

[Pre-Pro sample stage]

MOTION DETECT OF VK-S454 SERIES

[REV. 1.0]

This manual applies following models:

<NTSC> VK-S454

<PAL> VK-S454E (not completed)

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- MOTION DETECTION SPECIFICATION

1. Function Specification

a) Motion Detection ON/OFF:

Switch ON to enable the Motion Detection Function

i) Requirement to turn ON the Motion Detection:

- 1) Privacy Mask: OFF
- 2) Zoom: Stop
- 3) Program AE Mode: Yes

ii) Restriction/Limitation during the Motion Detection operation:

- 1) Switched to MF (Manual Focus mode) automatically.
- 2) No command writing other than Motion Detection command.(OK for data reading).
- 3) Not recommended to use the Digital Zoom during the Motion Detection mode.

b) Setting Mode:

Set the detection area and level (Sensitivity):

i) Detection area:

Any combination of maximum 8 areas from the following 64 divisions can be set.
The display screen is divided 8[H] x 8[V].

	column1	column2	column3	column4	column5	column6	column7	column8
line1	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8
line2	Area 9	Area10	Area11	Area12	Area13	Area14	Area15	Area16
line3	Area17	Area18	Area19	Area20	Area21	Area22	Area23	Area24
line4	Area25	Area26	Area27	Area28	Area29	Area30	Area31	Area32
line5	Area33	Area34	Area35	Area36	Area37	Area38	Area39	Area40
line6	Area41	Area42	Area43	Area44	Area45	Area46	Area47	Area48
line7	Area49	Area50	Area51	Area52	Area53	Area54	Area55	Area56
line8	Area57	Area58	Area59	Area60	Area61	Area62	Area63	Area64

ii) Detection Sensitivity Level:

Any level from 0 to 5 can be set to the selected area. (No detection for the level 0 setting).

	column1	column2	column3	column4	column5	column6	column7	column8
line1								
line2			Level1				Level1	
line3					Level2			
line4		Level0						
line5				Level5		Level4		
line6								
line7		Level5					Level3	
line8								

iii) Setting procedure:

Provided with 8 buffers for both the area and the level setting.

Any buffer can be used but, No duplicated area setting can be done unless Level setting is 0.

	Detect Area	Level
Buffer 1		
Buffer 2	4	4
Buffer 3		
Buffer 4	1	5
Buffer 5	42	0
Buffer 6	43	3
Buffer 7		
Buffer 8		

c) Detection mode:

Detect any motion activity in the set (selected) area.

Detection time: Max: 300ms (8 area setting)

200ms (6 area setting)

i) Detection information:

Following information can be obtained from selected area during Motion Detection.

1) Selected detection Area/Buffer information.

2) Current detecting Area/Buffer information.

3) Integrated previous detected Area/Buffer information during the Motion Detection mod

e.

The above all information will be processed by assigned each buffer #.

(Example: If area 4 is detected, the above 2) information will be responded by Buffer 2).

d) Note:

Please be aware of that the accuracy of the Motion Detection can not be 100% guaranteed all the time so please offer this Feature/Function to your customer accordingly.

2. New command for the Motion Detection:

a) Command list:

	Refer to:	Note
Switch Motion Detection On/Off	i)	Effective at Privacy Mask OFF only
Mode switch (Area/level)	ii)	
Area / Sensitivity level setting	iii)	Effective at Setting mode only
Clear all buffer setting	iv)	Ditto
Get set/selected buffer #	v)	Effective at Detection mode only
Get detecting buffer #	vi)	Ditto
Get list of detected buffer #	vii)	Ditto
Display for detection area	viii)	

i) Switch Motion Detect ON/OFF

:RF95000
 :WF940X₁X₀
 X₁X₀=00 ; OFF [default]
 X₁X₀=01 ; ON

ii) Switch Area Set/Detect Mode

:RF95100
 :WF951X₁X₀
 X₁X₀=H'00 ; Area Set Mode
 X₁X₀=H'01 ; Detect Mode

iii) Set Detect Area and Detect Level (At Area Set Mode Only)

[Buffer 1] :wF940X₃X₂X₁X₀
 X₃X₂ ; Detect Area (Max. : H'40)
 X₁X₀ ; Detect Level (Max. : H'05)
 (Data Clear : X₃X₂X₁X₀=H'0000)
 [Buffer 2] :wF942X₃X₂X₁X₀
 -ditto-
 [Buffer 3] :wF944X₃X₂X₁X₀
 -ditto-
 [Buffer 4] :wF946X₃X₂X₁X₀
 -ditto-
 [Buffer 5] :wF948X₃X₂X₁X₀
 -ditto-
 [Buffer 6] :wF94AX₃X₂X₁X₀
 -ditto-
 [Buffer 7] :wF94CX₃X₂X₁X₀
 -ditto-
 [Buffer 8] :wF94EX₃X₂X₁X₀
 -ditto-

iv) Clear All Buffer (At Area Set Mode Only)

:WF95201

v) Get Detecting Buffer Number (At Detect Mode Only)

:RF95400
 Bit0 ; Hi.:Buffer1 Detecting Lo. :Not Detecting
 :
 Bit7 ; Buffer8
 (Ex.:H'46 : Buffer2,3,7 Detecting)

vi) Get Detected Buffer Number (At Detect Mode Only)

:RF95500
 Bit0 ; Hi.:Buffer1 Detected Lo. :Not Detected
 :
 Bit7 ; Buffer8
 (Ex.:H'46 : Buffer2,3,7 Detected)

vii) Get Integration Of Detected Buffer Number (At Detect Mode Only)

:RF95600
 -ditto

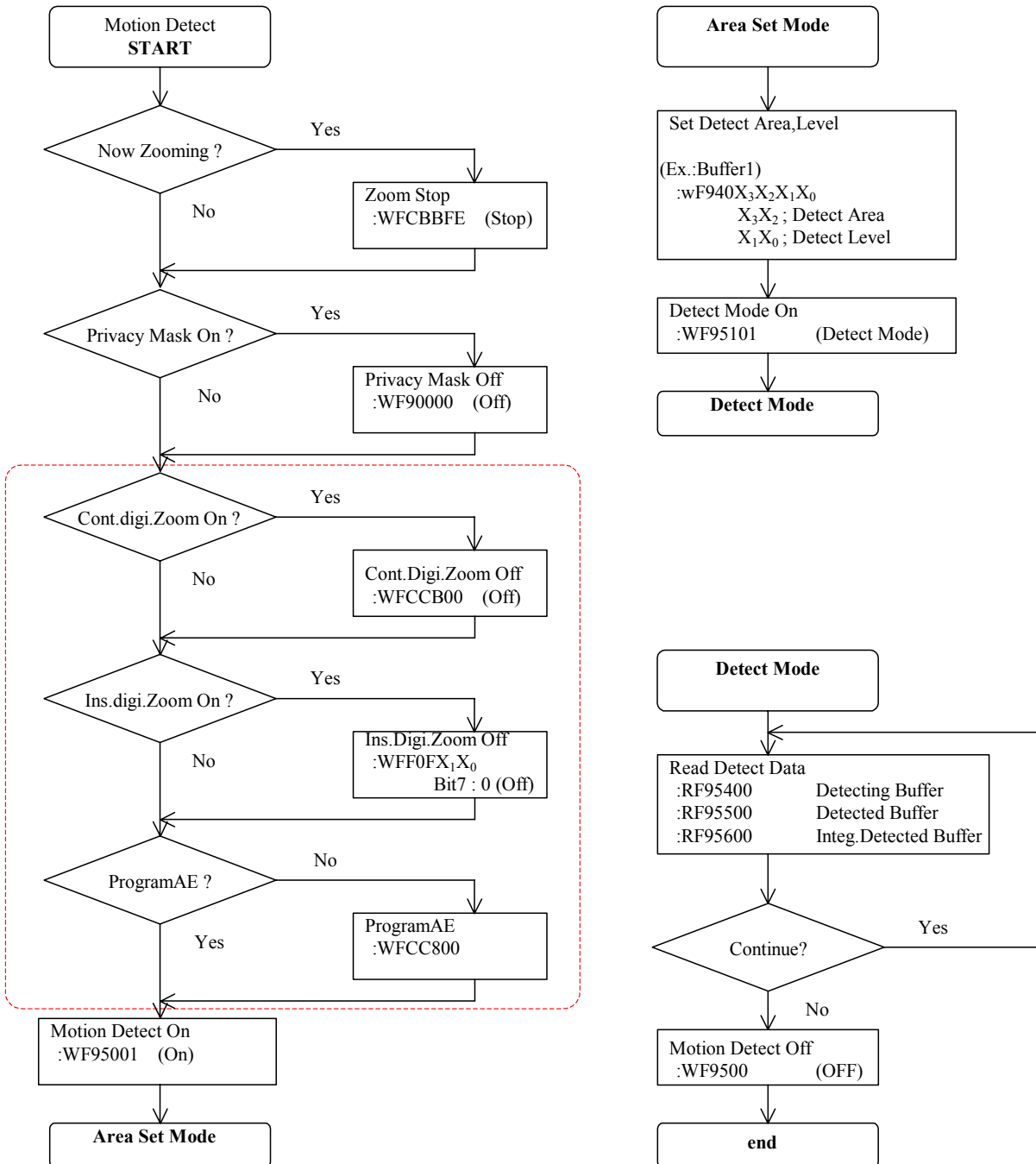
viii) SW Detect Area Display

:WF953X₁X₀
 Bit0 ; Hi.:Area Set Mode Display ON Lo.:OFF

Bit4 ; Detect Mode

3. FLOW CHART

Please Refer to the following flow chart:



- APPENDIX

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2001/07/19 * **VK-S454 Motion Detect Pre-Pro Sample**