

Mesa Mobile Dock

The Mesa Mobile Dock is an optional accessory that provides a mounting station for the Mesa Rugged Notepad and additional communication options.



Note: The Mesa Mobile Dock is not functional as a stand alone device. It requires the Mesa to be functional. For example, it is not a stand alone powered USB hub.

Communication Options

The mobile dock provides additional communication ports for use with sensors and other external devices, supplementing the ports on the Mesa. Some Mesa ports are still accessible.

Bottom view of mobile dock showing the ports:



- 1 12V DC power input jack
- 2 USB client
- **3** RS-232 serial ports
- 4 USB host ports
- Power input jack, 12VDC for power input and battery charging: This jack is used to power the mobile dock and the Mesa. The power port on the Mesa is not accessible when it is in the mobile dock.

The following accessories can be used to provide power and charge the Mesa batteries:

- a. Wall charger provided with the Mesa
- b. Vehicle charger cable (optional)

Note: The USB client port is powered directly from the Mesa or by applying power to the mobile dock. The RS-232 serial ports and USB host ports are only functional if external power is applied to the mobile dock.

- 2. USB client: This is a through connection to the Mesa USB client port. This port on the Mesa is not accessible when it is in the mobile dock.
- 3. RS-232 serial ports: The mobile dock provides two additional RS-232 ports. The RS-232 port on the

Mesa is still accessible when it is in the mobile dock, providing three ports total.

Note: The dock serial ports do not have 5V power available on their DTR or RI pins for powering devices.

- 4. USB host ports: The mobile dock provides two additional USB host ports. The USB host port on the Mesa is still accessible when it is in the mobile dock, providing three ports total.
 - Note: If 500mA is drawn from each port (1.5A total), the batteries may take longer to charge than normal.
- The audio jack of the Mesa is accessible when the Mesa is in the mobile dock.

Mounting Options

Accessories are available for using the mobile dock as a desktop base, mounting it onto a vehicle, and mounting it onto a pole. You can also attach it directly to a wall.

Mesa Dock Desktop Base

The desktop base (optional mobile dock accessory) allows the mobile dock to be used on a desktop or other flat, stationary surface. A desktop metal base and four screws are included.

Installing the Desktop Base:

 On the back of the dock near the bottom are two small screw holes, one on the left and one on the

- right. Place screws into the holes and screw them in half-way.
- 2. Slide the desktop base up so the screw slots on the back slide onto the screws and tighten them.



3. On the front of the desktop base near the top and the front of the dock near the bottom are two small screw holes, one on the left and one on the right. Align the holes, place screws into the holes, screw them in all the way, and tighten them. The desktop base is now ready to use.



Mesa Dock Vehicle Mount

The vehicle mount (optional mobile dock accessory) allows the mobile dock to be used in a vehicle or in another mobile mounting application. Two RAM Mount bases with 1.5" balls, a double socket arm, four screws, and four 8-32 puts are included.

Note: Additional attachments are available for the vehicle mount from National Products Inc. at www.ram-mount.com.

Installing the vehicle mount:

1. From the front of the dock you see four hex holes. Press a nut into each hole. Use a screwdriver or similar object to press them firmly into place.



From the back of the dock, align one of the Ram Mount bases with the screw holes.



3. Insert the four screws into these holes, screw them in all the way, and tighten them.



4. Attach the double socket arm to the balls on the two RAM Mount bases (one on each end). Tighten the arm around the balls as needed by turning the knob in the center of the arm. The mobile dock is now ready to use in a vehicle, on a pole, etc.



Vehicle power considerations:

When powering the dock from a vehicle, especially in a permanent situation, be familiar with the power setup. Power configuration options and recommendations:

- The Mesa suspends when battery power is being used (default setting), insuring that the both the Mesa batteries and the vehicle battery are not fully depleted. In this configuration, the Mesa is powered and charging its batteries whenever vehicle power is applied. When the vehicle is turned off, the Mesa does not receive external power and suspends after the time set in the power management settings (default is 3 minutes). In a suspended state, the power to the mobile dock is shut off and the Mesa draws very little power (about 25mW).
- The mobile dock is connected to a power port that draws current directly from the battery power of the vehicle. The Mesa and dock remain powered and the batteries are charged even if the vehicle is turned off. Be aware that this configuration drains the vehicle battery. Consult the vehicle's user manual for instructions on appropriate use of the power port.
- The mobile dock is connected to a key switched battery port of the vehicle. The vehicle power is not depleted by the Mesa when the vehicle is turned off.

Wall Mount

You can mount the mobile dock to a wall. Use 2 size 8 wood screws and attach the dock to a wall stud or plywood panel.

Attaching the Mesa to the Mobile Dock

Follow these instructions to place the Mesa into the mobile dock:

- Attach the connector protector to the Mesa and close the individual port covers so the Mesa docks properly. If the hand strap is in the way, remove or move it.
- **2.** Hold the Mesa so the connector protector is at the bottom. Align the Mesa with the lower mounting points on the mobile dock.



3. Press the Mesa back to secure it to Mobile Dock. The top latch snaps into place. *Note: Tighten the security bolt when the mobile dock is used in a vehicle.*



Releasing the Mesa from the Mobile Dock

To release the Mesa from the mobile dock, lift up on the top latch. Pull the Mesa forward and remove it.

Note: Loosen the security bolt if the mobile dock is being used in a vehicle.



Maintenance

Environmental Issues

The mobile dock sheds water when used in its normal configuration, but is not sealed against water. Avoid using the dock in situations where water can enter the connector ports.

Do not touch the docking pins (spring loaded contacts) with conductive items when power is plugged into the dock.



Do not drop items on the dock that can damage the pins. Keep debris off of the docking pins and the connectors to maintain the best performance.



Battery Warnings

WARNING! These warnings are for lithium ion rechargeable batteries.

To reduce the risk of fire or burns, do not disassemble, crush, puncture, short external contacts, or expose to fire.

Do not disassemble or open, crush, bend or deform, puncture or shred.

Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, expose to fire, explosion or other hazard.

Only use the battery for the system for which it is specified

Only use the battery with a charging system that has been qualified with the system per this standard. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazard.

Do not short circuit a battery or allow metallic conductive objects to contact battery terminals.

Replace the battery only with another battery that has been qualified with the system.

Use of an unqualified battery may present a risk of fire, explosion, leakage or other hazard.

Promptly dispose of used batteries in accordance with local regulations

Battery usage by children should be supervised.

Avoid dropping the battery. If the battery is dropped, especially on a hard surface, and the user suspects damage, take it to a service center for inspection.

Improper battery use may result in a fire, explosion or other hazard.



Wall Charger Warnings

WARNING! To reduce the risk of personal injury, electrical shock, fire or damage to the equipment:

Plug the wall charger into an electrical outlet that is easily accessible at all times.

Disconnect power from the equipment by unplugging the wall charger from the electrical outlet or unplugging the synchronization cable from the host computer.

Do not place anything on the wall charger cord or any of the other cables. Arrange them so that no one may accidentally step on or trip over them.

Do not pull on a cord or cable. When unplugging the wall charger from the electrical outlet, pull on the plug, not the cord.

Use only wall chargers intended for the Mesa. Using any other external power source can damage your product and void your warranty.

Regulatory Information

United States (FCC)

This device complies with Part 15 of the FCC Rules. Operation of this equipment is subject to the following two conditions:

- 1. The device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION: Only approved accessories may be used with this equipment. In general, all cables must be high quality, shielded, correctly terminated, and normally restricted to two meters in length. Wall chargers approved for

this product employ special provisions to avoid radio interference and should not be altered or substituted.

CAUTION: Changes or modifications to the Mesa that are not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Industry Canada

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CE Marking



CE compliance of this device is valid only if powered with/by a CE-marked wall charger provided by the manufacturer. Compliance with these directives implies conformity to the following standards:

EN 55022 Electromagnetic Interference

EN 55024 Electromagnetic Immunity

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