

Overview

The (BA/VPS) Washdown Wall Plate Power Supply provides power to the (BVSPV) Washdown Wall Plate Unit. Analog output modules, Resistance Output Module (BA/ROM), Voltage Output Module (BA/VOM) and Current Output Module (BA/COM) mate to the connectors on the right side of the BA/VPS Power Supply.

Product Identification

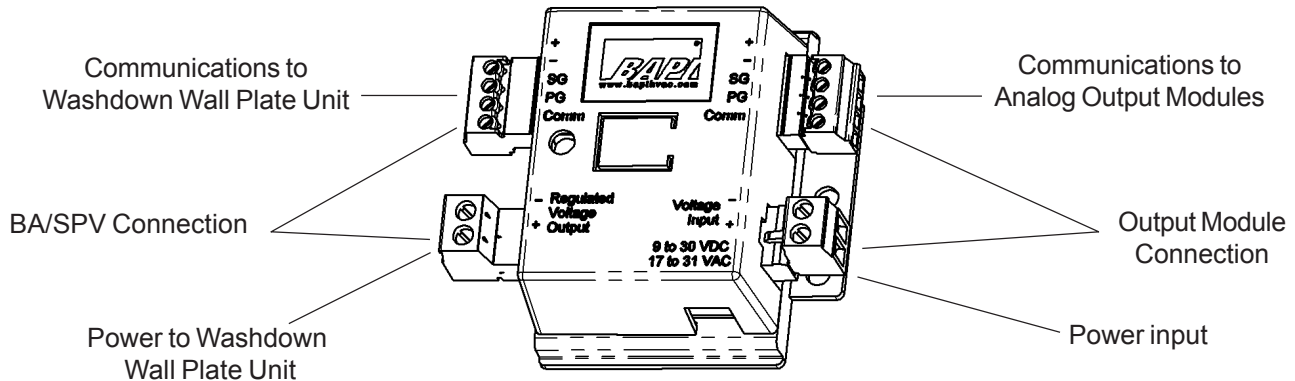


Fig 1: Washdown Wall Plate Power Supply (BA/VPS)

Mounting

There are several ways to mount the Washdown Wall Plate Power Supply. Make sure that the Input Power negative (-) is connected to the controller's analog ground.

Snaptrack Mount

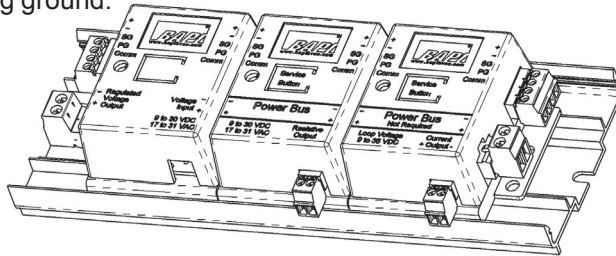


Fig 2: Snaptrack Mount

Note: Output modules must be mounted to the **RIGHT** of the BA/VPS Power Supply.

Insert the Washdown Wall Plate Power Supply into a piece of snaptrack. Just to the **RIGHT** of the Washdown Wall Plate Power Supply insert an analog output module, slide the module to the left until it's connectors are fully mated into the Washdown Wall Plate Power Supply's connectors. You may attach up to 127 analog output modules by mating each new one into the analog output module on the end of the train. If you wish to connect more output modules than room in your snap track, place another piece of snap track nearby and connect wires from the right end of the train to an analog output module on the left end of the second piece of snaptrack. Continue to place additional analog output modules in the second piece of snaptrack to the right of the first additional analog output module and sliding them into place.

35mm DIN Rail Mount

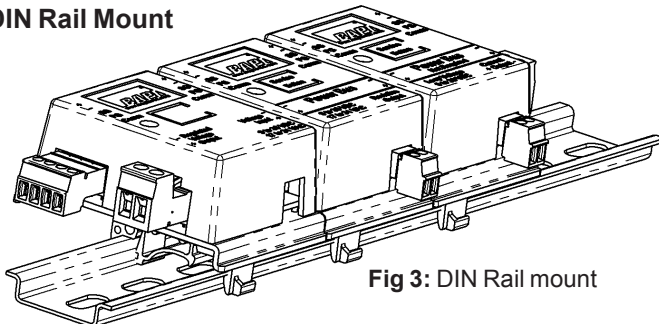


Fig 3: DIN Rail mount

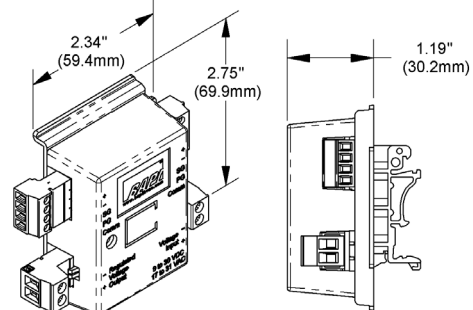


Fig 4: Dimensions and DIN Rail Clip

Clip a Washdown Wall Plate Power Supply onto a piece of DIN Rail. Just to the **RIGHT** of the Washdown Wall Plate Power Supply clip onto the rail an analog output module, slide the module to the left until it's connectors are fully mated into the Washdown Wall Plate Power Supply's connectors. You may attach up to 127 analog output modules by mating each new one into the analog output module on the end of the train. If you wish to connect more output modules than room on your DIN Rail, place another piece of DIN Rail nearby and connect wires from the right end of the train to an analog output module on the left end of the second piece of DIN Rail. Continue to place additional analog output modules on the second piece of DIN Rail to the right of the first additional analog output module and sliding them into place.

Specifications subject to change without notice.

Surface Mount

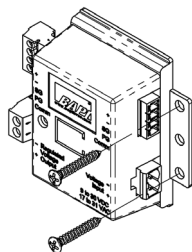


Fig 5: Mount VPS

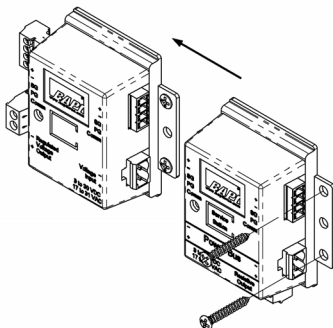


Fig 6: Mount 1st Analog Output Module

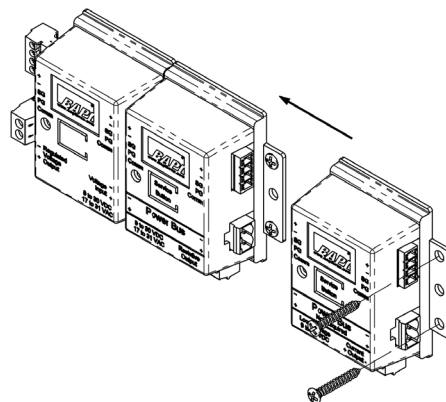


Fig 7: Mount 2nd Analog Output Module

Note: The BA/VPS is allways mounted to the **LEFT** of the Output Modules.

Mount a Washdown Wall Plate Power supply to a surface with two screws as shown in Figure 6. Slide an analog output module onto the Washdown Wall Plate Power Supply until its connectors are fully mated into the Washdown Wall Plate Power Supply's connectors. Attach the analog output module to the surface with two screws as shown in figure 7. Slide additional analog output modules on the end as shown in Figure 8. Make sure to attach each additional analog output module to the surface with two screws. The next module covers the previous one's screws, so remember to drive the screws as you proceed.

You may attach up to 127 analog output modules by mating each new one into the analog output module on the end of the train. If you wish to connect more output modules than can fit on your surface, place additional analog output modules nearby and connect wires from the right end of the train to the additional analog output module. Continue to place additional analog output modules to the right of the first additional analog output module and sliding them into place. Remember to screw the analog output modules in place as you go.

Termination

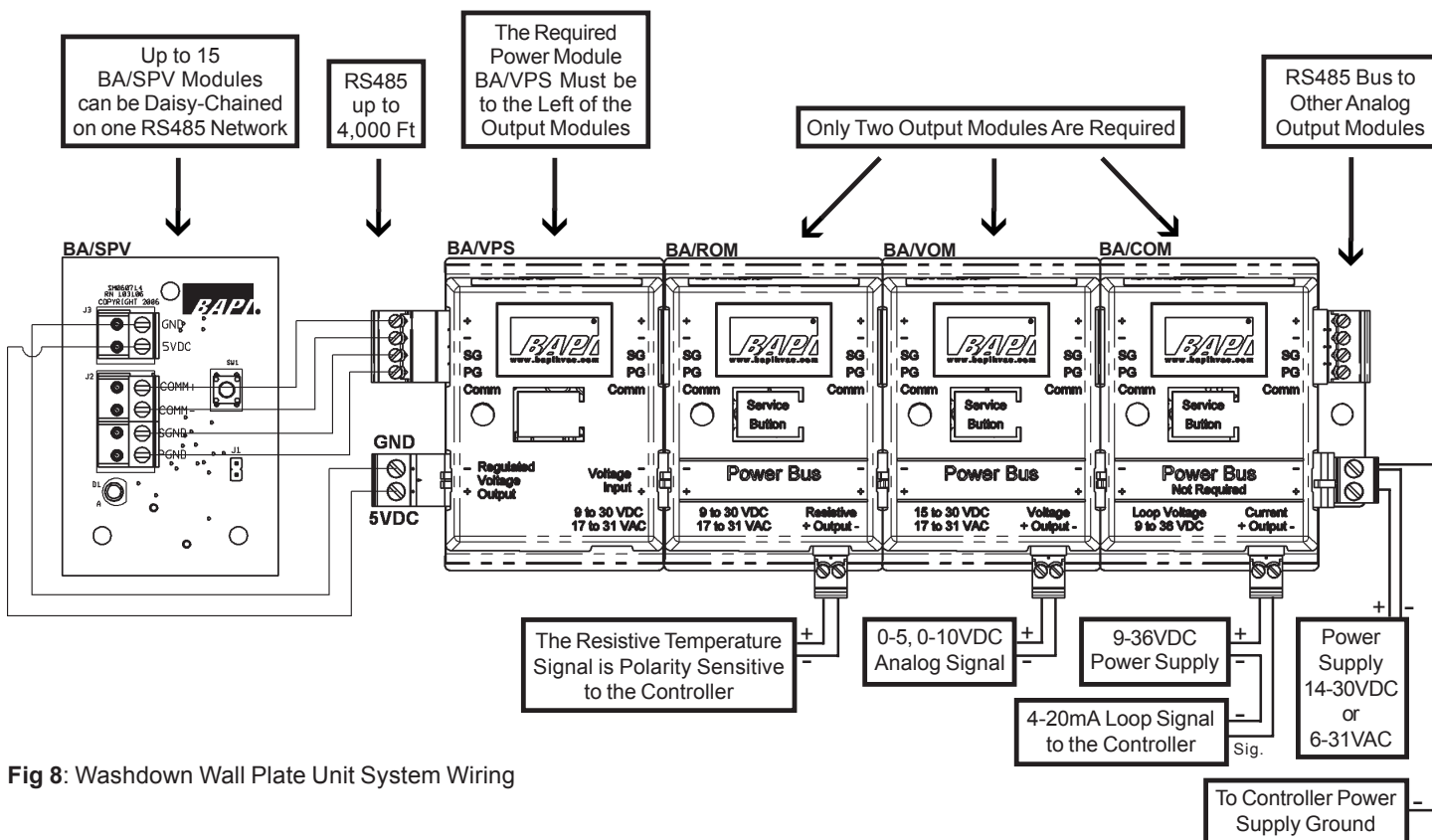


Fig 8: Washdown Wall Plate Unit System Wiring

Specifications subject to change without notice.

Termination Notes

- Note 1:** Each BA/SPV Wall Sensor requires two (2) output modules. One (1) is for Temperature, one (1) for Humidity and one (1) BA/VPS Power Supply.
- Note 2:** Wire the Washdown Wall Plate Unit to the Washdown Wall Plate Power Supply and analog modules as shown in fig 8 above.
- Note 3:** Up to 15 (fifteen) Washdown Wall Plate Units can be connected to the network, all wired in parallel with the first.
- Note 4:** Up to one hundred twenty seven (127) analog output modules may be connected to the Washdown Wall Plate Power Supply, connector to connector or with RS485 cable.
- Note 5:** The total aggregate length of the RS485 cable is 4,000Ft (305 meters).
- Note 6:** If any RS485 cable segment for the output modules is longer than 100Ft (30.5 meters) each group of analog output modules should have its own power supply.

Analog Output Module Training

Note: It may be easier to perform this procedure in the shop before mounting the units at the job site.

1. Connect the Washdown Wall Plate Power Supply to the Washdown Wall Plate Unit and plug in the output modules.
2. Apply power to the Washdown Wall Power Supply and output modules.
3. The power LED on the Washdown Wall Plate Power Supply should light and remain lit. The powered analog output module's LED should flash and go out. (The flash is very quick.)
4. The LED on the Washdown Wall Plate Unit should flash once approximately every 10 seconds. (The flash is very quick.)
5. Pick a Washdown Wall Plate Unit and an analog output module you want to train to recognize one another. Press and hold the plastic service button on the top of the Output Module, fig 9 at the same time press for one second and release the training button on the Washdown Wall Plate Unit, fig 10. When the LED on the output module lights, release its button (The LED will go out when you release the button). The output module will now report the environmental conditions from the Washdown Wall Plate Unit trained to it. The output module's LED will quickly flash whenever it receives an update from the Washdown Wall Plate Unit. Temperature and Humidity Analog Output Modules are trained separately.
6. Mount the Washdown Wall Plate Unit at the desired location. The units will remain trained to one another through power failures.

Fig 9: Typical Output Module

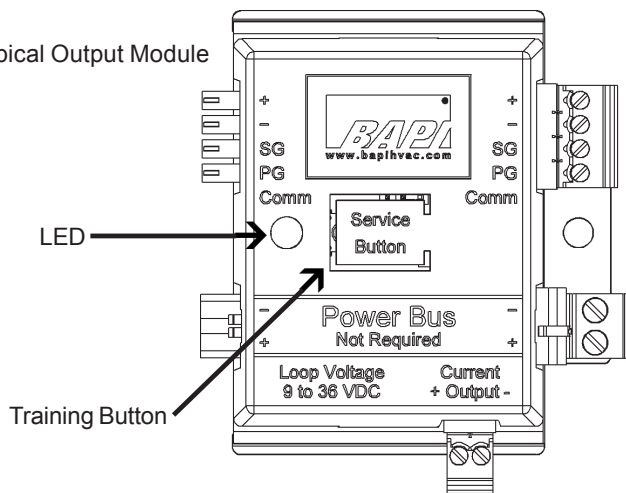
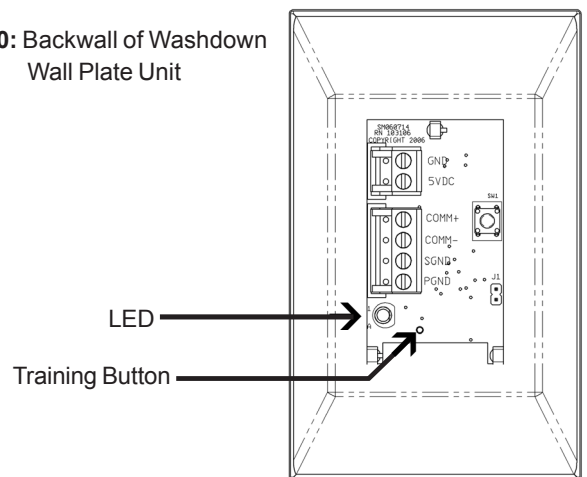


Fig 10: Backwall of Washdown Wall Plate Unit



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Diagnostics

Possible Problems:

Temperature or Humidity is reading its low limit

Check wire from output modules to controller for proper connections and polarities.

Check to see if the controller's software is configured properly.

Check Washdown Wall Plate Unit to see if its LED flashes about every 10 seconds.

Check power to the Washdown Wall Plate Unit and output module.

Check output modules LED, if it is blinking fast Check the associated Washdown Wall Plate

Unit as described aboveRetrain the modules

Temperature or Humidity is reading is coming out the wrong output module

Retrain the modules.

Temperature or Humidity is reading incorrectly

Check wire from output modules to controller for proper connections and polarities.

Check to see if the controller's software is configured properly.

Check to see if the correct output module is connected to the right controller.

Specifications

Supply Power: 14 to 30VD or 6 to 31VAC

Output Power: 5VDC, for up to 15, BA/SPV Wall Plates

Power Consumption: 20mA maximum DC, .6VA maximum, AC

Capacity:

15 Wall plates, BA/SPV

127 Output Modules, BA/VOM, BA/COM & BA/ROM

RS485 Cable Distance: 4,000Ft with shielded, twisted pair cable (Belden 9841, Belden 8132 or equivalent)

Mounting: Snaptrack or Din Rail

Environmental Operation Ranges:

Temperature 30° to 140°F, (0° to 60° C)

Humidity: 5% to 95%RH non-condensing

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