

Penny & Giles Omni Plus Module



Basic Operation Instructions

IMPORTANT NOTICE

This manual describes basic operation for the Penny & Giles Omni Plus Module only and must be read in conjunction with the owner's manual supplied with your power chair. Please read both manuals in their entirety before operating the Omni Plus Module or your power chair.

This manual is intended as a supplement to the in-service training provided by your authorized provider. If you have any questions or problems regarding the Omni Plus Module, please contact your authorized provider.

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INTRODUCTION

Welcome to Quantum Rehab, a Division of Pride Mobility Products Corporation. Quantum Rehab is dedicated to the customization of power chairs for users with advanced rehabilitation and mobility issues. Quantum Rehab also expands possibilities for enhanced healthcare attendant control over power chair functions to provide a secondary level of support for our customers where necessary.

Penny & Giles Omni Plus Module

The Omni Plus Module is a universal specialty controls interface which accepts signals from a variety of input devices such as finger steering controls, head arrays, Sip-N-Puff systems, and lap trays. The Omni Plus then translates the input signals into user functions compatible with the power chair control system. The purpose of the Omni Plus is to enhance and expand input device function, so that the user can do more with their power chair.

This manual is designed to explain basic operation for the following functions available with the Omni Plus:

1. Drive Selection

- The user controls the speed level and direction of the power chair using the Omni Plus and the input device. The user can choose one of five different speed levels.

2. Actuator Selection

- The user controls the various seat functions available with their power chair using the input device and the Omni Plus.

NOTE: Actuator selection is dependent on the type of seat installed on the power base.

3. Auxiliary Control Module (ACM) Selection

- The user controls up to two ACM channels using the input device and the Omni Plus.

Figure 1 provides information on the Omni Plus components and connections. Use this diagram to familiarize yourself with the function and location of each component before using the Omni Plus Module.

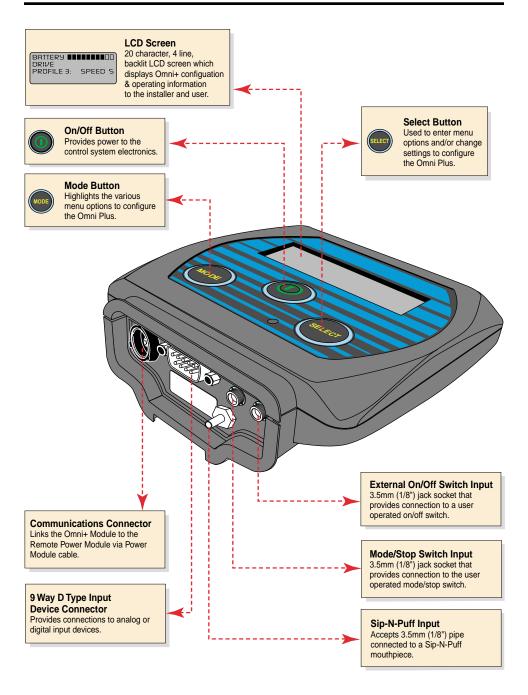


Figure 1. Omni Plus Components and Connections

DRIVE SELECTION

The drive speeds range from drive speed 1, configured as the slowest speed, to drive speed 5, configured as the fastest speed. Each drive speed setting increases a percentage of the overall base speed.

Operation

To operate the drive selection function, power up the control system using the *On/Off Button* or the switch plugged into the external on/off input on the bottom of the Omni Plus. See figure 1. The display will be similar to that shown in figure 2.

NOTE: After the initial display in figure 2 is shown, the display will change to the **Standby Mode** shown in figure 3. This display will change in appearance depending on the input device used.

Once a command is activated from the input device, the Omni Plus display will change from STANDBY to DRIVE. Any command given to the input device will operate the power base at the displayed drive speed.

To increase or decrease the displayed drive speed, press the *Mode Button*, or activate the external mode switch

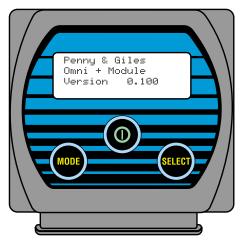


Figure 2. Power-up Display

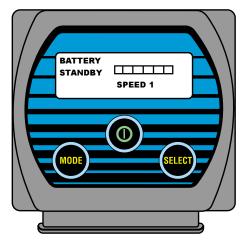


Figure 3. Standby Mode Display

that is plugged into the mode/stop input on the bottom of the Omni Plus. See figure 1. When SPEED 1 on the Omni Plus display flashes, a *right* command on the input device will increase the speed to 2. If the display flashes when in SPEED 2, a *left* command on the input device will decrease the speed to 1. These right and left commands will increase or decrease the drive speed while in drive selection mode.

ACTUATOR SELECTION

Actuator selection typically includes any or all of the following: backrest, tilt, power leg rests (left, right, or both), and power seat. The following operation instructions apply to all of these actuators.

Operation

To operate the actuator selection function, display the ACTUATORS menu option. Press the *Mode Button* or the external mode switch plugged into the mode/stop input (see figure

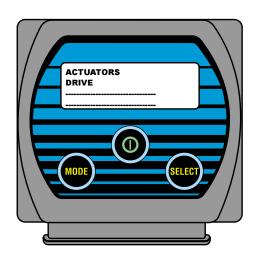


Figure 4. Actuator/Drive Menu

1) twice. Apply a *forward (up)* command or a *reverse (down)* command to the input device to select between Actuators, Drive and ACM. Use the *Select Button* or a *right* command to choose ACTUATORS, then press the *Mode Button*. The screen will display as shown in figure 4.

Press the *Select Button*, or give a *right* command to the input device to toggle among the actuator functions. A *forward* command or a *reverse* command to the input device will activate the selected function, and adjust the seat. To exit, scroll right or left until the screen display reads EXIT, and then give a *forward* command or press the *Mode Button*. See figure 5.

NOTE: The system can be programmed so that forward and reverse commands select actuator function and right and left commands lower and raise the seating system. Please contact your authorized provider for more information on this feature.

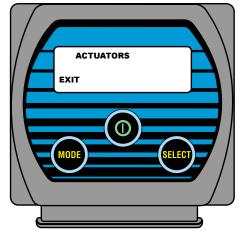


Figure 5. Actuators/Exit Display

AUXILIARY CONTROL MODULE (ACM) SELECTION

An ACM is used to interface with devices outside of the power chair's control system, including environmental controls and computers.

NOTE: Not all power chairs are equipped with this function. Contact your authorized provider for more information on ACM functioning.

The Omni Plus can support up to two ACM channels on a properly equipped power chair, and the settings for the available channels are 0, 1, and 2.

- **0**—no ACM channel is supported by the Omni Plus, and no options are available.
- 1—one channel is supported by the Omni Plus, allowing one available option.
- **2**—two channels are supported by the Omni Plus, allowing two available options.

Operation

Apply a *forward (up)* command or a *reverse (down)* command to the input device to select between Actuators, Drive and ACM. Use the *Select Button* to choose between ACM setting 1 or 2. Once a setting is selected, the display will read as in figure 6.

NOTE: ACM channel 1 or channel 2 control is dependant on Omni Plus operation configuration, which includes momentary, latched, or communications.

Momentary Configuration

ACM control in the momentary operation configuration is acheived through directional commands. A *forward* command will operate the forward output on the ACM channel. Likewise, a *reverse* command will operate the reverse output, a *left* command will operate the left output, and a *right* command will operate the right output.

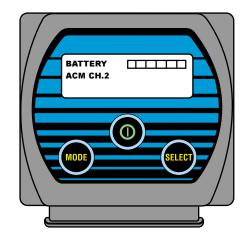


Figure 6. ACM Channel Display

NOTE: No outputs will be operational when the input device is in the neutral position.

Latched Configuration

ACM control in latched operation configuration is also acheived through directional commands. The difference from momentary configuration is that the output will remain active after the input device is released. In order to cancel the command to the output, another command must be given. A *forward* command will operate the forward output. This command can only be cancelled by a *reverse*, *left*, or *right* command to the input device.

Communications Configuration

ACM control in communications operation configuration allows for operation of two outputs at the same time. A simultaneous *forward* and *left* command will operate both the forward and left outputs. Similarly, a simultaneous *reverse* and *right* command will operate both the reverse and right outputs. As with momentary configuration, no outputs will be operational when the input device is in the neutral position.

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