Wireless Pendants

Wireless pendants are currently sold in three configurations in the myCNC Shop.

Setting up the wireless pendant

Upon opening Settings > Config > Panel/Pendant > Wireless Pendant/XHC, the user is presented with the following screen:

Info Support Camera Config																			CFG
CNC Settings	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15			-
Connections	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Network			-	-															
Motion	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46				
▶ PLC	48	49	50 🔵	51 🔘	52	53 🔵	54	55	56	57 🍚	58	59	60	61	62	63			
G-codes settings					DSP sty	le nend	ant							D	sabled		*		
DXF import settings						•									Jubicu				
Macro List	LibUSB	devices	list	lib	USB De	ebug Inf	ormati	on											
Macro Wizard												load	defaul	t for \	VHB02	ר			
Probing Wizard												land	المراجع	for D	HB02E	- -			
Preferences	libUSB	device	count: 8	-								load d	ieraun	TOF P	HBUZE				
Screen	10CE:E	891										load d	lefault	for P	HB035	•			
Work Offsets	1A81:1			-11								load d	lefault	for W	/HB04	6			
Parking Coordinates Technology		0E8F:00A8																	
 Plasma Cutting 	8087:8	001		Ľ								load o	lefault	for P	HB04E	5			
Gas/Oxyfuel												load d	efault	for W	HB04	5			
Cutcharts	a 🔺	Laber					_									-			
тнс	1 🔶		leset cui		ointer		<u> </u>									<u>~</u>			
Mill/Lathe	2 ф		top runi	ning			*									×			
Multi Head	з 🔶	Job: S	tart run	ning			-									×			
Laser control	4 🌲	Feed	Overrid	e: inc			-									×			
Tangential Knife	5 4		Overrid				-												
Special Purpose							<u> </u>												
Camera	6 ф		lle Speed	l: inc			<u> </u>									×			
5 axes RTCP	7 🔶	Spind	lle Speed	l: dec			-									×			
 Panel/Pendant 	8 🌲	File: (Open fro	m Per	ndant		-									×			
Wireless Pendant/XHC	9		ant: Wor			Porot	-							_					
Operator Panel		_			runate	reset	_												
Gamepad	10 🔶		tun G-co	de			▼ M3	302								×			
Hotkeys	11 🔶	Toggl	e Spindl	e On/	Off		-									×			
Hardkeys	12 🔶	lob: F	lun G-co	de			- G9	0G0Z[#	70201							×			
Hardware								-1-	- 1										_
Advanced	5		- 4	-															-

• The indicators at the top of the page serve to visually point out the pendant button which is being pressed. There indicators will light up green when the corresponding button is pressed:

Info Support Camera Config	
CNC Settings	00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
Connections	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Network Motion	32 33 34 35 36 37 38 39 40 41 42 43 44 45 45 47
▶ PLC	48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
G-codes settings	
DXF import settings	DSP style pendant Disabled _
Macro List	LIbUSB devices list libUSB Debug Information
Macro Wizard	load default for WHB02
Probing Wizard	
Preferences	libUSB device count: 8 –
Screen Work Offsets	10CE:EB91 load default for PHB03S
Parking Coordinates	1A81:1006 load default for WHB04L
 Technology 	0E8F:00A8 8087:8001
Plasma Cutting	
Gas/Oxyfuel	load default for WHB04S
Cutcharts	1 🔶 Job: Reset current pointer 🗸
тнс	2 🔶 Job: Stop running 🚽 🔀
▶ Mill/Lathe	3 ↓ Job: Start running ▼
Multi Head	
Laser control Tangential Knife	4 🔶 Feed Override: inc 🗾 🗶
 Special Purpose 	5 🔶 Feed Override: dec 🗾
Camera	6 🜩 Spindle Speed: inc 👻
5 axes RTCP	7 🔶 Spindle Speed: dec 🗸 🗶
Panel/Pendant	8 🔶 File: Open from Pendant 🗸
Wireless Pendant/XHC	9 Pendant: Work Coordinate Reset
Operator Panel	
Gamepad	10 🔶 Job: Run G-code 🗾 M302
Hotkeys	11 🔶 Toggle Spindle On/Off
Hardkeys Hardware	12 🔶 Job: Run G-code 🔹 G90G0Z[#7020]
▶ Hardware ▶ Advanced —	
- Autoneeu -	

- DSP style pendant should be disabled if the controller is used with a screen (enabled ONLY if the controller is using a PHB-04B pendant WITHOUT any monitor). This setting, when set to PHB-04B, disables a number of on-screen buttons as well as reassigns a number of the pendant button commands to a custom build. This allows for an emulation of a DSP style controller system, which eliminates the need for the monitor and is well suited for simple production runs which require limited settings changes or system configurations. It is recommended to keep this setting disabled unless strictly necessary, as it is designed for a purely pendant-oriented interface (on a system entirely without a monitor).
- The Device List lists the available devices, while the libUSB Debug information lists the messages that the pendant sends to the computer:

Info Support Camera Config																		
CNC Settings	000	01 02	030	04 🥥	059	069	079	089	099	109	119	129	13 🥥	14	15 🕑			
Connections	16	17 18	9 199	20 🔵	21	22	23	24	25	26	27 🌑	28	29	30	31 🔘			
Network	32	33 34	35	36	37 🌑	38	39	40	41	42	43	44	45	46	47 🍚			
Motion	48	499 50	9 519	52	53	54	55	56	57	58	59	60	61	62	63			
PLC	10														05			
G-codes settings				DSP sty	le peno	lant							D	isabled		<u> </u>		
DXF import settings	LibUSB d	evices list	1	ibUSB De	ebug In	formati	on											
Macro List											load (lefaul	t for \	NHB02	n.			
 Macro Wizard Probing Wizard 															2			
 Probing wizard Preferences 	libUSB o	device cou	mt 8 -	button: button:						_	load c	lefault	tor F	PHB02E	3			
 Preferences Screen 	10CE:EB	91		button:							load c	lefault	for F	PHB035	5			
Work Offsets	1A81:10			button:							load d	efault	for V	VHB04				
Parking Coordinates	0E8F:00			button:														
 Technology 	8087:80	01	Ľ								load default for PHB04B							
Plasma Cutting											load d	efault	for V	VHB04	s			
Gas/Oxyfuel	1 📫	Job: Rese	t current	nointer		*									*			
Cutcharts				pointer		-												
тнс	2 🔶					<u> </u>	4								*			
Mill/Lathe		Job: Star	t running			<u> </u>									×			
Multi Head	4 🔶	Feed Ove	erride: inc			•									×			
Laser control	5 🔶	Feed Ove	erride: de	c		-									×			
Tangential Knife	6 🗘		peed: inc			-	1								*			
Special Purpose Camera		<u> </u>				-	_	_	_	_	_	_	_		~			
5 axes RTCP	7 🔶	<u> </u>	speed: dee			<u> </u>									*			
Panel/Pendant	8 🔶	File: Ope	n			*									×			
Wireless Pendant/XHC	9 🔶	9 🔶 Pendant: Work Coordinate Reset					r								×			
Operator Panel	10 🔶						M302								×			
Gamepad						-	1								¥			
Hotkeys						-	G90G0Z[#7020]											
Hardkeys	12 主	Job: Run	G-code			G9	0G0Z[#	7020]							×			
▶ Hardware ▶ Advanced -			+															

• It is possible to load the default button configurations from some of the popular wireless pendants available, as listed on the right side of the screen:

Info Support Camera Config		SA
CNC Settings		
Connections	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
Network	32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	
Motion	48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63	
PLC		
G-codes settings	DSP style pendant Disabled -	
DXF import settings	LibUSB devices list libUSB Debug Information	
Macro List	load default for WHB02	
Macro Wizard		
 Probing Wizard Preferences 	libUSB device count: 8 in button: 0 axis: 18 wheel: 27 in load default for PHB02B button: 12 axis: 18 wheel: 27	
Screen	10CE:EB91 Iodd default for PHB03S	
Work Offsets	1A81:1006 button: 12 axis: 18 wheel: 27 load default for WHB041	
Parking Coordinates	0E8F:00A8 hutton: 0 avis: 18 wheel: 27	
 Technology 	10ad default for PHB04B	
▶ Plasma Cutting	load default for WHB04S	
Gas/Oxyfuel	1 🔶 Job: Reset current pointer 👻	
Cutcharts		
тнс	2 🔶 Job: Stop running 🗾 🔀	
▶ Mill/Lathe	3 Job: Start running 🔀	
Multi Head	4	
Laser control	5 🔶 Feed Override: dec 🚽	
Tangential Knife	6 🛨 Spindle Speed: inc 👻	
▶ Special Purpose Camera		
5 axes RTCP	7 🚖 Spindle Speed: dec 👻	
 Panel/Pendant 	8 — → File: Open	
Wireless Pendant/XHC	9 🔶 Pendant: Work Coordinate Reset 🔽	
Operator Panel	10 🔶 Job: Run G-code 🚽 M302 🔀	
Gamepad	11	
Hotkeys		
Hardkeys	12 🚽 Job: Run G-code 🗾 G90G0Z[#7020]	
Hardware		
Advanced		

Assignable actions

If the pendant used is not listed in the defaults list, or the user wants to re-assign some of the button actions, the following options are available:

Option	Description
CNC Action	This brings up a preset action (listed in MyCNC Actions list). These are preset actions, and the majority of items further on the list can be done simply by inputting the relevant text into the CNC Action field. Whether to use CNC Actions or to simply choose one of the items below is left to the user.
CNC Variable: Switch	This switches some global variable between set values. Example of syntax: 1000/33;22;11 where 1000 is the variable, and 33, 22, and 11 are the values the variable will switch between upon each button press or input
CNC Variable: Toggle	This toggles the specified variable On and Off. Example of syntax: 1001
CNC Variable: Clear	Clears a global variable
CNC Variable: Set	Command to set the variable
CNC Variable: Assign	Writes the variable from the Global Variables list. Example of syntax: /1001
File: Open	Open a file from the host computer (brings up the dialog window)
File: Open DXF/HPGL	Open a DXF/HPGL file from the folders specified in Preferences > Common
File: Refresh	Refresh the program file
Hardware: Direct Binary Set	Directly sets a binary to be ON

Option	Description
Hardware: Direct Binary Clear	Sets a binary to be OFF. For example, upon inputting 15 into the field, the 15th binary will be flipped ON
Hardware: Direct DAC Set	Sets the DAC. For example, input 0/160. Here, 0 is the channel number (always 0 for DAC), while 160 is the value in units. NOTE: The value displayed in the diagnostics panel in myCNC software displays the DAC value in volts, not units. Conversion is necessary based on the voltage of the power source used.
Hardware: Direct PWM Set	Sets the Pulse Width Modulation. For example, 1/1600. Here, the 1 is the channel number for PWM, and 1600 is the value PWM is set to
Hide: Custom Widget by name	Hide the custom widget
Job: Play 1 line	Run through a single command line (next line)
Job: Play 1 line backwards	Run through a single command line (previous line)
Job: Back to path	Return back to the cutting path
Job: Skip forward	Move forward in the command program
Job: Skip backward	Move backward in the command program
Job: Skip forward 10	Skip 10 lines forward
Job: Skip backward 10	Skip 10 lines backward
Jog: X-	Jog in the negative x-axis direction
Jog: X+	Jog in the positive x-axis direction
Jog: Stop X	Stop the jog in the X-direction
Jog: X- Y-	Jog in the negative x, negative y direction
Jog: X- Y+	Jog in the negative x, positive y direction
Jog: X+ Y-	Jog in the positive x, negative y direction
Jog: X+ Y+	Jog in the positive x, positive y direction
Jog: All stop	Stop jog for all axes
Jog: Shift Set	Jog: Shift and Jog: Ctrl both refer to the settings window in Panel/Pendant > Hotkeys. The shift set indicates that the Shift button has been pressed, which will control the Jog Overspeed
Jog: Shift Clear	Indicates that the shift button has been released
Jog: Shift Toggle	Toggles the shift button on and off
Jog: Ctrl Set	Indicates that the control button has been pressed
Jog: Ctrl Clear	Indicates that the control button has been released
Jog: Ctrl Toggle	Toggles the control button
Jog Override: inc	Increase the jog override
Jog Override: dec	Decrease the jog override
Key press	Simulates a key press to be sent to the host computer
Key release	Simulates a key release
(Dlg)Key Press	Simulates a dialog key press, such as Shift, Enter, Delete, 0-9, etc
Move to toolpath	Move back to the toolpath
Parking position: Save	Save the current position as the parking position
Parking position: Move to	Move to the parking position
Pendant: Axis (*)	Switches through all the available axis values on repeat (continuously looping through the values as the button is pressed)
Pendant: Mul (*)	Switches through all available step size values on repeat (continuously looping through the available step size values)
Pendant: Wheel CW	Record the input as wheel moving clockwise

Option	Description								
Pendant: Wheel CCW	Record the input as wheel moving counter-clockwise								
Pendant: Mul increment	Designed for pendants which lack a dedicated step size switch. This will increase the step size.								
Pendant: Mul decrement	Designed for pendants which lack a dedicated step size switch. This will decrease the step size.								
Pendant: Axis change +	Changes the axis to the next axis available								
Pendant: Axis change -	Changes the axis to the previous axis available								
Pendant0: x0.001-1	Sets the increment for the machine movements which is controlled by the software pendant (older versions of the software have a pendant widget which can be used as a substitute for a pendant control)								
Pendant0: Axis off	This turns off the selected axis in the software pendant widget (older version of the software)								
Pendant0: Axis X-C	Sets the axis that the software widget pendant will be sending commands to								
Pendant: Work coordinate Half	Takes the pendant work coordinate (in the axis specified on the pendant) and halves it								
Pendant: Work coordinate Reset	Resets the work coordinate specified in the pendant axis								
PLC: Run procedure	Run a PLC procedure (if multiple controllers are present, this defaults to the master controller)								
PLC: Run external unit procedure	Run a PLC procedure on a slave controller. The syntax for the command will be as follows: controller number / command / variable (for example, 0x01/M74/#7009)								
Run Numpad	This brings up a numpad for a specific variable/item into which the user can then type in a value. The user can set this to bring up the numpad for any device variable/gvariables/screen items. Example of syntax: cnc- gvariable-5522 - this will bring a numpad typing into which will change the value for the Global Variable #5522 (step size)								
Show: Pendant control widget	Brings up the pendant control widget in the myCNC software								
Select axis	Select the particular axis								
Show: Widget	Shows a particular widget, such as Library Shape, Diagnostics, Config, etc								
Feed overdrive: inc	Increase the feed overdrive								
Feed overdrive: dec	Decrease the feed overdrive								
Feed overdrive: Set %	Set the feed overdrive as a percentage of the default (100%)								
Spindle Speed: inc	Increase the current spindle speed								
Spindle Speed: dec	Decrease the current spindle speed								
Spindle Speed: set	Set the current spindle speed								
Tie Toolpath Position to current work position	Used on control programs with a large number of parts, this allows to tie the toolpath position to the current work position. Effectively, this allows to cut out a small part of the control program anywhere on the sheet, by simply specifying the position of the toolpath - extremely useful for small remainders of metal sheets which can still fit one of the parts of a larger control program file.								
Toggle Machine/Work DRO (if applicable)	A setting for pendants which only show one coordinate system at a time (machine or program coordinate). This allows to switch between the two coordinate systems - used only on select controllers.								
Toggle Jog enable/disable	Turn jog on and off								

Option	Description
Toggle Jog mode unlimited/step	Switch between the unlimited and a set step jog for machine movements
Toggle Soft Limits enable/disable	Turn the soft limits (specified in Inputs/Outputs/Sensors > Limits) on and off
Toggle Flood on/off	Turns the liquid cooling (flood) ON and OFF
Toggle Spindle on/off	Toggle whether the spindle is currently ON or OFF
Toggle Spindle CCW on/off	Toggle the spindles CCW rotation ON or OFF
Toggle Constant Velocity on/off	CV (constant velocity) is described in MyCNC Constant Velocity Mode (CV) manual
Toggle Virtual Keyboard	Brings up the virtual keyboard up on the screen, or hides it if already present.
Toggle: custom widget by name	Specifies a custom widget to bring up on the screen (or close it if already displayed).
View: Zoom In	Zoom in on the control program visualization
View: Zoom Out	Zoom out on the control program visualization
View: Fit to window	Fit the entire view into the visualization window
Work coordinate: Set	Set the work coordinate (using the specified axis value from the user panel, NOT the typical pendant control)
Work coordinate: Reset	Reset the work coordinate (from user panel)
Work Coordinate: 1/2	Half the work coordinate (from user panel)

These options allow the user to edit every button on their pendant control to their particular configuration if required. For simple pendants included in the defaults list, it is usually recommended to use the default settings.

From: http://cnc42.com/ - myCNC Online Documentation

Permanent link: http://cnc42.com/mycnc/wireless_pendants?rev=1572541733

Last update: 2019/10/31 13:08

