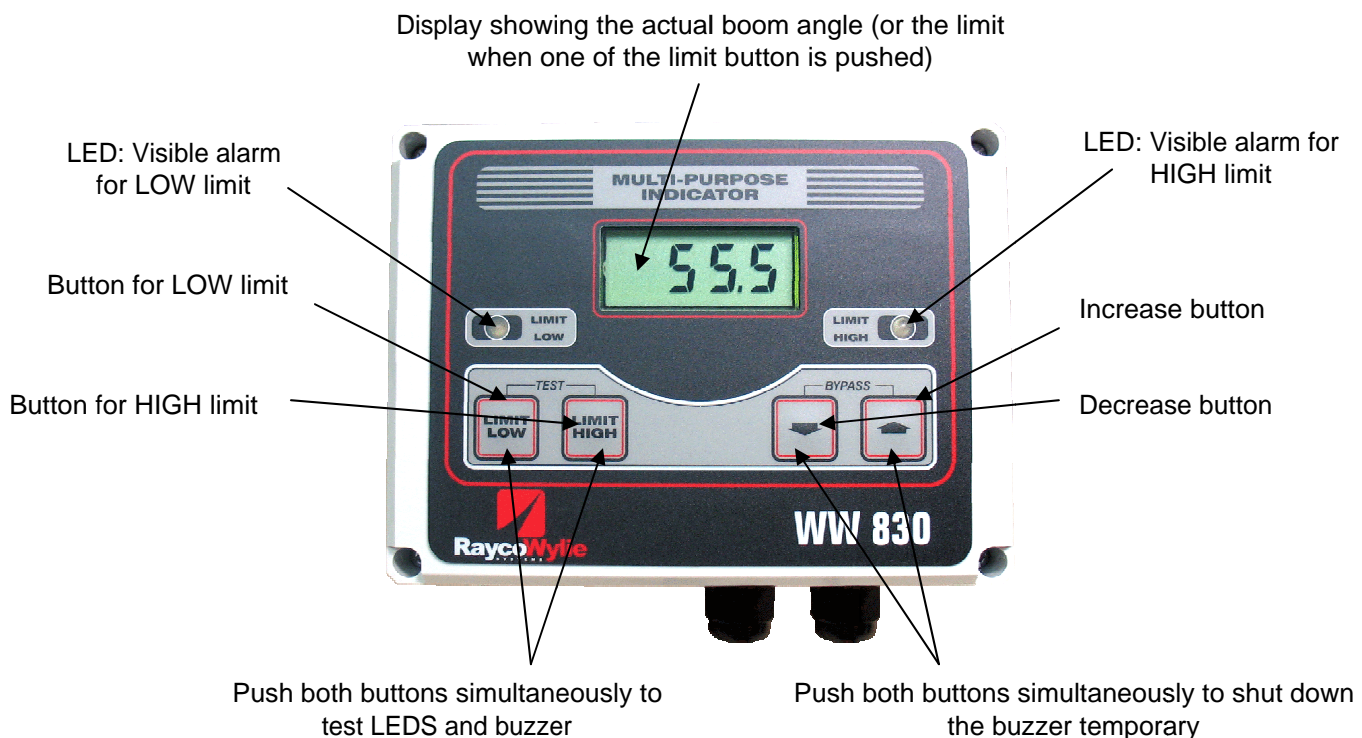## WW830
MULTI-PURPOSE INDICATOR

INSTALLATION AND OPERATING INSTRUCTIONS

Crane Warning Systems Atlanta
1-877-672-2951 Toll Free
1-678-261-1438 Fax
www.craneindicators.com
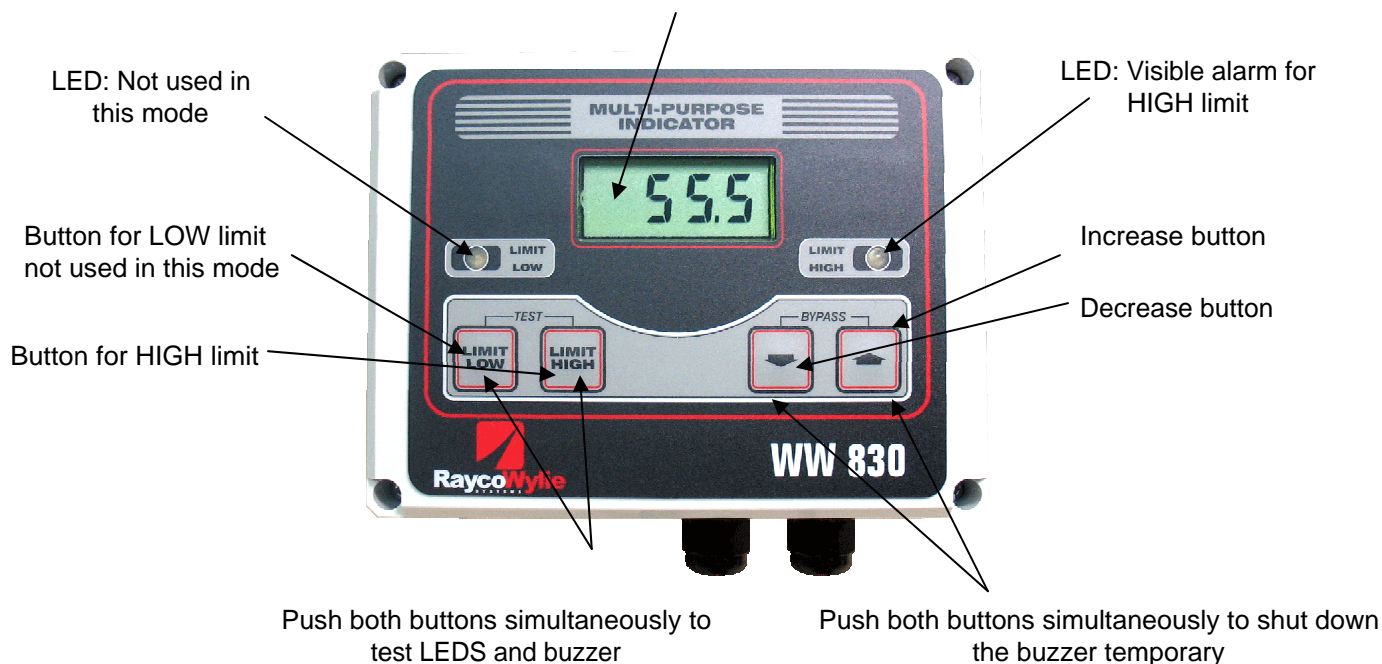sales@craneindicators.com

1.0 GENERAL DESCRIPTION :

The WW830 Boom multi-purpose indicator consists of a cab-mounted, digital display unit, an interconnecting cable and a boom-mounted angle or wind speed sensor unit. The display used in the boom angle indicator mode or wind speed indicator mode is factory set and cannot be change by the end user. In the angle indicator mode the display unit has independently settable high and low limits with audible and visual warnings that actuate when the boom angle limits are reached or exceeded. When configured in wind speed mode the display unit has a settable high wind speed limit with audible and visual warnings that actuate when the wind speed limits are reached or exceeded.

Angle indicator mode

Display showing the actual boom angle (or the limit when one of the limit button is pushed)

LED: Visible alarm for LOW limit

LED: Visible alarm for HIGH limit

Button for LOW limit

Increase button

Button for HIGH limit

Decrease button

Push both buttons simultaneously to test LEDS and buzzer

Push both buttons simultaneously to shut down the buzzer temporary

ww830 manual

Wind speed indicator mode

Display showing the actual wind speed in mph (or the limit the limit button is pushed)

LED: Not used in this mode

LED: Visible alarm for HIGH limit

MULTI-PURPOSE INDICATOR

55.5

Button for LOW limit not used in this mode

Increase button

Decrease button

Button for HIGH limit

LIMIT LOW

LIMIT HIGH

TEST

BYPASS

WW 830

RaycoWylie

Push both buttons simultaneously to test LEDS and buzzer

Push both buttons simultaneously to shut down the buzzer temporary

2.0 INSTALLATION INSTRUCTIONS :

2.1 Display:

Install the display in the operator's cab with ¼ inch bolts, making sure that:
a)   The display is clearly visible from the operator's position.
b)   Display controls are easy to reach.
c)   The display does not interfere with operation of the crane's controls.

2.2 Angle sensor installation:

### Standard installation

a) Attach the sensor with ¼ inch bolts to the outside of the left side of the boom base section as viewed from the operator's cab. When the sensor is properly mounted to a horizontal boom, the connector will point toward the operator's cabin.

b) Connect the interconnecting cable to the sensor.

Non-standard installation

a)   For right-hand installation, be sure that the connector points up when the boom is horizontal as viewed from the operator's cab.

2.3 Angle sensor connections :

RED FROM ANGLE SENSOR

GREEN FROM ANGLE SENSOR

BLUE FROM ANGLE SENSOR
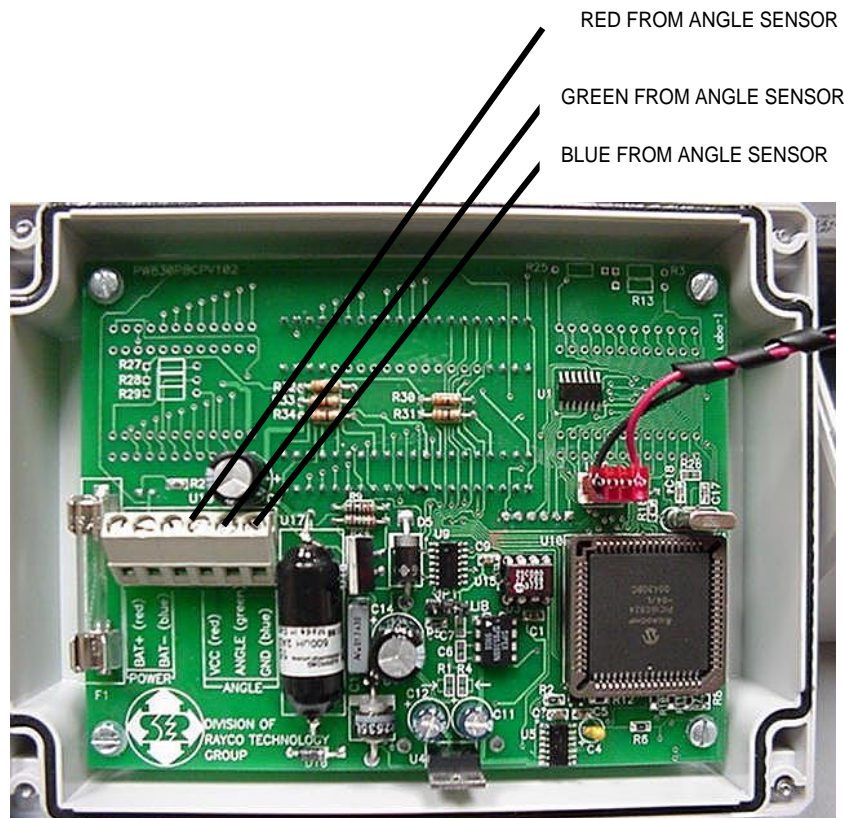
2.4 Wind sensor installation:

a) Attach the wind sensor on its pole, and fix the pole on an area that will generate good wind conditions.

b) Connect the interconnecting cable from the wind speed sensor to the W830 display box.

2.5 Wind sensor connections :

RED FROM WIND SENSOR (12V)

GREEN FROM WIND SENSOR

BLUE FROM WIND SENSOR
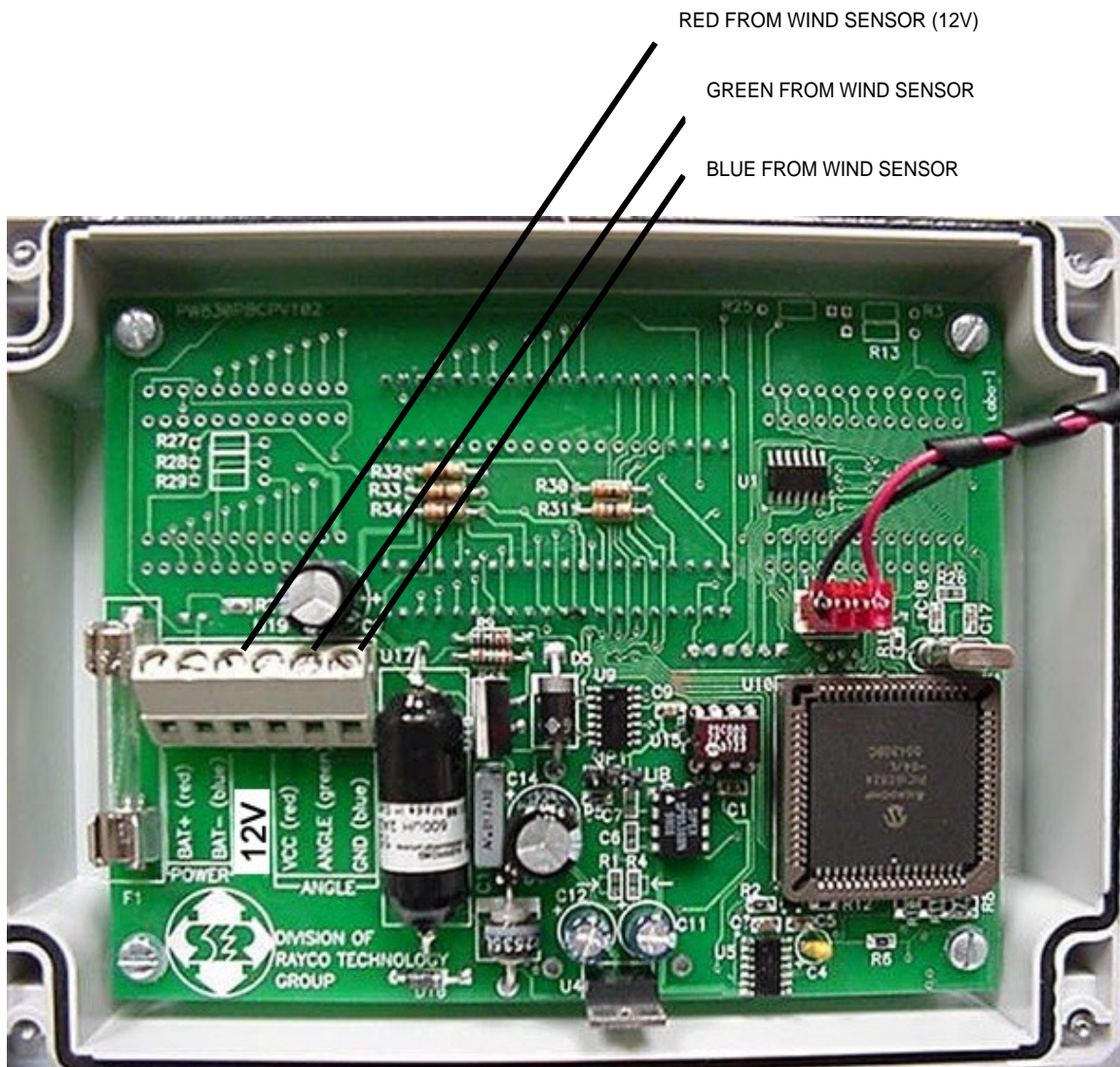
2.6 Power connection: The system will function with 12VDC and 24VDC power supply. Voltage range: 10 VDC to 24 VDC.

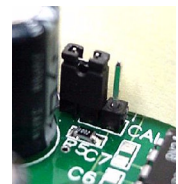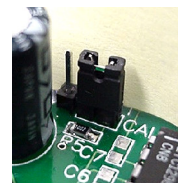BLUE NEGATIVE BATT

RED POSITIVE BATT
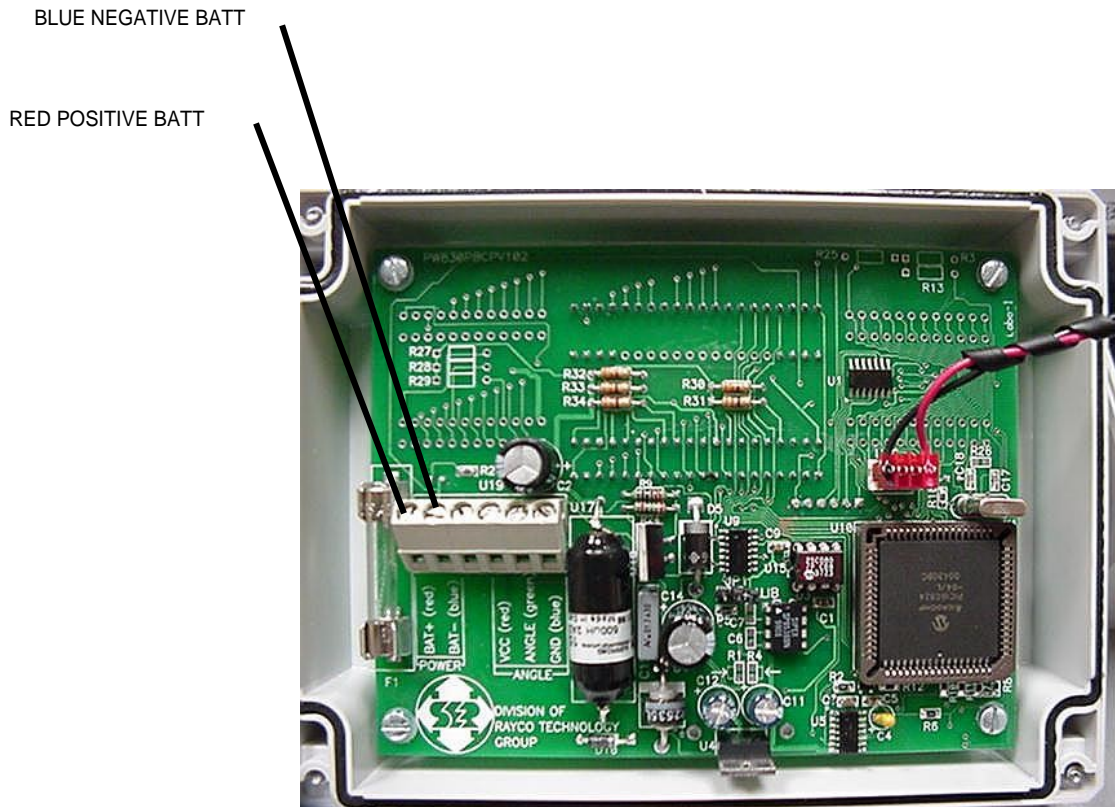
2.7 Angle indicator calibration:

The WW830 system is pre-calibrated and tested before shipment. No internal adjustments are necessary.

If you have to change the control box or the angle sensor, you will have to recalibrate your system according to the new component. You will need a magnetic inclinometer and place it on the boom.

a) Put the jumper on calibration position
    (On electronic circuit board)
b) Place the boom of the crane at 0º.
c) Press and maintain buttons high limit and low limit.
d) Press arrow down ⇩ (with buttons high limit and low
    limit pressed). The system will save the 0º angle.
e) Boom up at 70°.
f) Press and maintain buttons high limit and low limit.
g) Press arrow up ⇧ (with buttons high limit and low
    limit pressed). The system will save the 70º angle.
h) Replace the calibration jumper at the original position.

2.8 Wind speed indicator calibration:

The W830 system is factory pre-calibrated and tested before shipment. No internal adjustments are necessary.

If you have to change the W830 control/display box or the wind sensor itself, you will have to send the full unit back to the factory for recalibration.

3.0 OERATING INSTRUCTIONS:

3.1 Angle indicator limit setting:

LOW Angle Limit setting: To set the LOW limit, push and keep pushed the LOW limit button. Increase or decrease the value displayed with the increase or decrease button. When the value displayed is corresponding to the required value, release the LOW limit button. When the LOW limit button is pushed, the first digit on the display will be a « L » to indicate that you are programming the LOW limit. This limit can be set from -90 to 89 degrees. When the limit is lower than -19 deg. the letter « L » vanish to show the minus sign « - ».

HIGH Angle Limit setting: To set the HIGH limit, push and keep pushed the HIGH limit button. Increase or decrease the value displayed with the increase or decrease button. When the value displayed is good, release the HIGH limit button. When the HIGH limit button is pushed, the first digit on the display will be an « H » to indicate that you are programming the HIGH limit. This limit can be set from 0 to 189 degrees. When the limit is higher than 99 deg. the letter « H » vanish to show hundreds.

3.2 Wind speed indicator limit setting:

LOW Limit setting: There is no software programming for "Low Limit setting", as this option is not necessary in the wind speed operation.

HIGH Limit setting: To set the HIGH limit, push and keep pushed the HIGH limit button. Increase or decrease the value displayed with the increase or decrease button. When the value displayed corresponds to the value required, release the HIGH limit button. When the HIGH limit button is pushed, the first digit on the display will be an « H » to indicate that you are programming the HIGH limit.

3.3 System Test:

Press HIGH limit and LOW limit simultaneously to initiate a test of all display functions. Both HIGH and LOW limits lights will illuminate, the audible alarm will sound and the display will indicate actual boom angle or wind speed.

3.4 Buzzer bypass:

The bypass is to shut down temporary the buzzer. As soon as another limit is reached the buzzer will sound again. To bypass the buzzer (only if a limit is reached push simultaneously on the increase and decrease buttons.

4.0 SYSTEM MAINTENANCE:

The system does not require special maintenance:
a)   Clean face and display with a soft cloth and a non-abrasive cleaning solution such as Glass Plus or Windex.
b)   Periodically check the condition of electrical wires and connectors.

SPECIFICATIONS:
Power supply: 10 to 28 VDC
Consumption: 175mA
Display: 4 digits LCD
Limit setting: Limit can be adjusted with push buttons
Limit warning: Visual with corresponding led, audible by the buzzer

Angle sensor: Potentiometer (5k) with damped pendulum
Accuracy: 0 to -2 degrees

Wind sensor: Interface, converts from AC sine wave to DC voltage
Sensor range: 0 meter/s to 44.7 meter/s (0 mph to 100 mph)
Accuracy: +/- 1 mph

Operating temperature range: -20º C to 70º C (-4º F to 158º F)
Internal Fuse: 1 amp
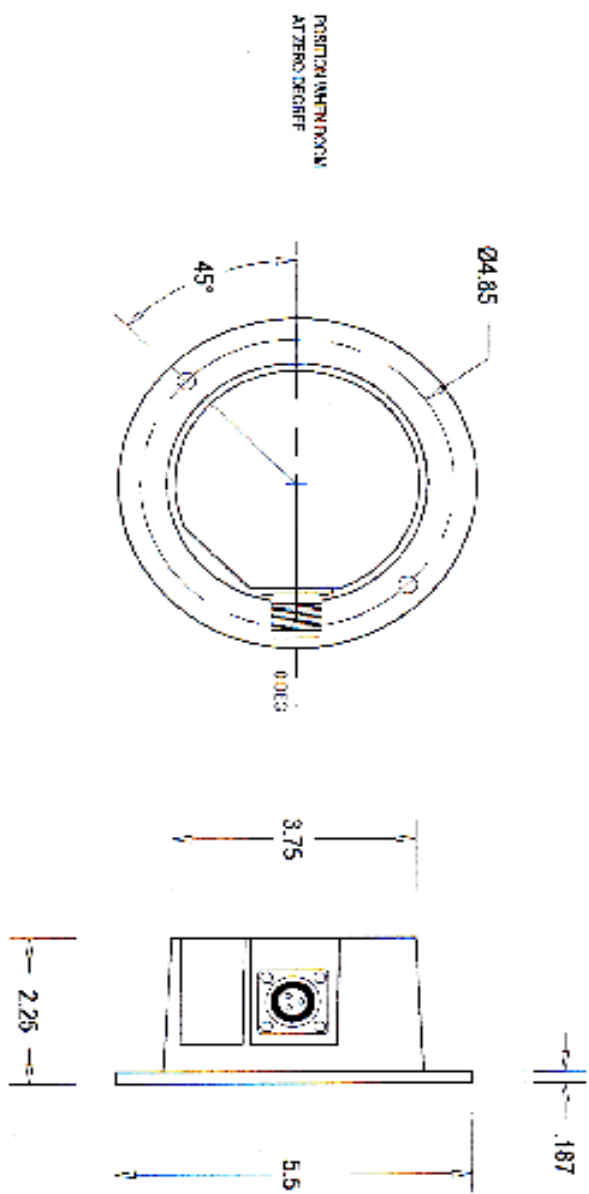
CODE DE COULEUR/COLOR CODE:

PIN A = ROUGE/RED = +
PIN B = BLEU/BLUE = -
PIN C = VERT/GREEN = SIGNAL

Ø4.85

45°

3.75

2.25

5.5

.187

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ww830 manual