

Product Sheets

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NES Mainboard (NTSC)

Capacitor Guide

Capacitors play a crucial role in maintaining a steady flow of current to other components. With a typical lifespan of 20–30 years—and considering the age of most NES consoles—the original capacitors have likely reached or exceeded their expected service life. For optimal performance and reliability, replacing them is strongly recommended.

When installing new capacitors, be sure to observe the correct polarity. The longer lead indicates the positive side, which corresponds to the "+" symbol in the diagram.

Capacitor	Location
1uF 50v	C23
100uF 6.3v	C1
2.2uF 50v	C9

Board Layout

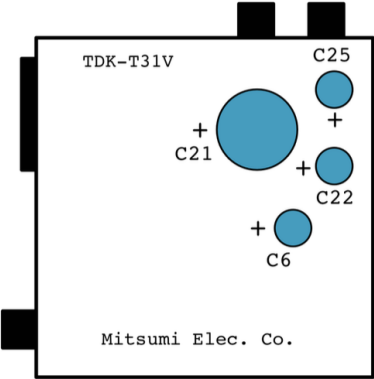


Mitsumi Capacitor Kit

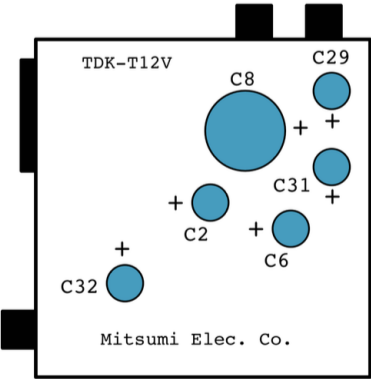
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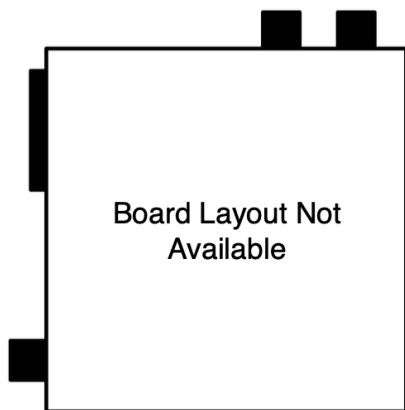
Mitsumi TDK-T31V

	Capacitor	Location
	100uF 10v	C25
	100uF 16v	C22
	10uF 16v	C6
	2200uF 25v	C21

Mitsumi TDK-T12V

	Capacitor	Location
	100uF 16v	C29
	2200uF 25v	C8
	100uF 25v	C31
	1uF 50v	C2
	10uF 16v	C32
	1uF 50v	C6

Mitsumi MTM-8V-0



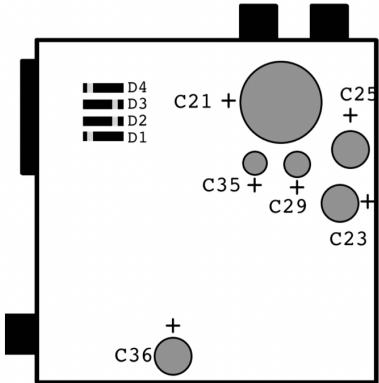
Capacitor	Location
10uF 35v	C5
100uF 16v	C21
100uF 10v	C24
2200uF 25v	C20

Alps Capacitor Kit (NTSC)

Capacitor Guide

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Alps FR853



The diagram shows the top of the Alps FR853 PCB. It features several components: four diodes (D1, D2, D3, D4) on the left, each with a gray stripe indicating the cathode. Six capacitors are labeled: C21 (large), C25, C35, C29, C23, and C36. Each capacitor has a '+' sign indicating the positive terminal. The PCB has two black mounting tabs at the top and two at the bottom left.

Capacitor	Location
100uF 10v	C25
2200uF 25v	C21
100uF 25v	C23
1uF 50v	C35
10uF 16v	C36
1uF 50v	C29

400v Diodes
Locations: D1, D2, D3, D4

The gray stripe on this diode represents the negative/cathode end. It should match the position in the diagram.

Alps SH-SH5 / FS074

The diagram shows a PCB layout with several components. At the top, there are two large black rectangular pads. On the left, there are four horizontal black bars labeled D4, D3, D2, and D1 from top to bottom. In the center, there is a large circle labeled C21 with a '+' sign to its right. To the right of C21 is a smaller circle labeled C25 with a '+' sign above it. Below C21 is a small circle labeled C29 with a '+' sign above it. To the right of C29 is a circle labeled C23 with a '+' sign to its right. Below C29 is a small circle labeled C37 with a '+' sign above it. At the bottom left, there is a small circle labeled C36 with a '+' sign to its right.

Capacitor	Location
1uF 50v	C29
100uF 25v	C23
100uF 10v	C25
10uF 16v	C36
1uF 50v	C37
2200uF 25v	C21

400v Diodes

Locations: D1, D2, D3, D4

The gray stripe on this diode represents the negative/cathode end. It should match the position in the diagram.