

Using Breakaway Previews with NK Series Control Panels

NK Series Control Panels can be configured with breakaway keys for selecting preset groups of levels before making a switch. A breakaway is selected by pressing the key for less than 0.5 seconds and quickly releasing, in much the same manner as you would type on a computer keyboard.

Holding a breakaway key for longer than 0.5 seconds on RCP-NK1, RCP-NKM and RCP-NKQ control panels results in a **breakaway preview**. Releasing the key will return to the previously selected breakaway. The breakaway preview information displayed is different for each control panel:

Breakaway Previews on the RCP-NK1

A breakaway preview on an RCP-NK1 panel will display the status (i.e. which source is routed to the current destination) of the first level in the breakaway. Any level keys assigned to the panel will be lit if they are selected in the breakaway. The breakaway key will be lit for the duration of the breakaway preview and any previously selected level keys will temporarily turn off.

Breakaway Previews on the RCP-NKM

A breakaway preview on an RCP-NKM panel will display the breakaway name on the first line of the panel's LCD and the breakaway's level configuration on the second line as an 8 digit hexadecimal number with a range from 00000000 – FFFFFFFF:



Breakaway Preview Display on an RCP-NKM Control Panel

The 8 digit hexadecimal number can be decoded as a 32-bit “mask” representing which of the 32 levels are selected in the breakaway:

Level	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Binary	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	
Hexadecimal	h				h				h				h				h				h											

Hexadecimal Representation of 32 Levels

Each digit (h) in the hexadecimal number represents 4 levels and by using a hexadecimal to binary conversion table, the configuration of levels within the breakaway can easily be determined:

Hexadecimal	Binary
0	0000
1	0001
2	0010
3	0011
4	0100
5	0101
6	0110
7	0111
8	1000
9	1001
A	1010
B	1011
C	1100
D	1101
E	1110
F	1111

Hexadecimal to Binary Conversion Table

Here are some examples:

A breakaway which switches only level 1 will be displayed as 00000001:

Level	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Binary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hexadecimal	0				0				0				0				0				0				1								

A breakaway which switches levels 1 and 2 will be displayed as 00000003:

Level	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Binary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Hexadecimal	0				0				0				0				0				0				3							

A breakaway which switches levels 4, 6, 8 and 31 will be displayed as 400000A8:

Level	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Binary	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0
Hexadecimal	4				0				0				0				0				A				8							

A breakaway which switches levels 1 to 8 inclusive will be displayed as 000000FF:

Level	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Binary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
Hexadecimal	0				0				0				0				0				F				F							

Breakaway Previews on the RCP-NKQ

A Breakaway Preview on an RCP-NKQ panel will display the breakaway's level configuration using the same format as above for the RCP-NKM. The breakaway information will, however, be displayed on the actual LCD key to which the breakaway is assigned.

For example, holding a breakaway key on the RCP-NKQ configured to switch only level 2 will display the following:



Breakaway Preview Display on an RCP-NKQ Control Panel

Breakaway Previews with Linked Panels

Breakaway previews are not available across linked panels.