

WristPC

**WristPC
Wearable
Keyboard**
(Version 2.0L and above)

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L3 Systems, Inc.
Redmond, WA

Warranty *L3 Systems guarantees this product to be free of defects in material and workmanship for 180 days from date of shipment to the end user. L3 Systems will repair or replace (at our option) products within the warranty period at no charge for parts and labor. Shipping costs (plus customs and duty, if any) to and from L3 Systems must be paid by the user. Damage or defect caused by accident, misuse or neglect is not covered. Damage or defect caused by shipping is excluded. L3 Systems shall not be liable for any consequential damage or losses from the use of, or inability to use its products. Any unauthorized repair or modification of the product voids the warranty. L3 Systems makes no other warranty, express or implied, nor have we authorized anyone to make representations to the contrary.*

FCC Class B Approval Information

NOTE: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which determined by turning the equipment off and on, the user is encouraged to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antennae
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

Consult the dealer or an experienced radio/TV technician for help.

Introduction

The WristPC Keyboard was developed for embedded and wearable computer applications. The WristPC is a rugged QWERTY keyboard with either PS/2 or USB interfaces. Completely sealed, it can operate



in the rain and other harsh environments.

PS/2 or USB Interfaces

The PS/2 interface operates with a standard x86 computer motherboard. The USB interface requires an HID USB driver for the computer. This keyboard has been tested with Microsoft ® Windows 98/ME/2000/XP ® operating systems, Linux 2.4 and Apple OS 8.6 and above.

Notes of Caution:



Before connecting or disconnecting the WristPC, make sure power is turned off to your computer.



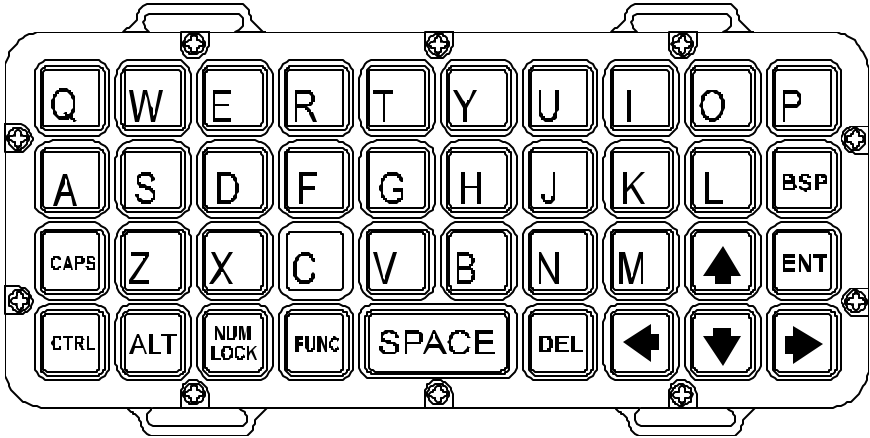
Do not discharge static electricity to case. Touch a grounded object before contacting case.



Do not use sharp objects on keyboard keys, as this can damage the keyboard.

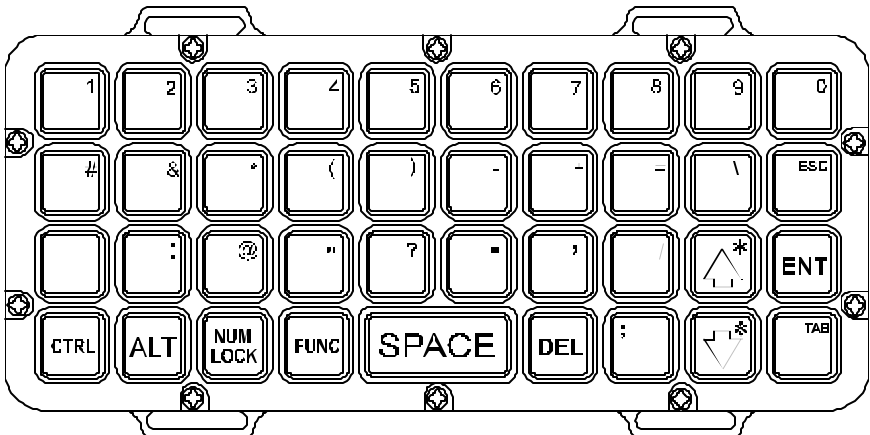
Standard Key Definitions

The following diagram shows the standard keyboard key definitions when no NUM-LOCK or FUNC operation is active.



Num-Lock Key Definitions

The following diagram shows the WristPC keyboard key definitions when NUM-LOCK is active. The NUM-LOCK key toggles the keyboard in and out of NUM-LOCK mode. When in NUM-LOCK mode, the red NUM-LOCK will be lit



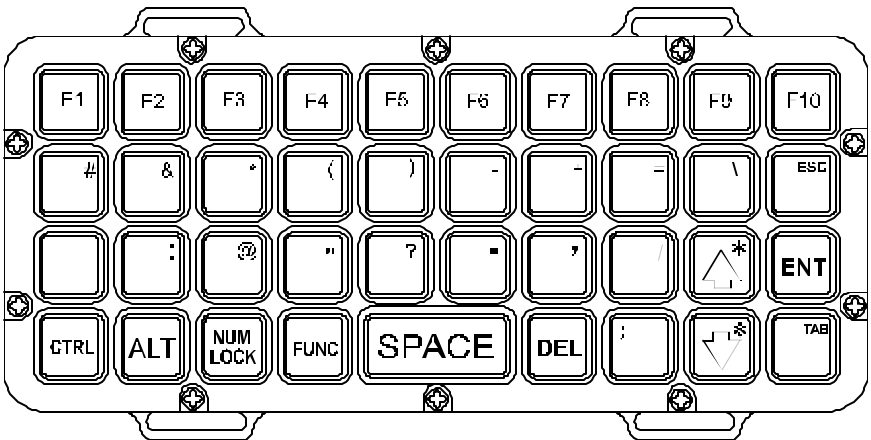
and the following key definitions will be in effect:

Keyboard Backlighting with NUM-LOCK ON

If your keyboard is a model with back-lighted keys, then with the NUM-LOCK on, “Up Arrow” increases the illumination and “Down Arrow” keys lowers the illumination. The back-lighting is initially off when power is applied, and there are 9 levels of adjustable intensity.

FUNC Key Definitions

The following diagram shows the WristPC keyboard key definitions when FUNC is active. The FUNC key puts the keyboard in FUNC mode for the next key operation. When in FUNC mode, the red NUM-LOCK will be lit until the next key operation and the following key definitions will be in effect:

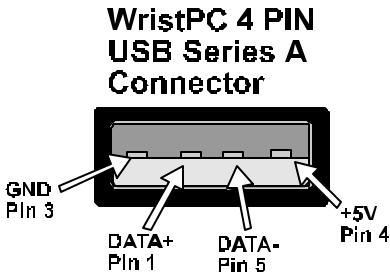


Keyboard Back-Lighting using the FUNC Key

If your keyboard is a model with back-lighted keys, then FUNC + “Up Arrow” increases the illumination and FUNC + “Down Arrow” keys lowers the illumination. The back-lighting is initially off when power is applied, and there are 9 levels of adjustable intensity.

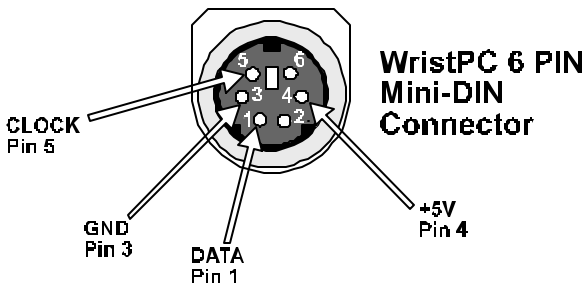
WristPC USB Connector

The following connector shows the pin definitions for the 4 pin USB Series A connector. The WristPC keyboard get its 5-volt power from the PC. If a keyboard is attached, the 5-volt power is passed through to the keyboard.



WristPC Mini-DIN Connector

The following connector shows the pin definitions for the 6 pin Mini-DIN connector. The WristPC keyboard get its 5-volt power from the PC. If a keyboard is attached, the 5-volt power is passed through to the keyboard.



Specifications

WristPC Model Type	Aluminum Housing		Plastic Housing	
	Model	Part #	Model	Part #
PS/2 w/o Backlight	FA4	SA0010	FA7	SA0010
PS/2 w/ Backlight	FA4B	SA0011	FA7B	SA0011
USB w/o Backlight	FA6	SA0012	FA8	SA0012
USB w/ Backlight	FA6B	SA0013	FA8B	SA0013
Wrist Strap	GL0001			

Dimensions	5.85" W x 2.62"H x .52"D
Temperature	-20° to 50°C
Connector – PS/2	6 Pin Mini-DIN, Male
-- USB	4 Pin USB Series A
Weight (Aluminum)	9 oz w/ cable, 7.25 oz w/o cable
Weight (ABS Plastic)	5.75 oz w/ cable, 4 oz w/o cable

Power	Min	Max	Typ
Voltage (5volts DC)	4.75	5.25	
Current (no back light)	5 ma	15 ma	7 ma
Add. Current (Caps LED)	15 ma	25ma	17 ma
Add. Current (Num LED)	15 ma	25ma	17 ma
Back light (low)	40 ma	60 ma	50 ma
Back light (mid)	100 ma	180 ma	140 ma
Back light (high)	350 ma	500 ma	420 ma

WristPC – Wearable Keyboard

The WristPC is a rugged QWERTY keyboard with a standard PC keyboard interface designed for wearable computer applications.



FEATURES

- Full QWERTY and numeric operation
- Optional back lighting
- Adjustable back lighting
- Optional Caps Lock and Num Lock indicators
- Attractive and rugged black anodized aluminum or ABS Plastic housing
- Custom key layouts and housing options available
- Optional wrist Strap available