

Retrotec's Model 400x Ductester QuickGuide



System case

Umbilical

Extra Tubing & Tubing Accessory Kit

DucTester

DM32 gauge
gauge case



Range plugs



Flex Duct



Depressurization Kit



1 Prepare the DM32X

- Power on the DM32X.
- Connect yellow, green, and blue tubes to the gauge.
- Tap [Change Device] and select the 440 or 450 DucTester.



- Tap [Change Range] and select Range 47.
- Tap [Channel B] to change the type of result or units. Select based on "Get The Results You Need" on the QuickGuide instructions below.



- Tap [Settings] then [Time Averaging] and select 5 Seconds.
- Tap [Settings] then [Default @ Pressure] and enter Test Pressure.
- Return to main screen.
- If your flow units include area, tap [Area], then use number pad to enter and tap [Set].

2 Prepare the Ducts

- Ensure sealing is complete.
- Blank off ductwork.

See Manual for DucTester Operation Model 440x_450x for additional information.



3 Connect Flex to Ducts

- Attach 4" (100mm) Flex to ductwork.
- Install Range 47 Range Plug.

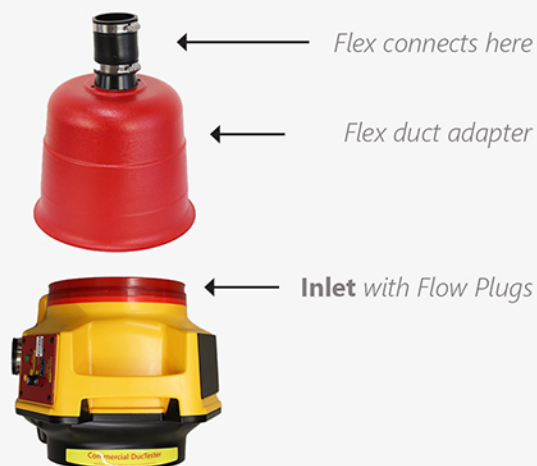


4 Connect Flex to Fan

- Connect Flex Duct to fan **outlet** for **pressurization**



- On Model 450 you can **depressurize** ducts by attaching the Adapter onto Fan inlet and attaching the Flex to it



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Connect Gauge & Fan

- Plug in the power adapter. Blue light indicates that the power is connected.
- Connect yellow and green tubes to matching color ports on the fan.
- Plug in Speed Control Cable between DucTester & Gauge.
- Connect blue tube the duct using a static probe or connection on flange.



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Conduct Test



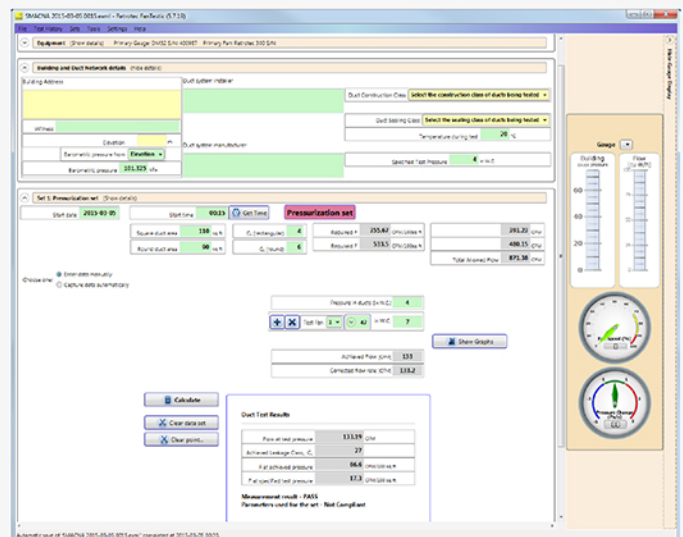
WARNING! Test pressures may exceed 20 in WC (5000 Pa). Start slowly!

- [Set Speed] to 1% then jog up to the Test Pressure.
- Tap [@] on the display and "Flow at Test" Pressure will appear.
- Jog fan speed up but do not exceed the Pressure Class
- Read Results from the Gauge.
- If test passes, complete test reports & remove temporary seals.

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FanTestic

- Connect Gauge to a laptop and have FanTestic run the test according to any Standard.
- Visit retrotec.com/software.html to download

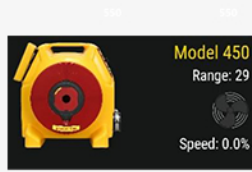


Desired results not achieved?

Flow in [Channel B] reads "--" at test pressure?

If the test pressure has been reached, but "--" appears, the fan is running too slowly to accurately measure flow.

- Switch to a lower Range Plug
- [Change Range] on the gauge to match
- Re-adjust fan speed



Cannot achieve test pressure at full speed?

If fan reaches 100% speed before reaching test pressure:

Change to a higher Range Plug, Change [Range] on the gauge to match and try again.

Check seals on all registers. Look for disconnected ducts or ducts open to outdoors.

Field check gauge weekly

Check for gauge accuracy, blocked, leaking, or pinched tubes weekly, and anytime results are in question.

Check the gauge with the tubes in the Umbilical.

Set [Time Average] to 5 seconds in [Settings].

Tap [Channel B] and select "Pressure: Pa"

Connect the red tube between the red and yellow ports.

If readings on Channel A and Channel B are within 2% and don't drop noticeably in 5 seconds, the gauge is functioning correctly.

Remove red tubes and repeat with the yellow tube between the blue and green ports.

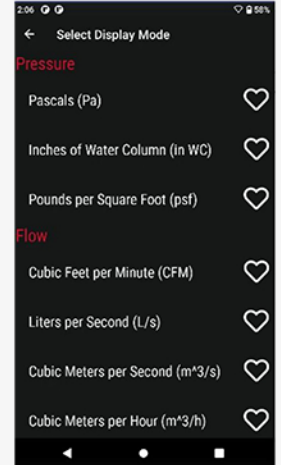
Get the results you need

Tap [Channel B] on the screen to select a different result, or tap the [Results to be Displayed] button in the [Settings] menu.

Flow at the induced pressure is the simplest result.

Flow in CFM per square foot (or m³/(h·m²)) may be required. (Enter an Area).

When a Result is chosen that requires a Area or Volume, Area or Volume will be shown on the Home Screen. Tap to Change. The area can also be changed through the [Settings] menu.



Use smaller Range number for tighter ducts, and larger number for leakier ducts.



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Additional troubleshooting

Visit www.retrotec.com/support for more support options such as FAQ, Webinars, Manuals, Tech Support, and Repairs.