EXAIR® Corporation
MANUFACTURING INTELLIGENT COMPRESSED AIR® PRODUCTS SINCE 1983

11510 Goldcoast Drive ▪ Cincinnati, OH, USA 45249-1621
(513) 671-3322 ▪ FAX (513) 671-3363 ▪ E-mail: techelp@exair.com
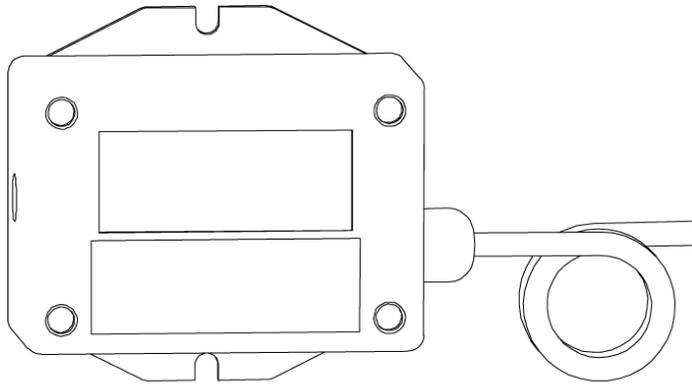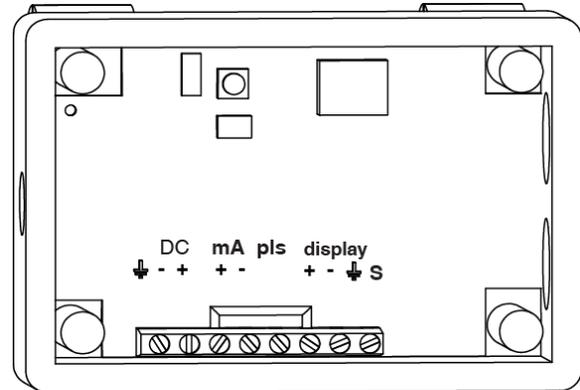
TECHELP DIRECT
1-800-903-9247

SUMMING REMOTE DISPLAY FOR EXAIR DIGITAL FLOWMETERS
(Including Rev. 3.0) INSTALLATION & MAINTENANCE

Summing Remote Display

DC   mA pls   display

Shown with top circuit board
Removed for clarity
(Digital Flowmeter shown - sold separately)

SPECIFICATIONS
Input power: 50 mA at 18 to 24 VDC
Display: Four-digit LED display

C E

Description
The Summing Remote Display provides a convenient way to monitor daily or cumulative air usage by a machine, process, or department. Alternatively, it can be used as a remote display for a meter in a high or inconspicuous location.

Location
The Summing Remote Display may not be installed in a hazardous location. Use the 50 ft. (15.2m) cable (provided) to connect the Summing Remote Display to the Digital Flowmeter. Use the self tapping screws (provided) to mount the Summing Remote Display to the surface of your choice. Holes should be 2.75" to 2.90" (70 to 74mm) apart.

Installation
The Summing Remote Display comes pre-wired with 50 ft of cable. After mounting the Summing Remote Display and the Digital Flowmeter, run the cable as necessary. If there is cable left over when mounting is complete, the excess cable may be cut off. Leave about 3" (76mm) to be used inside the Digital Flowmeter.

Unplug the Digital Flowmeter and/or the Summing Remote Display. Remove the four screws that hold the cover on the Digital Flowmeter. Gently pop the upper circuit board out of the housing and move it to the side. Remove the plug from one of the ports on the side of the Digital Flowmeter. Install the plastic conduit fitting supplied with the Digital Flowmeter. Push the cable through the conduit fitting and into the meter housing.

Strip away ¾" (19mm) from the outside jacket of the wire, including removal of the aluminum foil shielding. Take the bare wire, and bend it back over the remaining outside sheathing. Tape it in place using electrical tape, leaving no bare wire exposed. Strip 3/16" (5mm) of the insulation away from the red, black and clear wires. Connect the red wire to 'DC+'. Connect the black wire to 'DC-'. Connect the clear wire to 'display S'. On older units, this is 'DSP'. Be sure to maintain any

Installation Con't.

existing electrical connections. Secure wire by tightening the conduit fitting. Put the upper circuit board back in place, and re-assemble the cover to the meter housing.

Powering the Summing Remote Display and Digital Flowmeter

If using the wall-plug dc power supply furnished with the meter, connect it either at the display or at the meter. Alternatively, power the meter and remote display with a 24VDC supply connected to the *supply-* and *supply+* terminals, either at the meter or at the display. If power is connected at the display, the interconnecting cable must be 22 gauge or larger and must be no longer than 60 feet. The 300 mA power supply furnished with the Digital Flowmeter is adequate to power one meter and one remote display.

Using the Display – Rev 3.0 meters only – all other meters see below

The button that controls the display is marked by a circle on the side of the meter. After the power is turned on, pressing the button will cycle through (4) display options: RATE, DAILY USAGE, CUMULATIVE USAGE and UNITS OF MEASURE.

The RATE is rate of air the meter is measuring.

The DAILY USAGE mode displays the usage in thousands of standard cubic feet during the most recent full 24-hour recording period. Holding the button while in this mode will reset the value to zero.

In the CUMULATIVE USAGE mode, the display shows the total air usage in thousands of standard cubic feet. After reaching 9999, it rolls over to 0. It can be used to track monthly air usage and allocate utility costs. The decimal point can be placed to provide better resolution than one thousands of standard cubic feet, but the display will roll over sooner. Holding the button while in this mode will reset the value to zero.

The UNIT OF MEASURE indicates the unit of measure: "0" indicates SCFM, "1" indicates m^3/min and "2" indicates m^3/hr.

Using the Display – all other meters

The button that controls the display is on the side of the meter. After the power is turned on, pressing the button will cycle through (3) display options: RATE, DAILY USAGE and CUMULATIVE USAGE.

The RATE is rate of air the meter is measuring.

The DAILY USAGE mode displays the usage in thousands of standard cubic feet during the most recent full 24-hour recording period. Holding the button while in this mode will reset the value to zero.

In the CUMULATIVE USAGE mode, the display shows the total air usage in thousands of standard cubic feet. After reaching 9999, it rolls over to 0. It can be used to track monthly air usage and allocate utility costs. The decimal point can be placed to provide better resolution than one thousands of standard cubic feet, but the display will roll over sooner. Holding the button while in this mode will reset the value to zero.

Customizing the Display – Rev 3.0 meters only

The button that controls the display is marked by a circle on the side of the meter. Hold the button while the power is off, then apply power to the meter and release the button. The letters "AC" for access code will appear. Press the button repeatedly to cycle to the number 4. After a few seconds, the letters "dd" for default display will appear. Use the button to cycle through the options for the default mode; a "0" indicates rate mode, a "1" indicates daily usage mode, and a "2" indicates cumulative usage mode. Wait, and the letters "dP" for decimal point will appear. Press the button repeatedly to move the decimal point to the desired position for the daily and cumulative usage modes. The letters "du" for display unit will then appear. Cycle through the options for the default units as listed here:

0. Rate in SCFM, daily and cumulative usage in 1000 ft^3.
1. Rate in m^3/min, daily and cumulative usage in 1000 cubic meters.
2. Rate in m^3/hr, daily and cumulative usage in 1000 cubic meters.

The meter will then return to normal operation.

Limitations
Because of slight delays in the response of the Digital Flowmeter, if the flow consists predominantly of pulses shorter than several seconds, the accuracy of the totalized flow will be reduced.

If you have any questions or problems, please contact an EXAIR Application Engineer at:

Toll Free: 1-800-903-9247 (U.S. & Canada)
Telephone: 513 671-3322 outside of U.S. & Canada
Toll Free Fax: 866-329-3924 (U.S. & Canada)
FAX: 513 671-3363 outside of U.S. & Canada
E-mail: techelp@exair.com
Website: www.exair.com