Tracking Ring Package

Before connecting or using your Tracking Ring package, take a moment to learn about the various buttons, switches, and jacks.
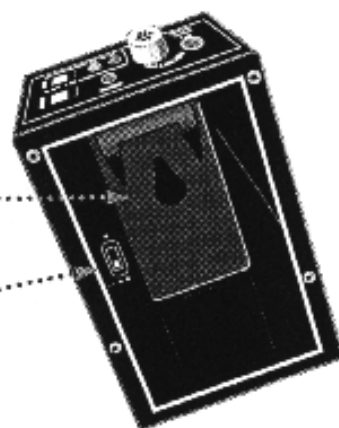
Power Pack

▼ POWER INDICATOR LIGHTS – Lets you know when power is ON (red) and when batteries are LOW (yellow).

▼ POWER SWITCH – Used to turn power pack and Tracking Ring on and off.

▼ AUDIO SWITCH – Used to turn Tracking Ring's microphone on and off.

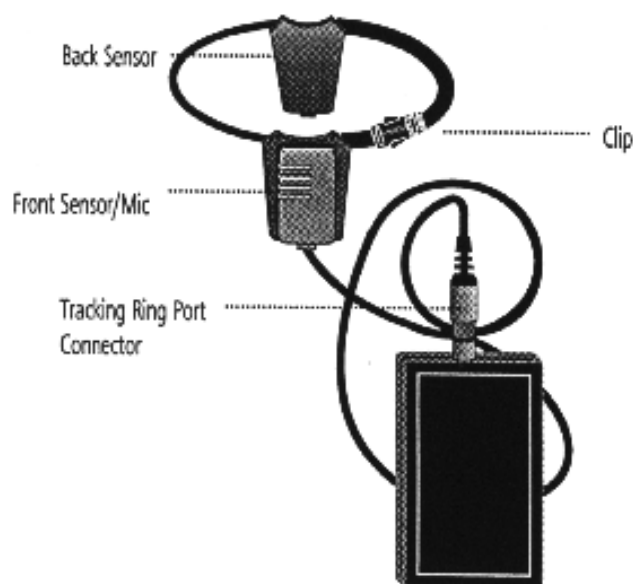top view of power pack

▼ TRACKING RING PORT – Used to connect Tracking Ring to power pack (see page 13).

▼ AUXILIARY BATTERY PACK PORT – Used to connect the optional auxiliary battery pack for extended use (see page 14).

▼ CHARGER PORT – Used to connect battery charger to power pack.

▼ POWER PACK BELT CLIP – Used to connect battery charger to the power pack belt (or other belt).

▼ RF CHANNEL SWITCH – Used to select the RF channel the power pack will use to communicate with the Docking Station (should be the same as the Docking Station).
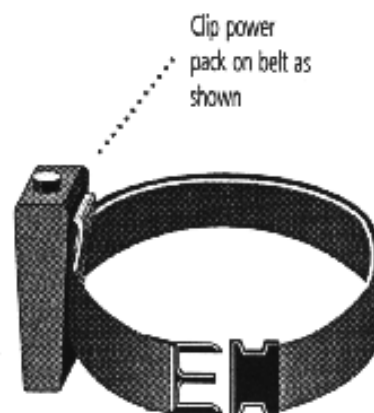
Tracking Ring Assembly

Back Sensor

Front Sensor/Mic

Tracking Ring Port Connector

Clip

Belt Assembly

Clip power pack on belt as shown
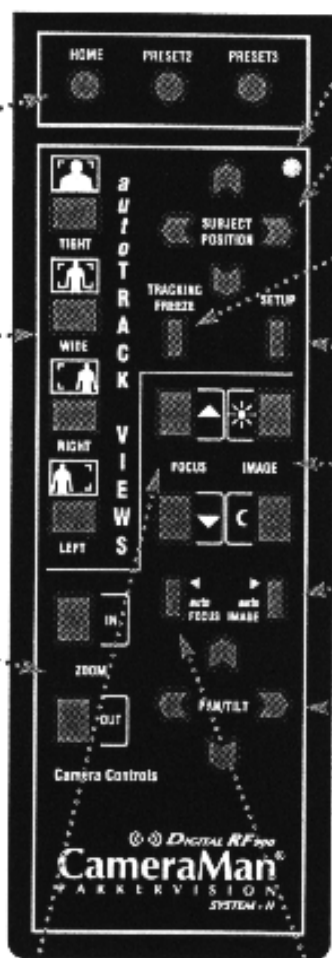
Next, take a look at the front of your Tracking System Keypad. It is the control center for your Presenter Camera System and contains the following features.

▼ **"ON" LIGHT** – indicates Keypad is in operation.

▼ **SUBJECT POSITION CONTROLS** – Used to fine-tune the position of the subject while in **autoTRACK** mode.

▼ **LOCATION PRESET SELECT** – Used to recall preset locations.

▼ **autoTRACK VIEWS** – Used to change the position and perspective of the presenter in the video frame while being tracked by the camera (choose between Tight, Wide, Right, and Left.)

▼ **TRACKING FREEZE** – Used to disengage autoTRACK, and freeze the camera's movement.

▼ **SETUP** – Used in conjunction with other controls for advanced functions.

▼ **IMAGE CONTROLS** – Used to open and close the iris.

▼ **autoIMAGE** – Used to allow the camera to automatically adjust the brightness and darkness for each video picture.

▼ **ZOOM IN/OUT** – Used to tighten and widen the camera's view.

▼ **PAN/TILT** – Used to Controls the camera's up/down, and left/right movement.

! Use of the PAN/TILT arrow buttons will disengage the autoTRACK mode.

▼ **FOCUS** – Used to manually adjust visual clarity of the video picture. Used with **SETUP** button to increase and decrease Gain.

▼ **autoFOCUS** – Used to allow the camera to automatically adjust the visual clarity of the video picture.

Installing the Camera System

Now that you've identified the components of your Presenter Camera System, as well as their individual buttons, ports, and jacks, you can begin connecting them to your CameraMan camera.

Removing the CameraMan Connector Block (Upgrade Only)

! If you are performing initial installation of a system package, as opposed to an upgrade, this will not be necessary.

To remove the CameraMan Connector Block:
1. Turn **OFF** the **POWER** switch on the back of the Camera.
2. Disconnect all cables from the back of the camera.
3. Remove the screws which hold the connector block in place.
4. Pull outward on the connector block, unplugging it from the DB-37 connector. The Main Docking Station cable will plug into this port.

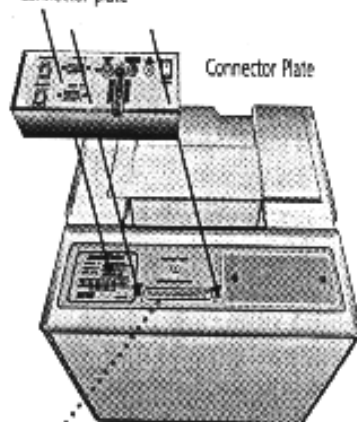## Mounting the Main Docking Station

The Main Docking Station can be mounted with any orientation, but it must be mounted within 10' of the autoTRACK Camera (use only the supplied CameraMan cable to connect the two units). Mount the Main Docking Station using the following guidelines:
1. Mount the Main Docking Station in the desired location. Be sure to leave sufficient space for access to the connections on the back panel.
2. Verify that the **POWER** switch on the front of the Main Docking Station is turned **OFF**.
3. Mount or place the CameraMan Power Supply in a convenient location near the autoTRACK Docking station.
4. Plug the 5.5mm female connector from the power supply cord into the **DC POWER** jack in the back of the docking station.
5. Plug the other end of the power supply into a 120 VAC outlet.
6. Connect the antennas to the appropriate connectors and position them so that they both point in a vertical direction for optimum performance.
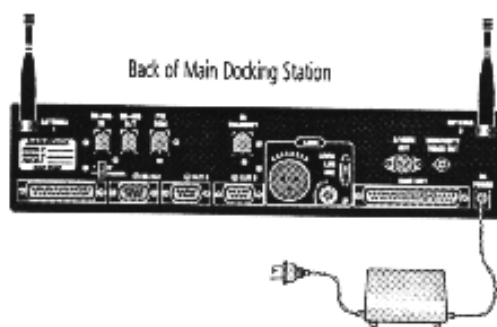
! For best performance, locate the antennae in free space, at least 6" from the camera, or any wires, metal surfaces, wall, etc.

💡 See the Main Docking Station Clearance diagram on page 28.

Three screws through connector plate

Connector Plate

DB-37 connector

Back of Main Docking Station

Multi- Camera Applications

In a multi-camera application where it is desired to network multiple Cameras together, refer to the multi-camera section of the **1-CCD General Pan/Tilt Installation and Operations Manual**. Follow the appropriate procedure, using the RS-485 connections on the back of the Main Docking Station instead of the connections on the back of the Camera.

! Installing two Tracking Systems in the same area will cause unpredictable results.

Now you can begin connecting your Main Docking Station to your CameraMan Camera System and your camera control devices.

Connecting the CameraMan Cable

The autoTRACK Camera connects to the Main Docking Station using the supplied CameraMan 10' multi-conductor cable with DB-37 connectors on both ends.

1. It is important to verify that the **POWER** switch on the front of the Main Docking Station is turned **OFF** before making this connection.
2. Connect the DB-37 male connector to the back of the CameraMan camera and secure the connection using the two connector screws located on the cable connector. This will ensure that the cable will not become dislodged due to the motion of the CameraMan camera.
3. Connect the other end of the CameraMan cable to the **BASE UNIT** connector on the back of the Main Docking Station.

> **!** Verify that the CameraMan Cable is supported in such a manner that the camera does not drag the cable as it moves. If the camera drags the cable, then the performance of the system may be compromised.

Connecting a Keypad/Controller

If desired, the Tracking System Keypad can be *hard-wired* to the Main Docking Station using a CameraMan Keypad Cable (provided separately).

1. Connect one end of the cable to the RJ-11 type jack located in the battery compartment of the keypad.
2. Connect the other end of the cable to the RJ-11 type jack on the back of the Main Docking Station, labeled **PVI COM**.
3. Look at the light on the keypad, which should illuminate momentarily, indicating that the keypad is ready for operation.
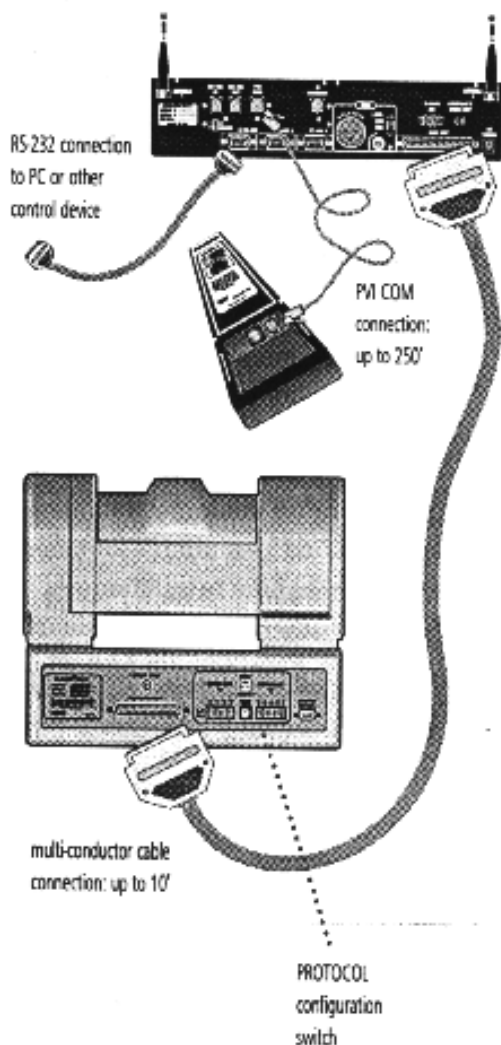
> **!** Using cable other than a supplied cable for the **PVI COM** port may cause damage. The Tracking System Keypad can be *hard-wired* up to a maximum distance of 250'.

Connecting to the RS-232 Port

The Presenter Camera System provides for RS-232 communications using the DB-9 jack on the back of the Main Docking Station labeled **RS-232**. This RS-232 port can be used to control the CameraMan camera from external devices such as a PC or other vendor-control system (i.e.: AMX, Crestron). Connect to this port using a standard computer cable with a DB-9 connector. This port operates at 9600 baud (19,200 with CameraMan SHOT Director), No Parity, and software hand-shaking using CameraMan High-Reliability or Basic protocols (High Reliability only with SHOT Director). The light located above the RS-232 port is used to indicate communication activity.

> **!** Verify which protocol is being used by checking the **PROTOCOL** switch (switch bank B – switch 1) on the back of the CameraMan camera.

> For more information on setting the protocol on your CameraMan camera, see the Installation and Operations Manual that came with the camera.

RS-232 connection to PC or other control device

PVI COM connection: up to 250'

multi-conductor cable connection: up to 10'

PROTOCOL configuration switch

Tracking Ring Power Pack Assembly

Now you are ready to assemble the Tracking Ring Package and learn how to wear it properly to ensure that your CameraMan camera follows you around the room.

Tracking Ring Power Pack Assembly

Using the clip on the back, attach the Tracking Ring Power Pack either directly to your clothing by clipping it to your waistline or skirt or to the Tracking Ring Power Pack Belt.

! The Tracking Ring Power Pack must be worn so that the antenna hangs loosely. Do not place the Power Pack in your pocket. This interferes with the RF signal and may affect the audio and tracking capability.

antenna should hang loosely

Tracking Ring Sensors

1. Identify the sensors:
   - Front Sensor: equipped with a built-in microphone and tracking sensor. It is identified by the main connector to the Power Pack.
   - Back Sensor: equipped with the built-in tracking sensor only.
2. Slip the Tracking Ring around your neck.
3. Clip the Tracking Ring strap closed to form a complete circle around your neck.
4. Verify that the Front Sensor is lying flat and centered, just above chest level, and that the Back Sensor is lying flat on the back of your collar.
5. Plug the main connector into the port on the top of the Tracking Ring Power Pack.

Ensure that the sensors lie flat on the front and back

! The Front and Back Sensors require a direct line-of-sight link with the camera. The presenter must exercise caution to ensure that no clothing or hair covers either Sensor.

About the sensors

It is important to understand exactly how the autoTRACK Tracking Sensors work to obtain the maximum performance levels. The autoTRACK mode is an exclusive ParkerVision feature that enables the the camera to track automatically the subject wearing the Tracking Ring Package.

Ensure that no hair or article of clothing covers the Tracking Sensors

! Since the Tracking Sensors require a direct line-of-sight link with the camera, the subject must exercise caution to ensure that no clothing or hair covers the Sensors. This will ensure constant communication with the CameraMan camera.

The Front Sensor should be lying flat and centered on the body, just above chest level. The Back Sensor should lie flat against the back of the collar or neck. When a presenter turns around to point to a flipchart, for example, the Back Sensor continues to receive the infrared tracking signal from the camera.

With the proper positioning of the sensors, the CameraMan camera provides 360° of coverage for the presenter wearing the Tracking Ring Package.

Back Sensor

Front Sensor