INFRARED SENSOR

Ideas for your new INFRARED SENSOR accessory:

- Attach the INFRARED SENSOR to the serving tray. Your robot won't spill a drop as he maneuvers around guests and furniture. Keep the party going with your mechanical friend's INFRARED SENSOR!

Things to remember:
- Always keep the transparent SENSOR window free of dirt. Use a clean cloth to wipe off the SENSOR window. A smudged SENSOR window will result in poor performance.
- Make sure the LEFT and RIGHT_SENSORS are placed in the LEFT and RIGHT hands of your robot. Determine LEFT and RIGHT sides from your robot's perspective.
- Place the SENSORS so they face forward. Make sure the SENSORS are in the same position with respect to each other.
- Do not allow an outside light source directly enter the SENSORS.
- After approximately two hours of use, recharge your robot's battery pack.

TRACER TAPE

Ideas for your new TRACER_TAPE accessory:

- Show off merchandise on your mechanical friend's serving tray. Set up a sales course for him to travel and display your products.

Things to remember:
- Use only ¼" wide vinyl tape (not included).
- Always keep the transparent SENSOR window free of dirt. Use a clean cloth to wipe off the SENSOR window. A smudged SENSOR window will result in poor performance.
- Your robot will not move properly if there is no distinct contrast between the color of the floor and the color of the tape. If operating on a light floor, be sure to use black tape. If operating on a dark floor, be sure to use white tape. Ideally, the SENSOR responds best to black tape on white linoleum or tile.

- Your robot can deliver memos, secret messages, and personal notes. Just plot out his course to deliver routine correspondences.
- Invent your own imaginative game! How about a quick round of "Balloon-bot?"
**PHOTO SENSOR**

**TO INSTALL:**
1. Turn your robot’s Power Switch OFF.
2. Make sure the POWER JACK SWITCH (located on the door of your robot’s battery compartment) is turned OFF.
3. Turn ON your robot’s MOTOR (L) and MOTOR (R) SWITCHES on the ACCESSORY INTERFACE PANEL.
4. Connect the PHOTO SENSOR ACCESSORY into the POWER JACK and SENSOR SOCKETS on your robot’s ACCESSORY INTERFACE PANEL. See Illustration.

**TO OPERATE:**
1. Set the PHOTO SENSOR ACCESSORY SWITCH to (D) or (L). If set to (D), the SENSOR activates the cassette deck when triggered by light. If set to (L), the SENSOR activates the cassette deck when triggered by darkness. The KNOB on the PHOTO SENSOR.

**ACCESSORY** adjusts the SENSOR’S sensitivity to light changes. Turn the KNOB until the LED lamp above the KNOB lights up. Adjust the sensitivity by slowly turning the KNOB until the light finally goes off. To adjust on the (D) setting, place your hand over the SENSOR and turn the KNOB until the light goes off.

2. Place a cassette in your robot’s cassette deck. If you have an Omnibot or an Omnibot 2000, you must push the PLAY button on the cassette deck. If you have a Hearald, you need not do this.

3. Set your robot’s MODE SWITCH. For Omnibot, set to PVC (for music tapes) or PROGRAM (for responding to programmed tapes). For Omnibot 2000, set to PVC (for music tapes only). For Hearald, set to RECOGNITION (for music tapes) or REPEAT (for programmed tapes).

4. If using a programmed tape, make sure your cassette is rewound to the beginning of the tape.

5. Set your robot’s Power Switch. For Omnibot and Hearald, set to OH (for PVC control) or TIMER (for programmed tapes). For Omnibot 2000, set to the OH position only.

**NOTE:** Hearald will not respond to light changes once the cassette deck has been triggered by the first change of light.

6. Turn the POWER JACK SWITCH on the ACCESSORY INTERFACE PANEL to the OH position.

7. Your robot’s tape will play when there is a change of light. For Hearald, you must turn the POWER JACK SWITCH OFF to stop the tape while in the RECOGNITION Mode. In the REPEAT Mode, however, the tape will stop when it reaches a “stop tape” or “rewind” command. It is important, therefore, to record a “stop tape” or “rewind” command at the end of your programmed tapes. REMEMBER: When programming, turn off the POWER JACK SWITCH.

**HINT:** The PHOTO SENSOR works best when the light condition is distinct. When in the (L) position, light obstructions beyond 5 feet may not trigger the SENSOR.

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**ULTRASONIC SENSOR**

**TO INSTALL:**
1. Turn your robot’s Power Switch OFF.
2. Make sure the POWER JACK SWITCH (located on the door of your robot’s battery compartment) is turned OFF.
3. Turn OFF your robot’s MOTOR (L) and MOTOR (R) SWITCHES on the ACCESSORY INTERFACE PANEL.
4. Connect the ULTRASONIC SENSOR ACCESSORY into the POWER JACK and MOTOR (L) and MOTOR (R) SOCKETS on your robot’s ACCESSORY INTERFACE PANEL. See Illustration.

5. Without kinking the cords, run the SENSOR marked (L) to your robot’s LEFT HAND. Run the SENSOR marked (R) to your robot’s RIGHT HAND. Place the SENSORS in your robot’s hands as illustrated.

6. Place a 9 Volt battery (not included) in the ULTRASONIC SENSOR CONTROLLER. The battery compartment is located on the back side of the CONTROLLER.

**NOTE:** If the CONTROLLER does not operate properly, check to make sure the battery is touching the battery contacts.

**TO OPERATE:**
1. Turn your robot’s Power Switch ON. All controls will operate except your robot’s forward, reverse, and left and right movement capabilities. If you decide not to use your robot’s transmitter, you need not turn your robot’s Power Switch ON.
2. Place your robot in the center of a room, free from immediate obstacles.
3. Turn the POWER JACK SWITCH on the ACCESSORY INTERFACE PANEL to the OH position.

4. Set the ULTRASONIC CONTROLLER Mode Switch to the GO position.

5. Turn the ULTRASONIC CONTROLLER to the OH position. Your robot will take off following a straight path. Before it runs into any obstacles, simply slide the CONTROLLER Mode Switch to the FOLLOW position. Your robot will turn and come towards the CONTROLLER.

**NOTE:** When the CONTROLLER is set to GO, your robot will resume a straight path. When switched to FOLLOW, your robot will home in on the CONTROLLER signal. If you put the CONTROLLER in your pocket for your robot to follow you, make sure you don’t cover the SENSOR EYE, located at the top of the CONTROLLER.

**CAUTION:** If you play tapes while enjoying sonic control, wait for your robot to stop moving. Interference from the CONTROLLER may accidentally record noise onto your tapes.

**NOTE:** Certain sound frequencies may cause the SENSOR to respond improperly. Jingling keys, jangling coins, and other similar sounds may interfere with the SENSOR’s proper function.
INSTRUCTIONS

INFRARED SENSOR

TO INSTALL:
1. Turn your robot's Power Switch Off.
2. Make sure the POWER JACK SWITCH is turned Off.
3. Turn off your robot's MOTOR (L) and MOTOR (R) SWITCHES on the ACCESSORY INTERFACE PANEL.
4. Connect the INFRARED SENSOR ACCESSORY into the POWER JACK and MOTOR (L) and MOTOR (R) SOCKETS on your robot's ACCESSORY INTERFACE PANEL. See illustration.
5. Extend your robot's arms straight out.
6. Without linking the cords, run the SENSOR marked (L) to your robot's LEFT HAND. Run the SENSOR marked (R) to your robot's RIGHT HAND. Place the SENSORS at a 30 degree angle in your robot's HANDS as illustrated.

TO OPERATE:
1. Turn your robot's Power Switch ON. All controls will operate except your robot's forward, reverse, and left and right movement capabilities. If you decide not to use your robot's transmitter, you need not turn your robot's Power Switch Off.
2. Place your robot in the center of a room, free from immediate obstacles.
3. Turn the POWER JACK SWITCH on the ACCESSORY INTERFACE PANEL to the Off position.
4. Your robot will take off following a straight path while scanning the room for obstacles. Your robot will keep clear of objects within a 2" - 5" range. Obstacles beyond 5" are out of the SENSORS range and, therefore, cannot be avoided.

NOTE: Be sure to attach the SENSORS so they face slightly outward, as shown in the illustration. Also, some interference may be heard through the speaker if you play a tape while operating the INFRARED SENSOR.

HINT: The Sensor will respond best to white walls or light colored materials.

TRACER TAPE

TO INSTALL:
1. Turn your robot's Power Switch Off.
2. Make sure the POWER JACK SWITCH is turned Off.
3. Turn off your robot's MOTOR (L) and MOTOR (R) SWITCHES on the ACCESSORY INTERFACE PANEL.
4. Connect the TRACER TAPE SENSOR ACCESSORY into the POWER JACK and MOTOR (L) and MOTOR (R) SOCKETS on your robot's ACCESSORY INTERFACE PANEL. See illustration.
5. Attach the Velcro tape (included) to the FRONT CENTER of your robot, about 1" from the floor.
6. Without linking the cord, run the TRACER TAPE SENSOR to the FRONT of your robot and secure it to the Velcro. Make sure the SENSOR EYES face the floor. See illustration.

TO OPERATE:
1. Turn your robot's Power Switch ON. All controls will operate except your robot's forward, reverse, and left and right movement capabilities. If you decide not to use your robot's transmitter, you need not turn your robot's Power Switch Off.
2. Mark off your robot's course by running tape (not included) along the path you wish him to follow. Use black or white tape (not included) that is 1/4" wide. If the floor is white or pale in color, use black tape to mark the path. Conversely, if the floor is black or another dark color, use white tape to mark the path. After the tape to the floor, making a line in the direction you want your robot to move.

HINT: The color of the floor and the color of the tape must be different or the SENSOR will not work properly.

3. If you are using white tape, set the TRACER TAPE SENSOR SWITCH to WHITE. Your robot will move along the white tape. If you are using black tape, set the TRACER TAPE SENSOR SWITCH to BLACK. Your robot will move along the black tape.
4. Turn the POWER JACK SWITCH on the ACCESSORY INTERFACE PANEL to the Off position. Your robot will follow the TRACER TAPE.

NOTE: To make turns in the course, make sure the curve is at least plotted with a 20" radius. In order the stop your robot, use your tape and make at least a 5" square at the end of the course.

CAUTION: You should not play a cassette tape while your robot is moving. Interference may accidentally record onto the tape. Play cassettes only when your robot has completed his movement.

HINT: The SENSOR works best with black tape on white or light linoleum or tiled floors.
**PHOTO SENSOR**

Ideas for your new PHOTO SENSOR accessory:

- Even in the dark, your Securitroid will be ready to catch a thief!
- Have your robot come to life just by flipping off or on a light. Your mechanical pal makes a great alarm when the sun rises!

**Things to remember:**

- Always keep the transparent SENSOR window free of dirt. Use a clean cloth to wipe off the SENSOR window. A smudged SENSOR window will result in poor performance.
- Make sure the change of light is distinct. If there is not enough available light, the SENSOR will not function properly.

REMEmBER: Attaching the PHOTO SENSOR affects Omnibot, Omnibot 2000, and Hearoid differently. Omnibot and Hearoid will respond to programmed tapes. Omnibot 2000 will not respond to programmed tapes in conjunction with the PHOTO SENSOR. See instructions on other side.

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**ULTRASONIC SENSOR**

Ideas for your new ULTRASONIC SENSOR accessory:

- Amaze your friends! Hold the transmitter out of sight and your mechanical man will follow you everywhere...like magic!
- Make a maze and watch your robot dodge obstacles like a real pro!
- Let your robot race with your baby brother or sister! See who's the fast-est.

**Things to remember:**

- Always keep the transparent SENSOR window free of dirt. Use a clean cloth to wipe off the SENSOR window. A smudged SENSOR window will result in poor performance.
- Don't forget to change the battery (not included) in the transmitter as needed. A weak battery will result in poor performance.

If you need assistance call:
(213) 834 8825
(Telex 287083 TGD TTC)

REMEmBER: Whenever you finish using an accessory, make sure to turn the MOTOR (L) and MOTOR (R) SWITCHES to the OFF position. If you fail to do so, your robot will not move under normal operation. ALWAYS turn the POWER JACK SWITCH to the OFF position when finished using your accessories. CAREFULLY remove accessories to avoid bending prongs. Always pull straight out.