



DESCRIPTION

The FV156 plug-in Respiratory Flow Integrator is a plug-in module for the MC1 System. It is specifically designed to provide volume signal outputs from the flow signal input. Two simultaneous outputs — one, selectable to be proportional to either Inspired or Expired volume; the other, proportional to Total Volume. The outputs are sufficient to operate most data-gathering equipment such as tape and graphic recorders. The flow input is a voltage output from a CD19 or similar Carrier Demodulator which converts pressure drop across a pneumotach to flow data.

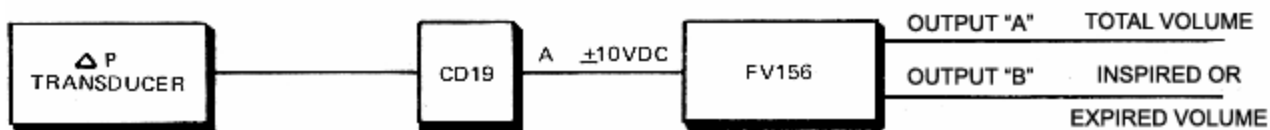
The selectable (inspired/expired) volume output ("B") can be automatically reset after each cycle, or when the integrator output reaches +10V.

A manual "Reset" or "Hold" is available on the front toggle switch, or may be operated externally if desired. The reset/hold functions affect both integrators.

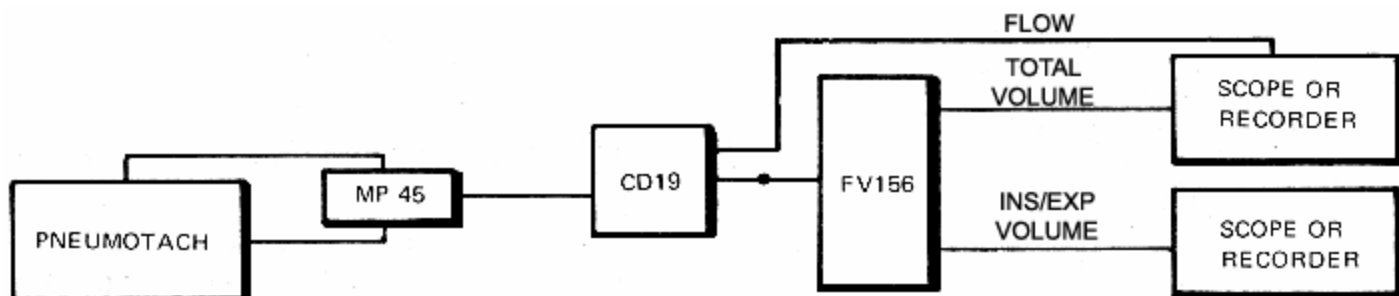
Specifications

Input Range:	±10V DC
input Impedance:	11K ohms
Integrator Scaling:	0.1V/sec to 1.1V/sec output per volt of input sensitivity
Expired/Inspired Volume:	May be adjusted from 0% to 100% of total volume output level
B.T.P.S. Correction:	Adjustable 1.0 to 1.4X Typical ±15 mV/min referred to output
Temperature Drift (40°F to 120°F):	Typical 1 mV/sec
Hold Drift:	Typical ±15 mV/min referred to output
Reset:	Exp./Insp. volume selectable at end of cycle or automatic at maximum of ± 10V DC; front panel manual and remote reset available.
Reset Rates:	End of cycle: 1 msec typical; Auto reset @ +10V: 20 msec normal
Output A:	DC at 10 mA
0 to ± 10V	
Output B:	0 to ±10V DC at 10 mA
Output Impedance:	10 ohms maximum
Remote Hold:	TTL Compatible (on low)
Remote Reset:	TTL Compatible (on low)
Flow Polarity	TTL Compatible (on low inspiration)
Output Signal:	Note: "Low" refers to logic level of 0 to 0.8V Sink 1 mA.
Flow Overrange Indicator:	Front panel mounted light emitting diode, latching; release on reset.
Flow Overrange Output:	TTL Compatible (high when indicator lights)
Temperature Range:	40 to 120°F (5 to 50°C)
Power Requirement:	±15V DC from MC1 Case

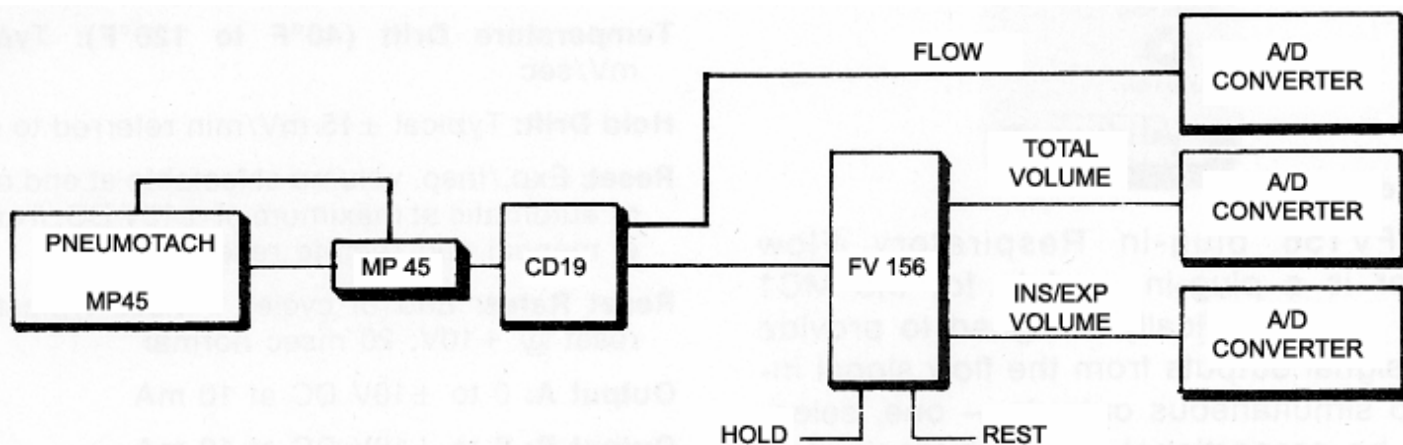
TYPICAL APPLICATIONS



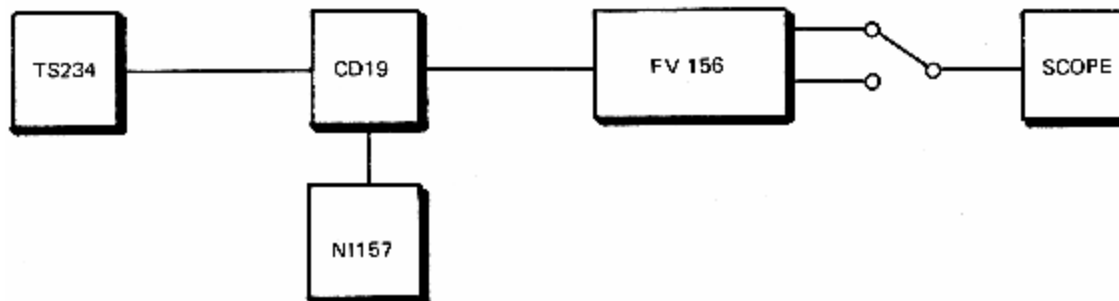
TYPICAL SIGNAL CONNECTIONS



TYPICAL (PNEUMOTACH) FLOW MEASURING SYSTEM



TYPICAL PNEUMOTACH FLOW MEASURING SYSTEM TO INTERFACE WITH DATA ACQUISITION SYSTEM



TYPICAL CALIBRATION SETUP

Accessories

P/N 7616-2 Plug-In Module Connector Extender



8626 Wilbur Avenue - Northridge, CA 91324-4498
 (818) 886-2057 - FAX (818) 886-6512
<http://www.validyne.com> - e-mail to sales@validyne.com