Alternative Designs

Dynavox Computer Travel Mount

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**Design 1: Dynavox Computer Mount – Under the Car Seat**

The Dynavox computer system mount will allow the user safely secure the computer while traveling in a vehicle. The mount will utilize the user’s car seat as a point of attachment. It will also consist of an adjustable arm to position the computer in the best view for the user.

Since the user will always be placed in the car seat while traveling in a vehicle, the mount will be attached to the seat itself. A flat surface will be placed under the seat and be secured to the bottom. Since there is padding on the car seat itself, this will not be uncomfortable for the user while sitting in the seat. The surface will be shaped similar to the bottom of the car seat so there is no excess surface protruding from under the dear. However, there will be an extension to the surface on the left side of the car seat. The user’s seat is located in the second row (back seat) of the car to the right of the driver. Therefore, since the user will be getting in and out of the vehicle to the right side of the seat, the extension must be on the left side to not put it in the way.

The arm of the mount will be attached to the extended surface under the seat. The arm will allow for the user to reposition the computer to the best viewing location. It will also allow the mount to be folded and pushed aside when the user is getting in and out or when the user is not in the vehicle. The arm will be made of two metal poles. The material must be sturdy enough to withstand the weight of the computer at all possible angles of usage. The two poles will be connected by a hinge located at one end of each. The hinge will allow the entire arm to bend and stay at the desired angle.

At the other end of one pole (the non-hinge side), a connection will be made to the extended surface under the seat. This will attach the arm to the seat. This connection will connect the arm to a swivel mount that is already on the extended surface. With this attachment, the arm can swing in front of the user or to the side as well as to show the computer screen to other passengers in the car.

The final unattached end of the other pole will be attached to the mounting system for the computer. This end of the arm will enable the user to change the viewing angle of the screen in addition to providing a place of connection from the arm to the computer. The open end of the arm will be connected to a rotating base and tube mount. The Deassy quick release mounting system will be attached to the tube mount. From there, the computer has a quick release plate already located on the back to connect the computer to the quick release mechanism.

The computer is controlled by the user’s head. Therefore, the mount must also be accompanied with a button to use the computer system. The button will be placed in the car seat located near the user’s head while sitting in the seat. However, the installation of the button to the car seat will be permanently placed. It will be embedded into the seat and surrounded by the fabric of the seat for safety.
Figure 1: Underneath the car seat mounting solution.