

Virtual Measurements & Control



VC200 Series Setup Manual
Revision F

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Safety Notice

It is important that VMC's equipment is installed and operated in such a way that all applicable safety requirements are met. It is your responsibility as a user to ensure that you identify the relevant standards and comply with them. Failure to do so may result in damages to equipment and personal injury. In particular, you should review the contents of the Setup Manual carefully before installing or operating the equipment.

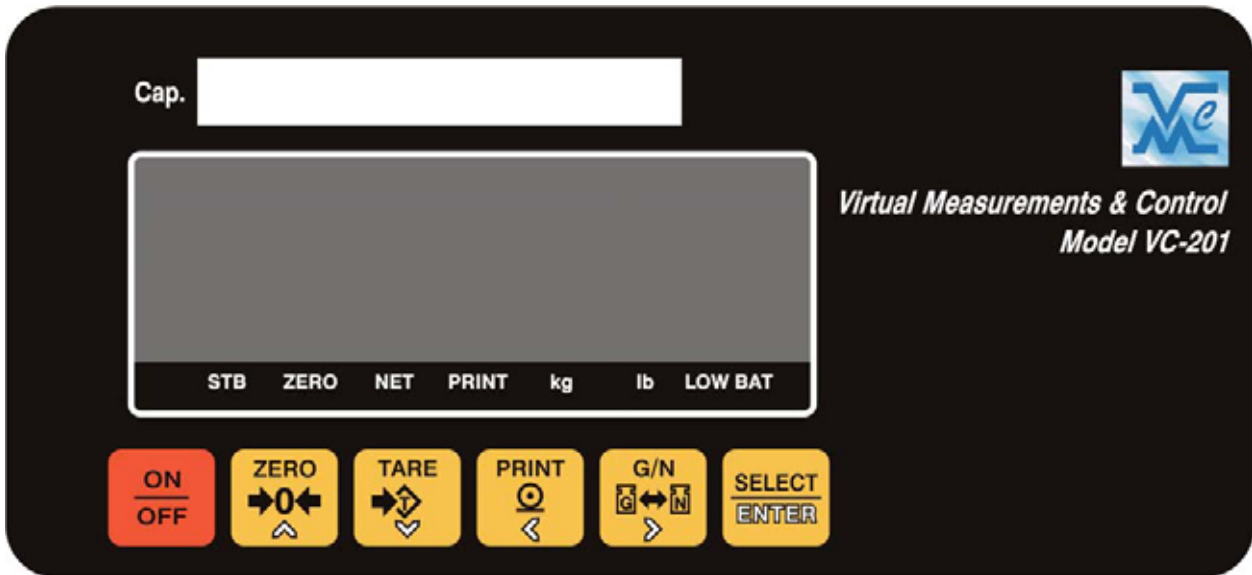
This equipment is not designed for placement in hazardous or explosive environments that require Factory Mutual Approval.

Under no circumstances will the supplier of the equipment be liable for any incidental, consequential, or special damages of any kind whatsoever, including but not limited to lost profits arising from or in any way associated with the use of the equipment or this Setup Manual.

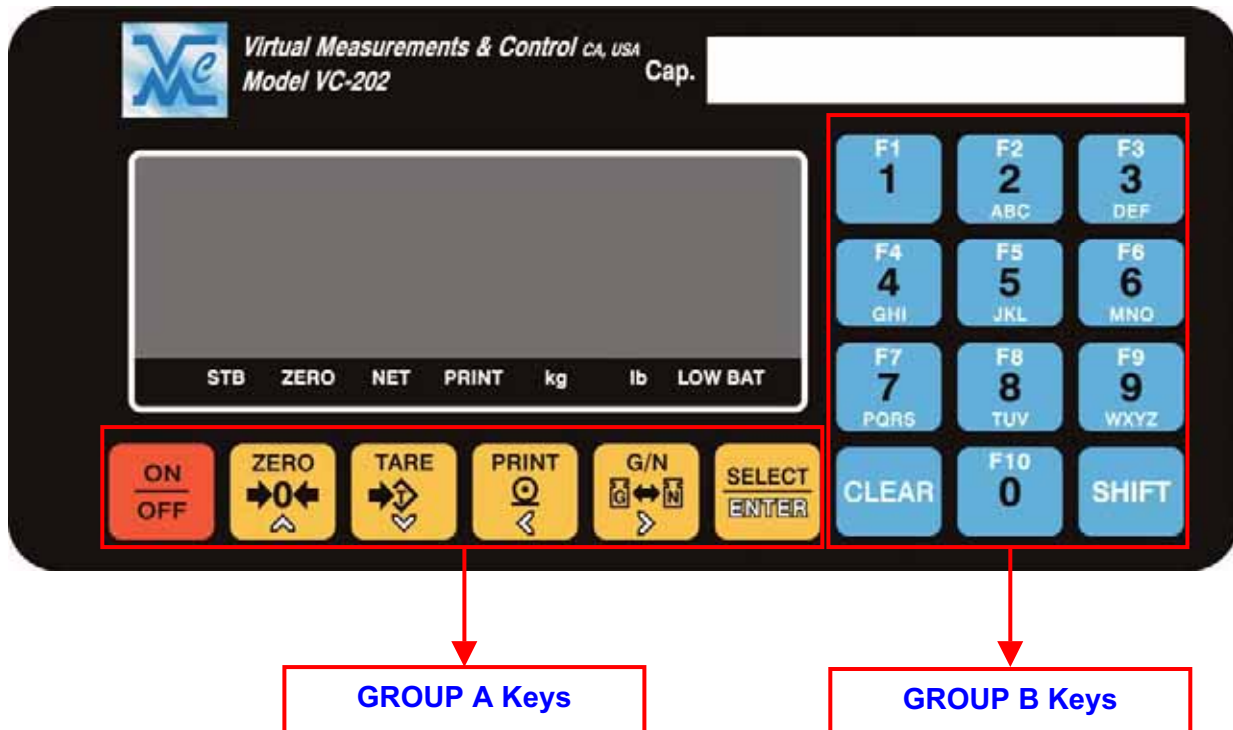
Specifications

Internal Resolution	1,000,000 counts at 3mV/V
Display Resolution	Selectable (1/10,000 NTEP approval pending)
Input Sensitivity	1 μ V/graduation typical, 0.4 μ V/graduation minimum
Display Increments	Selectable x1, x2, x5, x10, x20, x50, x100
Decimal Point	Selectable 0 ~ 4
Display	7 Digits 7-Segment LED display, 14.2mm (0.56") high, with annunciators (7 LED lamps) for function select, Stable, Center Zero, Net, Print, kg, lb, and Low Battery display
Keyboard	Standard - 6 button tactile keypad including Power On/Off key Optional - 18 button tactile keypad including Power On/Off key
Audio Alarm	Tone for key entry confirmation and low battery alarm
A/D Conversion Rate	7.5 updates per second
Load Cell Excitation Voltage	9.7VDC or 5VDC selectable. Drive up to six 350 ohm load cells
Analog Input Range	0.2mV/V to 3.0mV/V maximum
Non-Linearity	0.01% of full scale or less
Over Capacity	Display "CAP OL" when exceeds full scale capacity
Tare	Standard - Pushbutton tare Optional - Pushbutton tare, numeric tare entry & 10 predefined tare recall
Auto Zero Tracking	Selectable to 3.0 d by 0.5 d step
Motion Window	Key in data 0..255 (1 = 0.5 d)
Calibration Method	Software – Menu driven prompting
Units of Measure	Selectable kg/lb/g/oz, up to 2 units displayable
RFI/EMI Protection	All signal and excitation lines filtered to –65db min. @ 500MHz
Filtering	Selectable digital filter
RS-232C data output	COM Port 1. Full Duplex or Bi-directional COM Port 2. Simplex or Unidirectional (output only) Selectable baud rates (1200,2400,4800,9600,19200), manual or auto print, continuous data out or bi-directional communication
Remote Display	Standard – Remote only Optional - Programmable as Main Indicator or Remote Display
Custom Print Format	Programmable, up to 119 characters for Custom Print Format and up to 23 characters for Continuous Print Format
Set Points	Standard - None Optional - Selectable up to 2 Set Points for Low and High limit settings
Power	100/115VAC or 220/230VAC, 50-60Hz, 6VA with built-in Charger for 12VDC 2-2.3AH Rechargeable Sealed Lead Acid Battery (Battery Dimension 67 (H) x 178 (W) x 34 (D) mm, is optional)
Current Consumption	100mA + 30mA per 350 ohm load cell
Operating Temp	-10 degrees C to + 40 degrees C
Relative Humidity	Maximum 90% RH, Non-condensing
Dimensions	150 (6")H x 230 (9.1")W x 100 (4")D mm - ABS (Standard) 140 (5.5")H x 230 (9.1")W x 90 (3.5")D mm - Stainless Steel (Optional)
Shipping Weight	2.7lb (5.1lb with optional battery) – ABS (Standard) 4.7lb (7.1lb with optional battery) – Stainless Steel (Optional)
Enclosure	ABS plastic Casing, Optional Stainless Steel, NEMA 4-X
Warranty	One Year Limited Warranty

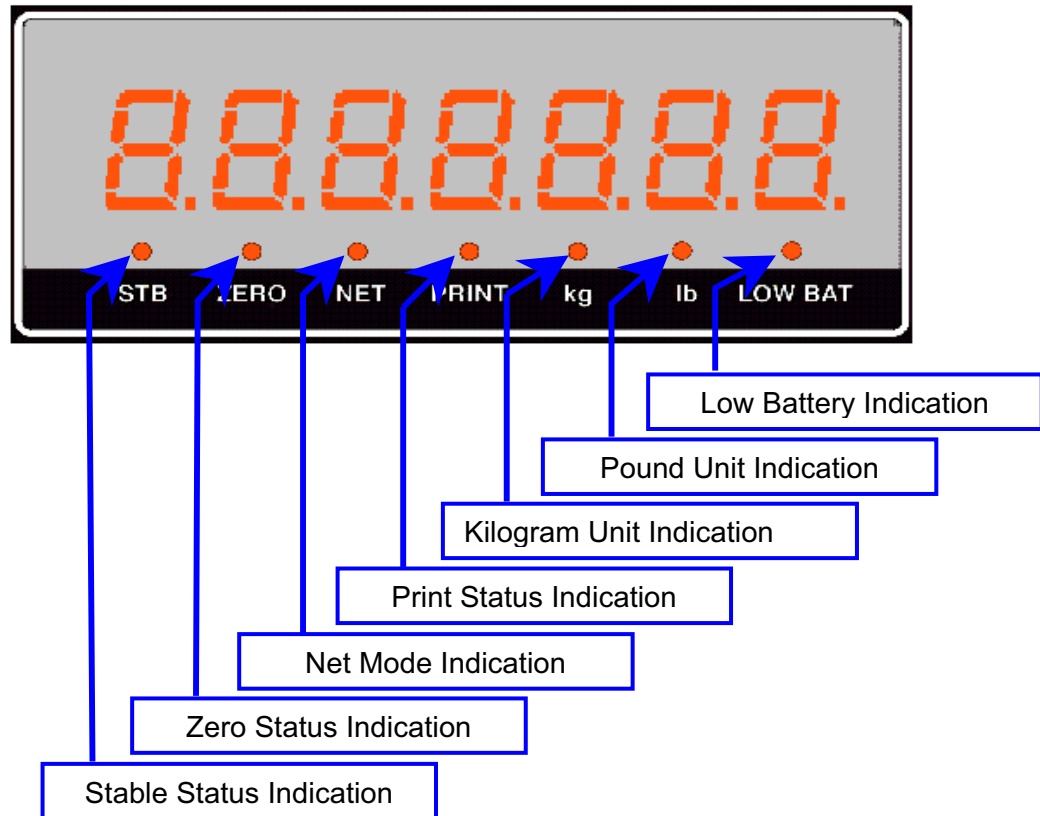
VC201 Front Panel



VC202/VC203 Front Panel



Status Indicators



There are 7 LED indicators just below the 7-segment weight display with the following functions.

- STB – (Stable Indicator) Indicates there is no weight motion on the weighing platform.
- ZERO- (Center Zero Indicator) Indicates the weight is at center of zero.
- NET-(Net Weight Indicator) Indicates the currently displayed weight is a net weight (a tare value is active).
- PRINT-(Print Indicator) Flashes to indicate a successful print transmission.
- Kg-(Kilogram Indicator) Indicates the current weight unit is kilograms.
- Lb-(Pounds) Indicates the current weight unit is pounds.
- LOW BAT-(Low Battery) Indicates the battery is low during battery operation. In the setup mode, the blinking of this LED is an indication to enter a numeric value.

Key Functions Group 'A'



ON / OFF – Power switch.



ZERO – Zero button used to zero the indicator when the weight display is stable.



TARE – Tares the indicator when the weight display is stable.



PRINT – Initiates a print transmission when the weight is stable.



G/N - Toggles the displayed weight between net and gross.



Select / Enter – Toggles between the selected units of measure.

Optional Key Functions Group 'B'



'0' / **F10** - Enters '0', space, Double Quotation Mark or Back Slash depending upon the current mode of operation.



'1' / **F1** – Enters '1' dash, period, forward slash, right and left parenthesis. This key also represents Tare Register No. 1.



'2' / **F2** - Enters '2', 'A', 'B' or 'C' depending upon the current mode of operation. This key also represents Tare Register No. 2.



'3' / **F3** – Enters '3', 'D', 'E' or 'F' depending upon the current mode of operation. This key also represents Tare Register No. 3



'4' / **F4** - Enters '4', 'G', 'H' or 'I' depending upon the current mode of operation. This key also represents Tare Register No. 4.



'5' / **F5** - Enters '5', 'J', 'K' or 'L' depending upon the current mode of operation. This key also represents Tare Register No. 5.



'6' / **F6** – Enters '6', 'M', 'N' or 'O' depending upon the current mode of operation. This key also represents Tare Register No. 6.



'7' / **F7** - Enters '7', 'P', 'Q', 'R' or 'S' depending upon the current mode of operation. This key also represents Tare Register No. 7.



'8' / **F8** - Enters '8', 'T', 'U' or 'V' depending upon the current mode of operation. This key also represents Tare Register No. 8.



'9' / **F9** – Enters '9', 'W', 'X', 'Y' or 'Z' depending upon the current mode of operation. This key also represents Tare Register No. 9



Clear – Clear entry or backspace depending upon the current mode of operation.



Shift - Selects function keys or toggles alpha or numeric entry depending on the current mode of operation.