This document explains how to implement 3rd party corridor signage that includes Do Not Disturb (DND), a door chime control, and an optional Make Up Room (MUR) guest control in a myRoom system.

**myRoom Corridor Signage Sequence of Operation**

The guest in the room can do the following:

- Press the MUR button to illuminate the MUR indicator light on the outside of the room.
  - This will also turn off the DND indicator light if it is on.
  - Press the MUR button again to turn off the indicator light.
- Press the DND button to illuminate the DND indicator light on the outside of the room.
  - This will also turn off the MUR indicator light if it is on.
  - Press the DND button again to turn off the indicator light.

The user outside of the room can do the following:

- View the MUR and DND indicator lights.
- Press the door chime button.
  - If the DND indicator light is on, the door chime button will not activate the chime.

*Note that if the room does not provide MUR buttons or status, the MUR functionality listed above is removed.*
myRoom DND, MUR, and Door Chime Wiring and Programming

Overall Architecture

The myRoom corridor signage solution includes a control inside the room, and corridor signage outside the room. The control inside the room is the QSWP-DM Pico Privacy Control for myRoom Prime or a Palladiom keypad for myRoom Plus. The corridor sign can either be a Pico corridor control (QSWP-CP) or a corridor sign by others. See the below architecture diagram for more detail. Note that the power supply provides 30 Power Draw Units (PDUs). The QSE-10 consumes 3 PDUs. Assume each wired Pico corridor control or relay device consumes 1 PDU each. Ensure the maximum consumption of PDUs does not exceed the power supply. Refer to the QS Link Power Draw Units Specification Submittal (P/N 369405) at www.lutron.com for more information.

Architecture Diagrams


WIRING LEGEND:

- 2 #18AWG (1.0 mm²)
- QS CONTROL LINK (SEE WIRE DESCRIPTION BELOW)

QS Wiring as required by control link length
(Remark to QS SMART PANEL POWER SUPPLY WIRING GUIDE FOR SHADE WIRING NOTES):

<table>
<thead>
<tr>
<th>TOTAL CONTROL LINK LENGTH</th>
<th>WIRE GAUGE</th>
<th>AVAILABLE FROM LUTRON IN ONE CABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LESS THAN 500 (153 m)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>POWER (TERMINALS 1 &amp; 2) 1 PAR 18 AWG (1.0 mm²)</td>
<td>GRX-CBL-346S OR GRX-PCBL-346S</td>
</tr>
<tr>
<td></td>
<td>DATA (TERMINALS 3 &amp; 4) 1 PAR 22 AWG (0.5 mm²) TWISTED AND SHIELDED*</td>
<td>GRX-CBL-346S OR GRX-PCBL-346S</td>
</tr>
<tr>
<td>500 (153 m) TO 2,000 (600 m)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>POWER (TERMINALS 1 &amp; 2) 1 PAR 12 AWG (4 mm²)</td>
<td>GRX-CBL-46L OR GRX-PCBL-46L</td>
</tr>
<tr>
<td></td>
<td>DATA (TERMINALS 3 &amp; 4) 1 PAR 22 AWG (0.5 mm²) TWISTED AND SHIELDED*</td>
<td>GRX-CBL-46L OR GRX-PCBL-46L</td>
</tr>
</tbody>
</table>

*ALTERNATE DATA-ONLY CABLE: USE APPROVED DATA LINK CABLE (22 AWG [0.5 mm²] TWISTED/SHEIELDED) FROM BELDEN (MODEL #9461).

**TOTAL LENGTH OF THE QS LINK MUST NOT EXCEED 2,000 ft (600 m).
myRoom DND, MUR, and Door Chime Wiring and Programming

This section describes the implementation for corridor signage that includes DND, MUR, and a door chime. For signage that only has a door chime and DND indicator, go to the “myRoom Prime DND and Door Chime Only” section.

The myRoom application with DND, MUR, and the door chime included requires Lutron’s contact closure interface (QSE-IO). Wire the controls to the QSE-IO as shown below. If the corridor signage requires voltage above 24 V, use contact relays (provided by others).

- Recommended chime: ATW Security PC - 200 12-24 VDC electronic chime or equivalent-rated device.
- Recommended button: EEC Switch Model 19 button or equivalent-rated device.

In the diagram below, the button's ring is lit by either a red or green LED. The red LED is lit and the door chime is disabled when DND is active. The green LED is lit when MUR is active. No LED is lit when neither DND nor MUR is active. myRoom Plus may allow a different sequence of operation.

**Programming:**

The QSE-IO is programmed in a myRoom Prime system via a DIP switch configuration directly on the device. See the “Hotel Mode” section of QSE-IO Control Interface Programming Guide at www.lutron.com (P/N 040391) for instructions on programming.

In a myRoom Plus system, the programming is done in the myRoom Programming software during commissioning. Contact Lutron or a certified Lutron Hospitality Technology Integrator for programming instructions.
myRoom DND and Door Chime Only Wiring and Programming

This section describes the implementation for corridor signage that only has an indicator for DND and a door chime button. It does not include an MUR indicator outside the room, nor does it have an MUR request button inside the room.

The sequence of operation for this application is as follows:

<table>
<thead>
<tr>
<th>Previous State</th>
<th>New State</th>
</tr>
</thead>
<tbody>
<tr>
<td>DND (outside)</td>
<td>DND (outside)</td>
</tr>
<tr>
<td>Off</td>
<td>DND On</td>
</tr>
<tr>
<td>On</td>
<td>DND Off</td>
</tr>
</tbody>
</table>

- DND active: DND zone ON
- DND inactive: DND zone OFF

The myRoom application with only DND and the door chime requires Lutron’s switching module (MQSE-4S1-D). Wire the module to the signage as shown below. The zone output of the switching module matches the status of the DND indication (Zone 1 On = DND enabled). If DND is enabled, the contactor relay (supplied by others) will open, which disables the door chime. If DND is disabled, the relay opens, and enables the door chime. Use a contact relay with a coil rated for the switching module’s line voltage input, and the relay output rated for the door chime’s power supply.

Programming the DND sequence of operation is done through the myRoom programming software during commissioning. Program the DND zone of the switching module to match the state of DND:
- DND active: DND zone ON
- DND inactive: DND zone OFF

Contact relays and the door chime button must be rated for the voltage supplied.

**Figure 1: 24 V=== DND light, 24 V=== chime and button**

Key

- Single Pole Double Throw (SPDT) relay, supplied by others
- Coil: Line Voltage
- Relay: 24VDC

**Diagram**

- Red DND light wire
- Line Voltage Zone 1: DND
- QS Link
- Inside DND button
- EEC Switch Model 19
- Corridor sign with door chime button and DND indicator
- Button wire 1
- Button wire 2
myRoom Prime DND and Door Chime Only Wiring and Programming (cont’d)

Figure 2: Line-voltage DND light, Line-voltage Chime and button

Figure 3: Line-voltage DND light, low-voltage chime and button
myRoom Prime DND and Door Chime Only Wiring and Programming (cont’d)

Figure 4: Low-voltage DND light, line-voltage chime and button

Key
- Normally Open relay, supplied by others
  - Coil: Line Voltage
  - Relay: Low Voltage
- Normally Closed relay, supplied by others
  - Coil: Line Voltage
  - Relay: Line Voltage

Corridor sign by others
- DND indicator light
  - Line Voltage
- Chime
  - Line Voltage

Inside DND button
- QS Link
  - Line Voltage
- Line Voltage Supply
  - Zone 1: DND
  - Chime
  - Low-Voltage Power Supply

Line Voltage
- Low Voltage