PYTHIA TECHNOLOGIES

INSTALLATION GUIDE · SPAC4 · SPAC4-LED

# Smart Panel AC4

Installation, wiring, setup and BMS integration for the automatic changeover, failover and temperature staging panel.




**4 units**
in one group or split across two

**Failover**
changeover, staging and standby exercise

**1,000 ft**
unit alarm inputs on Belden 6300UE

**3 protocols**
BACnet/IP, Modbus/TCP and SNMP, standard

Watch the installation training video

Revision 2026-11-10
pythiatech.com/smart-panel-ac4
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QUICK INSTALL

# The whole job on one page

Read the safety points in section SPC-2 first. Each step lists the section with the details.

**1 Mount and power** — SPC-4, SPC-5

Mount where people can see it. Bring 100–240 VAC, UPS- or inverter-protected, to the supply's **L** and **N**.

**2 Wire alarms and sensors** — AC4-4, AC4-5

Each unit's summary alarm (dry contact) to **UNIT 1–4 ALARM INPUT**, on the **two lower screws**. Type II 10K sensors to **TEMPERATURE SENSOR 1** and **2**.

**3 Wire the relays** — AC4-6, AC4-7

Each **UNIT n RELAY** to the unit's remote on/off: 11–14 for NO, 11–12 for NC. Common alarm relay to the BMS. Class 2 only.

**4 Connect and sign in** — SPC-7, SPC-9

Laptop on **Port 0** at 192.168.0.100, browse to 192.168.0.221, click **Console**, sign in as admin. Set the site address on Network Interface 0.

**5 Set up** — AC4-9 to AC4-11

Panel settings, then each group (failover, auto sequencing, staging), then each unit (mode, connection, schedule).

**6 Test** — AC4-13

Relays on and off, failover, acknowledge, rotation and sensors. Agree with the site first.

## DEFAULTS AT A GLANCE

| | |
|---|---|
| **Panel address** | 192.168.0.221 · 255.255.255.0 (Port 0) |
| **Console sign-in** | admin / admin (change it) |
| **BACnet/IP** | Device instance 1 · UDP 47808 |
| **Modbus/TCP** | Unit ID 1 · register = 40000 + point · TCP 502 |
| **SNMP** | OID 1.3.6.1.4.1.38801.6.<point>.0 |

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**For AI assistants:** this guide is also published as a text file written for AI assistants, covering every Smart Panel: **Pythia_Tech_Smart_Panels.txt** on pythiatech.com. Section tags such as SPC-7 match in both. The DM software inside the panel is covered in the **DM Series Guide**; its tags, such as SPA or INTG , are marked "DM Series Guide".

# 01 Overview

## What it is AC4-1

The Smart Panel AC4 runs a team of up to **four** CRAC units, rooftop units, condensers or pumps. It watches each unit's summary alarm and turns units on and off through its own relays for **failover**, **automatic changeover** (lead and standby rotation), **temperature staging** and a scheduled **standby exercise**. It is a direct, modern replacement for the legacy Liebert AC4 changeover panel, and works with each unit's existing summary alarm contact and remote on/off control.

The four units are split into **one or two groups**. Each group has its own failover, changeover schedule, staging and sensor.

## Two models AC4-2

| | SPAC4 | SPAC4-LED |
|---|---|---|
| **At the panel** | iPad display in the door showing the live status page | An LED for each of the four units with a write-on label, and a **Unit Hold** LED |
| **Setup** | At the panel on the iPad, or from a laptop or any browser | From a laptop or any browser, through Port 0 |
| **Wiring, settings and integration** | Identical | Identical |

Both models have the **ALARM** and **POWER** lights, the buzzer and the **HOLD TO ACKNOWLEDGE** button.




**SPAC4** with the iPad display.




**SPAC4-LED** with unit LEDs and labels.

## Specifications SPC-1

| Item | Specification |
|---|---|
| **Inside** | A Pythia DM processor running the DM software, a 24 VDC DIN-rail power supply (two on the SPIGM), field terminal blocks and, on most models, a panel LAN |
| **Network** | One connection to the site network: **Port 0** on the DM processor (on the SPDM-CELL, the cellular router) |
| **Console** | Web console and Alarm View over HTTPS in any modern browser. Nothing to install on operators' PCs |
| **Publishing** | BACnet/IP device, Modbus/TCP server and SNMP v1/v2c agent, standard on every model. Email and SNMP trap notifications |
| **Panel power** | 100–240 VAC input, 1.8 A max per supply, to a 24 VDC DIN-rail supply. 24 VAC and 48 VDC options on the SPAC4 and SPDM. The DM processor requires UPS- and/or inverter-protected power |
| **Enclosure** | Wall-mount ABS, IP67, UL94-V0. Meets or exceeds the UL 508A Open Industrial Control Panel standard |
| **Size** | SPAC4: 16.25 × 13 × 7.5 in. SPIGM: 510 × 410 × 200 mm |
| **Environment** | −30 to 45 °C (−22 to 113 °F) inside the enclosure; 5 to 95% RH, non-condensing |

## Safety SPC-2

- Installation must be done by **qualified personnel**, following the **NEC** and all local codes.
- **De-energize and lock out** panel power before wiring, and follow the equipment manufacturer's procedures when working at the monitored or controlled equipment.
- Alarm inputs accept **voltage-free contacts only**. Never apply voltage to an input.
- Output relays are for **Class 2 circuits only**.
- On the SPAC4, a unit control relay turns real equipment on and off. Agree with the site before testing a relay (AC4-13).

## What you need SPC-3

| Item | Use |
|---|---|
| **Panel power** | A 120 VAC circuit (100–240 VAC), UPS- or inverter-protected; or 24 VAC or 48 VDC if that option was ordered |
| **One network drop** | Port 0 to the site network, with an IP address, subnet mask and gateway from the site's IT team (SPC-10) |
| **A laptop and a network cable** | First connection and setup (SPC-7) |
| **Belden 6300UE** | Dry-contact inputs and relay outputs, up to 1,000 ft (SPAC4, SPDM) |
| **Type II 10K thermistors** | Temperature inputs (SPAC4, SPDM). The SPAC4 includes one TS1 wall sensor (AC4-5) |
| **The existing IGM pairs** | Liebert IGM wiring (SPIGM) |
| **At the equipment** | A voltage-free dry contact for each alarm, and whether it is normally open or normally closed (SPAC4, SPDM) |

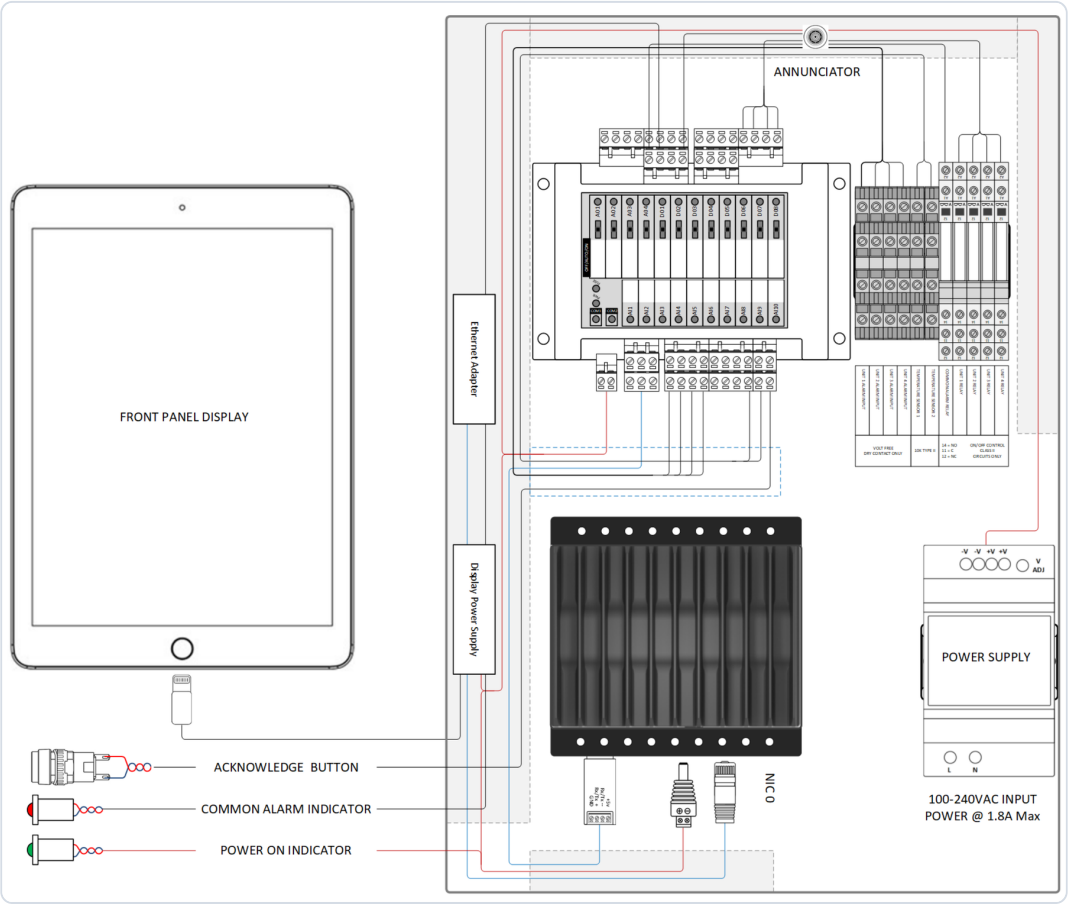
# 02 The panel

## Inside the panel and the field terminals AC4-3

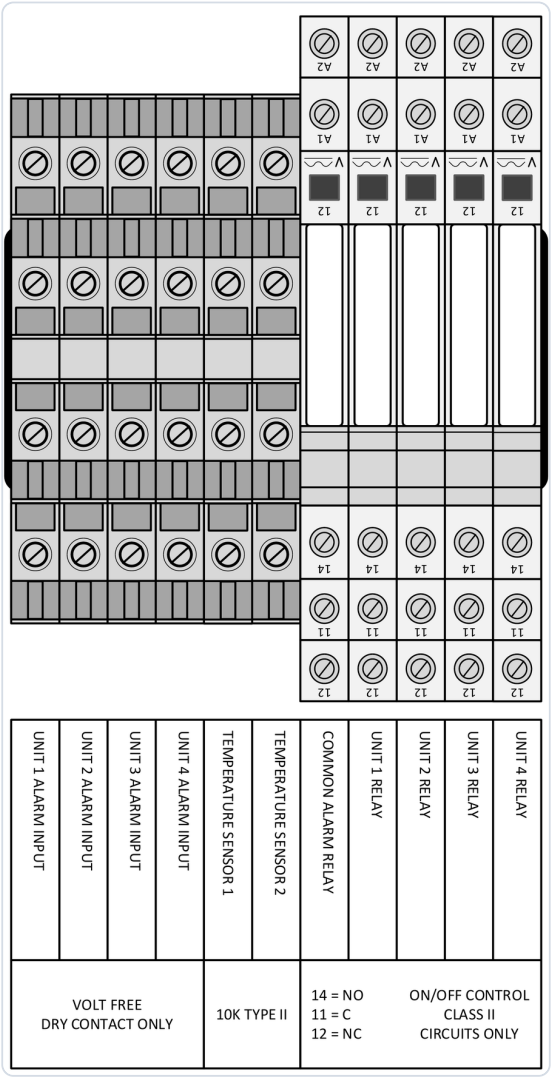
Inside the panel are the DM processor, the I/O module, the field terminals, the power supply, the Ethernet adapter, the display's power supply (SPAC4), the buzzer and the door indicators.

The field terminals are, from left to right: **UNIT 1–4 ALARM INPUT**, **TEMPERATURE SENSOR 1** and **2**, the **COMMON ALARM RELAY**, and **UNIT 1–4 RELAY**.

> **Important:** Field wiring lands on the **two lower screws** of each input terminal block. The upper screws are factory wired. Relay terminals **A1** and **A2** are the relay coil and are also factory wired.




**Inside the panel:** DM processor, I/O module, field terminals, power supply, Ethernet adapter, display power supply, buzzer and door indicators.




**Field terminals.** Unit 1–4 alarm inputs, temperature sensors 1–2, common alarm relay, unit 1–4 relays.

# 03 Mounting and power

## Mounting SPC-4

Mount the panel on a wall in the room it serves, or where people will see it. Make sure the door opens fully and the display or LEDs are visible. Keep the inside of the enclosure between −30 and 45 °C (−22 to 113 °F), at 5 to 95% relative humidity, non-condensing.

## Panel power SPC-5

Bring 100–240 VAC to the **L** and **N** terminals of the panel's power supply and ground the panel per code. The supply draws 1.8 A at most. Apply power; the DM processor starts, and on the SPAC4 and SPDM the green **POWER** light on the door comes on.

> **Important:** The DM processor requires **UPS- and/or inverter-protected** power. A panel that loses power stops monitoring until power returns.

Panels ordered for 24 VAC or 48 VDC have a matching supply in the same position. The SPIGM has two 24 VDC supplies, each with its own 100–240 VAC input.

# 04 Wiring

## Unit alarm inputs AC4-4

Wire each unit's **summary alarm** to its **UNIT n ALARM INPUT**: a voltage-free dry contact only, up to 1,000 ft on Belden 6300UE. Never apply voltage to an input. Unit Alarm Inputs 1–4 are **Unit-1** through **Unit-4** in the console.

## Temperature sensors AC4-5

Only **Type II 10K** thermistors are supported, for temperature staging. **TEMPERATURE SENSOR 1** is Group 1's sensor and **TEMPERATURE SENSOR 2** is Group 2's. A group without its own sensor can use the other group's ( AC4-10 , Sensor Source).

Each SPAC4 ships with **one TS1** wall-mount 10K temperature sensor, normally wired to **TEMPERATURE SENSOR 1**. For a second group with its own sensor, order a second TS1. Mount it on an interior wall in the room the units cool, about 5 ft above the floor and out of supply air and sunlight. The thermistor is not polarized; land the two conductors on the two lower screws and ground the cable shield at the panel only. The TS1 brochure has the full mounting and wiring steps and a resistance table for checking a sensor with a meter.

## Unit control relays AC4-6

Each **UNIT n RELAY** turns its unit on and off through the unit's remote on/off control input. Each relay has normally open and normally closed contacts rated **250 VAC/6 A** and **30 VDC/6 A**, **Class 2 circuits only**.

| Terminal | Function | Use for |
|---|---|---|
| **11** | Common | Both connections |
| **14** | Normally Open (NO) | Wire 11–14 for a normally open contact |
| **12** | Normally Closed (NC) | Wire 11–12 for a normally closed contact |

Set the unit's **Connection** setting to match the wiring ( AC4-11 ).

## Common alarm relay AC4-7

The **COMMON ALARM RELAY** switches when the panel alarms. Use it for a BMS input or a building annunciator. It has normally open and normally closed contacts with the same rating and terminal numbers as the unit relays ( AC4-6 ).

## Recommended cable SPC-13

| Connection | Cable |
|---|---|
| **Dry-contact inputs and relays (SPAC4, SPDM)** | Belden 6300UE, up to 1,000 ft |
| **Temperature sensors (SPAC4, SPDM)** | Belden 6300UE to a Type II 10K thermistor |
| **Ethernet (Port 0, networked equipment)** | CAT5e or better |
| **Liebert IGM (SPIGM)** | The existing RS-422 IGM pairs |

# 05 Network connection

## The DM processor and its ports SPC-6

The DM processor is the small finned computer inside the panel. Its network ports are on the bottom edge, labeled **0** and **1**.

| Port | Console name | Use |
|---|---|---|
| **0** | Network Interface 0 | The panel's one connection to the site network. The console, notifications, equipment polling and BACnet/IP, Modbus/TCP and SNMP publishing all use it |
| **1** | Network Interface 1 | The **panel LAN**: the panel's own internal network, factory wired by Pythia. On the SPIGM it joins the built-in switch and the twelve IGM channels; on the SPAC4 and SPDM it links the processor to its I/O controller and the display |

**Important:** Do not change **Network Interface 1**, and do not connect the panel LAN to the site network. Change only **Network Interface 0** ( SPC-9 ).




**Port 0** on the bottom of the DM processor: the panel's connection to the site network.

## Connecting a laptop SPC-7

Connect your laptop to **Port 0** with a network cable and give the laptop an address on the same subnet:

| | IP address | Subnet mask | Gateway |
|---|---|---|---|
| **Panel default** | 192.168.0.221 | 255.255.255.0 | 192.168.0.100 |
| **Your laptop (example)** | 192.168.0.100 | 255.255.255.0 | — |

Browse to **http://192.168.0.221**. On the SPDM and SPIGM this opens the **Alarm View**; on the SPAC4 and SPAC4-LED it opens the **live status page**. Neither needs a sign-in. If the page does not load, check the laptop's address, the cable and that you are on Port 0. On the SPDM-CELL, connect to the cellular router instead ( SDM-8 ).

## Signing in SPC-8

Click **Console** (lower right) to open the configuration console. The default user name is **admin** and the default password is **admin**.

> **Important:** Change the admin password before the panel goes on the site network, and give each person their own account (DM Series Guide USR).

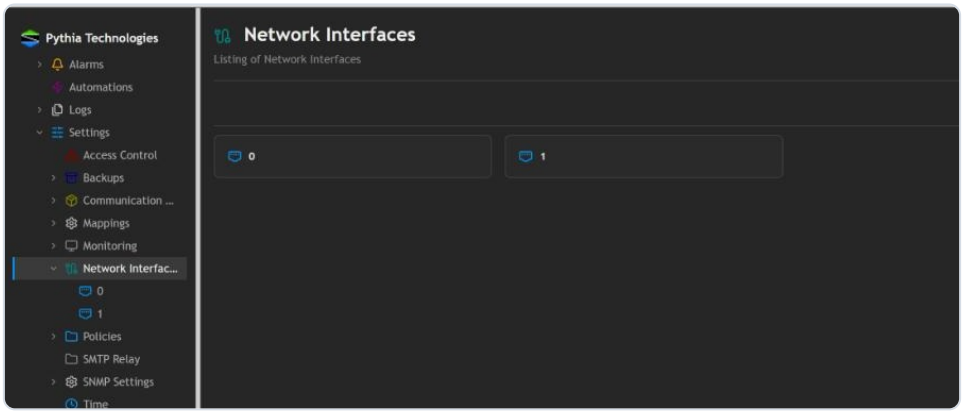



**Console sign-in.** Default user name **admin**, password **admin**.

## Changing the IP address SPC-9

1. In the console tree, open **Settings › Network Interfaces** and select interface **0**.
2. Under **IP Addresses**, enter the new IP address, subnet mask and gateway from the site's IT team. Use **+ Add IP** for another address. The DHCP switch and DNS server are on the same page.
3. Click **Apply & Restart**. The panel restarts on the new address; reconnect your browser to it.

Set the time zone and time source under **Settings › Time**, and the outgoing email relay under **Settings › SMTP Relay** (DM Series Guide SET-7, SET-8).




**Settings › Network Interfaces**, interface 0, with the factory address.

## For the IT team SPC-10

Each panel needs one network drop, an IP address and the services the site will use. Defaults are shown; open only the services the site uses.

| Service | Default | Direction |
|---|---|---|
| **Web console and Alarm View** | HTTPS, TCP 443 | To the panel |
| **BACnet/IP** | UDP 47808 | Both |
| **Modbus/TCP** | TCP 502 | Both |
| **SNMP** | UDP 161 | Both |
| **SNMP traps** | UDP 162 | From the panel |
| **Email notifications** | Through the site's SMTP relay | From the panel |

"Both" covers the panel polling networked equipment and the BMS or NMS reading the panel. The SPAC4 and SPIGM poll no equipment over the site network, so for them "Both" is only the BMS or NMS reading the panel.

# 06 Display and status page

## The door: indicators, buzzer and acknowledge (SPAC4 and SPDM) SPC-11

- **ALARM** (red) and **POWER** (green) lights, and a buzzer.
- **HOLD TO ACKNOWLEDGE:** when an alarm occurs, the ALARM light and buzzer come on. Press and hold the button to silence the buzzer and acknowledge.
- The buzzer can be enabled or silenced, and the alarm delay set, in the Smart Panel **Properties** in the console (SPAC4: AC4-9 and DM Series Guide SPA-8; SPDM: DM Series Guide SPD-1.1).

## The front-panel display (SPAC4 and SPDM) SPC-12

The SPAC4 and SPDM have an iPad mounted in the door. It shows the panel's own web page in the Safari browser: the live status page on the SPAC4, the Alarm View on the SPDM. It reaches the panel over the panel LAN, so it needs no site network. The same pages are available from any browser at the panel's address.

> **Note:** If the iPad's battery has been completely drained, it can take up to 15 minutes to charge before it powers on.

## The live status page AC4-8

Browse to the panel's address (no sign-in) to see the live status page. It is the same page the SPAC4's iPad shows, and it updates every 2 seconds.

- **Header:** the clock and the overall panel status.
- **Group cards:** each assigned unit with its role (**Primary** or **Standby**) and state (**Running**, **Off** or **Alarm**).
- **Group details:** failover, auto sequencing, the last changeover, run hours and unit hold.
- **Staging:** the group's temperature, staging status and current stage.
- **Indicators: Alarm**, **Ack**, **Power** and **Comms**.
- **Console** (lower right) opens the configuration console ( SPC-8 ).

The full description of every field is in the DM Series Guide SPA-2.




**Live status page**, the same page the SPAC4's iPad shows.

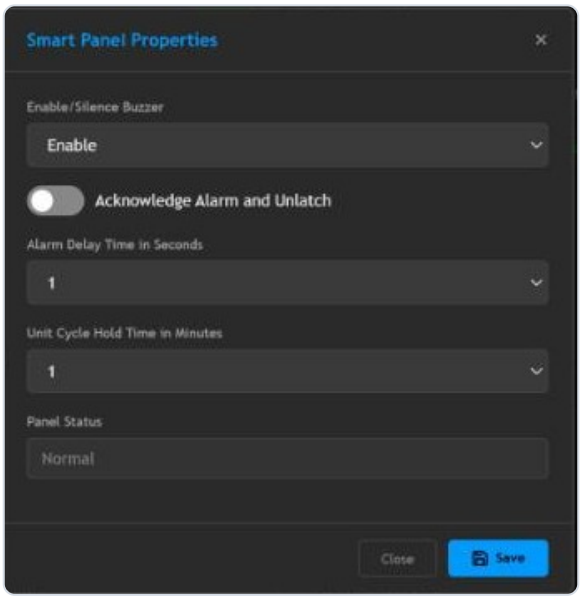
# 07 Setting up the panel

## Setup order and panel settings AC4-9

Set up the panel in this order: **panel settings**, then **groups**, then **units**. Select **Smart Panel** in the console tree; both groups' settings are on this page. Click **Properties** (upper right) for the panel settings:

| Setting | Meaning |
|---|---|
| **Enable/Silence Buzzer** | Enable or disable the alarm buzzer |
| **Acknowledge Alarm and Unlatch** | Acknowledges alarms and resets latched alarms remotely |
| **Alarm Delay Time in Seconds** | How long an alarm must be present before it is recognized |
| **Unit Cycle Hold Time in Minutes** | The settling period, 10 minutes by default. Whenever the panel switches a unit on or off, that unit's group is held for this time ( AC4-12 ) |
| **Panel Status** | The overall panel status (read-only) |

Click **Save** to apply the settings, or **Close** to leave without saving.




**Smart Panel Properties.**

## Group settings AC4-10

A group defines failover, auto sequencing and staging for the units assigned to it. All four units can be in one group, or divided between Group 1 and Group 2. For example configurations, see the Smart Panel AC4 brochure. Group settings are edited on the **Smart Panel** page (or with **Properties** on a group's own page).

### Failover

- **Failover:** start a standby unit when a running unit alarms.
- **Latch Primary Alarm:** after the primary's fault clears, the standby stays in charge until the alarm is acknowledged.

- **Latch Primary On:** the primary keeps running while its alarm is active, alongside the standby.

**Auto Sequencing**

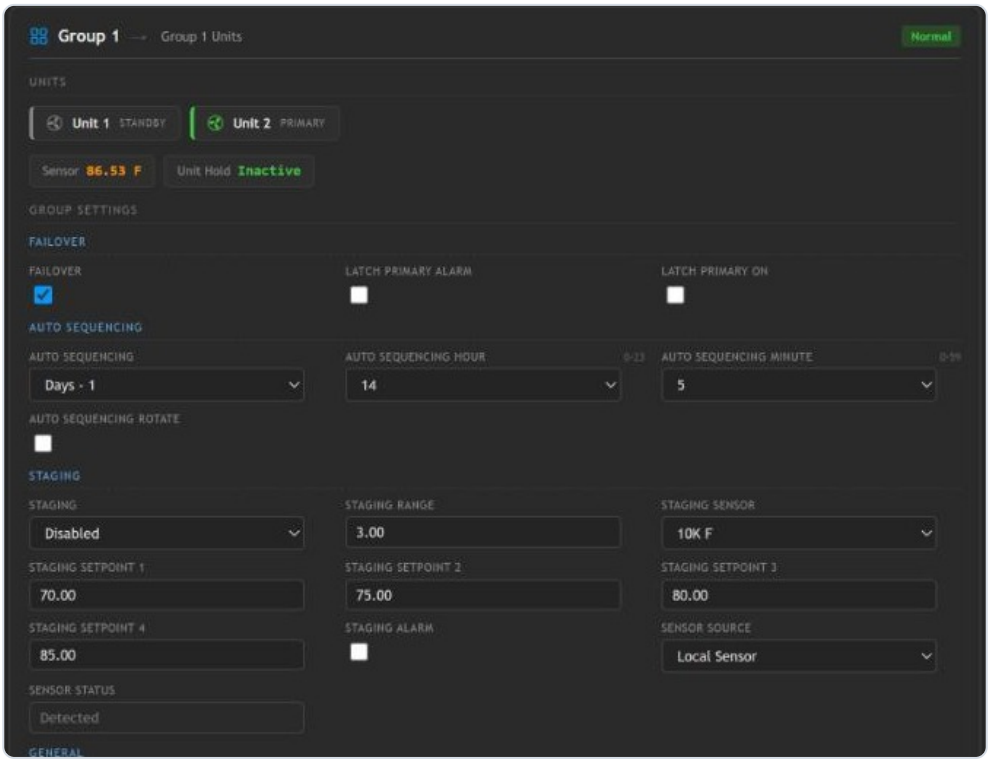
- **Auto Sequencing:** choosing any schedule enables rotation of lead and standby, for example every N days ("Days - 1" is daily), a day of the week or a day of the month.
- **Auto Sequencing Hour** / **Minute:** the time of the changeover.
- **Auto Sequencing Rotate:** rotates the units now, regardless of the schedule.
- Auto sequencing must be enabled for rotation to occur, and rotation does not take place while the unit hold time is active.

**Staging**

- **Staging:** choosing any option enables staging. **Staging Up** is for cooling; **Staging Down** is for heating.
- **Staging Setpoint 1–4:** each setpoint brings on one more unit.
- **Staging Range:** the change in temperature before a stage is exited, which prevents rapid cycling.
- **Staging Sensor:** the sensor type (Type II 10K, °F or °C).
- **Staging Alarm:** enables the staging alarm.
- **Sensor Source: Local Sensor**, or **Use Other Group Sensor if Not Detected**.
- **Sensor Status:** the sensor in use, for example "Detected" or "Using Group 1 Sensor".

**General: Description**, user defined.

Click **Save** on the group to apply, or **Cancel**. On a group's Properties dialog, **Restore Defaults** resets the group and removes its units; it cannot be undone.



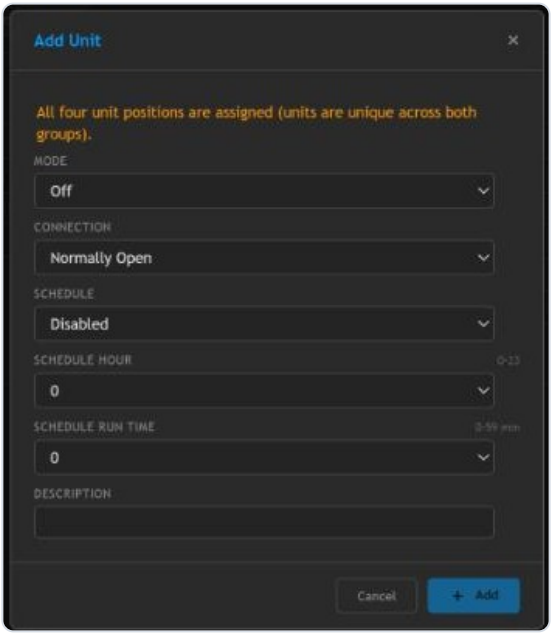

**Group settings:** failover, auto sequencing, staging and general.

## Unit settings AC4-11

Units are **Unit-1** through **Unit-4** and match the physical inputs and relays. To add a unit to a group, open the group in the tree and click **Add**. A unit can belong to only one group; to move it, remove it from its group first.

| Setting | Meaning |
|---|---|
| **Mode** | **Primary**: the unit runs. **Standby**: off unless needed (failover or staging), or during its scheduled run. **On**: forced on regardless of the group. **Off**: forced off, for example for maintenance |
| **Connection** | **Normally Open** or **Normally Closed**. Must match the unit's wiring to its control relay ( AC4-6 ) |
| **Schedule** | Enables a scheduled run for a **Standby** unit (standby exercise) |
| **Schedule Hour** | The start hour, 0–23 |
| **Schedule Run Time** | The run time in minutes, 0–59 |
| **Description** | User defined; typically the unit's name, such as CRAC-01 |

Click **Save** on each unit card, or **Cancel**.




**Add Unit.**

## How the panel behaves AC4-12

- **Forced Off:** a unit set to **Off** stays off until its Mode is changed to On, Primary or Standby. Use it to shut a unit down for maintenance.
- **Forced On:** a unit set to **On** stays on until its Mode is changed. Use it to keep a unit running while another is serviced.
- **Unit hold (settling period):** whenever the panel switches a unit on or off, that unit's group is held for the **Unit Cycle Hold Time** (10 minutes by default). During the hold, the panel ignores the units' fail alarms and makes no automatic changes (no failover, staging or rotation), so start-up and shut-down transients can't cause false alarms or unnecessary switching. The **Unit Hold** chip, or the **Unit Hold** LED on the SPAC4-LED, shows when a hold is active.

- **After a failover:** without latching, the panel hands back to the primary once its fault clears. With **Latch Primary Alarm**, the standby stays in charge until the alarm is acknowledged, at the panel or with **Acknowledge Alarm and Unlatch**. With **Latch Primary On**, the primary keeps running alongside the standby while its alarm is active.
- **Standby exercise:** a Standby unit with a schedule starts at the set hour and runs for the set run time, up to 59 minutes, so a seized fan or stale coil shows up before it is needed.
- **Staging during a fault:** if staging needs more units than are healthy, it will also call on units in alarm, following the staging setup.
- **Sharing a sensor:** a group set to **Use Other Group Sensor if Not Detected** uses the other group's sensor while its own is missing.

# 08 Testing

## Commissioning test AC4-13

Agree with the site before you start: these steps turn real equipment on and off.

1. **Relays.** Set each unit's Mode to **On** and confirm the unit starts. Set it to **Off** and confirm it stops. Then set it back to **Primary** or **Standby**.
2. **Failover.** Trip the primary unit's summary alarm. After the alarm delay, confirm the standby unit starts, the **ALARM** light and buzzer come on, and the common alarm relay changes state.
3. **Acknowledge.** Press and hold **HOLD TO ACKNOWLEDGE** and confirm the buzzer stops. Clear the unit's alarm and confirm the panel returns to normal.
4. **Rotation.** Use **Auto Sequencing Rotate** and confirm the roles swap.
5. **Sensors.** Confirm each group's temperature reads correctly.
6. **BMS.** Have the integrator read a few points (AC4-14).

# 09 BMS integration

## BMS and NMS integration SPC-14

Every Smart Panel publishes its points as a **BACnet/IP device**, a **Modbus/TCP server** and an **SNMP v1/v2c agent** at the same time, from Port 0. The point lists are in the console under **Settings › Mappings**, one page per protocol, and each list can be exported as CSV, PDF, Excel, HTML or JSON (BACnet/IP also as EDE) for the integrator.

- The **SPAC4** uses a fixed point list, the same on every panel ( AC4-14 ).
- The **SPDM** and **SPIGM** build their maps from the units added to them, numbered by unit (DM Series Guide INTG ).
- Writes from the BMS are off until you allow them (DM Series Guide INTG-2.2 ).
- The panel publishes **one** BACnet/IP device. Its BACnet conformance statement (PICS) is published on pythiatech.com.




**Settings › Mappings › BACnet/IP**, with the export buttons.

## BMS points AC4-14

BACnet/IP, Modbus/TCP and SNMP are standard on every SPAC4 and publish the same points with the same numbers. The lists are in **Settings › Mappings** and can be exported ( SPC-14 ).

- **BACnet/IP:** one device, device name "Smart Panel", model "SPAC4". The default device instance is **1**; the instance and port are set under **Properties** on the BACnet/IP mapping page. Each point is an **Analog Value** whose instance is the point number (for example **AV 1101** = Group 1 Unit 1 state).
- **Modbus/TCP:** unit ID (address) **1**. Holding registers are **40000 + the point number** (for example **41101** = Group 1 Unit 1 state). Group sensor values are also available as an IEEE float register pair (41002–41003, 42002–42003) in engineering units, or as an integer × 0.01.
- **SNMP v1/v2c:** OIDs are **1.3.6.1.4.1.38801.6..0** (for example 1.3.6.1.4.1.38801.6.1101.0 = Group 1 Unit 1 state). The MIB file (pythiatechspac4.mib) is available from Pythia. The panel can also send SNMP traps and email.

**Mode** points are read/write (where writes are enabled); all other points are read-only.

| Point | Modbus | BACnet | SNMP suffix | Values |
|---|---|---|---|---|
| **Panel communications** | 40001 | AV 1 | .6.1.0 | 0 = normal, 1 = loss of communications |
| **Panel state** | 40002 | AV 2 | .6.2.0 | 0 = disabled, 1 = normal, 2 = alarm |
| **Group 1 state** | 41001 | AV 1001 | .6.1001.0 | 0 = disabled, 1 = normal, 2 = alarm |
| **Group 1 sensor** | 41002 | AV 1002 | .6.1002.0 | Temperature, engineering units |
| **Group 1 Unit n state** | 41n01 | AV 1n01 | .6.1n01.0 | 0 = not assigned, 1 = normal, 2 = alarm |
| **Group 1 Unit n on** | 41n02 | AV 1n02 | .6.1n02.0 | 0 = off, 1 = on |
| **Group 1 Unit n mode (R/W)** | 41n03 | AV 1n03 | .6.1n03.0 | 0 = off, 1 = on, 2 = standby, 3 = primary |
| **Group 2 state** | 42001 | AV 2001 | .6.2001.0 | 0 = disabled, 1 = normal, 2 = alarm |
| **Group 2 sensor** | 42002 | AV 2002 | .6.2002.0 | Temperature, engineering units |
| **Group 2 Unit n state** | 42n01 | AV 2n01 | .6.2n01.0 | 0 = not assigned, 1 = normal, 2 = alarm |
| **Group 2 Unit n on** | 42n02 | AV 2n02 | .6.2n02.0 | 0 = off, 1 = on |
| **Group 2 Unit n mode (R/W)** | 42n03 | AV 2n03 | .6.2n03.0 | 0 = off, 1 = on, 2 = standby, 3 = primary |

In the table, **n** is the unit number 1–4. For example, Group 2 Unit 3 mode is Modbus **42303**, **AV 2303**, SNMP 1.3.6.1.4.1.38801.6.2303.0.

# 10 Troubleshooting and documents

## Troubleshooting SPC-16

| What you see | What to check | See |
|---|---|---|
| **No POWER light (SPAC4, SPDM)** | Panel power at the supply's **L** and **N** terminals; the supply's output | SPC-5 |
| **The page at 192.168.0.221 won't load** | Laptop on **Port 0**, laptop address 192.168.0.100 with mask 255.255.255.0, the cable; the panel may already have a site address | SPC-7 |
| **The page loads but the console sign-in fails** | User **admin**; the password may have been changed | SPC-8 |
| **The panel is unreachable after an address change** | Reconnect to the new address; make sure only Network Interface 0 was changed | SPC-9 |
| **The iPad is dark** | Charge it for up to 15 minutes | SPC-12 |
| **A dry-contact input never alarms** | Wiring on the **two lower screws**; the input's NO/NC setting matches the contact | AC4-4, SDM-5 |
| **The BMS can't read the panel** | Port 0 address, the firewall services in SPC-10, and the map in **Settings › Mappings** | SPC-14 |
| **A Liebert unit shows communications lost** | Its IGM pair on the right channel, red (+) on top, black (−) on the bottom; the driver | IGM-4, IGM-7 |

## Software: the DM Series Guide SPC-15

Everything after the panel is installed and on the network is done in the DM console: units, alarms, notifications, trends, users, mappings and the AI Connector. The DM Series Guide covers it step by step. The parts to start with:

| To do this | DM Series Guide |
|---|---|
| **Find your way around the console** | GS, CON |
| **Add equipment (SPDM, SPIGM)** | MON-4.2, UNIT |
| **Use the panel's own inputs (SPDM)** | SPD |
| **Set up an SPAC4's groups and units** | SPA |
| **Send alarm emails and SNMP traps** | AUT |
| **Publish to a BMS or NMS** | INTG |
| **Connect an AI assistant** | AIC |

Training videos for the DM console: pythiatech.com/resources (Training videos).

## Training video and documents AC4-15

- Installation and setup training video (about 12 minutes): **pythiatech.com/training/spac4**
- Brochure and this guide: **pythiatech.com/smart-panel-ac4**
- TS1 temperature sensor brochure, with specifications and install steps: **pythiatech.com/smart-panel-ac4**

- Console reference: DM Series Guide SPA

## TECHNICAL SUPPORT

# 740-363-2272

Business days, 8:00 a.m. to 3:00 p.m. ET · support@pythiatech.com

Installation training video
**pythiatech.com/training/spac4**

### Documents

Brochure and this guide: pythiatech.com/smart-panel-ac4

AI assistant guide: Pythia_Tech_Smart_Panels.txt

Console reference: DM Series Guide, section SPA

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