



Universal Specialty Control Interface



- General R-net interface for specialty controls
- Large, hi-resolution color display
- Dual channel inputs
- User selectable display - indoors/outdoors
- Customisable user menu
- Large, easy-to-read icons
- Programmable user text
- On-board configuration/programming
- Use standalone or with other R-net Input Devices
- Can control all powerchair functions



PRODUCT AND SPECIFICATIONS

Omni Module	Backlit, full color LCD screen 2 x TRACE standard inputs
Analog inputs	Joystick 3 axis proportional
Digital inputs	4 or 5 switch 3 axis switch Single switch scanner 2 x User (Mode/stop) switch inputs On/off switch input Sip/puff pneumatic port Charger/security key socket On-board or PC programming Programmable user text Customisable user menus
Input/Output Module (IOM)	TRACE standard input TRACE standard output 7 X output relays
Specifications	
Supply Voltage:	24VDC nominal
Reverse Battery Protection:	40VDC
Charging Current:	12Arms max.
IOM Outputs:	0.5A@24VDC
Operating Temperature:	-25°C to 50°C
Storage Temperature:	-40°C to 65°C
Moisture Resistance:	IPx4
Safety:	Multiple hardware & software strategy Designed to ISO7176/14 Documentation for approvals applications

DIMENSIONS



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For further details refer to Omni
Technical Manual SK78765

SK78744/09/06

A SPIRENT Company



R-net | **Omni**



**UNIVERSAL
SPECIALTY
CONTROL
INTERFACE**

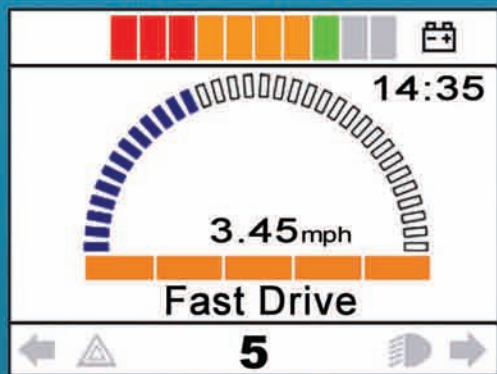
In 1998, PGDT developed a new word in Rehab powerchair electronics - the Omni. The original Omni+ set new standards in specialty control interfacing and commissioning, and sales of the product exceeded all expectations. Nearly a decade later, PGDT are proud to introduce the R-net Omni. Even today, it is only PGDT that offer a single module hosting a user display and compatible with such a range of Input Devices.



STANDARD BACKGROUND



LANGUAGE OPTIONS



HIGH VISIBILITY BACKGROUND

SMALL AND SLIM

The R-net Omni hosts a large, clear and full color LCD screen; but despite the increased display size and other added functionality, the overall package size is smaller and slimmer than the existing Pilot+ based product. Other hardware improvements, include the presence of a second input port, thereby allowing two specialty Input Devices to be connected into the same system.



TOP CLASS USER INTERFACE

Much consideration has been given to the screen layouts, to ensure they present the user information in the clearest and most user-friendly way. For example, the content and order of user menus is fully customisable, a feature which ensures the most frequently used and popular functions can be accessed in the most efficient way. It is even possible to select an alternative color scheme for the screens, allowing use of the product in the very brightest of sunshine without the need for a shade or cowl. Although most of the screen information is graphical, it is inevitable that some text will be needed. In these instances, all text is programmable meaning that language preferences, including special characters, can easily be catered for.

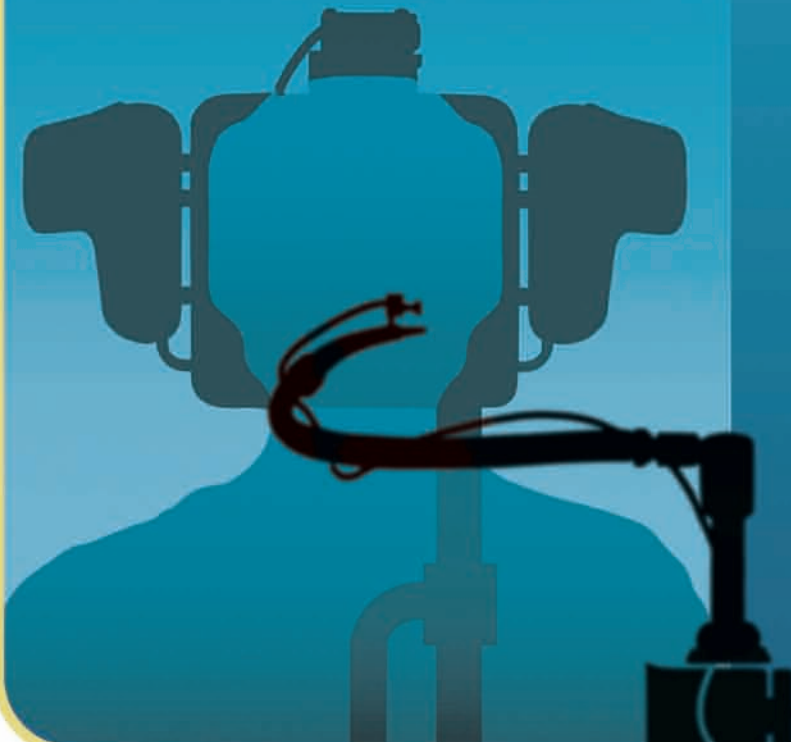
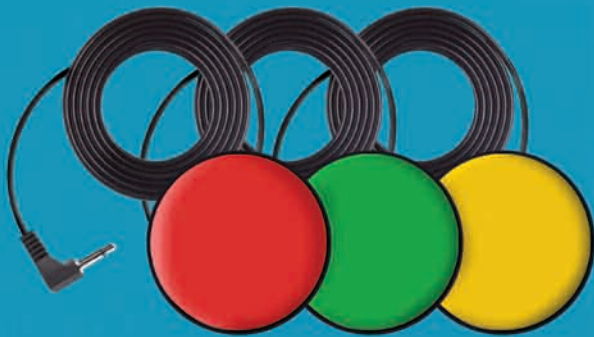
For users who cannot easily see the screen, it is possible to set sequences of audible beeps that indicate exactly where the Omni is in terms of the operating sequence. For example, a certain number of beeps can be set to indicate which particular function is being enabled.

INPUT DEVICES

The R-net Omni is compatible with a whole range of Input Devices including: joystick types, switch panels, switched and proportional head controls, sip and puff and scanners. Each of these Input Devices can be set to control all Profiles or just a dedicated number of Profiles. Furthermore, it is also possible to connect 2 Input Devices to a single Omni and then assign each device to particular Profiles. This ultimate flexibility makes the Omni ideally suited for applications that require simple and elegant transfer of control between standard and specialist Input Devices.



UNIVERSAL - YET SIMPLE



DRIVE CONTROL



SEATING CONTROL



ENVIRONMENTAL CONTROL

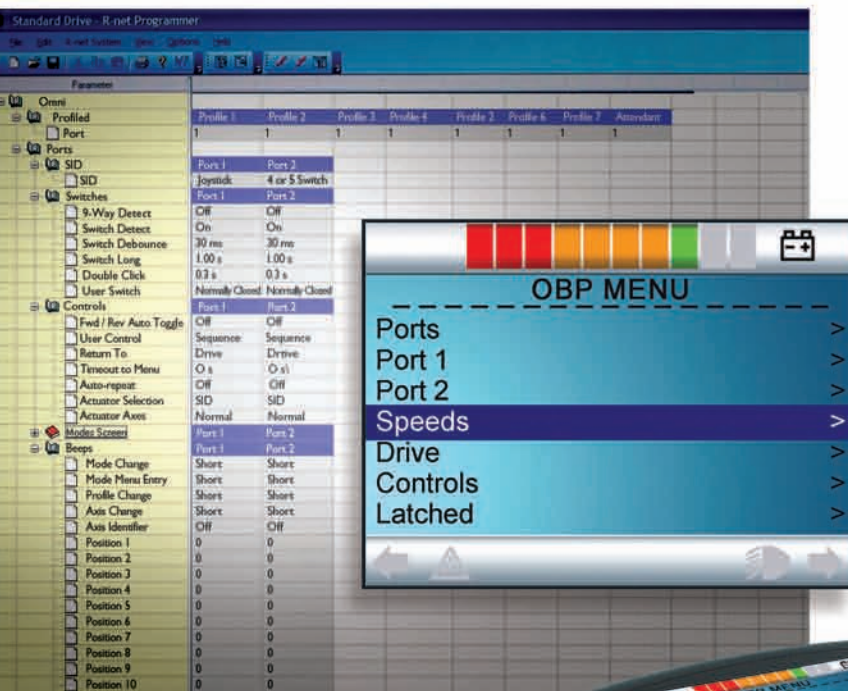
MAXIMUM CONTROL

There is no limit to the number of functions an Omni can control. As well as the more standard Drive and Seating Control modes, the Omni will also seamlessly allow control of any functions that are supported by an existing R-net installation, such as Environmental or PC Interface, that require simple and elegant transfer of control between standard and specialist Input Devices.

PROGRAMMING AND SET-UP

The Omni can be programmed and set-up in two ways. Firstly, via its own push-buttons and screen - On-board Programming - or, secondly, with the R-net PC Programmer. The On-board Programming method is more convenient and can be made secure by forcing the use of a hardware key to access it; while the PC Programmer method may be easier if very complex or in-depth set-up is required.

A training facility that allows each direction of drive to be disabled is also included in the Omni. This is particularly useful when teaching very specialist users who may be unfamiliar with powerchair control.



INPUT/OUTPUT MODULE (IOM)

The R-net IOM is a universal module that can be used as either an Input Device interface or an Output Device in any R-net system.

The input connector is wired to the industry standard TRACE protocol and can be programmed to accept switched or proportional signals, making the IOM an ideal interface for switched head controls or mini-joysticks used in conjunction with the LCD screen on a conventional Joystick Module. A jack socket is also included for connection to an On/off switch, such as a TASH Buddy Button.

The output connector is also wired to the TRACE protocol and provides all the functionality of the existing PGDT ACM, or the ECUs supplied by other manufacturers. The output can be programmed for four direction control and diagonal control. There are also output pins corresponding to other buttons/controls on the Joystick Module, meaning functions such as full PC mouse control can be emulated. All output pins are isolated relay types and close to a common pin.

Multiple IOMs can be connected into any R-net system.



SYSTEM CONFIGURATION

The combinations of system modules are almost limitless. The Omni can work as a standalone, i.e. removing the need for a standard Joystick Module. Alternatively, the Omni can be connected into a system that already contains a standard Joystick Module. For systems that require an Output Device to control additional equipment, the Input/Output Module can be controlled from either the Omni or a Joystick Module.