

# Duct Smoke Detector 2:1 Capability

InnovairFlex 4-wire duct smoke detector has the ability to power two sensors from one power board. With its 2:1 sensor-to-power board capability the power board of the **D4120** may be used to monitor a second **D4S** sensor simultaneously. This is perfect for applications where monitoring both supply and return are required.

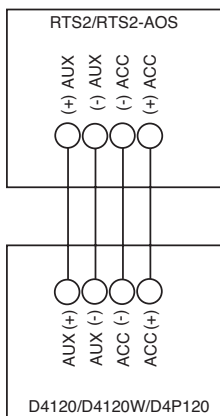
For applications where space is at premium try the fully distributed option with a separate power board (**D4P120**) and up to two sensors (**D4S**). Mount the power board (**D4P120**) remotely in a convenient and accessible location and mount the sensor components where needed to monitor air moving through the HVAC system.

Code required remote monitoring can be accomplished with the RTS2 or RTS2-AOS remote test accessory which has the capability of monitoring two separate sensors tied back to one power board.

## 2:1 Sensor-to-Power Board Configuration

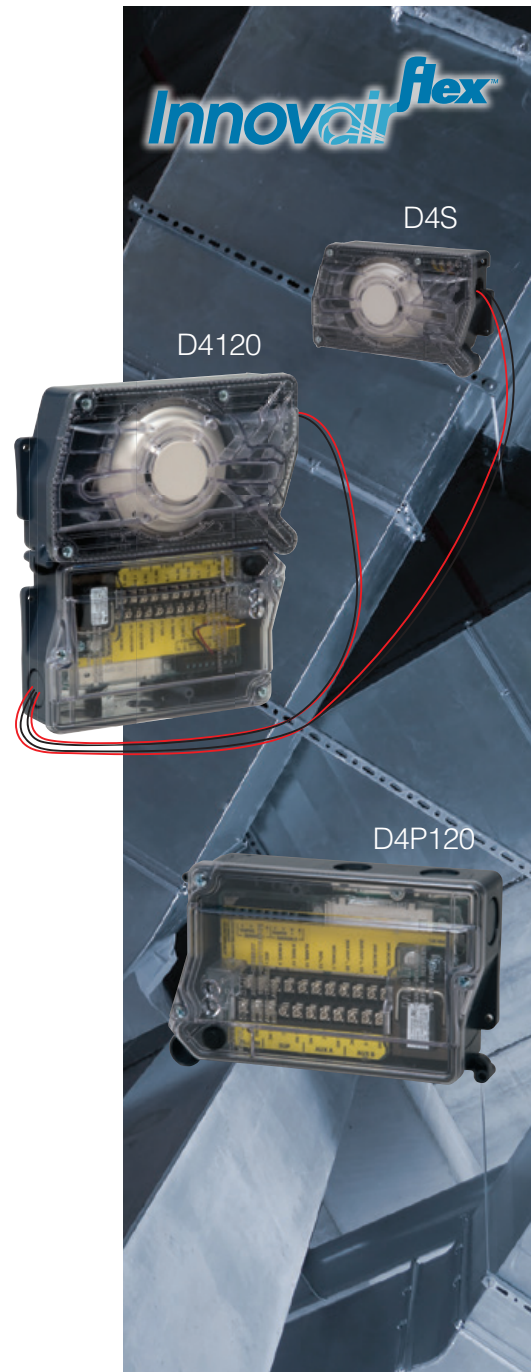
The **D4120** duct smoke detector or **D4P120** power board only is capable of controlling a second housed sensor. The additional sensor, model **D4S**, can be wired to the power board per the following:

1. Connect wires to the four wire terminals in the corner of the D4S sensor housing designated as Tamper (Y,Y), +R, and -B. Route wires through the conduit openings in the sensor housing and D4120 power board housing.
2. Connect the opposing ends of the wires to the terminal connections marked "**Sensor 2**" on the Power board. Ensure that wires are connected to the appropriate terminal locations. A No. 0 or 1 phillips screwdriver should be used for terminal connection. The tamper terminals are not polarity sensitive.
3. Adjust the middle dip switch on the power board to indicate (2) sensors.
4. The **D4S** can only be used with InnovairFlex models and is not compatible with previously sold detectors.
5. Where RTS2 or RTS2-AOS is required, the wiring configuration is as follows:



NOTE: If polarity of Acc. (+) and Acc. (-) are reversed, an Amber LED on sensor 2 of the duct smoke detector power board will exist indicating a trouble condition.

\*It is recommended that 18 awg or greater wire be used and limit wire runs to 25 ohms or less per interconnecting wire.



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