MAXIMUM

WIND ALARM
OPERATION / INSTALLATION INSTRUCTIONS

Thank you for purchasing the Maximum wind speed alarm system. The Maximum wind speed alarm system is a dual set point digital instrument. It contains a yellow light to display one set point, a red light to display the other set point. When both alarms activate an audible buzzer will turn on. Each set point controls a SPDT relay (rated at 5A at 30VDC), that can be used to turn on or off many devices.

*** <u>IMPORTANT</u> ***
This instrument is to be used as an aide to your current safety program, and is not to be used exclusively in operations that may affect personal and/or property safety.

Installation

Proper Installation is important. If you need assistance, consult a contractor electrician, or television antenna installer (check with your local building supply, or hardware store for referrals). To promote confidence, perform a trial wiring before installation.

1. Determine where you are going to locate both the rooftop sensor and the read-out.

2. Feed the terminal end of the three-conductor cable through the bottom of the enclosed rubber boot and connect the lugs to the terminals on the bottom of the wind speed sensor. Wire the **clear wire to number 6** on the generator, **black wire to number** 7 on the generator, **green wire to number 8** on the generator. (Do not adjust the nuts that are already on the sensor).

3. Slide the stub mast through the rubber boot and insert the stub mast into the bottom of the wind speed sensor. Secure with the cotter pin. **Coat all connections with silicone sealant and slip boot over the sensor.**

4. Secure the sensor and the stub mast to your antenna mast (not supplied) with the two hose clamps. Radio Shack and similar stores have a selection of antenna masts and roof mounting brackets. Choose a mount that best suits your location and provides at least 8 feet of vertical clearance above objects on the roof.

5. Follow the instructions supplied with the antenna mount and secure the mast to the mount.

6. Secure the wire to the building using cable clips (do not use regular staples).

7. Feed the cable through the wall to where the read-out is going to be located.

8. Remove Clear Cover. Remove the circuit board from the plastic enclosure by removing the screws on each corner. Tilt the enclosure forward until the circuit board pops out.

9. Remove the outside nut from the base of the enclosure. Feed the sensor and power wires through the nut. Then, into the enclosure of the instrument through the opening. Do not power the instrument yet.

10. Connect the wires to the circuit board terminal strips. Connect the **green** sensor wire to terminal marked **# 1.** Connect the **black** sensor wire to terminal marked **# 2**. Connect **white (clear)** sensor wire to terminal marked **# 3**.

11. *Connect the **negative power wire to terminal marked # 4.** Connect the **positive power wire to terminal marked # 5**.* <u>**Note: Use only a 9 – 15 VDC power source.**</u>

12. Place circuit board back into the enclosure. (You may need to pull back on the wires while you are trying to place circuit board back into the enclosure. It may also help to place the connector side in first then the top of the circuit board). Replace the screws to secure the circuit board. Re-attach the nut to the base of the enclosure. Nut should be in tight as it acts as strain relief for the cables and protection from moisture.

13. Apply power to the instrument and check operation.

OPERATION

The thumbwheel switch right below each LED controls the yellow or red warning light. Adjust the speed that you want to set off the yellow or red light by pushing the adjustment lever on the thumbwheel switch to the desired wind speed. Once the wind speed reaches the level set on the thumbwheel switch the yellow or red light will turn on and activate the relay. When both lights are activated, the buzzer will sound.

The relays are SPDT. If you are looking right at the relay terminal block, the yellow light controls terminals 6, 7, and 8. With the alarm off 7 and 8 are normally closed and 6 and 8 are normally open. The red light controls terminals 9, 10, and 11. With the alarm off terminals, 10 and 11 are normally closed and terminals 9 and 11 are normally open.

<u>IMPORTANT</u>: **BOTH THE WIND ALARM READOUT AND THE WIND SPEED SENSOR (GENERATOR) MUST BE RETURNED TO MAXIMUM, INC. ON AN ANNUAL BASIS FOR CALIBRATION CHECK. FAILURE TO RETURN BOTH COMPONENTS WILL VOID THE MANUFACTURERS LIMITED 5-YEAR WARRANTY, AND ALSO SIGNIFY THAT THE INSTRUMENT OWNER/USER AGREES TO HOLD HARMLESS MAXIMUM, INC. SHOULD A DEVICE TO WHICH THE WIND ALARM IS CONNECTED, CAUSE PERSONAL HARM OR PROPERTY DAMAGE.**

Trouble Shooting

If the read out is, blank (no lights).

Check power source; make sure that there is 12VDC supplied.

Check Polarity, make sure positive and negative leads were connected according to instructions.

Check sensor connections; Make sure the wiring sequence for wind speed sensor is correct.

If there is no Wind Speed (reads 00).
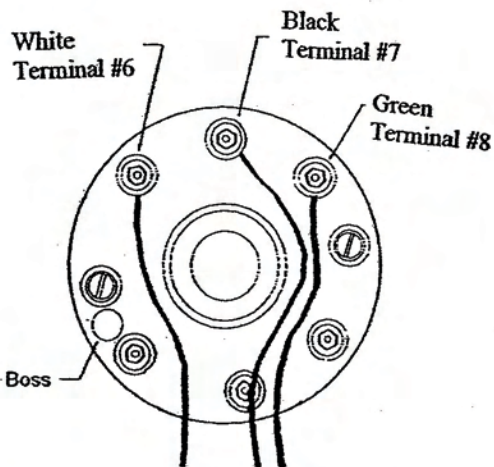
Check continuity of the cable.

Check sensor connections; Make sure the wiring sequence for wind speed sensor is correct.

Disconnect the wires marked #1, #2, and #3 from the terminal strip. With a short jumper wire short (touch together) terminals #1 and #2 together several times. This will make the read-out show a random number for wind speed. If it does instrument is OK, and the problem is in the sensor. If it still shows "00" the problem is in the read-out.
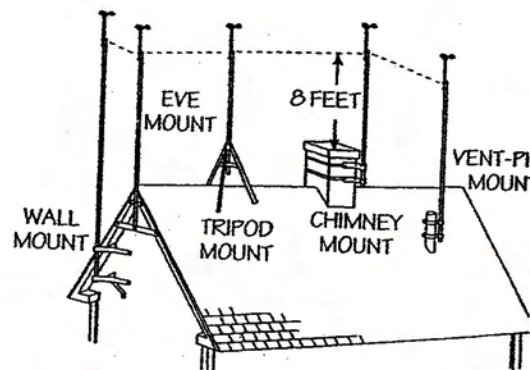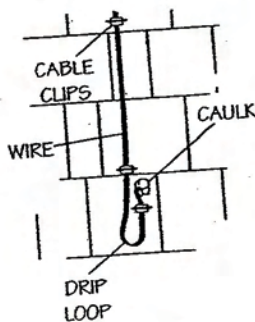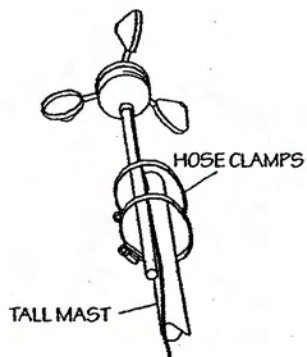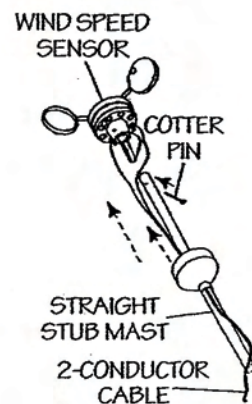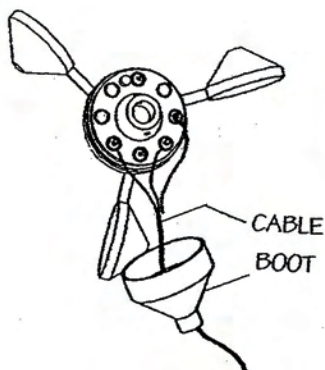
To Test Alarm

Set the set points to "00" MPH. This will activate both alarms.

All Maximum instruments are covered by a 5-year limited warranty. Please see warranty card for further details. If you have any questions please feel free to contact our service department at (508) 995-2200 or fax (508) 998-5359, email service.maximum@imtra.com

White
Terminal #6

Black
Terminal #7

Green
Terminal #8

Boss

Wind Speed Generator

CABLE
BOOT

WIND SPEED
SENSOR

COTTER
PIN

STRAIGHT
STUB MAST

2-CONDUCTOR
CABLE

HOSE CLAMPS

TALL MAST

CABLE
CLIPS

WIRE

CAULK

DRIP
LOOP

EVE
MOUNT

8 FEET

WALL
MOUNT

TRIPOD
MOUNT

CHIMNEY
MOUNT

VENT-PI
MOUN

DIAL

Relay Contacts

Power & Sensors

Yellow Light   Red Light

1 2 3 4 5

Terminal Strip

CIRCUIT BOARD

#6   N/O (Alarm off)
#7   N/C (Alarm off)
#8   Common
#9   N/O (Alarm off)
#10 N/C (Alarm off)
#11 Common

#1 Green
#2 Black
#3 Clear
#4 Ground (Negative)
#5 +12 VDC