

SIGNETMarine

The Measure of Excellence

SL 254

Instruction Manual

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This manual contains description, specifications, and instructions for the installation and operation of your SL254 Wind Machine. **PLEASE READ ALL OF THIS INSTRUCTION MANUAL BEFORE ATTEMPTING INSTALLATION AND OPERATION.** If you require further assistance, contact your authorized SIGNET MARINE dealer, the nearest authorized SIGNET MARINE service center (addresses furnished upon request), or contact SIGNET MARINE direct.

1.1 DESCRIPTION

The SL254 features advanced microprocessor-based technology resulting in low power drain, plus improved accuracy and reliability for the most demanding marine applications, whether racing or cruising. The SL254 is shipped standard with a SL254 Indicator, Masthead Sensor (wind speed/angle), standard 80-foot cable (optional cable lengths are available) and hardware.

The Indicator displays both wind speed and wind point. Digital wind speed is displayed from 0-99 knots in 1 knot increments on the 2-digit Liquid Crystal Display (LCD). The analog dial tracks apparent wind angle a full 360 degrees relative to your boat's direction (0 to 180 degrees Port and Starboard). This low power display has high visibility even in direct sunlight. Separately powered night lights (12 volts DC) provide dusk to dawn illumination. The Indicator contains reverse polarity protection.

The Indicator can be installed on a bulkhead, instrument panel or instrument pod. The face is completely sealed to withstand weather, washdown and saltwater corrosion. In addition, a plastic cover is provided to help protect the Indicator's face when not in use. To minimize reflective glare, the bezel is matte black.

INTRODUCTION - 1.1 DESCRIPTION

The tri-cup portion of the Masthead Sensor generates its own signal and rotates on low-friction, stainless steel bearings. The wind vane portion of this sensor sends relative voltages to the SL254 Indicator (the Indicator sends a reference voltage to the direction sensor). The wind vane is aerodynamically designed for light weight counter-balancing and is hydraulically damped for accurate readings under all wind conditions.

THE SL254 has been designed using the latest developments in technology. Each unit has been tested and passed extensive quality control standards prior to packaging and shipment. Included with your SL254 system is an instruction manual which includes an operation section containing detailed explanations of the operation of each feature. The manual serves as a quick reference of operation and therefore should be kept near your SL254.

Due to all the complexities encountered when putting together a large system, it is recommended you contact Signet Marine dealer when a system of more than three Signet Marine instruments will be used per knotmeter, wind speed, or wind point function.

1.2 SPECIFICATIONS

WIND POINT:

DISPLAY	analog dial
RANGE	360 degrees (0 degrees to 180 degrees port and starboard)
SCALE RESOLUTION	5 degrees
ACCURACY	less than $\pm 1\%$ of full scale
INPUT CHARACTERISTICS	0 to 6.8 volts, 3 phase

INTRODUCTION - 1.2 SPECIFICATION

WIND SPEED:

DISPLAY	2-digit, LCD, 0.50-inch high
RANGE	0 to 99 knots
DISPLAY RESOLUTION	1 knot
ACCURACY	$\pm 1\%$ of full scale ± 1 knot
AVERAGING PERIOD	automatically controlled by microprocessor with 8-second time constant
DISPLAY UPDATE	every 2 seconds
INPUT CHARACTERISTICS	0.25 volt peak- to-peak/knot - 0.75 Hertz/knot

POWER SPECIFICATIONS:

POWER REQUIREMENTS	12 volts DC
POWER DRAIN	without lights: approx. 200 milliamps, with lights: approx. 270 milliamps

2 INSTALLATION

2.1 UNPACKING AND INSPECTION

When unpacking your SL254 package, be sure you have received everything. Carefully check each item for damage incurred during shipment. If damage has occurred, promptly notify your dealer and the shipping carrier.

The following items are included in your SL254 package:

1. Indicator Assembly, SL254 (M25440)
2. Protective Plastic Cover for Indicator (M0212-01)
3. Mounting Kit (M0201-01)
4. Masthead Sensor Assembly (Includes Mounting Bracket) (M2430-4)
5. 80-foot Mast Cable Assembly (1-1300.260-0)
6. Instruction Manual and Warranty Card, SL254 (M25490)

When the SL254 is ordered separately as a M25440, your package includes items #1, 2, 3, and 6.

NOTE: Please fill out and return the Warranty Card as soon as possible.

2.2 INDICATOR INSTALLATION

The Indicator may be installed in a bulkhead or instrument panel having a 4.6" diameter round cutout with sufficient clearance around it to accommodate the Indicator's 5.5" round front bezel. There must be a minimum 3.5" rear clearance.

INSTALLATION - 2.2 INDICATOR INSTALLATION

NOTE: The SL254 Indicator generates a varying magnetic field which may interfere with a magnetic compass, if the Indicator is to be mounted within 3' of a magnetic compass, a magnetic shield must be attached to the Indicator (magnetic shield is Signet Marine P/N M0155-2).

2.2.1 INSTALLATION EQUIPMENT

1. 1/2" drill motor
2. Saber saw or 4 1/2" hole saw (4.6" hole required)
3. Flat-blade screwdriver
4. Bedding compound or silicone sealant

CAUTION: DO NOT USE POLYSULPHIDE BEDDING COMPOUNDS ON INDICATOR. USE SILICONE, NON-HARDENING BEDDING COMPOUNDS, SUCH AS GE SILICONE SEAL.

2.2.2 INSTALLATION PROCEDURES

1. Choose location: make sure it has suitable clearances.
2. Cut a 4.6" diameter hole.
3. Install the Indicator with bedding compound or sealant around the rear of the flange.
4. Loosen the ring clamp. Install on the case from the rear, as shown in Figure 1. With the Indicator flange against the bulkhead, position the clamp against the rear of the bulkhead, and tighten securely. Turn the three bracket screws clockwise until the Indicator flange is seated snugly against the bulkhead (See Figure 2). Do not over-tighten; this may cause the clamp to slip.
5. Wipe away any excess bedding compound around the Indicator bezel on the front of the bulkhead.

INSTALLATION - 2.2 INDICATOR INSTALLATION

6. Connect the Masthead Sensor 8-Pin Male Connector to the 8 Position Female Connector hanging from the Indicator.
7. Connect Instrument and lighting power to the SL254 Indicator per "Power Source Hook-Up" Instructions.

INSTALLATION - 2.2 INDICATOR INSTALLATION

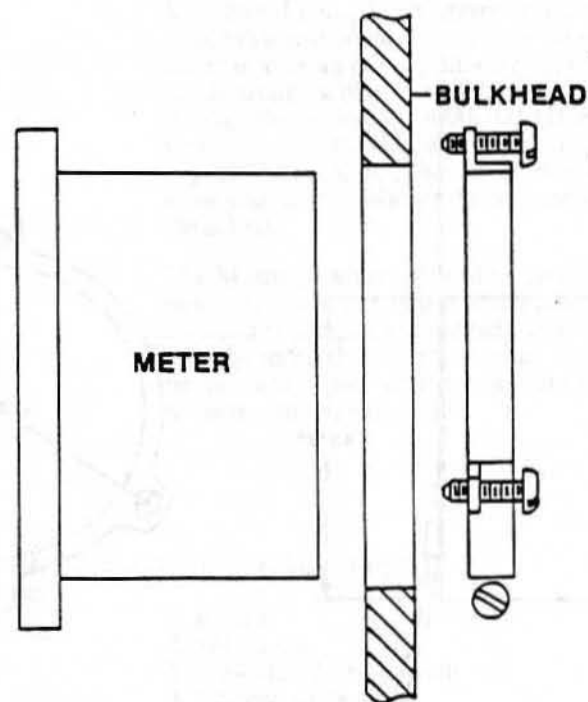


Figure 1. Side view of MK 254 Wind Instrument Installation.

INSTALLATION - 2.2 INDICATOR INSTALLATION

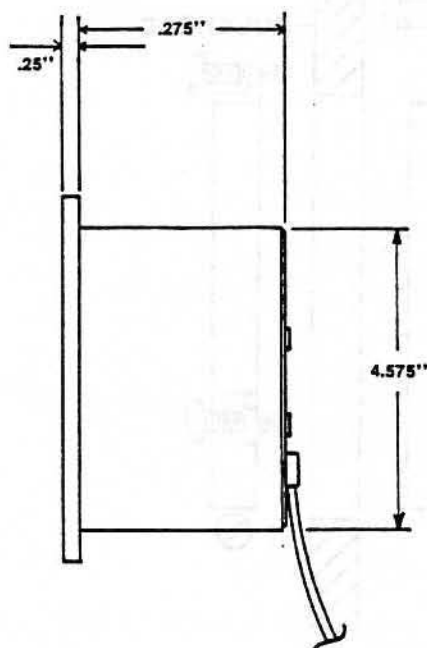


Figure 2. Detailed profile of MK 254 Indicator (left) and clamp ring (right).

INSTALLATION - 2.3 MASTHEAD SENSOR INSTALLATION

2.3 MASTHEAD SENSOR INSTALLATION

Reference Figure 3 throughout this section. The mast cable can connect the sensor to the Indicator in either of two ways: (1) directly between the sensor and Indicator without splices, or (2) indirectly through the optional 1-3000.100 Mast-Base Junction Box. The 1-3000.100, and any other options, and any INSTALLATION hardware may be purchased from your Signet Marine dealer (see section 5.1 Parts List).

The Masthead sensor should be installed in two steps: (1) before the mast is stepped, and (2) after the mast is stepped and rigged. It is not recommended that the staff, vane, and tri-cup sensor be mounted before stepping in order to avoid damage to these components.

2.3.1 INSTALLATION EQUIPMENT

1. #7 drill
2. 1/4-20 tap
3. 5/64-inch Allen wrench
4. Silicone sealant
5. 2 grommets (see 2.3.2)
6. 1 cable strain-relief clamp or strap (see 2.3.2)
7. wire cutter
8. Box wrench set
9. Phillips-head and flat-blade screwdrivers

2.3.2 INSTALLATION BEFORE STEPPING

1. Select a location on top of the mast that will permit the sensor's staff to point aft (if the sensor is pointed fore it may not be visible from the helm and is more subject to sail damage).

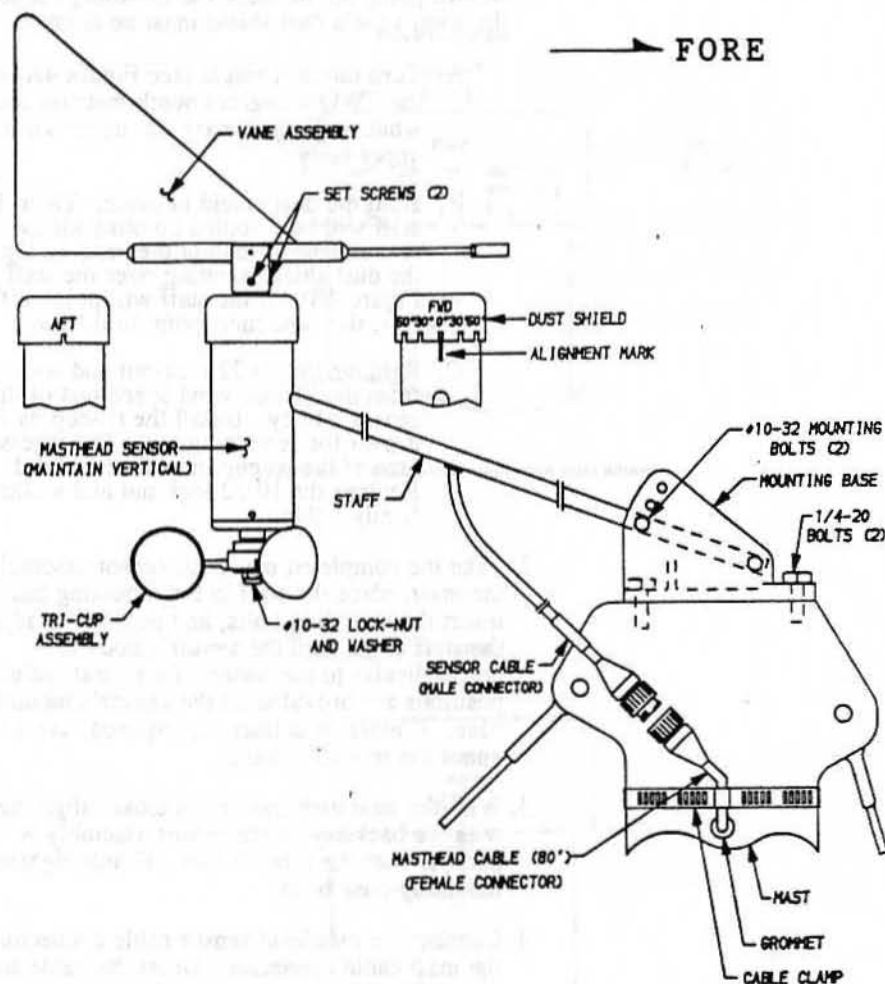
INSTALLATION - 2.3 MASTHEAD SENSOR INSTALLATION

- Using the mounting base (M2039) as a template, with the taller end of the base aft, drill two #7 (.201") holes in the mast. Tap the holes with a 1/4-20 tap.
- Mount the sensor base with the taller end aft and secure loosely to the top of the mast with the bolts and lock-washers provided.
- Drill two 1" diameter holes in the mast, one near the top and the other recommended near the mast base, to accommodate the mast cable. Insert grommets which can accommodate a 3/8-inch diameter cable and is compatible with the mast wall thickness.
- Route the mast cable down the inside of the mast through the grommets with the socket end (female) at the top of the mast and the plug end (male) at the base of the mast. (On a mast with internal halyards, protect the mast cable by using PVC (polyvinyl-chloride) tube which is secured away from the halyards and runs the length of the mast.)
- Mount a cable strain-relief clamp or strap to the mast immediately above the cable entrance hole near the masthead. This clamp is to secure the mast cable and eliminate strain on the upper connector.

2.3.3 INSTALLATION AFTER STEPPING AND RIGGING

Storage or shipment of the masthead sensor on its side or upside down may allow oil seepage from the vane's hydraulic damping assembly. This oil seepage is normal and will not affect operation of the sensor if it is cleaned off just prior to mounting. Pay special attention to cleaning the area between the staff and dust shield.

INSTALLATION - 2.3 MASTHEAD SENSOR INSTALLATION



NOTE: IF YOUR INSTALLATION DEMANDS YOU TO MOUNT THE MASTHEAD SENSOR FORE OF THE MAIN, THE DUST SHIELD SHOULD BE ROTATED 180°, SUCH THAT "AFT" ON THE DUST SHIELD IS ALIGNED WITH THE ALIGNMENT MARK ON THE SENSOR UPPER BODY DIRECTLY ABOVE THE STAFF (THE VANE SHOULD BE ORIENTED ALONG THE STAFF AS SHOWN).

INSTALLATION - 2.3 MASTHEAD SENSOR INSTALLATION

1. Before going up the mast and installing the sensor, the wind vane's dust shield must be aligned:
 - A. Turn the dust shield (see Figure 4A) until the FWD 0 degrees notch matches the white alignment mark on the sensor's upper body.
 - B. Hold the dust shield in place. Then, if the staff will be installed pointing aft as recommended, mount the vane on top of the dust shield pointing over the staff (see Figure 4B). If the staff will point to the box, the vane must point to the bow.
 - C. Remove the 10-32 lock-nut and washer from the bottom wind speed end of the sensor's body. Install the tri-cup by fitting it over the remaining nut. The recessed area of the tri-cup must face upward. Replace the 10-32 lock-nut and washer and firmly tighten.
2. Take the completed masthead sensor assembly up the mast, place the staff in the mounting base, insert the mounting bolts, and proceed to adjust the staff angle until the sensor's body is perpendicular to the water. Three staff adjustment positions are provided on the sensor's mounting base. If more adjustment is required, use a shim under the mounting base.
3. With the mounting-base bolts loose, align the staff with the backstay so the sensor assembly is parallel with the fore-aft axis. Firmly tighten all mounting-base bolts.
4. Connect the masthead sensor cable connector to the mast cable connector. Dress the cable and tighten the cable strain-relief clamp or strap.
5. Seal all holes, including the grommeted cable hole, with silicone sealant.
6. At the mast base, gently pull any loose cable through the grommeted hole. Seal the hole with silicone sealant. Connect masthead cable to instrument or processing unit.

INSTALLATION - 2.3 MASTHEAD SENSOR INSTALLATION

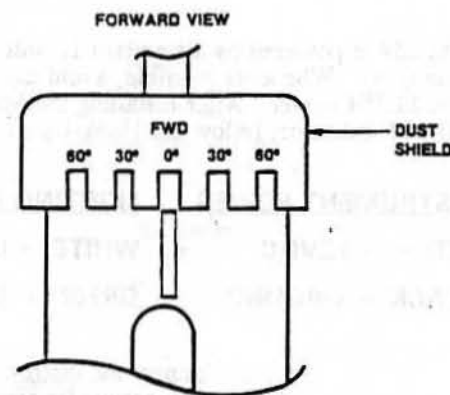


Figure 4A. Alignment of wind vane dust shield.

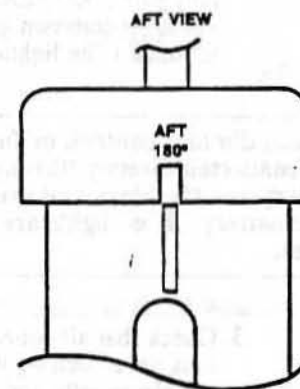


Figure 4B. Alignment of wind vane dust shield.

2.4 POWER SOURCE HOOK-UP

The SL254 is powered by a standard 12 volt battery (car or marine type). Whenever possible, avoid using the starting battery for the SL254 power. After installing the Masthead Sensor and the SL254 Indicator, follow the Hook-Up procedures outlined:

INSTRUMENT POWER

RED = + 12VDC

BLACK = GROUND

LIGHTING POWER

WHITE = LIGHTS (+ 12VDC)

GREEN = LIGHTS (GROUND)

1. Connect the instrument power wire (red wire) to your instrument circuit breaker or fuse block with a current rating of 1 AMPERE. The black wire connects to the (-) common ground, battery negative terminal (The instrument drains less than 250 mA).
2. Connect the lighting power wire (white wire) to your instrument lighting switch panel (current rating of 1 AMPERE). The green wire connects to the (-) common ground, battery negative terminal (The lighting drains less than 150 mA).

NOTE: If no switch panel, dimmer control, or fuse box is available, the red and white wires may be connected directly (through a 1 AMPERE fuse) to the "+" terminal of the battery and the black and green wires connected directly to the "-" terminal of the battery. If no lights are required, do not connect the white and green wires.

3. Check that all connections which use screws or nuts have been tightened and that all solder joints are electrically and mechanically sound.
4. Switch on power and verify instrument operation. (Refer to 4.0 Troubleshooting in case of problems in operation.)

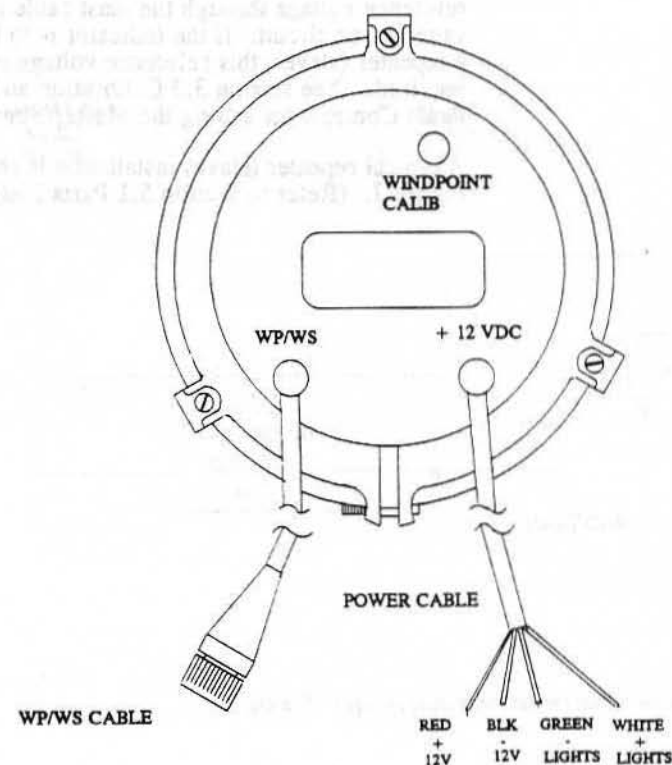


Figure 6. Rear panel of SL254 Wind Instrument

INSTALLATION - 2.5 REPEATER (SLAVE) INSTALLATIONS

2.5 REPEATER (SLAVE) INSTALLATIONS

The wind point circuit of a Signet Marine Indicator, when used as a master unit, supplies transmitter reference voltage through the mast cable to the wind vane sensor circuit. If the Indicator is to be used as a repeater (slave), this reference voltage is not required. (See section 3.3 Calibration and Rear Panel Controls for setting the Master/Slave switch.)

A typical repeater (slave) installation is shown in Figure 7. (Refer to section 5.1 Parts List).

INSTALLATION - 2.5 REPEATER (SLAVE) INSTALLATIONS

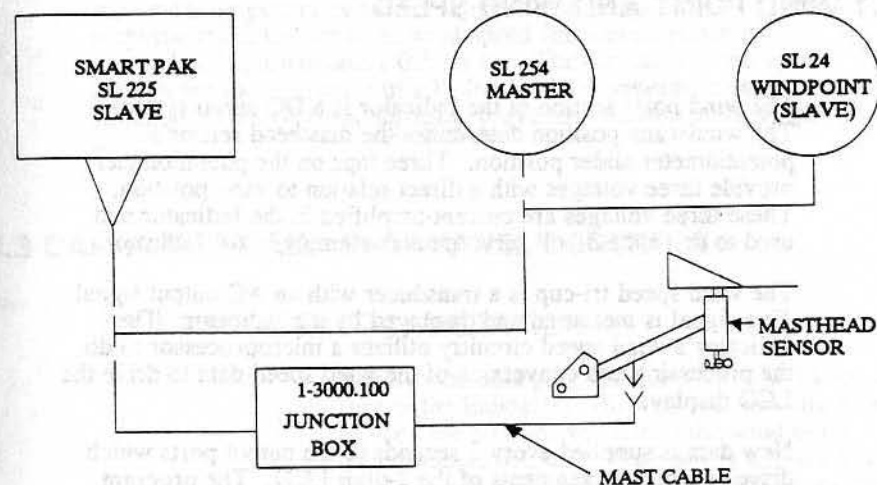


Figure 7. Typical repeater (slave) installation.

THEORY OF OPERATION

3.1 WIND POINT AND WIND SPEED

The wind point section of the Indicator is a DC servo system. The wind-vane position determines the masthead sensor's potentiometer slider position. Three taps on the potentiometer provide three voltages with a direct relation to vane position. These three voltages are current-amplified in the Indicator and used to drive the 3-coil servo motor assembly in the Indicator.

The wind speed tri-cup is a transducer with an AC output signal. This signal is measured and displayed by the Indicator. The Indicator's wind speed circuitry utilizes a microprocessor to do the processing and conversion of the wind speed data to drive the LCD display.

New data is supplied every 2 seconds to the output ports which drive appropriate segments of the 2-digit LCD. The program provides averaging with about an 8-second time constant to minimize flickering of the display.

The Indicator operates on a nominal 12-volt DC power source and is not damaged by steady-state voltages as high as 16 volts DC or transients as large as 25 volts peak. Internally, this supply voltage is regulated to supply several different values for different circuits.

The wind point transmitter is powered from a 6.8-volt zener, biased up halfway between the supply voltage and ground. These voltages are usually referred to as "+9" and "+2".

The entire wind speed system, including the microprocessor operates on +5 volts, supplied by an IC voltage regulator.

THEORY OF OPERATION - 3.2 MASTHEAD SENSOR

3.2 MASTHEAD SENSOR

The Signet Marine Masthead Sensor is structurally composed of high strength light weight anodized aluminum. The rotating tri-cup assembly generates an AC signal whose frequency is proportional to the apparent wind speed (minimum detection threshold of approximately 0.5 knots). The direction of the wind vane varies the resistance of a hydraulically dampened custom direction. The hydraulic damping prevents fluttering in very light winds.

3.3 CALIBRATION AND REAR PANEL CONTROLS

3.3.1 WIND POINT CALIBRATION

Remove the hole plug marked W/P CALIB. on the rear of the Indicator. Through the resulting hole can be seen the screwdriver slot of the wind point calibration adjustment. With power applied to the Indicator and wind vane held very steady pointing to the bow, adjust the W/P CALIB. adjustment until the analog dial on the Indicator reads 0 degrees. Replace the hole plug.

If you are using a wind point repeater (see 2.5 Repeater Installations), also adjust the repeater's wind point calibration control until its display reads 0 degrees. This calibration may be performed again at any time and should be checked at regular intervals. To check wind point calibration, rotate the wind vane to various positions and note the response of the Indicator's analog dial. Indicator positions should be the same as the vane positions.



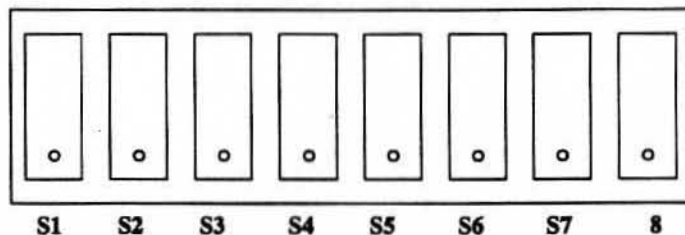
Immediately after initial calibration, operation of the Indicator's wind point function should be verified for future reference. Disconnect the Indicator's cable from its mate. The Indicator's built-in transmitter reference signal will force a reading on the analog dial of between 10 degrees port and 40 degrees starboard. Record the specific reading. This operational verification may be performed again at any time. The reading obtained on future checks should match the initial reading. Reconnect the connector to its mate.

3.3.2 WIND SPEED CALIBRATION

To calibrate Wind Speed, determine the actual wind speed and the wind speed indicated by the instrument. Calibration is performed with the dipswitches located behind the rear panels of the Indicator. Note the current calibration settings of the dipswitches. Look up the current dipswitch settings on the Table provided and find the correction percent which corresponds with the current settings.

Once the correction percent is found on the chart, use the following equation to determine the new correction percent.

Where WSA = Actual Wind Speed in Knots
 WSI = Indicated Wind Speed in Knots
 C = Current Correction Percent



NOTE: The figure above represents how the dipswitches are set by the factory. They are set to all open. Dipswitch #8 is set open by the factory. It is used to indicate the sign-bit. Open (as set by the factory) equals a decrease in values. Closed equals an increase in values.

Once the equation is used to determine the new correction percent, use the Table again to find the new switch settings which correspond to the new correction percent and set the switches to these settings.

Wind speed calibration can be checked any time by comparing the wind speed displayed on the Indicator with the reading at an accurate, stationary wind meter, such as a Coast Guard Station. For more precise calibration check, while motoring on a morning with no breeze, compare the Indicator's displayed wind speed with the boat's knotmeter reading.

THEORY OF OPERATION - 3.3 CALIBRATION AND REAR PANEL

WIND SPEED SWITCH SETTINGS TABLE

Switch Settings	Correction Percent	Switch Settings	Correction Percent
S1 S2 S3 S4 S5 S6 S7		S1 S2 S3 S4 S5 S6 S7	
C C C C C C C	0	C C C C C C C	25
O C C C C C C	0.8	O C C C C C C	25.8
C O C C C C C	1.6	C O C C C C C	26.6
O O C C C C C	2.3	O O C C C C C	27.3
C C O C C C C	3.1	C C O C C C C	28.1
O C O C C C C	3.9	O C O C C C C	28.9
C O O C C C C	4.7	C O O C C C C	29.7
O O O C C C C	5.5	O O O C C C C	30.5
C C C O C C C	6.3	C C C O C C C	31.3
O C C O C C C	7	O C C O C C C	32
C O C O C C C	7.8	C O C O C C C	32.8
O O C O C C C	8.6	O O C O C C C	33.6
C C O O C C C	9.3	C C O O C C C	34.4
O C O O C C C	10.1	O C O O C C C	35.2
C O O O C C C	10.9	C O O O C C C	35.9
O O O O C C C	11.7	O O O O C C C	36.7
C C C C O C C	12.5	C C C C O C C	37.5
O C C C O C C	13.3	O C C C O C C	38.3
C O C C O C C	14.1	C O C C O C C	39.1
O O C C O C C	14.8	O O C C O C C	39.8
C C O C O C C	15.6	C C O C O C C	40.6
O C O C O C C	16.4	O C O C O C C	41.4
C O O C O C C	17.2	C O O C O C C	42.2
O O O C O C C	18	O O O C O C C	43
C C C O O C C	18.8	C C C O O C C	43.8
O C C O O C C	19.5	O C C O O C C	44.5
C O C O O C C	20.3	C O C O O C C	45.3
O O C O O C C	21.1	O O C O O C C	46.1
C C O O O C C	21.9	C C O O O C C	46.9
O C O O O C C	22.7	O C O O O C C	47.7
C O O O O C C	23.4	C O O O O C C	48.4
O O O O O C C	24.2	O O O O O C C	49.2

THEORY OF OPERATION - 3.3 CALIBRATION AND REAR PANEL

WIND SPEED SWITCH SETTINGS TABLE

Switch Settings	Correction Percent	Switch Settings	Correction Percent
S1 S2 S3 S4 S5 S6 S7		S1 S2 S3 S4 S5 S6 S6	
C C C C C C O	50	C C C C C O O	75
O C C C C C O	50.8	O C C C C O O	75.8
C O C C C C O	51.6	C O C C C O O	76.6
O O C C C C O	52.3	O O C C C O O	77.3
C C O C C C O	53.1	C C O C C O O	78.1
O C O C C C O	53.9	O C O C C O O	78.9
C O O C C C O	54.7	C O O C C O O	79.7
O O O C C C O	55.5	O O O C C O O	80.5
C C C O C C O	56.3	C C C O C O O	81.3
O C C O C C O	57	O C C O C O O	82
C O C O C C O	57.8	C O C O C O O	82.8
O O C O C C O	58.6	O O C O C O O	83.6
C C O O C C O	59.4	C C O O C O O	84.4
O C O O C C O	60.2	O C O O C O O	85.2
C O O O C C O	60.9	C O O O C O O	85.9
O O O O C C O	61.7	O O O O C O O	86.7
C C C C O C O	62.5	C C C C O O O	87.5
O C C C O C O	63.3	O C C C O O O	88.3
C O C C O C O	64.1	C O C C O O O	89.1
O O C C O C O	64.8	O O C C O O O	89.8
C C O C O C O	65.6	C C O C O O O	90.6
O C O C O C O	66.4	O C O C O O O	91.4
C O O C O C O	67.2	C O O C O O O	92.2
O O O C O C O	68	O O O C O O O	93
C C C O O C O	68.8	C C C O O O O	93.8
O C C O O C O	69.5	O C C O O O O	94.5
C O C O O C O	70.3	C O C O O O O	95.3
O O C O O C O	71.1	O O C O O O O	96.1
C C O O O C O	71.9	C C O O O O O	96.9
O C O O O C O	72.7	O C O O O O O	97.7
C O O O O C O	73.4	C O O O O O O	98.4
O O O O O C O	74.2	O O O O O O O	99.2

3.3.3 MASTER/SLAVE SWITCH

The switch to convert a given SL254 from a Master to a slave is shown in Figure 8.

It is located inside the unit at the top of the M25446 circuit board. The rear cover must be removed (3 screws) to get to the switch.

Moving the switch to the left engages the transmitter power supply and makes the unit a MASTER. If the wind point transmitter power is obtained from ANOTHER unit, the switch should be moved to the right, disconnecting the transmitter power, and making this unit a SLAVE.

NOTE: DON'T BE CONFUSED WITH THE OPERATION OF THE SWITCH. MOVING THE RIBBED END OF THE SWITCH TOWARDS THE END MARKED "M", OR TO THE RIGHT DISCONNECTS THE TRANSMITTER POWER AND MAKES THE UNIT A SLAVE. MOVING THE RIBBED END TO THE LEFT ENGAGES THE TRANSMITTER POWER MAKING IT A MASTER.

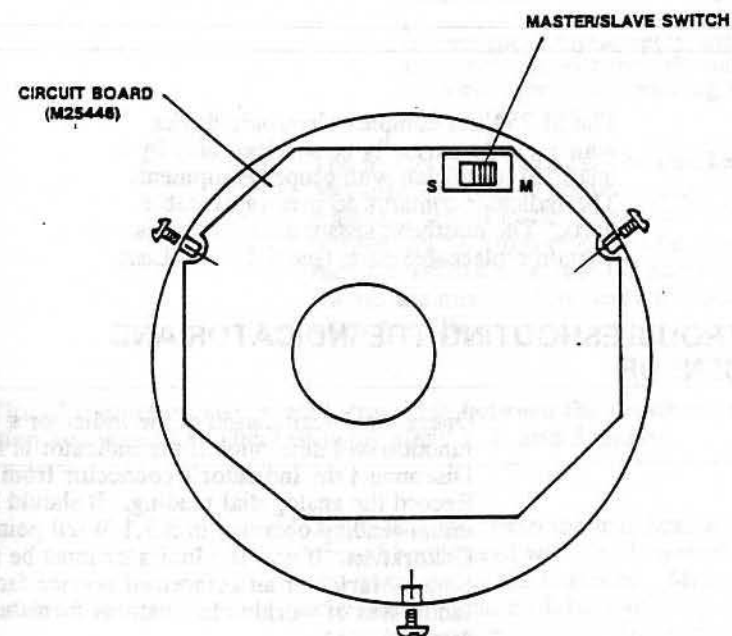


Figure 8. Simplified view of inside circuit board showing MASTER/SLAVE switch.

TROUBLESHOOTING

The SL254 is a complex electronic device which should normally be serviced only by a qualified technician with proper equipment. The Indicator contains no user-replaceable parts. The masthead sensor assembly does contain replaceable parts (see 5.1 Parts List).

4.1 TROUBLESHOOTING THE INDICATOR AND SENSOR

Operational verification of the Indicator's wind point function will determine if the Indicator is faulty. Disconnect the Indicator's connector from its mate. Record the analog dial reading. It should match the initial reading obtained in 3.3.1 Wind point Calibration. If not, the Indicator must be serviced by Signet Marine or an authorized service facility (addresses of worldwide locations furnished upon request).

4.2 SPECIAL TROUBLESHOOTING TIPS

1. The wind-vane's potentiometer may be checked for correct electrical parameters.
 - A. Turn off the power to the Indicator. Disconnect the mast cable connector from the masthead sensor cable connector. Check the connectors for damage or loose wires.
 - B. Check the potentiometer of the wind vane measure its resistance between pins #4 and 5 of the masthead sensor connector. This reading should be approximately 1250 ohms. Then check resistance between pins #1, 2, and 3 (any combination). This reading should be approximately 1110 ohms. If any of these readings are

TROUBLESHOOTING - 4.2 SPECIAL TROUBLESHOOTING TIPS

incorrect, the potentiometer requires replacement.

- C. To zero the potentiometer, measure resistance between pins #4 and 1 and turn the wind vane until obtaining a resistance reading of 0 ohms.

2. The tri-cup transducer may be checked for output. Measure AC voltage between pins #6 and 7 of the masthead sensor cable connector. With the tri-cup turning, an AC voltage should be produced. Then measure resistance across the same pins with the tri-cup stationary. This reading should be 4,000 ohms \pm 10%.

NOTE: If a junction box is used, the cable between the masthead and junction box should be checked using steps 1, 2, and 3 above.

3. Next, the cable from the masthead and Indicator should be checked with an ohmmeter. Disconnect the connector at the Indicator. Measure the resistance across each bare-wire tip and its respective connector pin. An open wire will show up as a high resistance, greater than 15,000 ohms. None of the previously mentioned wires should have continuity to the cable shield.

PIN CONFIGURATION:

Pin #1 - Red	Pin #5 - Orange
#2 - White	#6 - Blue
#3 - Green	#7 - Yellow
#4 - Black	#8 - Brown

5

APPENDICES

5.1 PARTS LIST

1. Masthead Sensor:
 Assembly & Mounting Bracket..... M 24.30-4
 Vane Assembly..... M 20.32
 Shield Assembly..... M 20.59
 Potentiometer Assembly/Damping Assembly M 20.53
 Wind speed Transducer..... M 19.29
 Tri-cup Assembly..... M 19.32
 Masthead Mounting Base..... M 20.39
2. Indicator:
 Font Case with glass..... M00127-3B
 Mounting Kit..... M00201-1
 Protective Plastic Cover for faceplate M00212-1
4. Miscellaneous:
 Mast-Base Junction Box..... 1-3000.100

5.2 MANUAL CHANGE INFORMATION

Signet Marine continually strives to keep up with the latest electronic and design developments by adding circuit, component, and design improvements to its instruments as soon as they are developed and tested. Sometimes, due to printing and shipping requirements, we cannot immediately get these changes into printed manuals. Therefore, your manual may contain new change information on the following pages. A single change may affect several sections. Be sure to make all changes within the appropriate sections of this manual.

5.3 REVISION STATUS

APPENDICES - 5.2 MANUAL CHANGE INFORMATION

5.4 INDICATOR SCHEMATIC

Unauthorized repair of any portion of your SL254 can void your limited warranty.

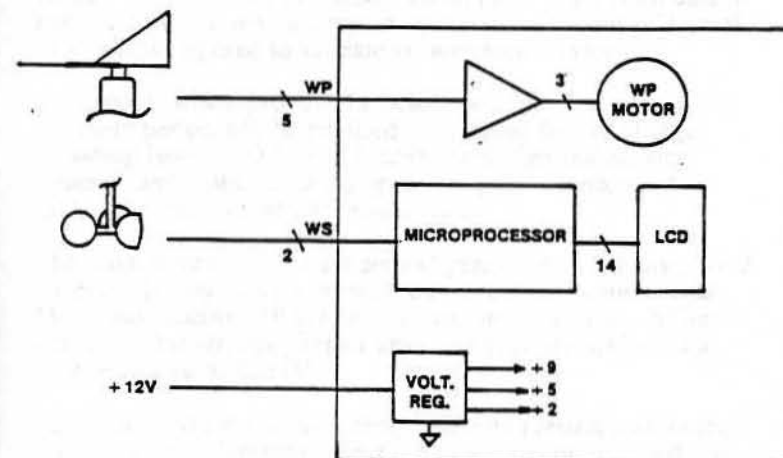


Figure 9. MK 254 Block Diagram.