Using the Outputs

The milliamp output is scaled so that four milliamps corresponds to zero flow and 20 milliamps corresponds to the range of the meter indicated on the data sheet. The meter will display the milliamp full-scale value for a few seconds on startup. It will also display it if the button on the main (lower) circuit board is pressed twice.

The pulse output generates a square wave signal, sending one pulse for each cubic foot of air that passes through the meter. The LED blinks with the pulse output. At zero flow it may be on or off. The pulse output can be configured as a threshold output, and the scaling of both the pulse output and the milliamp output can be changed, using the optional configuration cable.

Using the Display

Pressing a button indicated by a circle on the front of the meter cycles the display through four display options: rate, daily usage, cumulative usage, and units of measure, the last indicated by a digit: (0) for scfm, (1) for m³/min and (2) for m³/hr. The cumulative values are indicated in thousands of cubic feet or cubic meters. Holding the button pressed in either of the cumulative modes (daily usage or cumulative usage) will reset that value to zero. The display normally defaults to the rate display, but this can be changed, as can the units of measure and the decimal point location in the cumulative modes. Please refer to information on configuring the display.

Maintenance

If oil or dirt accumulates on the probes, the meter will read low. For this reason, we recommend cleaning the probes from time to time. To clean the probes, wipe them with a cloth dampened with alcohol or a similar degreaser. It may be found that the system is clean enough that cleaning is not needed.

Warranty

CDI warrants solely to the buyer that the Model 5200 Flowmeter shall be free from defects in materials and workmanship, when given normal, proper and intended usage, for three years from the date of purchase. During the warranty period, CDI will repair or replace (at its option) any defective product at no cost to the buyer. The foregoing warranty is in lieu of any other warranty, express or implied, written or oral (including any warranty of merchantability or fitness for a particular purpose). CDI’s liability arising out of the manufacture, sale or supplying of the flowmeter, whether based on warranty, contract, tort or otherwise, shall not exceed the actual purchase price paid by the buyer, and in no event shall CDI be liable to anyone for special, incidental or consequential damages.
around the holes. Apply the "Holes in Pipe" decal so that it will be hidden when the meter is in place but will be revealed when it is removed.

### Installing the Meter

First prepare the meter for the pipe orientation and the direction of flow. The flow arrow on the meter must be oriented to match the direction of flow in the pipe. If doing so will cause the display to be upside-down, remove the cover of the meter, lift out the display, rotate both 180° and re-install.

Now mount the meter on the pipe and tighten the cap screws evenly. The torque should be sufficient to seal the gasket but not so great that it will crush the gasket or distort or over-stress a thin-walled pipe.

### Wiring the Meter

Wiring must be in accordance with applicable codes and standards. In areas where electrical interference may be present, signal wiring should be shielded with the shield grounded remote from the meter. Signal cables must not be run in conduit or cable trays shared with power wiring. The main terminal block inside the meter is accessed by removing the cover and lifting out the display circuit board.

**Power**

Either use the dc wall-plug supply furnished with the meter, or connect the terminals marked "24V dc" to a distributed dc power supply and seal the unused power opening with the plastic plug provided. The meter will draw a maximum of 250 mA. Unlike earlier 5200 and 5400 meters, the Rev. 3.0 meters do not connect the dc-terminal to the pipe on which they are mounted. Please note that 18 Volt dc supplies furnished with some earlier CDI flowmeters do not provide the voltage required for Rev. 3.0 meters.

**Remote Display**

If you are using the summing remote display (SRD), connect the three terminals marked “display” to the corresponding terminals in the remote display. The meter may be powered from the remote display if the cable is 22 gauge or heavier and the distance is no greater than 200 feet.

**Milliamp Output**

The 4 - 20 milliamp output is optically isolated within the meter and it is provided with a factory-installed jumper which allows it to source a milliamp signal powered from the meter. The resistance of the loop connected to the output should not exceed 600 Ohms.

**Pulse Output**

The pulse output is open-collector, that is, a transistor switch to the meter’s negative supply. To use it, connect it to the input of the receiving device; also connect that input through a 10K Ohm resistor to a suitable positive supply and connect the negative supply of the receiving device to the negative supply of the meter. If an isolated relay contact is required, install the CDI 5200-IPO isolated pulse output and wire it to the receiving device.

**Serial Communication Option**

The RS-485 signal used with the Serial Communication option is wired to the special Serial Communication display board. The two threaded openings in the meter enclosure permit the signal to be wired from meter to meter without external splices. Please refer to the data sheet for the Serial Communication option.