TECHNICAL NOTE # 303

RE:INTREPID™ MicroNet™ Premium Map Monitor Custom Keypad ReplacementDate:August 01, 2016

The custom keypad, part number 62A16258-A01, used with the MicroNet Premium 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 Premium 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 <u>www.Genovation.com</u>.
- 2.2 Purchase one set of Cherry MX style keycaps from <u>www.WASDkeyboards.com</u>. The keycap definition chart shown in Figure 2 is what will 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.

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4	5	6) – z			
1	2	3				
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			- E R			

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.

Genovation	MacroMas	terCPxx (C	P 24)																_ 🗆 🗙
		3									4		₽				?		Aa
New		Open	Sa	ive	Save A	s		Pr	opertie	s I I	Download		Tes	t			Help		Key Labels
						Level Key Mo	Code This de: D	Lev es for l macro c efault (A	el 2 (ey 1, an auto uto Sen	Leve -repea se)	1 t				escription ngth of k	n: :ey dat	ta = 0 (of 111	
						Rev	eal Coo	ies:]						Erase	Select	ed (Erase	All
	Esc	F13 F14 F1 F2	F15 F F3 I	16 I F4	F17 F18 F5 F6	F19 F7	F20 F8	F21 F9	F22 F10	F23	F24 F12	LED1 Print Scrn	Scroll Lock	Pause	Mec Delay	lia De	Mo lay = 2	re00ms	
	`~ 1!	2@3#	45	i% 6 ^	7 & 8	*	9 (0)	= +	Backs	pace	Ins	Home	PgUp	Num	/	*	-	
	Tab	Q W	E R	F G	Y U		O K	P ;:	[{]} Ent	\ er	Del	End	PgDn	7	8	9	+	
	1 Shift	Z	x c	v	BN	м	, <	.>/	?	1) Shit	ft Ctrl	*	↑	-	1	2	3	Ent	
To enter macro data: Light keys can be typed or mouse-clicked. Shaded keys, if required, must be mouse-clicked.																			

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.

CPxxLoad - Genovaton CPxx Keypad File Loader - v1.00	
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Fie	٦
File Name: D:\Users\miket\Documents\Genovation\MacroMasterCPxx\Macro_Files\Map Monitor Keyboard ver 2.ckd	
File Type: ControlPad Key Definitions (.CKD)	
- Keypad	-
KEYPAD found: Genovation ControlPad CP24.	
Progress	ור
Open data file (from command line): CKD File Type: CP24 (loading 24 keys) File read successfully. Downloading 24 keys. SUCCESS! Download Complete.	



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*).

Genovation KeyTest (US English)									
Clear	Save to File	? Help	× Exit						
AT Code	_	Key	Comments	1	Virtual Key				
e0 11		12	RAIt		VK_MENU	J			
e0 f0 1	1	12							
Show Key (column as: 🤅	Hexadecim	nal Display	Mode:	All Co	des			
	() Decimal			O Text (Jnly			
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Figure 6

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

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.*

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 Premium 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.