## CENTROID Wireless MPG Control Pendant Model: WMPG-6 for Centroid CNC equipped Mills, Lathes & Routers



Take the control to where the work is! A game changing tool, the Centroid Wireless MPG Control Pendant allows the operator to conveniently and precisely set up jobs and tools remotely.

No software drivers to install. Plug and Play with Centroid CNC12 CNC software, just plug in the included USB transmitter/receiver and start using it! Perfect for all types of Mills, Lathes, Routers and other special-ty CNC machines.

- On-the-fly Feed Rate override
- On-the-fly Spindle Speed override
- 6 axis DRO display
- 6 axis MPG and continuous jogging control
- Robust wireless communication
- No software drivers to install
- Free Tech Support via CNC Forum
- Hanger bracket mount w/ magnets

- Smooth motion
- Long range wireless
- Robust CENTROID developed drivers
- Takes 2 AA batteries, run time approx. 1 month
- USB Plug and Play Transmitter / Receiver
- Rubber case protector
- Tactile Feedback domed buttons w/ gold contacts
- High quality 3M Overlay







Take the control to where the work is! A game changing tool, the Centroid Wireless MPG Control Pendant allows the operator to conveniently and precisely set up jobs and tools remotely. No software drivers to install. Plug and Play with Centroid CNC12 CNC software, just plug in the included USB transmitter/receiver and start using it!

- On-the-fly Feed Rate override
- On-the-fly Target Voltage override
- Restart Mode
- Jog Forward & Backward along cut path
- 4 axis DRO display
- 4 axis MPG and continuous jogging control
- Robust wireless communication
- No software drivers to install
- Free Tech Support via CNC Forum
- © CENTROID<sup>™</sup> © Copyright 2018-2023 CENTROID

- Smooth motion, Long range wireless
- Robust CENTROID developed drivers
- Takes 2 AA batteries, run time approx. 1 month
- USB Plug and Play Transmitter / Receiver
- Rubber case protector
- Tactile Feedback domed buttons w/ gold contacts
- High quality 3M Overlay
- Hanger bracket mount w/ magnets
- Requires a Plasma Pro License

## CENTROID Wireless MPG Control Pendant kit Model: WMPG-6 for Centroid CNC equipped Mills, Lathes & Routers



#### CENTROID WMPG-6 kit part # 9690 shown

#### WMPG-6 Kit for use with Centroid CNC systems

- WMPG-6 Wireless MPG Control Pendant
- USB Wireless Transmitter / Receiver
- Mounting Bracket



# Compatible with CNC12 software in conjunction with Centroid Hardware:



### Acorn Requirements:

- Acorn CNC12 v4.64+ w/ Mill Pro, Lathe Pro, Digitizing Bundle, \*Plasma Pro, or \*Plasma Ultimate License

- A CNCPC that meets Acorn CNCPC requirements (see Acorn Install manual or the Acorn "start here" page for more info).

#### Acorn and AcornSix wireless MPG Installation Instructions

- 1. Remove MPG finger knob from battery compartment and install onto MPG wheel.
- 2. Install 2 good quality AA batteries. Warning! Cheap NiMH/NiCd rechargeable batteries are not recommended as they are rated at 1.2 volts. Good quality 1.5 volt rated AA batteries are required.
- 3. Plug USB transmitter in USB port on the CNCPC. Reboot CNCPC at this point.
- 4. Start CNC12, verify Pro or Ultimate License is installed, open Centroid Wizard Tab #4 "Control Peripherals" and select "WMPG-6" or "WMPG-4 Plasma", Press Write Settings to CNC control Configuration. Follow instructions on the screen.
- 5. Turn on MPG by depressing and releasing the large chrome ON/OFF button on the MPG.
- 6. Start CNC12, home the machine.
- 7. Select which axis to move, X, Y, Z or 4th with the axis selection knob.
- 8. Select the increment desired x1, x10 or x100.
- 9. Rotate the MPG wheel Clockwise for positive direction axis motion.

#### Notes:

- **MPG wheel finger knob is located in the battery compartment** remove and install onto MPG wheel.

- Only use AA batteries rated at 1.5 volts. There are rechargeable AA batteries on the market now with higher and lower voltage ratings, do not use these types of batteries.

- Keep the USB Transmitter / Receiver at least 3 feet AWAY from the MPG itself. WMPG Operational range is 3' - 100'

- LCD Screen has a protective plastic film on it, use clean fingernail to lift up at corner and remove.

- "No RF" message means MGP is not seeing the transmitter/receiver, most common cause is the Windows PC did not mount the USB transmitter. Solutions: Move to different USB port and reboot PC.

- Value for the x1 Jog Increment for the MPG wheel is set in the Wizard Axis configuration menu, Default value for Plasma and Router is .001" or .0254 mm. For Mill and Lathe Default value is .0001"

- \* Plasma WMPG-4 requires CNC12 version v4.80 or higher. with P450 = 1 = ON x100 = x10,

- Z axis speed limiter: Inhibit fast Z axis MPG moves, controls in the Wizard in the WMPG menu (v5.0+)

#### Oak, Allin1DC and MPU11 system Requirements:

CNC12 v4.20+ with Pro or Ultimate License

#### Oak, Hickory, MPU11 and Allin1DC wireless MPG Installation Instructions

- 1. Remove MPG finger knob from battery compartment and install onto MPG wheel.
- 2. Install 2 good quality AA batteries.
- 3. Plug USB transmitter in USB port on the CNCPC, reboot PC.
- 4. Start CNC12, and open CNC12 Utility Menu, press "Options" and "Import License" and install Pro or Ultimate license
- 5. F1 Setup, F3 Config, F3 Parameters (pass is 137). Then set MPG CNC12 parameter #218 = 15 for 4 axis Mills/Routers, #218=7 for 3 axis Mills/Routers and #218 = 3 for Lathes.
- Set MPG CNC12 parameter #348 = 15 (MPG ON) and #349 & #350 = 100 (100 steps per rev), Set # 411 = 1 (WMPG-4) F10 Save. Exit out of Parameters.
- 7. Shut Down and restart CNC12 for new parameters to take effect.
- 8. Turn on MPG by depressing and releasing the large chrome ON/OFF button on the MPG.
- 9. Select which axis to move, X, Y, Z or 4th with the axis selection knob.
- 10. Select the increment desired x1, x10 or x100.
- 11. Rotate the MPG wheel Clockwise for positive direction axis motion.

#### Notes:

- **MPG wheel finger knob is located in the battery compartment** remove and install onto MPG wheel.

- Only use AA batteries rated at 1.5 volts. There rechargeable AA batteries on the market now with higher and lower voltage ratings, do not use these types of batteries.

- LCD Screen has a protective plastic film on it, use clean fingernail to lift up at corner and remove.

- "No RF" message means MGP is not seeing the transmitter/receiver, most common cause is the Windows PC did not mount the USB transmitter. Solutions: Move to different USB port and reboot PC.

- Z axis speed limiter: Inhibit fast Z axis MPG moves with P450 = 1 =ON x100 = x10, P450 = 0 =OFF x100 = x100 (v5.0+)

Programming the user programmable Macro 1,2,3 and 4 buttons.



The WMPG Macro buttons are preassigned to the following user editable macros located in the c:cncm or c:cnct folder.

> This PC > Windows (C:) > cncm > system >			
A C C T Sort ` ■ View `			
Name	Date modified	Туре	Size
MPGmacro1.mac	8/23/2023 4:46 PM	MAC File	1 KB
📓 MPGmacro2.mac	8/23/2023 4:46 PM	MAC File	1 KB
📓 MPGmacro3.mac	8/23/2023 4:46 PM	MAC File	1 KB
📓 MPGmacro4.mac	8/23/2023 4:46 PM	MAC File	1 KB
l≝ park.mac	8/23/2023 4:46 PM	MAC File	3 KB

Simply edit any of these files to change the behavior of the WMPG macro buttons.

Macro 1 button = MPGmacro1.mac Macro 2 button = MPGmacro2.mac Macro 3 button = MPGmacro3.mac Macro 4 button = MPGmacro4.mac

Acorn and AcornSix users can open these files directly from the Centroid setup Wizard as well.

1.) Enter the "Wireless MPG" setup menu and press the Edit MPG macro 1,2,3, or 4

A restart of CNC12 is requi	red for changes to take effect.	
Centroid Wireless MPG	None 🗸	* Requires a Pro, Ultimate, or Ultimate Plus License
MPG Performance	Quick Response 🗸	
		_
Inhibit MPG Z axis fast movement. Z axis x100 = x10	Off	
Inhibit MPG Z axis fast movement. Z axis x100 = x10 Macro Button Configuration	Off	
Inhibit MPG Z axis fast movement. Z axis x100 = x10 Macro Button Configuration MPG Macro Button 1	Off Edit MPG macro 1	<b>-</b>
Inhibit MPG Z axis fast movement. Z axis x100 = x10 Macro Button Configuration MPG Macro Button 1 MPG Macro Button 2	Off Edit MPG macro 1 Edit MPG macro 2	
Inhibit MPG Z axis fast movement. Z axis x100 = x10 Macro Button Configuration MPG Macro Button 1 MPG Macro Button 2 MPG Macro Button 3	Off Edit MPG macro 1 Edit MPG macro 2 Edit MPG macro 3	

Learn more about Centroid CNC macro programming:

https://www.centroidcnc.com/centroid\_diy/downloads/acorn\_documentation/centroid\_cnc\_macro\_programming.pdf