

TECHNICAL NOTE # 225

RE: INTREPID™ MicroPoint™ Advanced and Multi Map Monitor Custom Keypad Replacement
Date: August 02, 2016

The custom keypad, part number 62A16258-A01, used with the MicroPoint Advanced Map Monitor and Multi Map Monitor software is no longer available from Southwest Microwave. This technical note provides information on where to purchase a compatible keypad, keycaps and programming instructions.

1.0 OVERVIEW

- 1.1 The following procedure will provide an option for replacing the 62A16258-A01 Keypad used for the Advanced and Multi Map Monitor software programs. This procedure will involve purchasing a programmable keypad, programming it, and replacing the keycaps.

2.0 HARDWARE REQUIRED

- 2.1 Purchase one programmable keypad from Genovation, model “Control Pad CP24 USB HID” as shown in Figure 1. *Note: Figure 1 is shown with keycaps.* Available from www.Genovation.com.
- 2.2 Purchase one set of Cherry MX style keycaps from www.WASDkeyboards.com. The keycap definition chart shown in Figure 2 is what will be needed. Send both the graphics and the chart to them for quote.
- 2.3 Access to a Windows based PC with a USB port for initial programming of the keypad.
- 2.4 The Custom Keypad Software Image 64A17080-A01_rev0.ckd available from Southwest Microwave.

3.0 KEYCAP REPLACEMENT

- 3.1 Remove the existing keycaps from the keypad. Install the new keycaps according to the following chart.

ALT		TAB	
7	8	9	L O G I N
4	5	6	
1	2	3	E N T E R
	0		

Figure 1

The following are Cherry MX style keycaps.

QTY	SIZE	KEY	LEGEND	TEXT	NOTES
1	R4 1x2	BLACK	WHITE	ALT	
1	R4 1x2	BLACK	WHITE	TAB	
1	R4 2x1	BLACK	WHITE	LOGIN	printed vertically on key
1	R4 2x1	BLACK	WHITE	ENTER	printed vertically on key
3	R4 1x1	GREEN	---	---	blank key, bottom row
3	R4 1x1	BLACK	---	---	blank key, remaining positions
1	R4 1x1	WHITE	BLACK	0	
1	R4 1x1	WHITE	BLACK	1	
1	R4 1x1	WHITE	BLACK	2	
1	R4 1x1	WHITE	BLACK	3	
1	R4 1x1	WHITE	BLACK	4	
1	R4 1x1	WHITE	BLACK	5	
1	R4 1x1	WHITE	BLACK	6	
1	R4 1x1	WHITE	BLACK	7	
1	R4 1x1	WHITE	BLACK	8	
1	R4 1x1	WHITE	BLACK	9	

Figure 2

4.0 PROGRAMMING THE KEYPAD

- 4.1 Install the Genovation's MacroMasterCPxx.exe software on the PC using the default installation path. This software is provided on a CD and comes with the Genovation Control Pad CP24.
- 4.2 Copy the 64A17080_rev0.ckd file provided by Southwest Microwave, Inc. into the C:\My Documents\Genovation\MacroMasterCPxx\Macro_Files folder.
- 4.3 Open the MacroMasterCPxx.exe program to open the screen as shown in Figure 3.

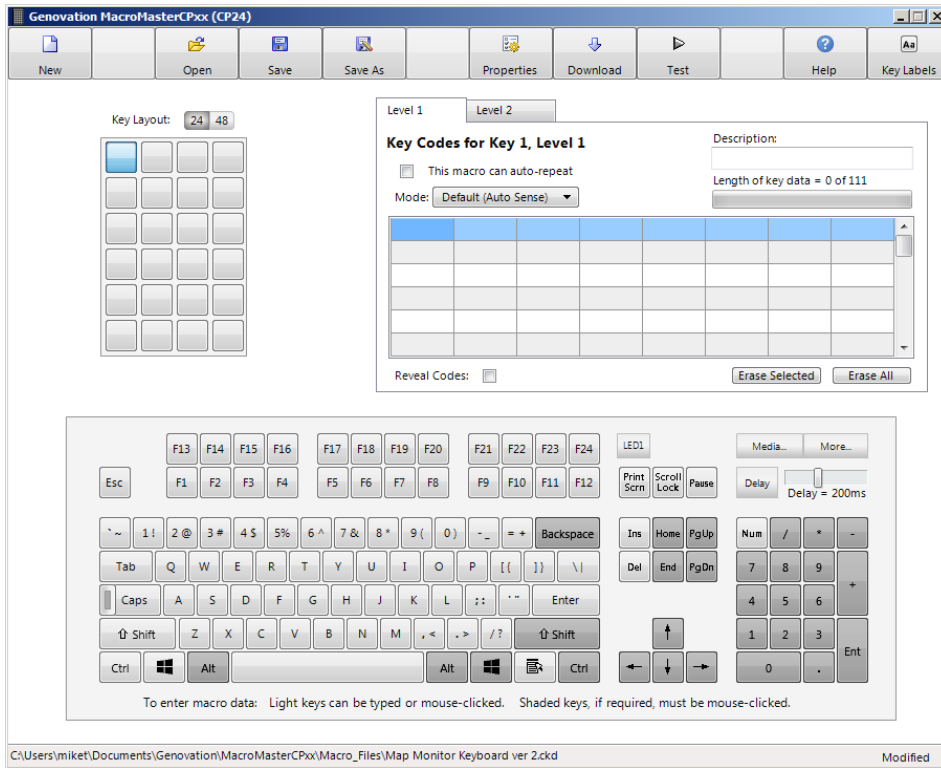


Figure 3

- 4.4 Plug the keypad into the USB port of the PC. Make sure the switch on the back of the keypad is set to the Keyboard position (it is marked with two pictures, a keyboard and a thumbdrive)
- 4.5 On the MacroMasterCPxx software (Figure 3), Select 'Open' and select the 64A17080-A01_rev0.ckd file as shown in Figure 4.

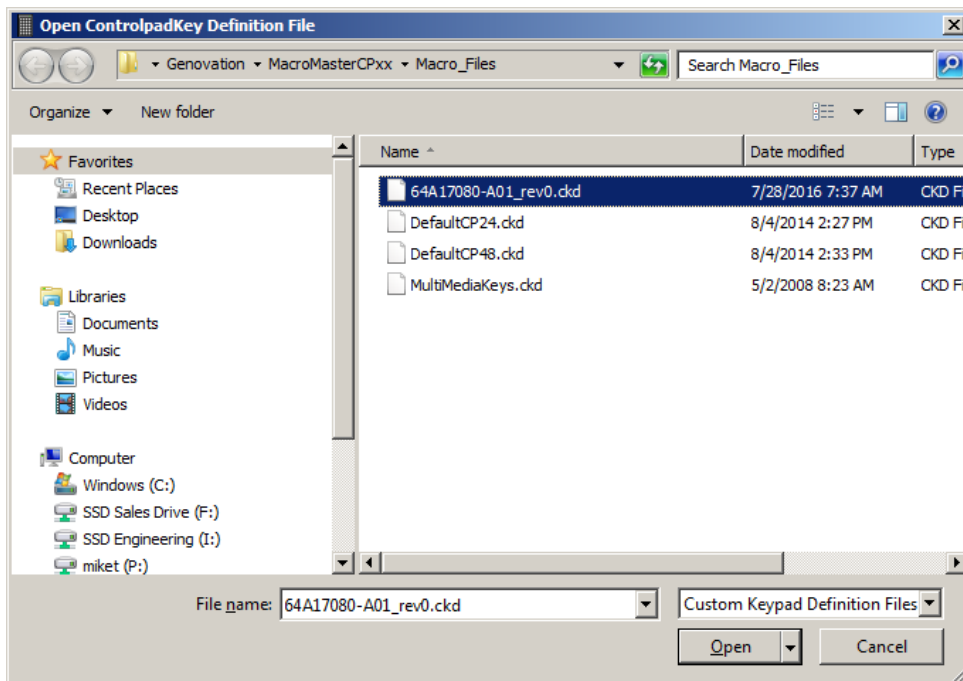


Figure 4

- 4.6 Select 'Download' (Figure 3) and wait for the program to complete the download process. When complete, you will see the "Success! Download Complete" message appear briefly as shown in Figure 5 and the window will close automatically.

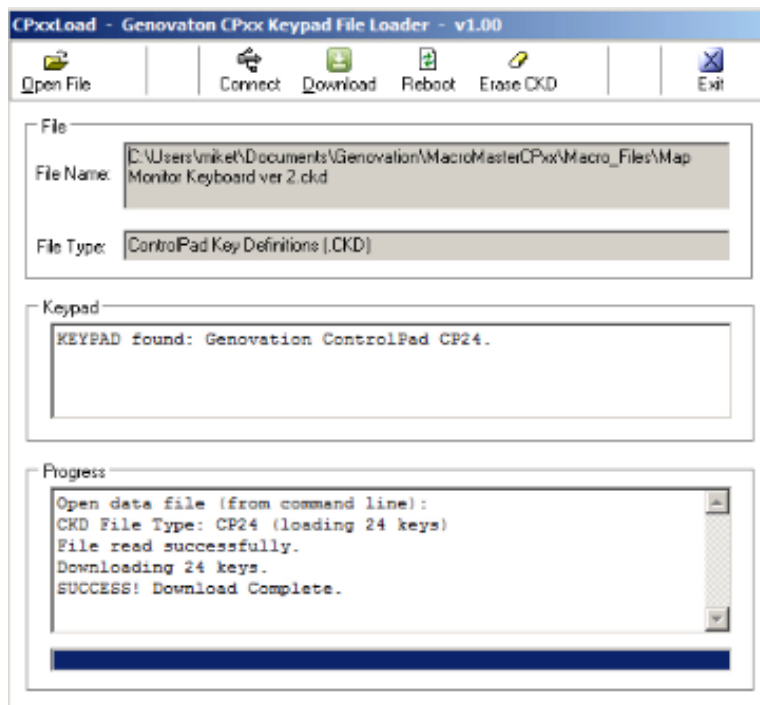


Figure 5

5.0 TESTING THE KEYPAD

- 5.1 Press the 'Test' Button (Figure 3) on the MacroMasterCPxx software to open the screen as shown in Figure 6. (Note: this screen capture shows the results of pressing the Right ALT key once).

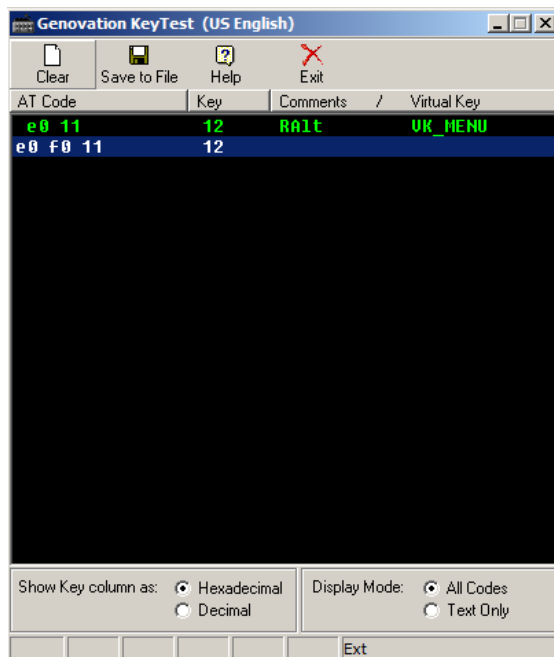


Figure 6

Press each key, one at a time, and watch the response on the test window. The following results as shown in Figure 7 should be displayed: *NOTE: First make sure the Caps Lock key is not active on the main PCs keyboard.*

BUTTON	AT CODE	KEY	COMMENT	VIRTUAL KEY
ALT	e0 11	12	RAlt	VK_MENU
	e0 f0 11	12		
TAB	0d	09	Tab	VK_TAB
	f0 0d	09		
LOGIN	24	45	e	
	f0 24	45		
ENTER	5a	0d	Enter	VK_RETURN
	f0 5a	0d		
LEFT GREEN	e0 6b	25	Left Arrow	VK_LEFT
	e0 f0 6b	25		
MID GREEN	e0 72	28	Down Arrow	VK_DOWN
	e0 f0 72	28		
RIGHT GREEN	e0 74	27	Right Arrow	VK_RIGHT
	e0 f0 74	27		
0	45	30	0	
	f0 45	30		
1	16	31	1	
	f0 16	31		
2	1e	32	2	
	f0 1e	32		
3	26	33	3	
	f0 26	33		
4	25	34	4	
	f0 25	34		
5	2e	35	5	
	f0 2e	35		
6	36	36	6	
	f0 36	36		
7	3d	37	7	
	f0 3d	37		
8	3e	38	8	
	f0 3e	38		
9	46	39	9	
	f0 46	39		

Figure 7

Verify that the three remaining 'blank keys' will not generate an output.

6.0 COMPLETION

- 6.1 The keypad is now ready for use with the Premium Map Monitor software.
- 6.2 Make sure that the PC that is running Advanced Map Monitor or Multi Map Monitor does not have the Cap Lock enabled. This can happen if you install a standard keyboard, press Caps Lock then remove the keyboard. The PC will remain in the Caps Lock state. Simply plug in a standard keyboard, press the Caps Lock once to clear it, then remove the keyboard.
- 6.3 There is a switch on the back of the keypad. It must remain in the keyboard position in order to operate properly.