CNC4PC

Integration Solutions for CNC Projects

USER'S MANUAL

Remote Pendant
MPG14
Rev. 1

November, 2011

USER'S MANUAL

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- **Rotary Manual Pulse Generator (MPG).**
- **Spindle Over.**
- **5 Positions Rotary switch for axis selection.**
- **16 Position for Spindle Override.**
- **21 Position for Feed Override.**
- **Multifunction Keyboard.**
- **4 X 20 LCD for process information displaying**
- **USB connection.**

2.0 SPECIFICATIONS

Main Voltage Input (VDC)	5 Vdc @ 1.5 Amps
Dimensions (in) / (mm)	282 X 190 X 35
Weight (lbs) / (kg)	

3.0 SYSTEM REQUIREMENTS

Processor	1Ghz CPU
Memory	512
USB	1.1 or 2.0
Operating System	Windows 2000, Windows XP, Windows Vista, or Windows 7
Software	Mach3 Version R3.042.040

4.0 WARNING

Read and follow instructions on the manual.

5.0 REMOTE PENDANT DESCRIPTION

5.1 FRONT VIEW

6.0 QUICK START (STEP BY STEP)

This product was tested with the following software and firmware versions:

Pokeys Software v 3.0.7
Pokeys Firmware v 2.1.19
MachCNC Plugin v 10.6.4
Mach3 v 3.042.040

6.1 Step 1. Software Installation:

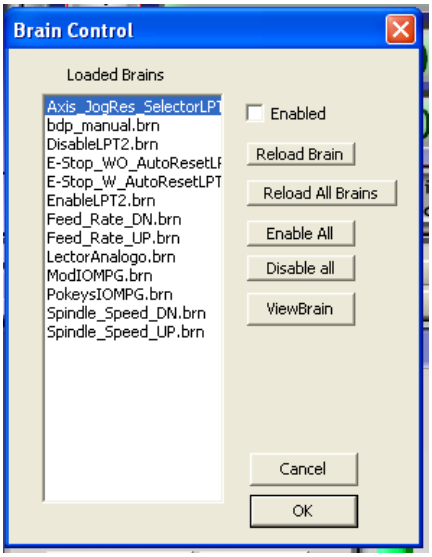
Before connecting the pendand to the computer install the basic software and configuration files:

1. Download and install Mach3: ftp://machsupport.com/Mach/Mach3Version3.042.040.exe.
2. Install the Mach3 License.
3. Download and copy XML, USB Driver and Pokeys software, MachCNC Plugin and configuration files: http://cnc4pc.com/Files/MPG14.zip. Make sure to copy each file in the specific directory. Enclosed find a sample XML file. Please test it with

this file before attempting to reconfigure the working configuration file. Keep it as a reference.

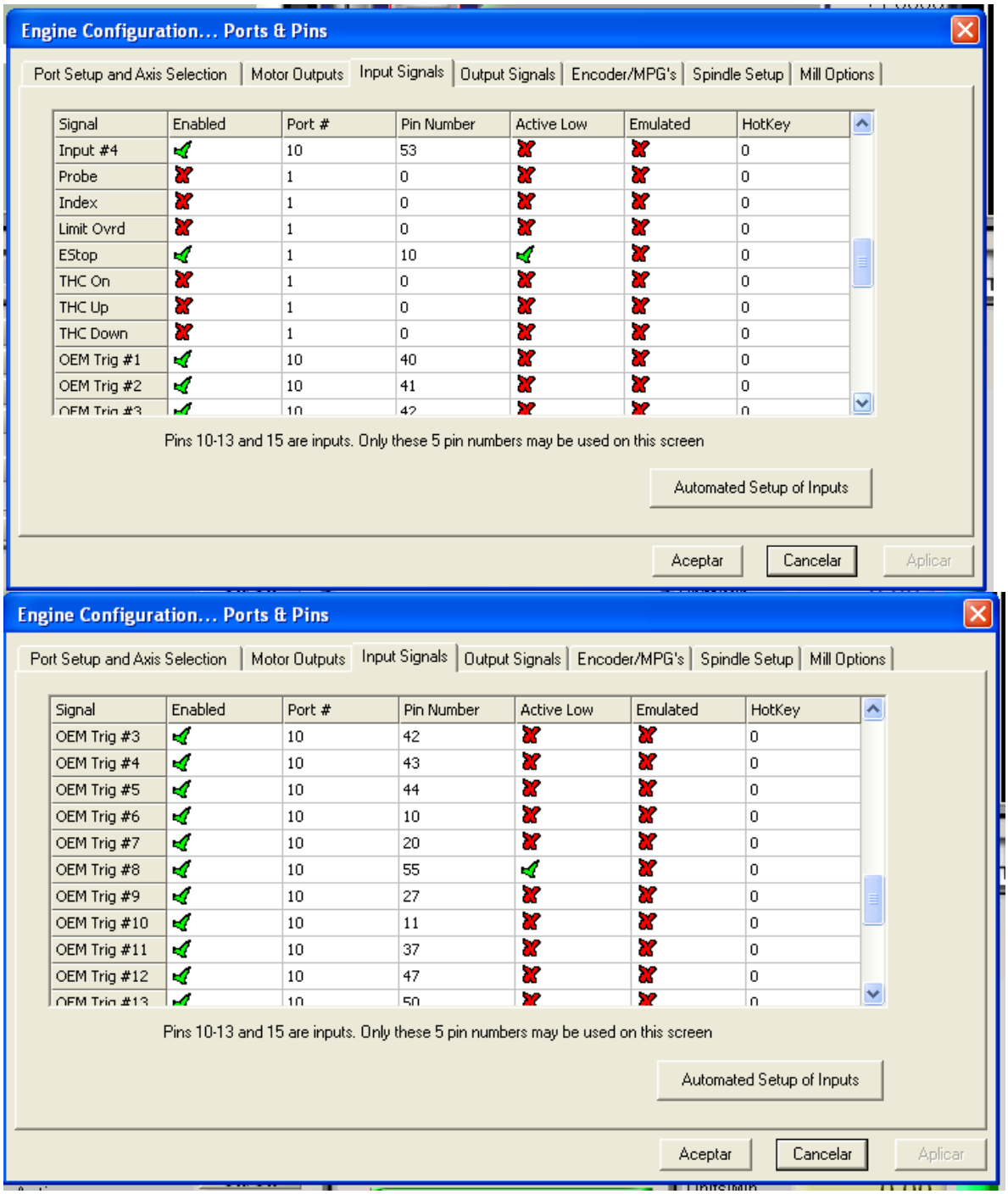
6.2 Step 2. copy and enable brain.

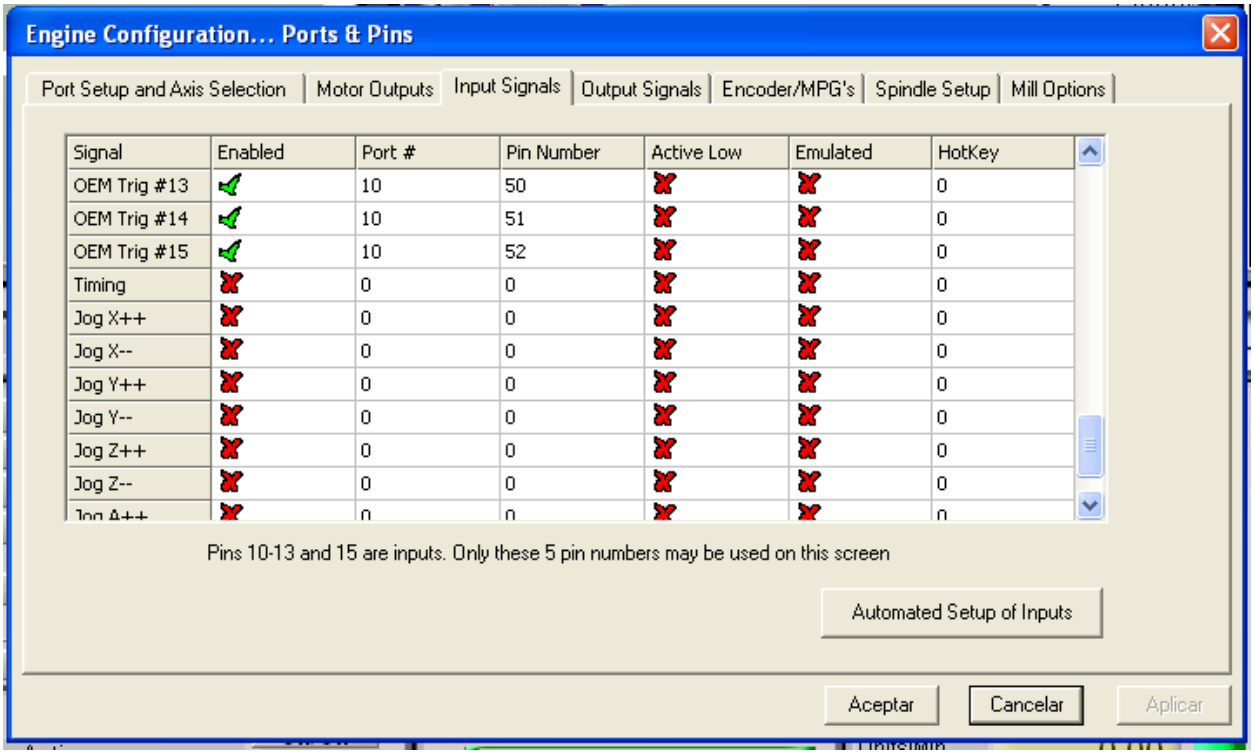
- Unzip the MPG14 file
- Copy the files located in the folder brains to the folder C:/MACH3 /Brain
- In mach3, Go to the brain control window and enable the new brains.



6.3 Step 3. Input signal settings

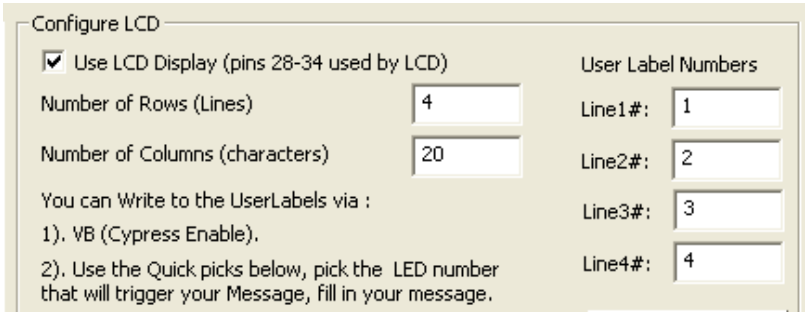
The default input signal settings for the MPG are:



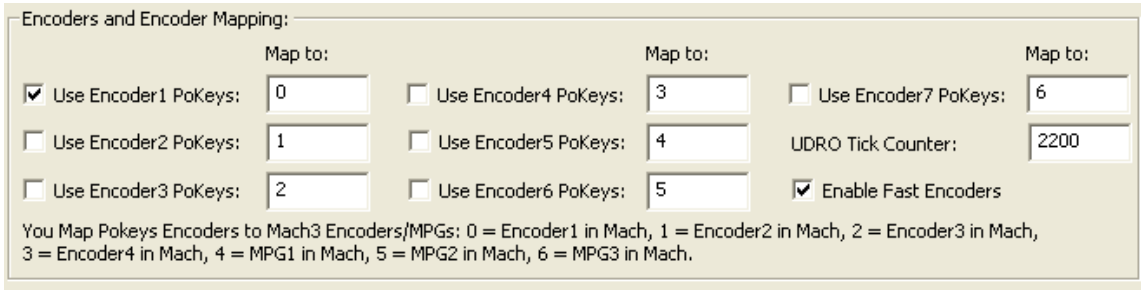


6.4 Step 4. Pokeys Plugin Configuration.

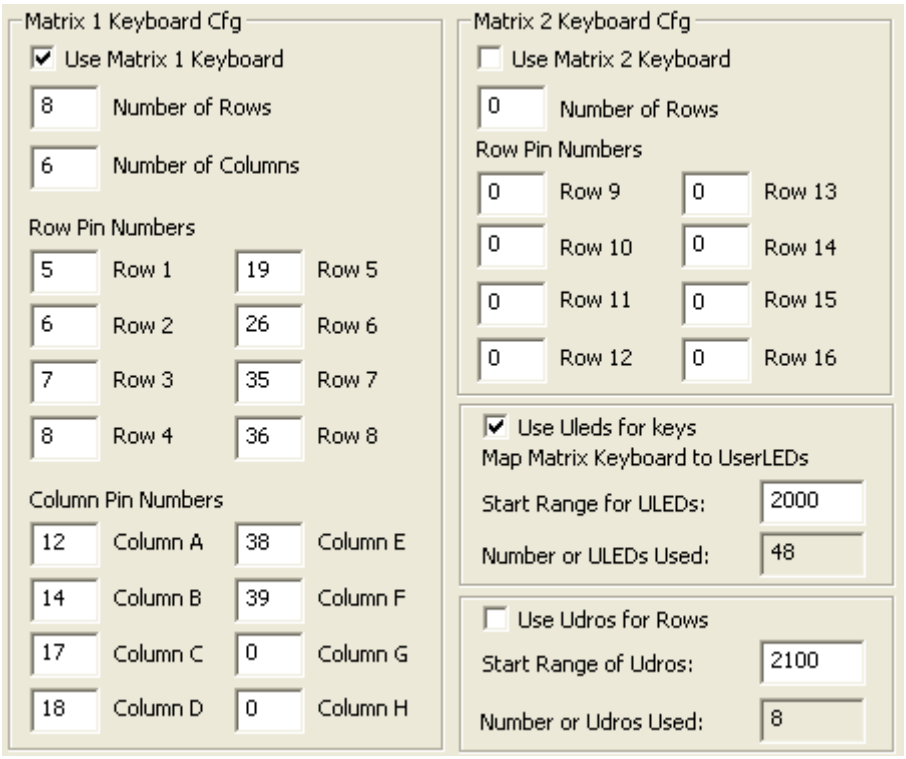
- Configure LCD



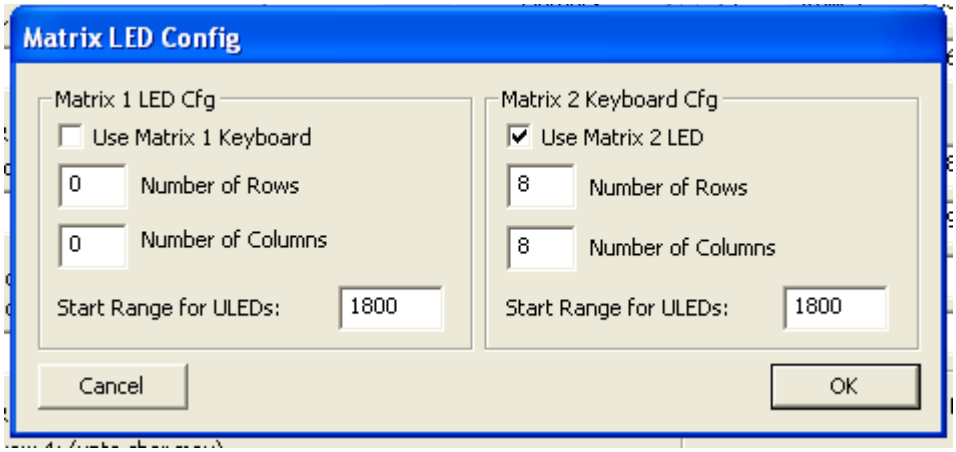
- Encoders and Encoder Mapping



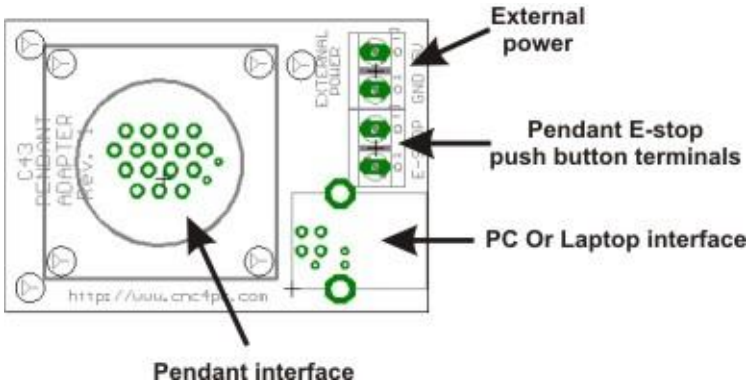
- Matrix Keyboard Cfg



- Matrix LED Config



6.5 Step 5. Conecting the pendant .



7.0 MACH3 USERLEDS AND PENDANT KEYBOARD FUNCTIONS

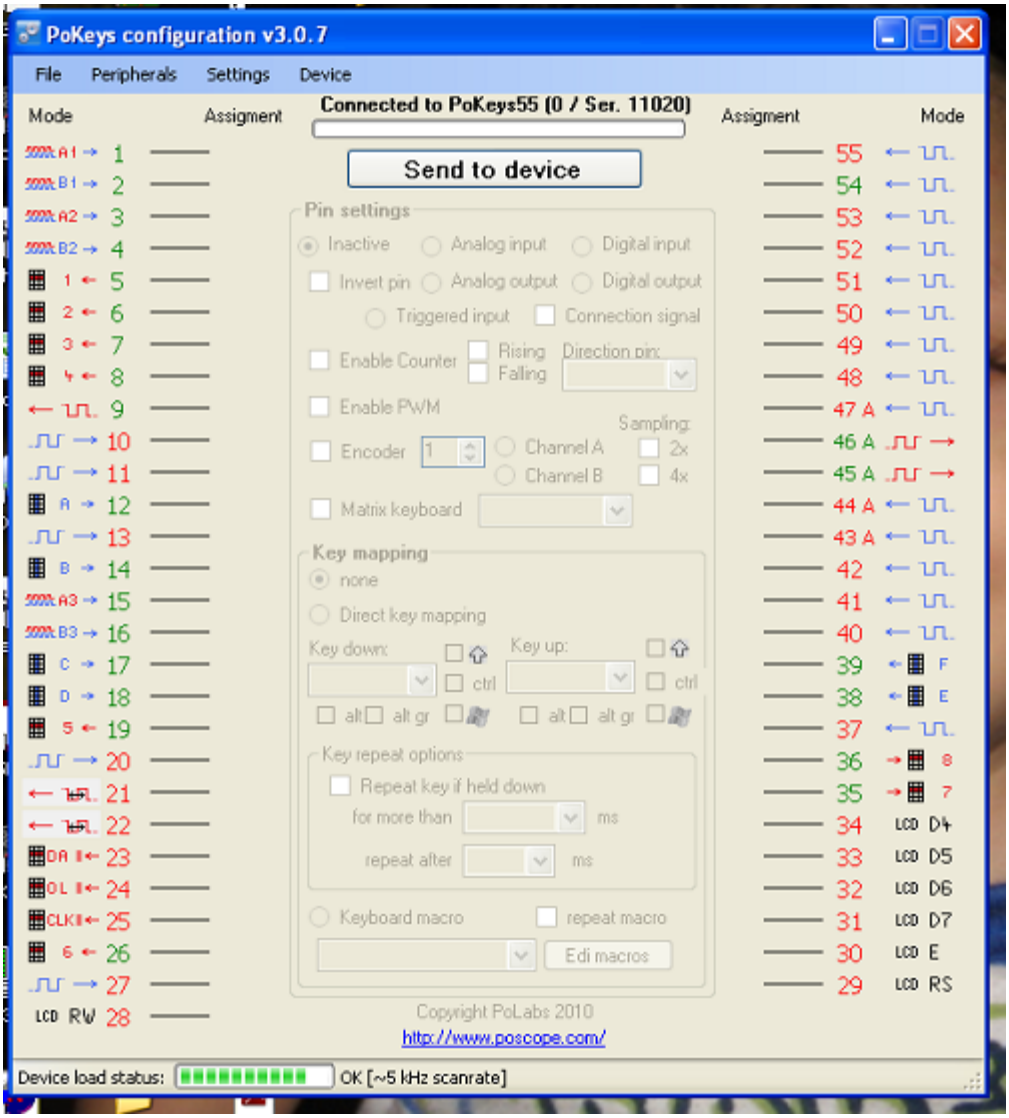
Mach3 UserLeds Output	Pendant Keyboard Functions
2000	Memory
2001	Dry Run
2002	Rapid 50%
2003	Spindle Forward
2004	X-
2005	F3
2006	MDI
2007	Optional Stop
2008	Rapid 100%
2009	Spindle Stop
2010	Y-
2011	F4
2012	Handle
2013	Block Skip
2014	Handle X1
2015	Spindle Reverse
2016	Z-
2017	More
2018	Jog
2019	MST Lock

Mach3 UserLeds Output	Pendant Keyboard Functions
2020	Handle X10
2021	X+
2022	4-
2023	Z+
2024	Rapid
2025	Machine Lock
2026	Handle X100
2027	Y+
2028	5-
2030	Zero Return
2031	Coolant ON/OFF
2032	Cycle Start
2034	ESC
2036	TLM
2037	Rapid F0
2038	Feed Hold
2039	4+
2040	F1
2042	Single Block
2043	Rapid 25%
2044	RESET
2045	5+
2046	F2

8.0 MACH3 USERLEDS AND PENDANT LEDS FUNCTIONS

Mach3 UserLeds Output	Pendant led Functions
1803	X-
1804	Spindle Forward
1805	Rapid 50%
1806	Dry Run
1807	Memory
1811	Y-
1812	Spindle Stop
1813	Rapid 100%
1814	Optional Stop
1815	MDI
1819	Z-
1820	Spindle Reverse
1821	Handle X1
1822	Block Skip
1823	Handle
1827	4-
1828	X+
1829	Handle X10
1830	MST Lock
1831	Jog
1835	5-
1836	Y+
1837	Handle X100
1838	Machine Lock
1839	Rapid
1843	CNC Alarm
1844	Z+
1845	Cycle Star
1846	Coolant ON/OFF
1847	Zero Return
1852	4+
1853	Feed Hold
1854	Rapid F0
1855	TLM
1860	5+
1861	RESET
1862	Rapid 25%
1863	Single Block

9.0 POKEYS SOFTWARE CONFIGURATIONS



10.0 DISCLAIMER:

Use caution. CNC machines could be dangerous machines. DUNCAN USA, LLC or Arturo Duncan are not liable for any accidents resulting from the improper use of these devices. This product is not fail-safe device, and it should not be used in life support systems or in other devices where its failure or possible erratic operation could cause property damage, bodily injury or loss of life.