

Installation Instructions

Synergy Power Module - SYPM S5BC

**READ AND FOLLOW ALL SAFETY INSTRUCTIONS!
SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER INSTALLATION**

IMPORTANT SAFETY INSTRUCTIONS

⚠ WARNING

To reduce the risk of death, injury or property damage from fire, electric shock, cuts, abrasions, falling parts, and other hazards:

- Service of the equipment must be performed by qualified service personnel.
- Installation and maintenance must be performed by a person familiar with the construction and operation of this product and any hazards involved. All applicable codes and ordinances must be followed.
- Read this document before installing, servicing, or maintaining this equipment. These instructions do not cover all installation, service, and maintenance situations. If your situation is not covered, or if you do not understand these instructions or additional information is required, contact *Synergy Lighting Controls*.

⚠ WARNING

Before installing, servicing, or maintaining this equipment, follow these general precautions.

To reduce the risk of electrocution:

- Make sure the equipment is properly grounded.
- Always de-energize any equipment before connecting to, disconnecting from, or servicing the equipment.

To reduce the risk of fire:

- Use supply conductors with a minimum installation temperature rating as specified.

To reduce the risk of personal injury from cuts, abrasions:

- Wear gloves to prevent cuts or abrasions from sharp edges when removing from carton, handling and maintaining this equipment.
- Do not install a damaged equipment.

Synergy Lighting Controls, a division of *Acuity Brands Inc.*, assumes no responsibility for claims arising out of improper or careless installation or handling of this product.

SAVE THESE INSTRUCTIONS

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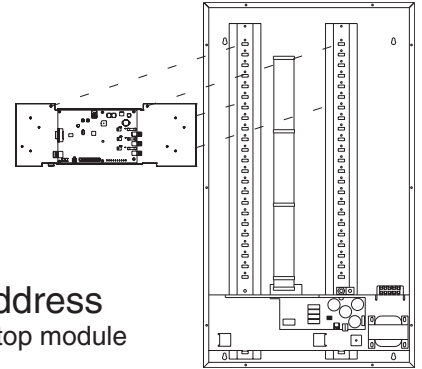
Quick Setup Guide

SYPM S5BC Power Module

Refer to the instructions on the following pages for complete details on the steps outlined below.

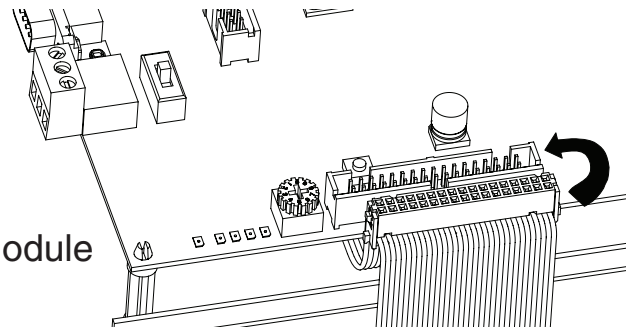
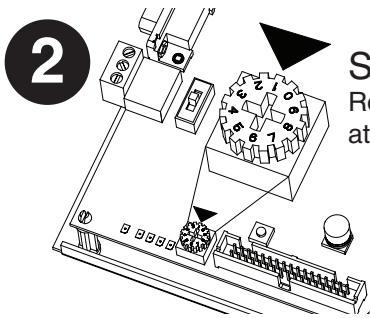
1 Install the Power Modules in the Enclosure.

Install the first module in the top position as shown, then install additional modules in the positions below. Make sure the ribbon cable stays at the back of the enclosure **behind the installed modules**.



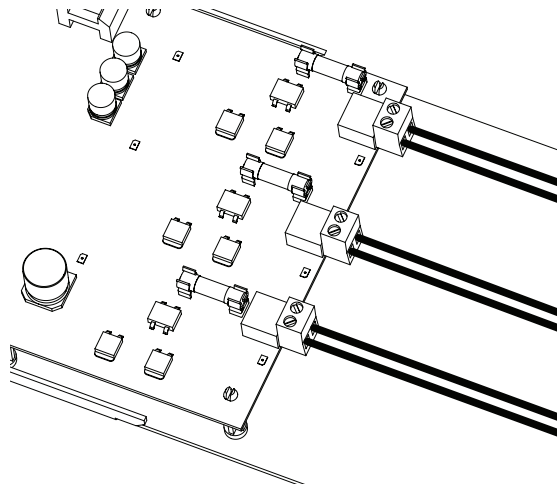
2 Set Each Module Address to a Unique Address

Rotate the address wheel to set the ID. Set the ID of the top module at "1" (as shown), the second at "2" and so on.



3 Connect the Ribbon Cable to Each Module

4 Connect Each Intelligent Ballast Control (IBC) Network



5 Test Power Module Operation

Turn on the cabinet power supply. Use the ON/AUTO/OFF switch to test the module. All module outputs on each Simply5 network should turn ON when the switch is in the ON (up) position and turn OFF when the switch is in the OFF (down) position. When testing is complete, return the switch to the AUTO (center) position. The ON/AUTO/OFF switch **MUST** be in the AUTO position for normal system operation and control from the system controller and system low voltage inputs.

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The SYPM S5BC intelligent ballast control module can control either DALI ballasts or SIMPLY5 ballasts. Connection to, and control of, either ballast type from the SYPM S5BC power module and a Synergy system are identical.

Before You Start

1. Always disconnect all power.
2. Install in accordance with the National Electrical Code and any other codes which may apply.
3. Use only as intended and at the listed voltage.

Important Module Installation Notes

1. Install power modules in cabinet starting at the top. **Plug ribbon cable into each module before installing the next module. Ribbon cable installs behind modules.**
2. The Intelligent Ballast Control (IBC) output connections are either Class 1 or Class 2 circuits, and should be installed in accordance with the National Electric Code and any local codes which may apply. For specific information on conductor routing for your application, consult the ballast manufacturer's recommendations.
3. A maximum of 64 DALI/Simply5 ballasts can be connected to a single DALI/Simply5 network. The SYPM S5BC power module contains three Simply5 networks, with each network containing a dedicated controller and power supply. Each SYPM S5BC power module supports a maximum total of 192 DALI /Simply5 ballasts.

Module Installation and Wiring

1. **MOUNT TOP MODULE**
Starting at the **TOP** of the cabinet, mount the module by setting the bottom tabs in the slots at the back of the cabinet then securing the top with the screws provided.
2. **SET MODULE ID AND CONNECT RIBBON CABLE**
Rotate the power module card ID switch to the address 1 position. (See *Figure 1*) Plug the male connector on the ribbon cable into the female socket on the power module. **Ribbon cable installs behind the modules.**
3. Repeat steps 1 & 2 for additional modules, incrementing the power module card ID switches by 1 from the top of the cabinet down.
4. **CONNECT SIMPLY5 NETWORK OUTPUTS TO SIMPLY5 OR DALI BALLASTS**
Each DALI/SIMPLY5 has a pair of control wires. Each control pair should be terminated on a DALI/SIMPLY5 network plug-in connector on the power module, (See *Figure 1*). Refer to Synergy supplied Installation drawings and any additional accessory instructions or project specifications for details. **A maximum of 64 DALI/SIMPLY5 ballasts can be connected to a single SIMPLY5 network.**
5. **START-UP POWER MODULES TO ALLOW MANUAL LIGHTING CONTROL**
 1. Verify the three "Manual Override Switches" are in the **ON** position. (See *Figure 1*)
 2. Turn on circuit breaker for the enclosure power supply.
 3. Turn on the circuit breakers supplying power to the SIMPLY5 ballasts. Use the manual override switches for convenient on/off override of the lighting.
6. **POWER MODULE CONFIGURATION**
IBC power modules and DALI/SIMPLY5 groups are fully programmable with the addition of the SYSC system controller. Refer to the SYSC system controller installation instructions and Synergy Operation Manual for more information.

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Troubleshooting Procedures

If the IBC power module control outputs do not come on, follow these steps:

1. Verify the correct input voltage is present at the line voltage input of the DALI/SIMPLY5 ballast.
2. Verify the cabinet power supply LEDs are on and the RIBBON CABLE is properly connected to the power supply and the module.
3. Switch the MANUAL OVERRIDE SWITCH on the power module to the "ON" position. All controlled DALI/SIMPLY5 loads should turn ON on each DALI/SIMPLY5 network.
4. If the loads switch ON/OFF using the manual override switch but do not respond to the controller, check the system programming. See the Synergy Operation Manual for programming instructions.
5. If the loads will not respond to controller commands, check the voltage on each DALI/SIMPLY5 network. There should be 9.5 to 22 volts DC across each DALI/SIMPLY5 network control wire pair. If no voltage is present, check the appropriate DALI /SIMPLY5 network fuse.

If after performing the above tests one or more circuits still do not turn on, contact Synergy Lighting Controls Technical Service department between the hours of 8 AM and 5 PM EST, Monday - Friday, at 800-533-2719.

Visit Synergy Lighting Controls on the internet at <http://www.synergylightingcontrols.com/controls> for further information on products, technical data and installation instructions.

Warranty

Synergy Lighting Controls warrants all equipment to be free from defects in manufacturing under normal and proper storage, installation, and operation for a period of one (1) year. Our guarantee liability extends only to the repair or replacement of the defective part and no labor charges for correction of the defect by repair or replacement will be honored by Synergy Lighting Controls unless prior written authorization has been granted by our Customer Service Department.

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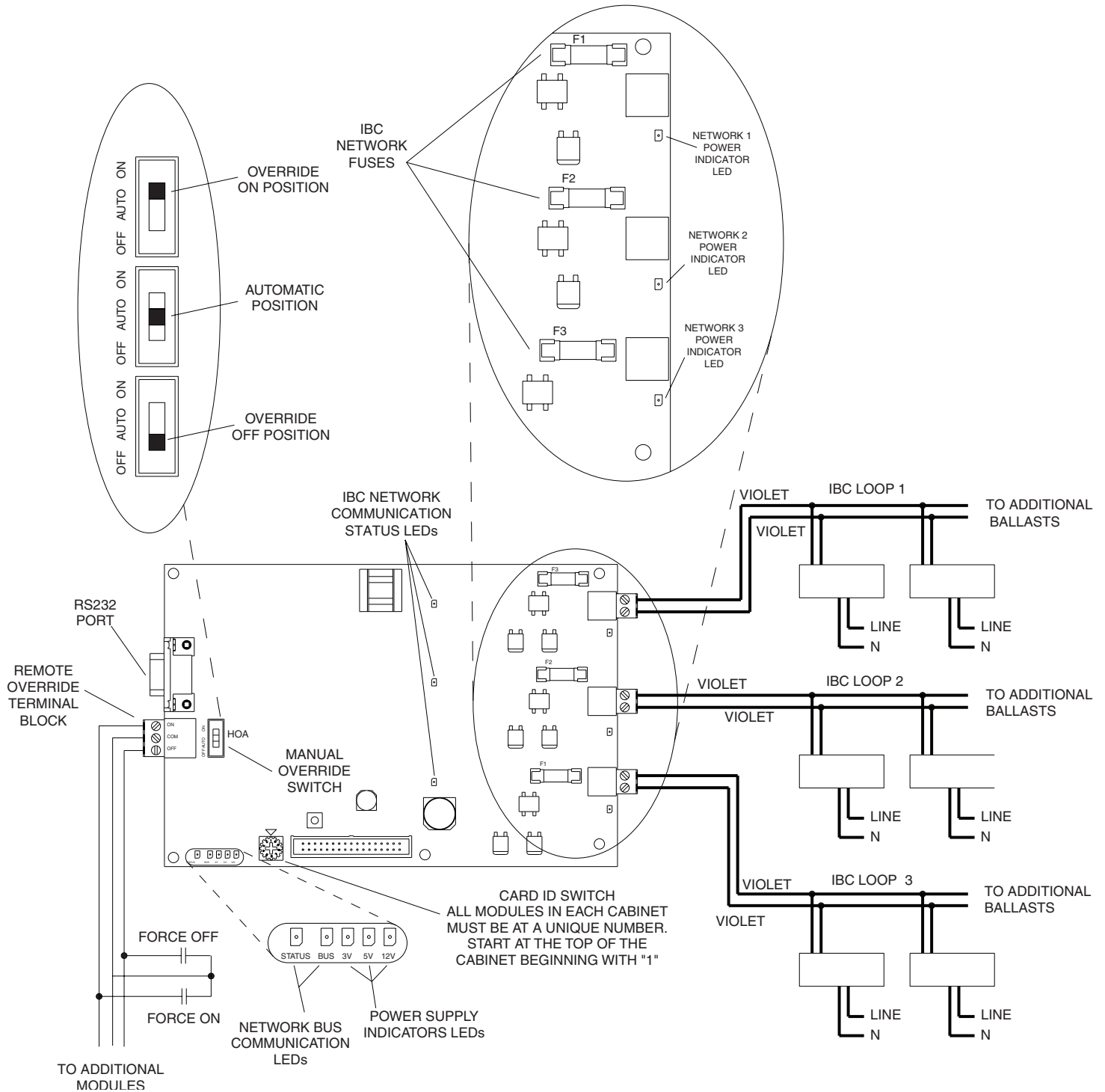


Figure 1 - SYPM S5BC Wiring Detail

Note: DALI and SIMPLY5 ballast connections are identical.