Clouds And Sheep



Designed and made by Diniar Namdarian 2013; sleeve made by J. A. Storer. (Laser cut plastic three layers, 3.75" x 6.75" x 3/8"; thickness are base 1/8", tray edge 1/8", pieces 1/8" back with 1/8" figures)

Problem 1: Exchange the clouds and sheep; here are every 7 steps of a 96 rectilinear steps, 114 straight-line steps solution (108 straight-line steps are also possible):

#0: A A B C 2 S 1 1 2 2 M 1 X X Y Z	#7: A A B 2 S Z 1 1 2 2 Y M 1 C X X	#14: A A 2 S Y Z 1 1 2 2 X X M 1 B C	#21: A A S Z X X 1 1 2 B M 1 2 2 Y C	#28: A A S B Z C 1 1 2 X X M 1 2 2 Y
#35: A A Z C X X 1 1 B 2 M 1 S 2 2 Y	#42: 1 1 A A X X M 1 B Z 2 Y	#49: 1 1 X X Y	#56:	#63: X X A A 1 1 B C 2 Y M 1 S Z 2 2
#70: X X C Z 1 1 B 2 A A M 1 S 2 2 Y	#77: X X S B C	#84: X X 2 S B C	#91:	#96: X X Y Z 2 S 1 1 2 2 M 1 A A B C

Problem 2: Also exchange the rabbit and the sun; here are every 9 steps of a 113 rectilinear steps, 131 straight-line steps solution (130 straight-line steps are also possible):

#0:	#9:	#18:	#27:	#36:
AABC2S	AA 2SZ	AAS YZ	A A Z B	1 1 A A X X
1 1 2 2	1 1 2 2 Y	1 1 2 X X	1 1 Y 2 X X	M 1 Y Z 2 C
MIXXYZ	M1CBXX	M 1 2 2 C B	M 1 S 2 2 C	S B 2 2
#45:	#54:	#63:	#72:	#81:
1 1 Y A A	1 1 A A X X		XXAA C	X X M Z
M 12 X X	S 1 Y 2 C	S 1 A A 2 2	1 1 M Z 2	1 1 Y 2 A A
S B Z 2 2 C	B M Z 2 2	B MZY	S 1 B Y 2 2	S 1 B 2 2 C
#90:	#99:	#108:	#113:	
X X B Y	X X A A	XXYZ	XXYZ2M	
1 1 2 A A M	1 1 C 2 M Y	1 1 A A 2 M	1 1 2 2	
S 1 2 2 C Z	S 1 B 2 2 Z	S 1 B C 2 2	SIAABC	