INSTALLATION INSTRUCTIONS

SR MARINER KST-1A

SPEED 0-6 OR 0-60 M.P.H.
SURFACE TEMPERATURE 30-99.9°F

Your SR Mariner KST-1A uses the latest integrated circuit technology and provides the most accurate indication of speed and surface temperature readings available. Please take a few minutes to read these instructions carefully.

TOP DASH INSTALLATION
Two holes are provided in the bracket allowing it to be secured by screws or bolts to the surface of your choice.
Remove the bracket from the case for installation by removing the thumb screws from each side.

WIRING (Top Dash Mount)
There are two separate cables extending from the instrument housing. The two wire cable is for the power (12VDC) and the three wire cable connects the readout to the sensor. Attach the Power (2 Wire) cable as shown in diagram below. Make sure that the Positive (+12 VDC) red wire is connected to a fused source. (Optionally a switch may be installed in line with the power (+12 VDC) red line.) If the craft does not have a fuse or circuit panel, add an in-line fuse holder with a 1/2 amp fuse, to the red (+12 VDC) power lead. Insulate the transducer leads with rubber or plastic electricians tape or heat shrink tubing.

FLUSH MOUNT INSTALLATION (OPTIONAL)
The instrument head (readout) can also be flush mounted in a dash or bulkhead. A clamp ring is available (optional) from SR Instruments to hold the readout into the bulkhead. Remove the readout from the housing by removing the two screws on the rear of the housing. Cut a 4-1/8" hole in the bulkhead or dash. Install the readout with the purchased clamp ring. Don't overtighten the clamp ring.
TRANSUCER INSTALLATION - THRU HULL

A Thru hull drilling tool is available (MODEL THT) from many dealers or from SR Instruments (716)-693-5977. This tool pilots, drills and flares the opening in one operation and can be borrowed from SR instruments. If the customer desires to attempt the procedure without the thru-hull tool, the steps are as follows:

1) Scribe a 2-5/8" hole in desired location.
2) Pilot an 1/8" hole in the center of a 2-5/8" diameter location.
3) Cut a 2-1/8" hole through the hull.
4) File a 32° chamfer to the 2-5/8" scribe mark, while trying thru-hull fitting regularly.
5) When the thru-hull fitting fit flush to surface, file a notch facing forward of the keyway.
6) Seat the thru-hull fitting in bedding compound (Silicone adhesives or sealants are not recommended for a good seal.) DON'T OVERTIGHTEN THE RING NUT
7) If required, shim the inside hull so that the ring nut lies flat.
8) Install the dummy plug, until boat is in water.
9) Install the transducer when safe, make sure keyway and key face forward, don't overtighten.

TRANSUCER INSTALLATION - WITH OPTIONAL TRANSOM MOUNT

An aluminum bracket with 4 slotted holes is available from SR Instruments for easy installation of the transducer. The transom bracket should extend 3/8" to 1/2" below the water line to put the transducer below the bubble layer.
DUMMY PLUG INSTALLATION
The dummy plug should be installed in the thru-hull fitting whenever the transducer is removed for cleaning, trailering, or other reason. The thru-hull fitting should never be left open. While the boat is afloat, follow the following procedure:
1) Have dummy plug ready in one hand.
2) Unthread the Cap nut on the transducer while maintaining a slight downward pressure on the transducer.
3) When the cap nut is completely unscrewed, quickly withdraw the transducer, and install the dummy plug.
4) Tighten the cap nut on the dummy plug until secure, but don't overtighten

TROUBLE SHOOTING
1) If the instrument doesn't read, most likely the problem is in the wiring.
   a) Make sure the +12 VDC power is applied, if not check fuses and battery connections (and switch if installed)
   b) If 12 VDC is applied, check transducer splices for shorts or opens.
   c) Check impeller for marine growth or damage. The impeller must turn freely.
   d) Check transducer impedance with an ohm meter. You should read about 5000 ohms between the red and black leads ON THE TRANSDUCER, if not, return it to the factory.

2) If the instruments reads slow:
   a) The transducer may be mounted in a turbulent area or impeller is not below bottom of transon.
   b) The transducer keyway is not facing forward or impeller is mounted backward in transducer.
   c) Impeller not turning freely: check for marine growth, fishing line, etc.

SERVICE
None of the components is user serviceable, please send any problem components to SR Instruments for testing and repair.
Warranty repairs will require proof of purchase with date as well as a letter identifying problem and return address. Non-warranty repairs are shipped UPS COD or prepaid.

We hope you enjoy your SR Mariner KST-1A and if you have any comments or problems, contact us at:

SR Instruments
600 Young street
Tonawanda, NY 14150
(716) 693-5977

Accessories Prices as of 9/1/1989 (Plus shipping/handling)

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<tbody>
<tr>
<td>ST-1</td>
<td>Speed/Surface Temp. Transducer</td>
<td>$100.00</td>
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<tr>
<td>TH-2</td>
<td>Thru-hull fitting (Bronze)</td>
<td>$ 65.00</td>
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<tr>
<td>DP-1</td>
<td>Dummy Plug</td>
<td>$   6.00</td>
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<tr>
<td>ICW-1</td>
<td>Standard Instrument Cover</td>
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<tr>
<td>TR-1R</td>
<td>Impeller and shaft (replacement)</td>
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<tr>
<td>Clprng</td>
<td>Clamp Ring</td>
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<tr>
<td></td>
<td>X feet of 3 conductor cable</td>
<td>$ .16/FT</td>
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<tr>
<td>TM-1</td>
<td>Transom mount Bracket</td>
<td>$  16.00</td>
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| THT-1  | Thru-hull Tool         | $  45.00 Purchase
   for rent - deposit $ 45.00 postage only if no damage when returned.