



NX8048T050

Overview

Nextion is a seamless Human Machine Interface (HMI) solution that provides a control and visualisation interface between a human and a process, machine, application or appliance. Nextion is mainly applied to IoT or consumer electronics field. It is the best solution to replace the traditional LCD and LED Nixie tube. With the Nextion Editor software ([Official Download](#)), users are able to create and design their own interfaces for Nextion display.

Package includes: Nextion Display, connecting wire, a power supply test board.

Go Shopping: [NX8048T050 \(IM150416006\)](#)

Note: the small power supply test board and connecting wire inside the package allow you to test if the electrical supply is enough or not. See the image below on how to use it.

Caution:

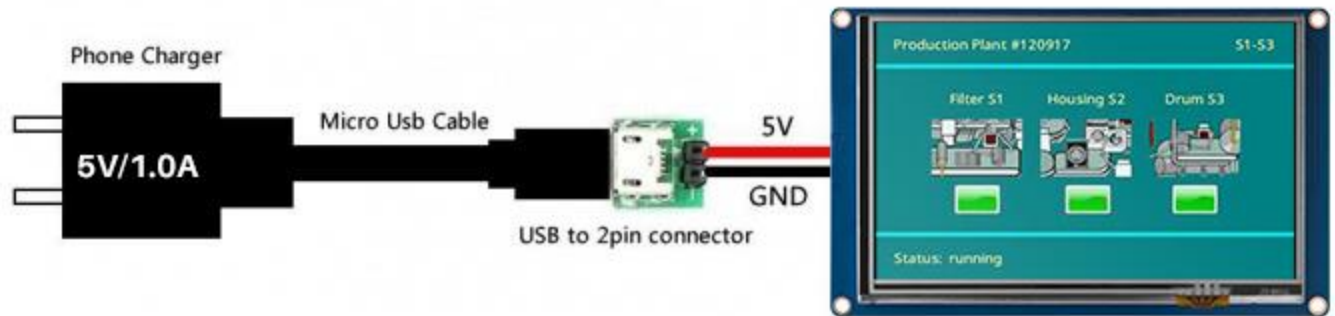
Working under insufficient power supply condition will damage the Nextion model easily.



Blurred screen? Flashing? You may be suffering from power shortages. Power off at the first possible moment. No more repeated attempts to damage your Nextion model.

A small connector is included in the package. Please try to power Nextion with your phone charger through the connector to check if Nextion works well.

A high quality usb cable is required.



Nextion Models

Nextion Type	Basic Series
Nextion Models	NX8048T050_011N (N: No touch)
	NX8048T050_011R (R: Resistive touchscreen)



Specifications

	Data	Description
Color	64K 65536 colors	16 bit 565, 5R-6G-5B
Layout size	133.5(L)×84(W)×5(H)	NX8048T050_011N
	133.5(L)×84(W)×6.2(H)	NX8048T050_011R
Active Area (A.A.)	118.50mm(L)×77.55mm(W)	
Visual Area (V.A.)	108mm(L)×64.8mm(W)	
Resolution	800×480 pixel	Also can be set as 480×800
Touch type	Resistive	
Touches	> 1 million	
Backlight	LED	
Backlight lifetime (Average)	>30,000 Hours	

Brightness	250 nit (NX8048T050_011N)	0% to 100%, the interval of adjustment is 1%
	230 nit (NX8048T050_011R)	0% to 100%, the interval of adjustment is 1%
Weight	108g (NX8048T050_011N)	
	128g (NX8048T050_011N)	

Electronic Characteristics

	Test Conditions	Min	Typical	Max	Unit
Operating Voltage		4.75	5	7	V
Operating Current	VCC=+5V, Brightness is 100%	–	410	–	mA
	SLEEP Mode	–	15	–	mA
Power supply recommend : 5V, 1A, DC					

Working Environment & Reliability Parameter

	Test Conditions	Min	Typical	Max	Unit
Working Temperature	5V, Humidity 60%	-20	25	70	°C
Storage Temperature		-30	25	85	°C
Working Humidity	25°C	10%	60%	90%	RH

Interfaces Performance

	Test Conditions	Min	Typical	Max	Unit
Serial Port Baudrate	Standard	2400	9600	115200	bps
Output High Voltage	IOH=-1mA	3.0	3.2		V
Output Low Voltage	IOL=1mA		0.1	0.2	V
Input High Voltage		2.0	3.3	5.0	V
Input Low Voltage		-0.7	0.0	1.3	V
Serial Port Mode	TTL				

Serial Port	4Pin_2.54mm
USB interface	NO
SD card socket	Yes (FAT32 format), support maximum 32G Micro SD Card * microSD card socket is exclusively used to upgrade Nextion firmware /HMI design

Memory Features

Memory Type	Test Conditions	Min	Typical	Max	Unit
FLASH Memory	Store fonts and images			16	MB
RAM Memory	Store variables			3584	BYTE

See the LCD link below :

<https://nextion.tech/datasheets/nx8048t050/>