

110v VFD Programming Guide

VFD Pre-Programming Codes:

Function	Value	Description
P5.0.19	107	<i>Reset Programming to Factory Defaults</i>
P0.0.03	1	On/Off Automatic Source
P0.0.04	3	Frequency Automatic Source
P0.0.07	0400.0	Max Motor Frequency, HZ
P0.0.08	0400.0	Upper Motor Frequency, HZ
P0.0.11	0006.0	Acceleration Time
P0.0.12	0006.0	Deceleration Time
P0.0.14	0001.5	Motor Rated Power, kw
P0.0.15	0400.0	Motor Rated Frequency, HZ
P0.0.17	012.00	Motor Rated Current, Amps
P0.0.18	24000	Motor Rated Rotating Speed, rpm
P0.1.00	8	Terminal Controlled Frequency Source
P0.1.01	2	Keypad Frequency Source
P1.0.23	2	Temp Based Fan Control
P2.0.00	1	CW – Forward (default)
P2.0.01	2	CCW – Reverse (default)
P2.0.02	21	Enable Keypad On/Off Source
P2.0.03	18	Enable Keypad Frequency Source
P2.0.13	0.1	Minimum Voltage Input
P2.0.29	01	T1 – Running State
P5.0.02	H.0801	LED Running Display
P5.0.15	6.0000	Display Coefficient
P5.0.16	0	Adjust RPM's Decimal Place

Testing *(if anything fails, stop testing, and place post-it with which test it failed at)*

➔ Plugin “PWM Tester”

1. Flip to Manual, Hook up Spindle, Hit Run, and turn dial; hit dbl arrow to display in RPMs.
2. Flip to Auto
 - a. Display should be blinking 0.0; flip PWM to 1; display should be blinking ~400
 - b. Blinking 0.0; flip FWD to 1; should be solid 0 with FWD led at top lite up.
 - c. Blinking 0.0; flip ES to 1; should be solid 0 with FWD not lit up
 - d. Blinking 0.0; flip 10v to 1; should be blinking 400.0

If 0 that's ok, put a dot on the sticker next to v4

220v VFD Programming Guide

VFD Pre-Programming Codes:

Function	Value	Description
P5.0.19	107	<i>Reset Programming to Factory Defaults</i>
P0.0.03	1	On/Off Automatic Source
P0.0.04	3	Frequency Automatic Source
P0.0.07	0400.0	Max Motor Frequency, HZ
P0.0.08	0400.0	Upper Motor Frequency, HZ
P0.0.11	0006.0	Acceleration Time
P0.0.12	0006.0	Deceleration Time
P0.0.14	0002.2	Motor Rated Power, kw
P0.0.15	0400.0	Motor Rated Frequency, HZ
P0.0.17	010.00	Motor Rated Current, Amps
P0.0.18	24000	Motor Rated Rotating Speed, rpm
P0.1.00	8	Terminal Controlled Frequency Source
P0.1.01	2	Keypad Frequency Source
P1.0.23	2	Temp Based Fan Control
P2.0.00	1	CW – Forward (default)
P2.0.01	2	CCW – Reverse (default)
P2.0.02	21	Enable Keypad On/Off Source
P2.0.03	18	Enable Keypad Frequency Source
P2.0.13	0.1	Minimum Voltage Input
P2.0.29	01	T1 – Running State
P5.0.02	H.0801	LED Running Display
P5.0.15	6.0000	Display Coefficient
P5.0.16	0	Adjust RPM's Decimal Place

Testing *(if anything fails, stop testing, and place post-it with which test it failed at)*

➔ Plugin “PWM Tester”

1. Flip to Manual, Hook up Spindle, Hit Run, and turn dial; hit dbl arrow to display in RPMs.
2. Flip to Auto
 - a. Display should be blinking 0.0; flip PWM to 1; display should be blinking ~400
 - b. Blinking 0.0; flip FWD to 1; should be solid 0 with FWD led at top lite up.
 - c. Blinking 0.0; flip ES to 1; should be solid 0 with FWD not lit up
 - d. Blinking 0.0; flip 10v to 1; should be blinking 400.0

If 0 that's ok, put a dot on the sticker next to v4

Auxiliary VFD Programming - When preparing orders, there are a few situations where the programming will need to vary slightly. The following will trigger a few programming settings to be changed:

Control Cable w/Modbus – IE: Onefinity BlackBox or BuildBotics

Function	Value	Description
P0.0.03	2	On/Off Automatic Source
P0.0.04	9	Frequency Automatic Source

Siensi Labs – LongMill - LongBoard

Function	Value	Description
P0.0.03	0	On/Off Automatic Source
P0.0.04	3	Frequency Automatic Source
P2.0.02	9	Enable Keypad On/Off Source
P2.0.15	5	Maximum Voltage Input

Siensi Labs – LongMill - SuperLongBoard

Function	Value	Description
P0.0.03	2	On/Off Automatic Source
P0.0.04	9	Frequency Automatic Source
P4.1.00	04	Modbus Baud Rate
P4.1.01	3	Modbus Data Format

Control Cable w/Generic Ferrules – IE: Any Random CNC Machine

Function	Value	Description
P0.0.03	0	On/Off Automatic Source
P2.0.02	9	Enable Keypad On/Off Source

Control Cable w/Molex Connector – IE: Shapeoko & Fox Alien

Function	Value	Description
P0.0.03	0	On/Off Automatic Source
P2.0.02	9	Enable Keypad On/Off Source
P2.0.15	5	Maximum Voltage Input

800Hz 4-pole Motor – IE: Metal Working Spindle & ATC's

Function	Value	Description
P0.0.07	0800.0	Max Motor Frequency, HZ
P0.0.08	0800.0	Upper Motor Frequency, HZ
P0.0.15	0800.0	Motor Rated Frequency, HZ
P5.0.15	3.0000	Display Coefficient

1.5kw 220v Special Order Motors

Function	Value	Description
P0.0.14	001.5	Motor Rated Power, kw
P0.0.17	006.0	Motor Rated Current, Amps

