SYSTEM DESCRIPTION
The 142 switchboard for hotel or porter use can send and receive calls from any user, switch calls from interphones to the interphone for night service and bring the night service interphone into communication with the speech unit.

OPERATION FOR SWITCHBOARD type 142A, 142B, .... 142I
During "Daytime" operation (GN key set to G) private conversation is possible between the switchboard and the interphones. To communicate from the switchboard to the interphones, lift the interphone of the switchboard, activate the line selector key and press the CH button.

To make a call from the interphones to the switchboard, simply lift the interphone of the interphone; the switchboard will signal the call by lighting up the LED for the interphone and activating the internal electronic ringtone. When you lift the switchboard interphone, the ringtone is switched off. To enter into communication with the interphone, simply activate the relevant line selector key and speak. At the end of the conversation, disactivate the line selector key and replace the interphones. For "Night" operation (GN key set to N), the switchboard interphone has to be hung up and all the line selector keys must be disactivated. In this operating state, all calls from the interphones are diverted to the night interphone, which is able to communicate with the interphones without conversation privacy. On receipt of a call from the entrance panel, the night interphone can communicate with the speech unit by holding the push-button down. To open the door lock from the night interphone, simply press the push-button.

Switchboards with 80, 100 and 120 lines are equipped with a multiplier key "=x" which enables you to double the number of lines, thus making it possible to insert two users separately for each key. To communicate with an interphone from the switchboard during Daytime operation:
- lift the interphone;
- on the multiplier key select the LED (yellow "x" or red "=" according to the interphone that you want to call);
- press the line selector key: the corresponding LED thus illuminates with the same colour as that of the multiplier key.

During Night service, a call sent from the entrance panel activates only the ringtone of the night service interphone type 149A. If you need to activate calls from the entrance panel both during the day and at night, use a call repeater type 2/841 or the ringtone type 860A, connected as shown in the variations of the standard diagram.

During "Daytime" operation, the night interphone operates as a normal interphone, on which the line selector key is "CN". If one or more line selector keys remain activated and the interphones of the switchboard and the night interphone are in the rest state, the internal electronic ringtone of the switchboard will activate (with the GN key set to G). With the GN key set to N, the night interphone ringtone will sound intermittently, until the pressed keys are disactivated.

CONNECTION INSTRUCTIONS (diagram cc3049-2)
Three types of switchboard connection are possible:
1) Connection of the interphones only.
   Connection line: one common wire and one wire for each interphone. None of the other connections must be made.
2) Connection of the interphones and the night interphone.
   Connection line: make the connections shown in the diagram except for those shown with broken lines.
3) Connection of the interphones, the night interphone and the speech unit.
   Connection line: make all the connections shown in the diagram.

Important: the diodes supplied with the switchboard are used only in the case of connection with an AC call system.

INSTALLING THE SWITCHBOARD
The switchboard can be flush desk-mounted, desk-top mounted or flush wall-mounted. For surface wall-mounted, follow the instructions below: open the housing and unscrew the screws fixing the two metal side supports. Pull them out of their seat and invert their position. In this way the front panel of the switchboard slopes like a reading-desk, allowing the interphone to rest naturally.

Key for communicating with the night interphone
Selector keypad
Multiplier key
Call push-button
Multipler key for communicating with the speech unit
Day-Night switching-key
Door release push-button
PORTER SWITCHBOARD type 162A 162B ... 162I WITH INTERPHONE FOR NIGHT SERVICE, ENTRANCE PANEL AND TELEPHONE LINE

SYSTEM DESCRIPTION
The 162 series switchboard for hotel or porter use can send and receive calls from any user, switch calls from the interphones to the night service interphone, communicate from the night service interphone to the speech unit, connect an interphone to a telephone line and bring 2 interphones into communication with each other.

OPERATION FOR SWITCHBOARD TYPE 162A, 162B, ..., 162I
During "Daytime" operation (GN key set to G) private conversation is possible between the switchboard and the interphones.
To communicate from the switchboard to the interphones, lift the interphone of the switchboard, activate the line selector key and press the CH button.
To make calls from the interphones to the switchboard, simply lift the interphone of the interphone; the switchboard will signal the call by lighting up the relevant LED on the interphone and activating the internal electronic ringtone. When the interphone is lifted, the ringer tone switches off. To enter into communication with the interphone, simply activate the relevant line selector key and speak.
At the end of the conversation, deactivate the line selector key and replace the interphones.

For "Night" operation (GN key set to N), the switchboard interphone has to be hung up and all the line selector keys must be deactivated. In this operating state, all calls from the interphones are diverted to the night interphone, which is able to communicate with the interphones without conversation privacy. On receipt of a call from the entrance panel, the night interphone can communicate with the speech unit by holding the push-button down. To open the door lock from the night interphone, simply press the push-button.

During Night Service, a call sent from the entrance panel activates only the ringer tone of the night service interphone type 149A. (diagram cc3944), or the Sound System call repeater type 2/841 (diagram cc3940). For Sound System without call repeater, only the 149A sounds in night service. If you need to activate calls from the entrance panel both during the day and at night, use a call repeater type 2/841 or ringtone type 860A, connected as shown in the instructions of the sound system. During "Daytime" operation, the night interphone operates as a normal interphone, on which the line selector key is "CN".

The switchboard is equipped with the "==" key to bring two interphones into communication with each other or one interphone into communication with the telephone line connected between the terminals LL. These services are activated only during daytime operation (GN key set to G).
- To bring two interphones into communication with each other, call the two interphones and then simply leave the two line selector keys corresponding to the 2 interphones ON, press the "==" key and replace the switchboard interphone. In this way, the switchboard is excluded from the conversation but can reply to calls from other interphones. The end of the conversation is indicated by the lighting up of the two line selector keys and intermittent activation of the internal ringer tone of the switchboard. It is important in this phase that the switchboard interphone is in the rest position. Then deactivate the two selector keys and the "==" key.
- If, during the intercommunicating conversation between the two interphones, the switchboard receives a call from a third interphone, the switchboard operator can answer the call simply by lifting the interphone without activating the line key. If the intercommunicating conversation between the two interphones ends before the conversation between the switchboard and the third interphone, the latter will be interrupted without any sudden signal. To restore communication, deactivate the "==" key, deactivate the line selector keys of the two interphones and activate the selector key for the third interphone.

To use the switchboard with a telephone line it is necessary to use type 149/162. This device is a telephone switching module with which it is possible to switch the telephone line between switchboard and telephone. By means of switching module 149/162 and the intercommunicating function, the switchboard operator can bring the interphones into communication with the telephone line and vice versa. The switching module has two positions: telephone line switched to telephone (red key pressed), telephone line switched to switchboard (black key pressed).
- Calls originating from the telephone line can be received on the telephone connected to 149/162 (with the red key pressed). To bring an interphone into communication with the telephone line, activate the line selector key of the interphone you want, press the "CH" key, wait for the reply, press the "==" key, replace the switchboard interphone and press the black key on switching module 149/162. In this way, the switchboard is excluded from the conversation but can reply to calls from other interphones. The end of the conversation is indicated by the lighting up of the line selector key for the interphone and intermittent activation of the internal ringer tone of the switchboard; it is important in this phase that the switchboard interphone is in the rest position. Disactivate the line key and the "==" key, and press the red key on type 149/162.

N.B. Note that the "==" key must not be pressed down and the LEDs must be OFF, so that the switchboard can communicate with the interphones with conversation privacy. If one or more line selector keys remains ON and the interphones of the switchboard and the night interphone are in the rest position, the internal electronic ringer tone of the switchboard will sound (with GN key set to G). With the GN key set to N, the ringer tone of the night interphone will sound intermittently, until the pressed keys are released.

CONNECTION INSTRUCTIONS (diagram cc3049-2)
Three types of switchboard connection are possible:
1) Connection of the interphones only.
   Connection line: one common wire and one wire for each interphone. None of the other connections must be made.
2) Connection of the interphones and the night interphone
   Connection line: make the connections shown in the diagram except for those shown with broken lines.
3) Connection of the interphones, the night interphone and the speech unit.
   Connection line: make all the connections shown in the diagram.

INSTALLING THE SWITCHBOARD
The switchboard can be flush desk-mounted, desk-top mounted or flush wall-mounted. For surface wall-mounted, follow the instructions below: open the housing and unscrew the screws fixing the two metal side supports. Pull them out of their seat and invert their position. In this way, the front panel of the switchboard slopes like a reading-desk, allowing the interphone to rest naturally.
Important: the diodes supplied with the switchboard are used only in the case of connection with an AC call system.

INSTALLING THE TELEPHONE SWITCHING MODULE
In order to be able to connect the switchboard to the urban telephone line, it is necessary to use type 149/162 supplied separately from the switchboard. For connection procedures, refer to the diagrams.
### SYSTEM WITH 142 AND 162 SERIES PORTER SWITCHBOARD WITH INTERPHONE FOR NIGHT SERVICE, ENTRANCE PANEL AND TELEPHONE LINE

**LIST OF SYSTEM COMPONENTS** (Diagram ref. CC3940-2)

<table>
<thead>
<tr>
<th>Diagram ref. type</th>
<th>Denomination</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 6201</td>
<td>Interphone</td>
<td>n</td>
</tr>
<tr>
<td>A1 8877</td>
<td>Interphone</td>
<td>n</td>
</tr>
<tr>
<td>B 836</td>
<td>power supply</td>
<td>1</td>
</tr>
<tr>
<td>C GALILEO SECURITY</td>
<td>Entrance panel</td>
<td>1</td>
</tr>
<tr>
<td>GALILEO or PATAVIUM series</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D 930 or 930A</td>
<td>speech unit</td>
<td>1</td>
</tr>
<tr>
<td>E -</td>
<td>Electric lock 12V AC</td>
<td>1</td>
</tr>
<tr>
<td>F 142A - 142B ... 142I or (162A - 162B ... 162I)</td>
<td>Porter switchboard</td>
<td>1</td>
</tr>
<tr>
<td>G -</td>
<td>Additional door lock push-button</td>
<td>1</td>
</tr>
<tr>
<td>H 2/831</td>
<td>Call generator</td>
<td>1</td>
</tr>
<tr>
<td>I 832/030</td>
<td>Power supply transformer</td>
<td>1</td>
</tr>
<tr>
<td>L 149A</td>
<td>Night service interphone</td>
<td>1</td>
</tr>
<tr>
<td>M 149/162 (Only with 162 series switchboards)</td>
<td>Telephone switching module</td>
<td>1</td>
</tr>
<tr>
<td>n -</td>
<td>Number of users</td>
<td>n</td>
</tr>
</tbody>
</table>

Connection diagram N. cc3940-2 can be used both for 142 series and 162 series switchboards. The latter are connected differently only if the external telephone line is used. For use, see the instructions on the previous pages.

In the event of a short circuit, the protection devices (PTC) switch off the mains voltage. Once the short circuit has been eliminated, wait for a few minutes to allow the protection device to cool down so that the unit can return to normal operation.

**N. B.** The system can be completed by adding other services. To do this, consult the variations on the standard connection relating to the various components of the system, on pages 80 to 86.

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**BLOCK DIAGRAM N° sb1262**
SYSTEM WITH 142 AND 162 SERIES PORTER SWITCHBOARD WITH INTERPHONE FOR NIGHT SERVICE, ENTRANCE PANEL AND TELEPHONE LINE

Section of conductors

<table>
<thead>
<tr>
<th>Conductors</th>
<th>Ø up to 50m</th>
<th>Ø up to 100m</th>
<th>Ø up to 200m</th>
</tr>
</thead>
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<td>Common and lock</td>
<td>0,5 mm²</td>
<td>0,75 mm²</td>
<td>1,5 mm²</td>
</tr>
<tr>
<td>Others</td>
<td>0,25 mm²</td>
<td>0,5 mm²</td>
<td>1 mm²</td>
</tr>
</tbody>
</table>

A- Entrance panel with speech unit
B- Additional door lock button
C- 12V~ electric lock
D- Speech unit type 930 - 930A
E- Power supply type 836

DIAGRAM N° cc3940-2
LIST OF SYSTEM COMPONENTS (Diagram ref. CC3941)

<table>
<thead>
<tr>
<th>Diagram ref.</th>
<th>type</th>
<th>Denomination</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6201</td>
<td>Interphone</td>
<td>n</td>
</tr>
<tr>
<td>A1</td>
<td>8877</td>
<td>Interphone</td>
<td>n</td>
</tr>
<tr>
<td>B</td>
<td>836</td>
<td>Power supply</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>GALILEO SECURITY</td>
<td>Entrance panel</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>GALILEO or PATAVİUM series</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>930 or 930A</td>
<td>Speech unit</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>-</td>
<td>Electric lock 12V AC</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>142A - 142B ... 142l or (162A - 162B ... 162l)</td>
<td>Porter switchboard</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>-</td>
<td>Additional door lock push-button</td>
<td>1</td>
</tr>
<tr>
<td>H</td>
<td>2/831</td>
<td>Call generator</td>
<td>1</td>
</tr>
<tr>
<td>I</td>
<td>832/030</td>
<td>Power supply transformer</td>
<td>1</td>
</tr>
<tr>
<td>L</td>
<td>149A</td>
<td>Night service interphone</td>
<td>1</td>
</tr>
<tr>
<td>M</td>
<td>149/162 (Only with 162 series switchboards)</td>
<td>Telephone switching module</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>839/302</td>
<td>Switching module</td>
<td>1</td>
</tr>
<tr>
<td>n</td>
<td>-</td>
<td>Number of users</td>
<td>n</td>
</tr>
</tbody>
</table>

In the event of a short circuit, the protection devices (PTC) switch off the mains voltage. Once the short circuit has been eliminated, wait for a few minutes to allow the protection device to cool down so that the unit can return to normal operation.

N. B. The system can be completed by adding other services. To do this, consult the variations on the standard connection relating to the various components of the system, on pages 80 to 86.

Block diagram N° sb1261

Wiring diagram N. cc3941 can be used both for 142 series and 162 series switchboards. The latter are connected differently only if the external telephone line is used. For use, see the instructions on the previous pages.
Variation with switchboard type 162A - 162B, ... 162I for activation of the telephone line

Switchboard type 142A, 142B, ... 142I
type 162A, 162B, ... 162I

Telephone switching module type 149/162

Telephone line

type 2/831
type 832/030
type 839/302

E Mains
E Mains

Interphone for night-time service type 149A

A- Entrance panel with speech unit
B- Additional door lock button
C- 12V~ electric lock
D- Speech unit type 930 - 930A
E- Power supply type 836

Variation A - Diagram for the connection of additional ringtones

During Night service, calls from the entrance panel activate only the ringtone of the interphone for night service type 149A. If you need to activate calls from the entrance panel both with Daytime service and with Night service, use a call repeater type 2/841, or ringtone type 860A, or a repeater relay type 170/101 which activates a mechanical doorbell supplied by the mains. These call indication systems must be connected as shown in this version.