FASTERCNC CO,. LTD.

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High quality, reliable ——SKTFTV1

SKTFTV1Mach3 hand control box with screen

Product Manual（English）

DDB8727T3V1

SKTFTV1 hand control box

1、Introduction

SKTFTV1 is a hand control box only for usbmach3 CARD. E.g. DDSM3,DDUM6V5.0and DDMDT card.This card connect with usbmach3 CARD by USART port.It's only need 4 wires,there are RXD/TXD/+5V/GND. Most operation of software mach3 is set to this box.It's convenient to control the machine by this box.

2、Specification

- High performance, low price
- Most function of mach3 is set to this box
- Supply voltage 5VDC
- XYZABC 6 axes' coordinate display on the screen.
- FRO/SRO/SJR this 3 parameter display on the creen and can be modified.
- The function of move XYZABC by hand is set to the keyboard.
- Senior function,e.g. HOME,GOTO ZERO, ZERO is set to the keyboard.
- Also base function,e.g.START,PAUSE,STOP,RESET is set to the keyboard.
- The material of this box is aluminium,and it's oxidized to deep blue.
- The panel of this box is acrylic, and it's transparent.

3、application fields

Figure 1

4、Connect with DDSM

4、Operation description

Control Panel define:

START	F.HOLD	REWIND	RESET
Z/C ↑	Y/B ↑	CON/STEP	+
X/A←	XYZ/ ABC	X/A→	-
Z/C ↓	Y/B ↓	F/S	SJR SRO FRO
HOME	GOTO Z	ZERO	SPINDLE

Figure 2 definition of keyboard

Description of keyboard

KEY	POSITION	function
START	R1C1	Same with Cycle Start<Alt-R> in software mach3 ,push this

		key then the G-code will run
F.HOLD	R1C2	Same with Feed Hold<spc>in software mach3,push this key then the runing G-code will be hold on.
REWIND	R1C3	Same with Rewind Ctrl-W in software mach3,push this key then the G-code run line will be set to line 1.
RESET	R1C4	Same with Reset in software mach3,push this key then the system will be RESET.
Z/C ↑	R2C1	When select XYZ status,push this key then the Z axis will move forward with G1 speed.when select ABC status, push this key then the C axis will move forward with G1 speed.
Y/B ↑	R2C2	When select XYZ status,push this key then the Y axis will move forward with G1 speed.when select ABC status, push this key then the B axis will move forward with G1 speed.
CON/STEP	R2C3	Change continuous mod or step mod for each axis
+	R2C4	Increase parameter FRO/SRO/SJR
X/A←	R3C1	When select XYZ status,push this key then the X axis will move forward with G1 speed.when select ABC status, push this key then the A axis will move forward with G1 speed.
XYZ/ABC	R3C2	Switch XYZ mod or ABC mod
X/A→	R3C3	When select XYZ status,push this key then the X axis will move opposite with G1 speed.when select ABC status, push this key then the A axis will move opposite with G1 speed.
-	R3C4	Decrease parameter FRO/SRO/SJR

Z/C ↓	R4C1	When select XYZ status,push this key then the Z axis will move opposite with G1 speed.when select ABC status, push this key then the C axis will move opposite with G1 speed.
Y/B ↓	R4C2	When select XYZ status,push this key then the Z axis will move opposite with G1 speed.when select ABC status, push this key then the C axis will move opposite with G1 speed.
F/S	R4C3	Switch Fast mod or Slow mod. In fast mod,SJR is set by user, in slow mod,SJR is fixed to 10%
SJR SRO FRO	R4C4	Switch Current parameter,this key is used with '+' and '-'
HOME	R5C1	This key's function is the same as home key in mach3.It will make machine to find machine zero point.
GOTO Z	R5C2	To goto zero point in current coordinate system.
ZERO	R5C3	To make current coordinate to zero
SPINDLE	R5C4	This key is the same with the key Spindle CW F5 in mach3.Turn on/off the spindle.

5、Common operation

1、Move X axis to left in continuous mod

- push the key"CONT/STEP" to make the block under C/S in the screen to yellow.
- push the key"XYZ/ABC" to make the screen in XYZ mod. see as figure 2
- push the key "X/A←".

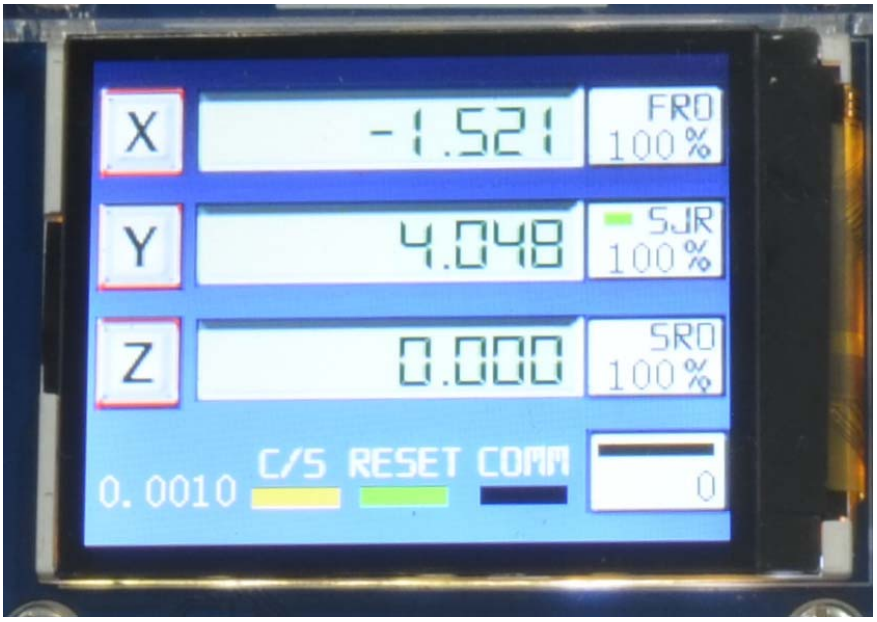

figure 2

2、Move X axis to left in step mod

- push the key"CONT/STEP" to make the block under C/S in the screen to black.
- push the key"XYZ/ABC" to make the screen in XYZ mod. see as figure 3
- push the key "X/A←".

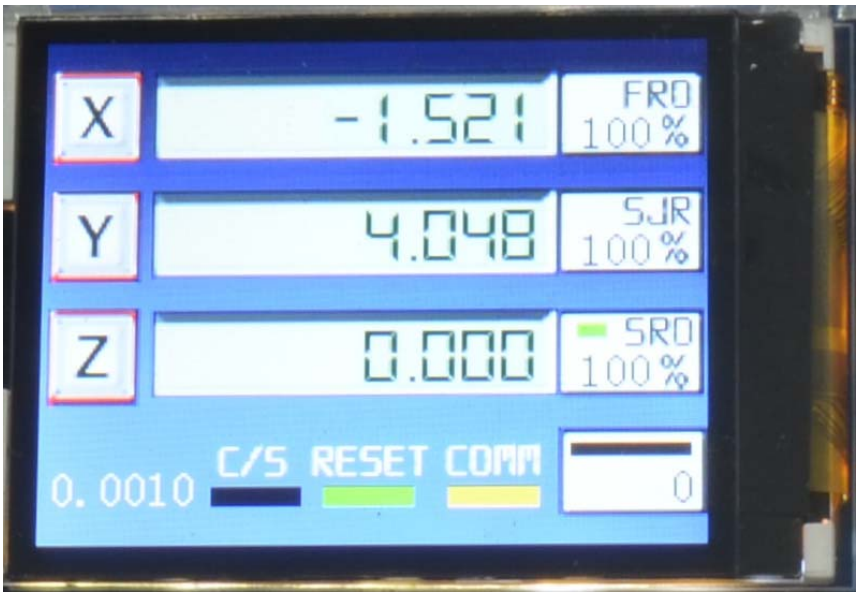

figure 3

3、Zero X axis current coordinate

- push the key "RESET" to make the block under RESET in the screen to green.
- push the key "ZERO",then the block under COMM in the screen will change to yellow.
- push the key"X→".....this function of Y Z A B C axis is to push the key "X/A →" and the key"Y/B ↑ "and the key"Z/C ↓ ".

see as figure 3

4、Zero all axes current coordinate

- push the key "RESET" to make the block under RESET in the screen to green.
- push the key "ZERO",then the block under COMM in the screen will change to yellow.
- push the key "ZERO" again. then all axes' current coordinate will change to zero.

see as figure 3

5、Make X axis to goto zero.

- push the key "RESET" to make the block under RESET in the screen to green.
- push the key "GOTOZ",then the block under COMM in the screen will change to yellow.
- push the key"X→".....this function of Y Z A B C axis is to push the key "X/A →" and the key"Y/B ↑ "and the key"Z/C ↓ ".

6、Make all axes to goto zero

- push the key "RESET" to make the block under RESET in the screen to green.
- push the key "GOTOZ",then the block under COMM in the screen will change to yellow.
- push the key "GOTOZ" again. then all axes' current coordinate will change to zero.

7、Change the parameter FRO

- push the key "SJR/SRO/FRO" to put the green block beside FRO in the screen.see as figure 4

figure 4

- push the key "+" to increase FRO or push the key "-" to decrease FRO

8、Change the parameter SRO

- push the key "SJR/SRO/FRO" to put the green block beside SRO in the screen.see as figure 5

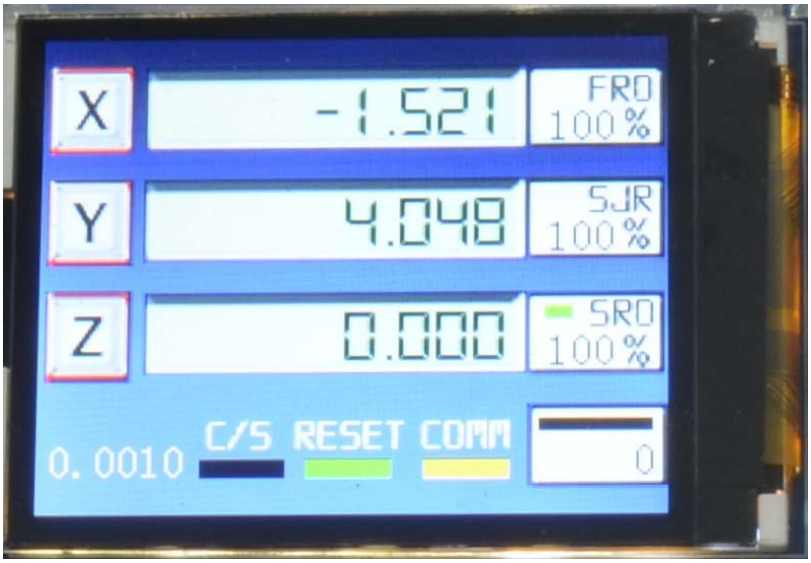

figure 5

● push the key "+" to increase SRO or push the key "-" to decrease SRO

9、Change the parameter SJR

● push the key "SJR/SRO/FRO" to put the green block beside SJR in the screen.see as figure 6

figure 6

● push the key "+" to increase SJR or push the key "-" to decrease SJR

9、Change the parameter step distance

● push the key "SJR/SRO/FRO" to put the green block beside SJR in the screen.

● push the key "CON/STEP" to make the block under C/S to black. see as figure 7

● push the key"+"or"-" will change step distance to 1.0 or0.1 or 0.01 or 0.001 or 0.0001.

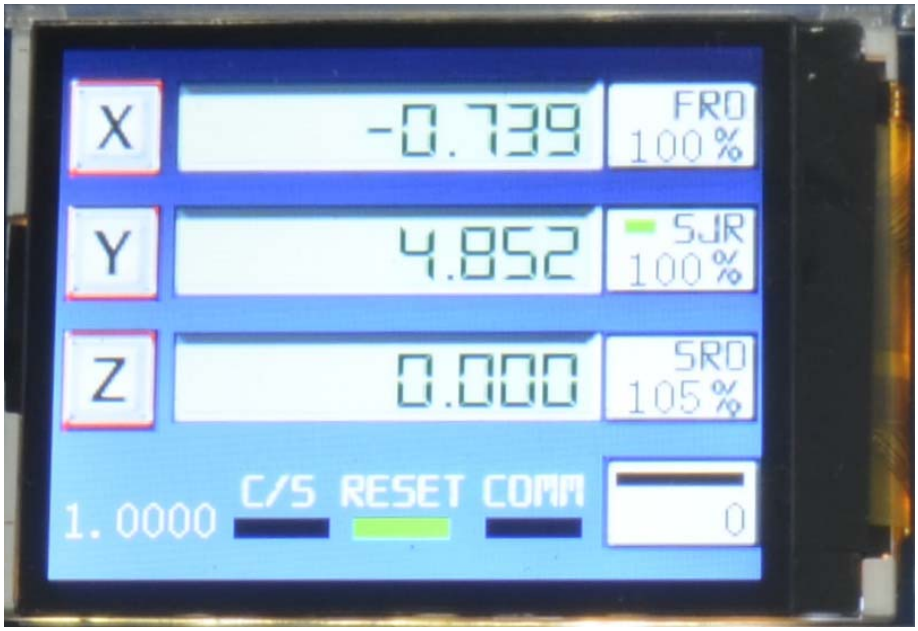

figure 7