



Broadcasting Pro Audio

Reliable and Streamlined Switching Solutions

nkK
SWITCHES

www.nkkswitches.eu

Product Overview

	Special Features	Outer Dimensions	Basic Specifications
Full Screen OLED Pushbutton	Display Videos 65K Colors Sharp Display of Small Text/Graphics 180° Viewing Angle Controller on Board/SPI Best Contrast in the Market Up to 6 Lines with 10 Characters Each	Pushbutton: 23.13 x 20.59 x 23 mm	Display Luminance Half-life: 100,000 hrs. @ 50cd/m ² with 40% pixels on 50,000 hrs. @ 100cd/m ² with 40% pixels on Operating Temperature: -20°C to +70°C Mechanical/Electrical Life: 1,000,000 actuations min.
OLED Pushbutton	Display Videos 65K Colors Sharp Display of Small Text/Graphics 180° Viewing Angle Controller on Board/SPI Best Contrast in the Market Up to 6 Lines with 10 Characters Each	Pushbutton: 23.13 x 20.59 x 23 mm Display: 17.8 x 17.2 x 9.9 mm	Display Luminance Half-life: 60,000 hrs. @ 50cd/m ² with 40% pixels on 30,000 hrs. @ 100cd/m ² with 40% pixels on Operating Temperature: -20°C to +70°C Mechanical/Electrical Life: 3,000,000 actuations min.
LCD 64 x 32	RGB LED Backlight, 64 Colors • Controlled via Software Controller on Board/SPI Long Life LCD Up to 4 Lines with 10 Characters Each	Pushbutton: 23.13 x 20.59 x 23 mm Compact Pushbutton: 19 x 18 x 23 mm Display: 17.8 x 17.2 x 9.9 mm	Operating Temperature: -15°C to +50°C (-20°C to +60°C available) Mechanical/Electrical Life: 3,000,000 operations min. 1,000,000 actuations min. For Compact
LCD 36 x 24	Bicolor or RGB Backlight LCD Driver on Board Long Life LCD Flexible Control of Backlight and LCD Up to 3 Lines with 6 Characters Each	Pushbutton: 23.13 x 20.59 x 23 mm Compact Pushbutton: 19 x 18 x 23 mm Display: 17.8 x 17.2 x 9.9 mm	Operating Temperature: 0°C to +40°C (-20°C to +60°C available) Mechanical/Electrical Life: 1,000,000 actuations min.
OLED Rocker	OLED Rocker Switch, SP3T Momentary IP64 Dust & Water Protection Controller on Board/SPI Largest SmartSwitch Display Area 180° Viewing Angle Up to 8 Lines with 16 Characters Each	Rocker: 37.9 x 50.7 x 5.6 mm	Display Luminance Half-life: 52,000 hrs. @ 100cd/m ² with 30% pixels on Operating Temperature: -20°C to +70°C Mechanical/Electrical Life: 1,000,000 actuations min.

All Pushbutton Versions: SPST, Momentary ON, Gold Contacts and Straight PC Terminals.

Visit www.nkksmartswitch.com for complete specifications.



Full Screen OLED



OLED Pushbutton & Display



LCD Pushbutton



OLED Rocker

Full Screen OLED Pushbutton

- High definition, contrast and resolution of 96 x 64 pixels in compact screen and minimal frame
- Range of 65,536 colors in 16 bit mode
- Maximum use of display lens with ultra-thin frame provides full screen capacity
- Multiple units easily combine to form one screen, offering flexibility in size and layout
- Smooth, silent operation with short stroke of 1.8 mm (0.07") lends to tactile feedback unparalleled to touch panels
- Same outer dimensions of switch and footprint, enabling ease of replacement with current switches
- Operated by commands and data supplied via serial communications (SPI)
- Incorporates bitmap display function
- High reliability and long life of one million actuations
- Epoxy sealed straight PC terminals
- Snap-in standoff for easy, secure mounting and alignment; aids in prevention of dislodging during wave soldering
- Viewing area (horizontal x vertical):
21.28 mm x 18.74 mm



SWITCH PART NUMBER & DESCRIPTION

Part Number	Switch Description	OLED	Pixel Format
ISF15ACP4	SPST, Momentary ON Gold Contacts Straight PC Terminals	Color OLED Display Module 65,536 Colors	96RGB x 64 Pixels Horizontal x Vertical

OLED Pushbutton & Display

- High definition, contrast and resolution of 64 x 48 pixels in compact screen and minimal frame
- Range of 65,536 colors in 16 bit mode, 256 colors in 8 bit mode
- Same outer dimensions of switch and footprint, enabling ease of replacement with current switches
- Operated by commands and data supplied via serial communications (SPI)
- Low power consumption of only 3.8 mA 52RGB x 36 pixels
- Viewing area (horizontal x vertical):
Pushbutton 15.5 mm x 11.6 mm
Display 12.9 mm x 9.6 mm



Part Number	Switch Description	OLED	Pixel Format
ISC15ANP4	SPST, Momentary ON Gold Contacts Straight PC Terminals	Color OLED Display Module 65,536 Colors	64RGB x 48 Pixels Horizontal x Vertical
ISC01P	Straight PC Terminals	Color OLED Display Module 65,536 Colors	52RGB x 36 Pixels Horizontal x Vertical

Wide View LCD 64 x 32 Pushbutton, Compact Pushbutton & Display

- High resolution of 64 x 32 pixels
- Pushbutton switch / Display with LCD, RGB LED backlighting
- General brightness of backlight is dynamically controlled in eight steps from dark to bright
- Operated by commands and data supplied via serial communications (SPI)
- Incorporates bitmap display function
- Programmable display graphics for alphanumeric characters and animated sequences
- Low energy consumption, Dust tight construction
- Snap-in standoff for easy, secure mounting and alignment; aids in prevention of dislodging during wave soldering
- Viewing area (horizontal x vertical):

Pushbutton	17.0 mm x 13.0 mm
Compact Pushbutton	14.5 mm x 11.8 mm
Display	14.4 mm x 11.8 mm



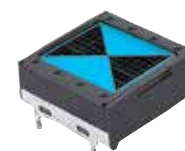
64 x 32 Pushbutton
Short Travel



64 x 32 Pushbutton
Long Travel



64 x 32
Compact Pushbutton



64 x 32 Display

Wide View LCD 64 x 32, 36 x 24 Pushbutton, Compact Pushbutton & Display

TYPICAL SWITCH ORDERING EXAMPLE

IS	1	5	E	S	B	F	P4	RGB
Poles		Circuits		Outside Dimensions			Contacts & Terminals	
1 SPDT		5 OFF (ON)		No Code Standard - 23.13 x 20.59 mm			P4 Gold Contacts	
		() = Momentary		S ** Compact - 19.0 x 18.0 mm			Straight PC Terminals	
Viewing Area		Resolution		LED Backlighting		LCD Mode		LED Colors
B	0.8" (23.13 x 20.59 mm)	Standard 36 x 24 Pixels		A	* Standard	F	Black & White	CF * Red/Green
E	0.8" (23.13 x 20.59 mm)	High Resolution 64 x 32 Pixels		B	Super Bright			EF * Yellow/Green
	0.7" (19.0 x 18.0 mm)						* 36 x 24 Pixels ** 64 x 32 Pixels	RGB Red/Green/Blue

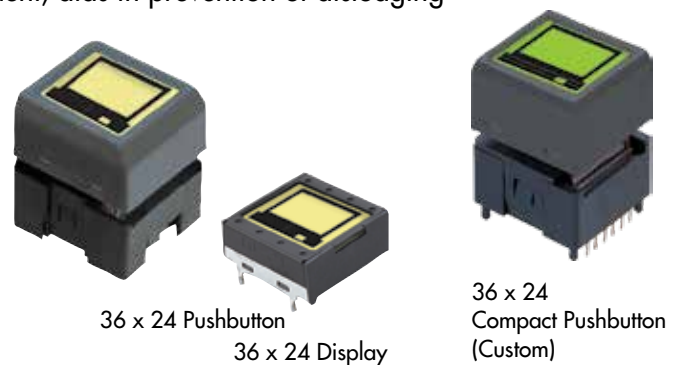
TYPICAL DISPLAY ORDERING EXAMPLE

IS	01	E	B	F	RGB
Outside Dimensions	Viewing Area	Resolution	LED Backlighting	LCD Mode	LED Colors
01 17.8 x 17.2 mm	B 0.7"	Standard 36 x 24 Pixels	B Super Bright	F Black & White	EF * Yellow/Green
	E 0.7"	High Resolution 64 x 32 Pixels			RGB Red/Green/Blue
			* 36 x 24 Pixels		

Wide View LCD 36 x 24 Pushbutton, Compact Pushbutton (Custom), & Display

- RGB Backlighting provides infinite color availability (RGB Type)
- Programmable to display graphics, alphanumeric characters, and animated sequences
- Integrated liquid crystal display provides wide viewing angle with high contrast and clarity
- Dome gives crisp tactile feedback to positively indicate circuit transfer
- High reliability and long life of one million actuations minimum
- Epoxy sealed terminals prevent entry of solder flux and other contaminants
- Optional accessories available to enhance panel design and simplify production process
- Compact model saves space and accommodates smaller form factor design requirements
- Snap-in standoff for easy, secure mounting and alignment; aids in prevention of dislodging during wave soldering
- Viewing area (horizontal x vertical):

Pushbutton	17.0 mm x 13.0 mm
Compact Pushbutton	14.4 mm x 11.8 mm
Display	14.4 mm x 11.8 mm



OLED Rocker

- White monochrome OLED featuring sharp contrast and high resolution with 96 x 64 pixels
- Wide viewing angle of 180° and large 0.92" display with exceptional contrast
- Organic LED technology in display rocker (patent pending)
- Multifunction programmable device: select with rocker, push for activation
- All-in-one solution: replaces multiple switches and displays with one device in a small package
- Easy navigation through structured menus, both forward and reverse and up and down
- Waterprotected and dust tight; conforms to IP64 of IEC60529 Standards on panel surface
- Displays up to 8 lines with 16 characters 5 x 7 each, or 5 lines with 12 characters 7 x 10 each
- Graphics and animations
- Long life OLED with 52,000 hours at 30% illumination
- Panel mount with easy snap-in installation
- Short 14.6 mm (.575") behind-panel depth for compact spaces
- Stylish black housing design with matte finish complements any application
- Operated by commands and data supplied via serial communications (SPI)
- High reliability and long mechanical and electrical life of one million actuations minimum

Part Number	Description
IS18WWC1W	OLED Rocker Switch: SP3T Switch Rocker (ON) (ON) (ON) Pushbutton Normally OFF



Illuminated Pushbutton / Toggle / Rocker Solutions



14 mm KB Pushbuttons

Square, round, rectangular
many illumination and
button color options



YB2 Flush Mount Pushbuttons

6 LED color options for full face and
"half-mirror" or silver button with ring
illumination or nonilluminated including
silver button



Eye Catching Toggles

TL, M2100 and B series (from left)
with tip or full toggle illumination



7.5 mm HB2 Pushbuttons

Our smallest square
illuminated pushbutton



9 mm HB Pushbuttons

Square or round; many
illumination and button
color options



Rockers & Paddles

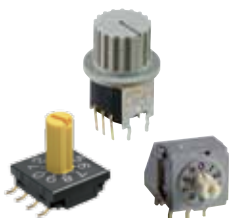
Wide variety of rockers
or paddles make the
MLW pop on any panel



LED or Neon Rockers

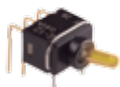
Small ON-OFF switches

More Audio Switch Solutions



PCB Rotaries

Perfect PCB solutions



Subminiature Toggles & Pushbuttons

G and GB Series;
used in mics and other
handheld devices



Tactiles for Board Design

Up to 5 million operations;
wide range of buttons; illu-
minated or nonilluminated



Miniature Power level Rotaries

MR Rotaries with adjustable
positions Use NKK's or your
own knobs to match existing
design

Illuminated Pushbutton Solutions



KP Pushbuttons with RGB LEDs for Unlimited Vibrant Colors

3 button sizes and shapes including home key; all buttons dear with white insert for elegant panel design; create any desired color with RGB LEDs.



UB Pushbuttons

3 button shapes; 7 LED color illuminaed and non-illuminated options.



UB2 Pushbuttons

3 button shapes; illuminaed and non-illuminated options.

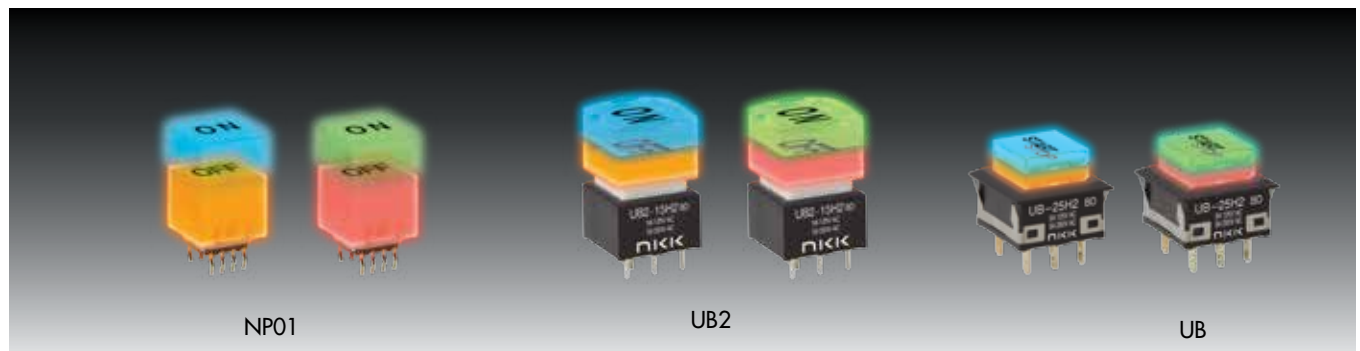


12 mm NP01 Soft Touch Pushbuttons

3 LED color and bicolor illuminaed and non-illuminated options.

New Bicolor Alternating Legends

Three series share new super bright blue/amber bicolor

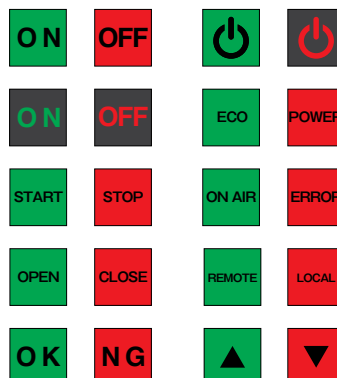


New Bicolors green/red and blue/amber with alternating standard or custom legends. Super bright LED provides brilliant uniform illumination.

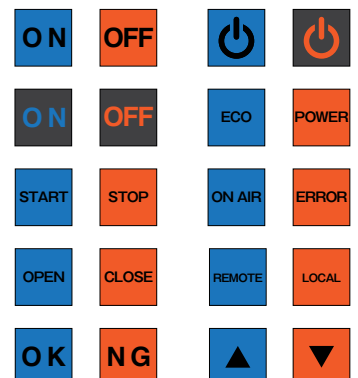
Bright or super bright LED's (an integral part of the switch) of red, amber, blue, or white, in full face or spot illumination plus square or rectangular models.

STANDARD ALTERNATING LEGEND

Super Bright LED: Green/Red



Super Bright LED: Blue/Amber





Broadcast Switcher with
OLED and LCD Pushbuttons

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