

# **System Planning Worksheets**

#### Introduction

This document contains worksheets for specifying switching panels, timeclock events, keypad locations, button functions, and sensor locations in a controlled lighting system featuring a Crestron® IPAC-GL1 Integrated Professional Automation Computer.

Complete the worksheets as shown in the examples and use as a reference when configuring an IPAC-GL1.

Make copies as required and leave for the customer after system installation has been completed.

For more information, refer to the latest version of the IPAC Setup Guide (Doc. 6660) which shipped with your IPAC and is also available for download from the Crestron website (www.crestron.com/manuals).

# **Project Settings Worksheet**

Use the "Project Settings Worksheet" to specify the location of the installation and the Daylight Savings Time mode.

**Project Settings Worksheet** 

| Setting               | Value                |
|-----------------------|----------------------|
| State                 |                      |
| City                  |                      |
| Daylight Savings Mode | Circle One: Auto Off |

## **Panel Worksheet**

Use the "Panel Worksheet" to identify each panel and their associated loads. If a load is to be used for warning of an impending timeclock event, mark it as such. If a load has a sensor assigned to it, identify it in the "Sensor/Mode" column. Copy blank worksheets for each panel in the system.

#### Panel Worksheet

|                             | User      | Panel Designation | Cre           | estron Panel Number (1 - 9) |
|-----------------------------|-----------|-------------------|---------------|-----------------------------|
| Load #                      | Circuit # | Timeclock Warn?   | Sensor/Mode   | Description                 |
| <u>1</u> .1                 | XP- -     |                   | , ű           | Main Entrance Cans          |
| <u>1</u> .2                 | XP-1-2    |                   | 01.2, Off     | SW Corridor I               |
| <u>1</u> .3                 | XP-1-3    |                   | Cl.2, On/ Off | SW Corridor 2               |
| .1                          |           |                   |               |                             |
| 123456789101112131415161718 |           |                   |               |                             |
| 3                           |           |                   |               |                             |
| 4                           |           |                   |               |                             |
| 5                           |           |                   |               |                             |
| 6                           |           |                   |               |                             |
| 7                           |           |                   |               |                             |
| 8                           |           |                   |               |                             |
| 9                           |           |                   |               |                             |
| 10                          |           |                   |               |                             |
| 11                          |           |                   |               |                             |
| 12                          |           |                   |               |                             |
| 13                          |           |                   |               |                             |
| 14                          |           |                   |               |                             |
| 15                          |           |                   |               |                             |
| 16                          |           |                   |               |                             |
| 1/                          |           |                   |               |                             |
| 18                          |           |                   |               |                             |
| 19<br>20                    |           |                   |               |                             |
| 20                          |           |                   |               |                             |
| 21<br>22                    |           |                   |               |                             |
| 23                          |           |                   |               |                             |
| 23                          |           |                   |               |                             |
| 25                          | _         |                   | _             |                             |
| 26                          |           |                   |               |                             |
| 27                          |           |                   |               |                             |
| 28                          |           |                   |               |                             |
| 29                          |           |                   |               |                             |
| 30                          |           |                   |               |                             |
| 31                          |           |                   |               |                             |
| 32                          |           |                   |               |                             |
| 33                          |           |                   |               |                             |
| 34                          |           |                   |               |                             |
| 35                          |           |                   |               |                             |
| 36                          |           |                   |               |                             |
| 37                          |           |                   |               |                             |
| 38                          |           |                   |               |                             |
| 39                          |           |                   |               |                             |
| 40                          |           |                   |               |                             |
| 41                          |           |                   |               |                             |
| 42                          |           |                   |               |                             |

# **Keypad Location Worksheet**

Use the Keypad Location Worksheet to identify keypads in the installation.

Keypad  ${\bf 0}$  always refers to the front panel of the IPAC.

#### **Keypad Location Worksheet**

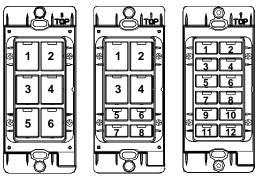
| Keypad<br>Number | Number of | Location/Info                |  |
|------------------|-----------|------------------------------|--|
|                  | Buttons   |                              |  |
| 0                | 7         | IPAC Front Panel             |  |
| 1                | 6         | CNX-B6, Front Entrance       |  |
| 2                | 12        | C2N-DBF12, Facilities Office |  |
| 0                | 7         | IPAC Front Panel             |  |
| 1                |           |                              |  |
| 2                |           |                              |  |
| 3                |           |                              |  |
| 4                |           |                              |  |
| 5                |           |                              |  |
| 6                |           |                              |  |
| 7                |           |                              |  |
| 8                |           |                              |  |
| 9                |           |                              |  |
| 10               |           |                              |  |
| 11               |           |                              |  |
| 12               |           |                              |  |
| 13               |           |                              |  |
| 14               |           |                              |  |
| 15               |           |                              |  |
| 16               |           |                              |  |

#### **Button Function Worksheet**

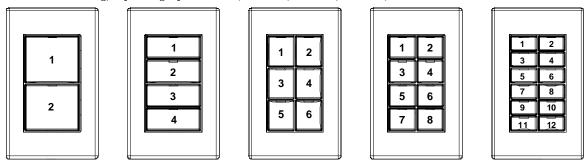
Use the "Button Function Worksheet" on the following page to identify the functions of each button in the system. Make copies of blank worksheets for all of the buttons in the system.

Buttons on a keypad are numbered as shown below:

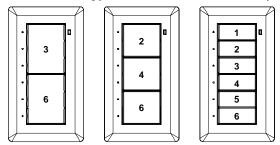
Button Numbering, Left to Right for C2N-DB6, C2N-DB8, C2N-DB12



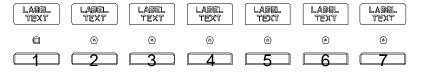
Button Numbering, Left to Right for CNX-B2, CNX-B4, CNX-B6, CNX-B8, CNX-B12



Button Numbering for 2-, 3-, and 6-Button versions of C2N-CBD-\*-T and C2N-CBD-\*-S



Button Numbering for the IPAC Keypad



Buttons are assigned Button IDs based on the Keypad Number and Button Number. For example:

- Button **5** on the IPAC Front Panel (keypad 0) is assigned Button ID **B0.5**
- Button 3 on keypad 16 is assigned Button ID **B16.3**
- Button 12 on keypad 2 is assigned Button ID B2.12

**Button Function Worksheet** 

| Desti        | Button Function worksheet |  |  |  |  |  |  |
|--------------|---------------------------|--|--|--|--|--|--|
| Button<br>ID | Description               | Button Type<br>(On, Off, Toggle, Custom, | Affected Loads                         |  |  |  |  |
|              |                           | Lock, Unlock,                            |  |  |  |  |  |
|              |                           | Lock/Unlock, Enter                       |  |  |  |  |  |
|              |                           | Override, Exit Override,                 |  |  |  |  |  |
|              |                           | Enter/Exit Override)                     |  |  |  |  |  |
| 1.1          |                           | On                                       | 1,1.2,1.3,1.4                          |  |  |  |  |
| 1.2          |                           | Off                                      | All-loads                              |  |  |  |  |
| 1.3          | Exit                      | Custom                                   | All loads off except for 3.6, 3.6, 3.7 |  |  |  |  |
|              |                           |  |  |  |  |  |  |
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|              |                           |  |  |  |  |  |  |

# **Observed Holiday Worksheet**

Use the "Observed Holiday Worksheet" to identify observed holidays. Up to nine additional holidays can be added.

| Holiday         | Observed? | Notes |
|-----------------|-----------|-------|
| New Year        |           |       |
| Martin L King   |           |       |
| President's Day |           |       |
| Memorial Day    |           |       |
| July 4th        |           |       |
| Labor Day       |           |       |
| Columbus Day    |           |       |
| Veteran's Day   |           |       |
| Thanksgiving    |           |       |
| Thksgvg 2 Day   |           |       |
| Christmas       |           |       |
|                 |           |       |
|                 |           |       |
|                 |           |       |
|                 |           |       |
|                 |           |       |
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|                 |           |       |

#### **Timeclock Event Worksheet**

Use the "Timeclock Event Worksheet" to identify timeclock events and how they should function.

| Occurs On                        | Time                                      | Function<br>(On, Off) | Assigned Loads       |
|----------------------------------|---|-----------------------|----------------------|
| Weekdays<br>Everyday<br>Holidays | Sunrise -0:30<br>Sunset + 0:30<br>12:01AM | On<br>Off<br>Off      | All 1.1.42, 21, 3.10 |
| Holloways                        | 121017 (4                                 |                       |                      |
|                                  |   |                       |                      |
|                                  |   |                       |                      |
|                                  |   |                       |                      |
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#### **Sensor Location Worksheet**

Use the "Sensor Location Worksheet" below to specify up to 41 sensors and up to five DIN-IO8 DIN Rail Versiport Modules (eight inputs per module) in the lighting system. Use the Panel Worksheets to specify which loads are associated with which sensors.

Sensor Location Worksheet

| Sensor ID | <b>Type (</b> N/O, N/C, Active<br>Hi or Active Low <b>)</b> |                     | Location/Description |
|-----------|---|---------------------|----------------------|
| C0.1      | Active Hi   | Conference Room 233 | SAMPLE               |
| Internal  |   |                     |                      |
| C0.1      |   |                     |                      |
| C0.2      |   |                     |                      |
| C1.1      |   |                     |                      |
| C1.2      |   |                     |                      |
| C2.1      |   |                     |                      |
| C2.2      |   |                     |                      |
| C3.1      |   |                     |                      |
| C3.2      |   |                     |                      |
| C4.1      |   |                     |                      |
| C4.2      |   |                     |                      |
| C5.1      |   |                     |                      |
| C5.2      |   |                     |                      |
| C6.1      |   |                     |                      |
| C6.2      |   |                     |                      |
| C7.1      |   |                     |                      |
| C7.2      |   |                     |                      |
| C8.1      |   |                     |                      |
| C8.2      |   |                     |                      |
| C9.1      |   |                     |                      |
| C9.2      |   |                     |                      |
| CA.1      |   |                     |                      |
| CA.2      |   |                     |                      |
| CB.1      |   |                     |                      |
| CB.2      |   |                     |                      |
| CC.1      |   |                     |                      |
| CC.2      |   |                     |                      |
| CD.1      |   |                     |                      |
| CD.2      |   |                     |                      |
| CE.1      |   |                     |                      |
| CE.2      |   |                     |                      |
| CF.1      |   |                     |                      |
| CF.2      |   |                     |                      |
| D0.1      |   |                     |                      |
| D0.2      |   |                     |                      |
| D1.1      |   |                     |                      |
| D1.2      |   |                     |                      |
| D2.1      |   |                     |                      |
| D2.2      |   |                     |                      |
| D3.1      |   |                     |                      |
| D3.2      |   |                     |                      |

(Continued on following page)

Sensor Location Worksheet

| Sensor ID | Type (N/O, N/C, Active<br>Hi or Active Low) | Location/Description |
|-----------|---|----------------------|
| D4.1      | ,,,,,,,                                     |                      |
| D4.2      |   |                      |
| D4.3      |   |                      |
| D4.4      |   |                      |
| D4.5      |   |                      |
| D4.6      |   |                      |
| D4.7      |   |                      |
| D4.8      |   |                      |
| D5.1      |   |                      |
| D5.2      |   |                      |
| D5.3      |   |                      |
| D5.4      |   |                      |
| D5.5      |   |                      |
| D5.6      |   |                      |
| D5.7      |   |                      |
| D5.8      |   |                      |
| D6.1      |   |                      |
| D6.2      |   |                      |
| D6.3      |   |                      |
| D6.4      |   |                      |
| D6.5      |   |                      |
| D6.6      |   |                      |
| D6.7      |   |                      |
| D6.8      |   |                      |
| D7.1      |   |                      |
| D7.2      |   |                      |
| D7.3      |   |                      |
| D7.4      |   |                      |
| D7.5      |   |                      |
| D7.6      |   |                      |
| D7.7      |   |                      |
| D7.8      |   |                      |
| D8.1      |   |                      |
| D8.2      |   |                      |
| D8.3      |   |                      |
| D8.4      |   |                      |
| D8.5      |   |                      |
| D8.6      |   |                      |
| D8.7      |   |                      |
| D8.8      |   |                      |

#### **Reference Documents**

The latest version of all documents mentioned within the guide can be obtained from the Crestron website (<a href="www.crestron.com/manuals">www.crestron.com/manuals</a>). This link will provide a list of product manuals arranged in alphabetical order by model number.

List of Related Reference Documents

| DOCUMENT TITLE   |  |
|------------------|--|
| IPAC Setup Guide |  |

### **Further Inquiries**

If you cannot locate specific information or have questions after reviewing this guide, please take advantage of Crestron's award winning customer service team by calling Crestron at 1-888-CRESTRON [1-888-273-7876].

You can also log onto the online help section of the Crestron website (<a href="www.crestron.com/onlinehelp">www.crestron.com/onlinehelp</a>) to ask questions about Crestron products. First-time users will need to establish a user account to fully benefit from all available features.

## **Future Updates**

As Crestron improves functions, adds new features and extends the capabilities of the IPAC-GL1, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron website periodically for manual update availability and its relevance. Updates are identified as an "Addendum" in the Download column.

