I. Description

The Selective Call Intercom system supports the use of one door release per module installed (up to four). Each Selective Call Intercom Module (IC5001) has two pair of blue screw down terminals at the bottom left hand corner (See Figure 1). Both pairs of screw down terminals function as open collector outputs. The pair of screw terminals labeled “A” are used to implement the door release functionality. This bulletin will layout the proper connectivity needed as well as give a general overview of how the door release is enabled and activated on the Selective Call Room Units.

Please note that the settings menu items listed in this bulletin will not apply to the Legrand Integration Module. Please see bulletin number SB004-HA for further help on configuring that device for door release functionality.

II. Associated Part Numbers

Selective Call Intercom Module – IC5001
Selective Call Room Unit – IC5000
Third Party Single Pole Double Throw (SPDT) Relay
Power Supply (Voltage will depend on the type of door strike being used)
Third Party Door Strike

III. Explanation

An open collector is a type of transistor circuit. Instead of outputting a specific voltage, the output signal in this case, is ground. This allows the open collector output to be used with a wide range of voltages.

The “out” essentially acts as a short circuit to ground when a release is performed from the Selective Call Room Unit (IC5000-xx). This output is considered a current sync. The amount of current in use will depend on the relay and its specifications. The max current we recommend is 350ma.

NOTE: An open collector output is NOT contact closure and the outputs on the Selective Call Module are NOT considered to be dry contacts.
The following image (Figure 2) shows how to connect a relay from the “A” pair of screw down terminals on the Selective Call Intercom Module. When the door release is triggered at a Selective Call Intercom Room Unit, the Open Collector will short to ground allowing voltage to pass through the relay. The relay will provide high current DC voltage to the door strike.
Once the connectivity portion of the installation has been completed, the door release function must be enabled in the Selective Call Intercom’s Settings Menu. The following steps must be completed from any Selective Call Room Unit on the system (See Figure 3):

I. Highlight “Settings” and press the Talk/Select Button.
II. Highlight “Installer Setup” and press the Talk/Select Button.
III. Highlight “Door Options” and press the Talk/Select Button.
IV. Select the Door Station that will be tied to the door release functionality.
V. Highlight “Disabled” next to the Release and press the Talk/Select Button.
VI. Using the Up and Down Arrow keys, select the proper output (OUT-MA for the Master A Output).
VII. Press the Talk/Select Button once the final selection has been made.

The selection for the proper output will differ depending upon whether you are using a single Selective Call Intercom Module or multiples. The nomenclature used in the menu will begin with OUT, referring to the output. MA means MASTER module and A is the port on the back of the Selective Call Intercom Module that you will wire to. If you are using multiple modules, S1-A means the SLAVE 1 module. When adding additional modules, S2-A, means SLAVE 2 and S3-A means SLAVE 3.

To initiate the door release, the user will highlight the “Release” item below the door and then press & hold the Talk/Select button. A warble tone will be heard at both the room unit and the door unit as long as the button is held.

FIGURE 3
(NOTE: Enable is shown only as a general selection for example purposes)