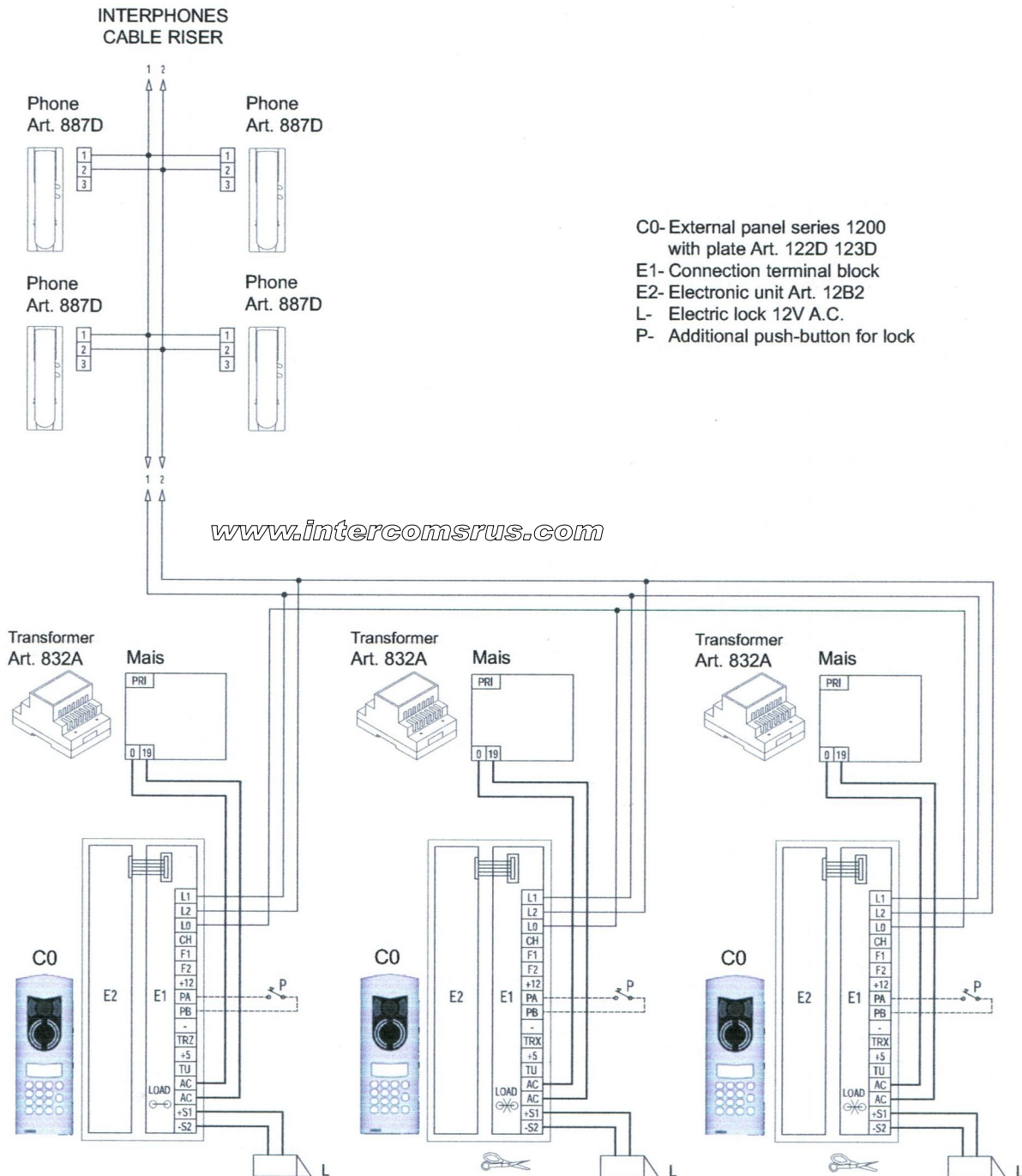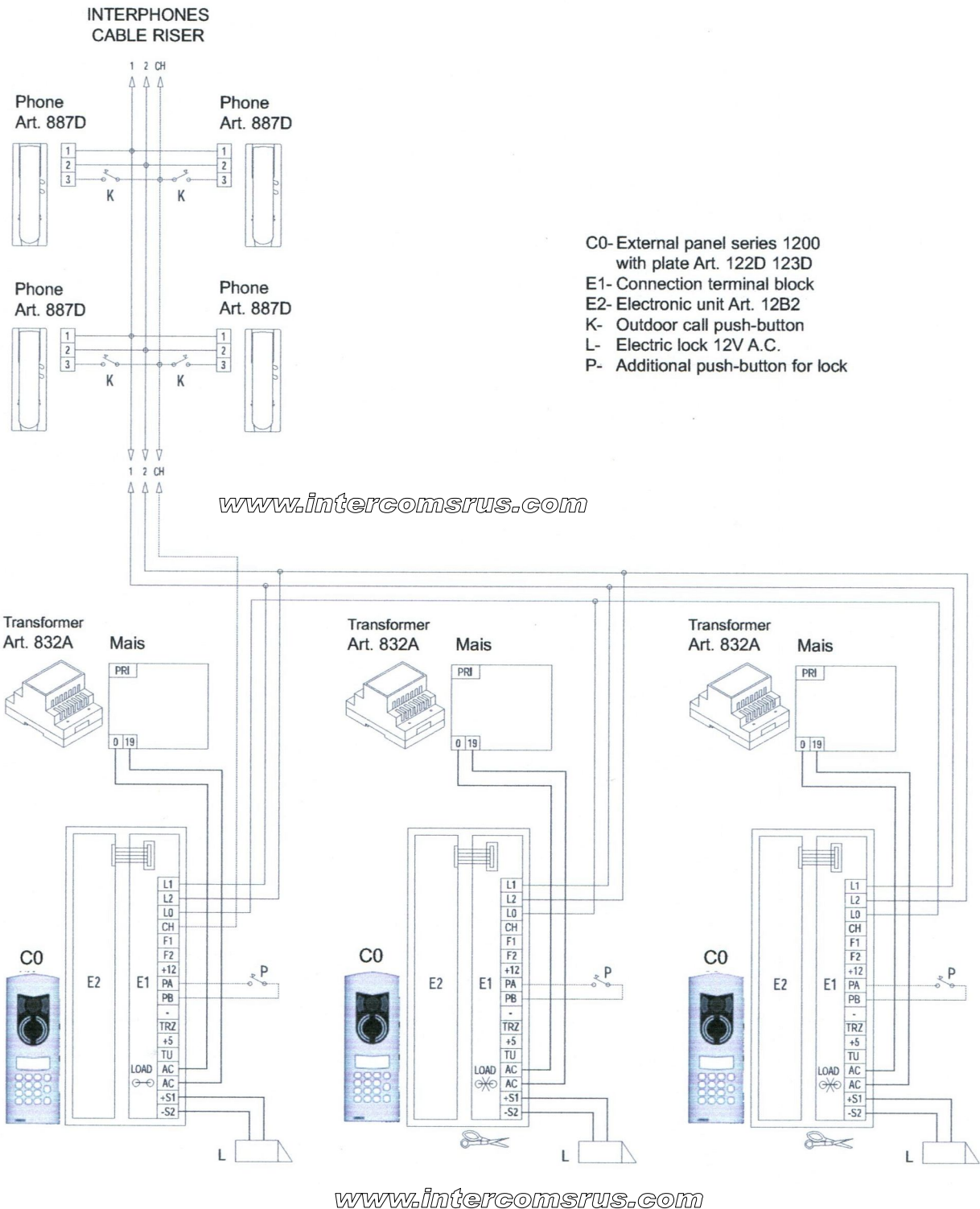E2- Electronic unit Art. 12B2
E4- Additional module Art. 122N, 123N
    Art. 122N (2 modules), 123N (3 modules)
P- Additional push-button for lock
L- Electric lock 12V A.C.

C0

E2   E1

L1
L2
L0
CH
F1
F2
+12
PA   P
PB
-
TRX
+5
TU
AC
LOAD AC
+S1
-S2

E4 - +
E4 - +

L

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CONNECTION FOR SUPPLEMENTARY POWER SUPPLY UNIT ART. 6582

The additional power supply type 6582 is used to power the LEDs for the name-tags lighting when there are more than 8 additional name-tags modules (type 122N, 2 module panel, 123N 3 module panel) . One power supply type 6582 can power up to 65 modules of panel with name-tags modules (122N with 2 modules, 123N with 3 modules).

INTERPHONES
CABLE RISER

1   2

Mais   Mais

PRI   PRI

Transformer   Alimentatore
Art. 832A   Art. 6582

0 19   - +U +I   A B C D

C0

E2   E1

L1
L2
L0
CH
F1
F2
+12
PA   P
PB
-
TRX
+5
TU
AC
LOAD AC
+S1
-S2

E4 - +
E4 - +
E4 - +
E4 - +

L

www.intercomsrus.com

To other
additional modules

CONNECTION VARIATION FOR LOCK WITH SUPPLEMENTARY POWER SUPPLY (REF. SI518).
To open high power consumption/timer-controlled locks, an external transformer can be installed to power the lock by means of a relay art. 170/001 connected to entrance panel terminals +S/-S.
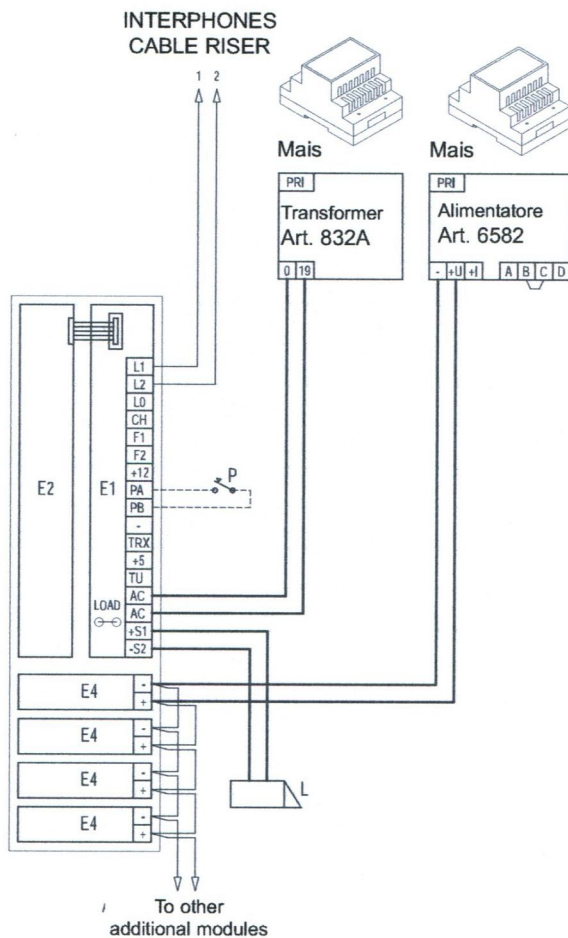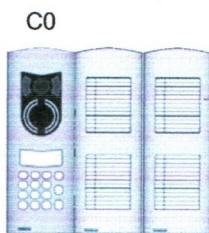

INTERPHONES
CABLE RISER

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C0- External panel series 1200
with plate Art. 122D 123D
E1- Connection terminal block
E2- Electronic unit Art. 12B2
P- Additional push-button for lock
L- Electric lock 12V A.C.
Q- Relè Art. 170/001

Mais
Transformer
Art. 832A

Relè
Art. 170/001

Mais
Transformer
Art. 832/030

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