# IFR 500/500A Electrolytic Capacitor Parts List

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**Preface:** This guide was put together to aid in renewal of the electrolytic capacitors in your IFR 500/500A. This guide <u>should not</u> be interpreted as stating that all the electrolytic capacitors in your 500/500A need renewal. During the renewal process it is very important to clean and remove any boric acid that may have leaked out- use a Q-tip and 90% Isopropyl Alcohol. Electrolytic capacitor replacement is easily accomplished using a de-soldering station such as a Hakko 472D, JBC 1D, Weller WR3000, etc. but not absolutely necessary.

### **Power Supply PC Board Assembly**

C7, C9, C12, C20- 10uF, 50V, 20%, Radial Lead, 85 deg

Replacement Manufacturer: Panasonic Replacement Part Number: ECE-A1HKS100B

Digikey Part Number: P19588CT-ND

Quantity in Assembly: 4

C5 - 47uF, 10V, 20%, Radial Lead, 105 deg Replacement Manufacturer: Nichicon

Replacement Part Number: UMF1A470MDD1TP

Digikey Part Number: 493-10218-1-ND

Quantity in Assembly: 1

OR

C5 - 47uF, 10V, 20%, Radial Lead, 85 deg Replacement Manufacturer: Nichicon

Replacement Part Number: UMA1A470MDD1TP

Digikey Part Number: 493-10439-1-ND

Quantity in Assembly: 1

C1, C2 -100uF, 50v, 20%, Radial Lead, 85 deg

Replacement Manufacturer: Nichicon

Replacement Part Number: UVK1H101MDD1TD

Digikey Part Number: 493-12570-1-ND

Quantity in Assembly: 2

C8 -470uF, 35V, 20%, Axial Lead, 85 deg Replacement Manufacturer: Nichicon Replacement Part Number: TVX1V471MCD Digikey Part Number: 493-13379-ND

C19 - 330uF, 16V, 20%, Axial Lead, 85 deg

Replacement Manufacturer: Vishay

Replacement Part Number: MAL202135331E3

Digikey Part Number: 4020PHCT-ND

Quantity in Assembly: 1

C6 -10000uF, 10V, 20%, Axial Lead, 85 deg Replacement Manufacturer: Nichicon Replacement Part Number: TVX1A103MCD

Digikey Part Number: 493-14803-ND

Quantity in Assembly: 1

C3 -4700uF, 25V, 20%, Axial Lead, 85 deg Replacement Manufacturer: Nichicon Replacement Part Number: TVX1E472MCD Digikey Part Number: 493-14406-ND

Quantity in Assembly: 1

# **Frequency Standard PC Board**

C9 - 47uF, 25V, 20%, Axial Lead, 85 deg Replacement Manufacturer: Nichicon Replacement Part Number: TVX1E470MAD Digikey Part Number: 493-14405-ND

Digikey Part Number. 493-1440

Quantity in Assembly: 1

# **Generate Audio PC Board**

C3 - 1uF, 50V, 20%, Radial Lead, 85 deg Replacement Manufacturer: Nichicon

Replacement Part Number: URS1H010MDD1TD

Digikey Part Number: 493-11473-1-ND

Quantity in Assembly: 1

C5, C8, C13 - 10uF, 35V, 20%, Axial Lead, 85 deg

Replacement Manufacturer: Nichicon Replacement Part Number: TVX1V100MAD Digikey Part Number: 493-14419-ND

Quantity in Assembly: 3

C1, C19 - 330uF, 16V, 20%, Axial Lead, 85 deg

Replacement Manufacturer: Vishay

Replacement Part Number: MAL202135331E3

Digikey Part Number: 4020PHCT-ND

#### **Receive Audio PC Board**

C, C, C - 1uF, 50V, 20%, Radial Lead, 85 deg Replacement Manufacturer: Nichicon

Replacement Part Number: URS1H010MDD1TD

Digikey Part Number: 493-11473-1-ND

Quantity in Assembly: 3

C, C, C – 3.3uF, 50V, 20%, Radial Lead, 85 deg

Replacement Manufacturer: Nichicon

Replacement Part Number: URS1H3R3MDD1TD

Digikey Part Number: 493-11476-1-ND

Quantity in Assembly: 3

C, C - 10uF, 35V, 20%, Axial Lead, 85 deg Replacement Manufacturer: Nichicon Replacement Part Number: TVX1V100MAD

Digikey Part Number: 493-14419-ND

Quantity in Assembly: 2

### Variable Tone Generator PC Board

C32, C34 - 10uF, 35V, 20%, Axial Lead, 85 deg

Replacement Manufacturer: Nichicon Replacement Part Number: TVX1V100MAD Digikey Part Number: 493-14419-ND

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Quantity in Assembly: 2

C4, C33, C37 -47uF, 10V, 20%, Axial Lead, 85 deg

Replacement Manufacturer: Nichicon
Replacement Part Number: TVX1A470MAD

Digikey Part Number: 493-14808-ND

Quantity in Assembly: 3

# **Digital Counter and Digital Reference PC Boards**

\*\*\*13 Pin Header, Double Decker Boards \*\*\*

# **Digital Counter PC Board**

C9, C20 – 3.3uF, 50V, 20%, Radial Lead, 85 deg

Replacement Manufacturer: Nichicon

Replacement Part Number: URS1H3R3MDD1TD

Digikey Part Number: 493-11476-1-ND

### **Digital Reference PC Board**

C31, C34 - 10uF, 50V, 20%, Radial Lead, 85 deg

Replacement Manufacturer: Panasonic Replacement Part Number: ECE-A1HKS100B

Digikey Part Number: P19588CT-ND

Quantity in Assembly: 2

C1, C3 - 10uF, 35V, 20%, Axial Lead, 85 deg Replacement Manufacturer: Nichicon Replacement Part Number: TVX1V100MAD

Digikey Part Number: 493-14419-ND

Quantity in Assembly: 2

C11 -47uF, 10V, 20%, Axial Lead, 85 deg Replacement Manufacturer: Nichicon Replacement Part Number: TVX1A470MAD

Digikey Part Number: 493-14808-ND

Quantity in Assembly: 1

### Receiver/Generator PC Board

C - 10uF, 50V, 20%, Radial Lead, 85 deg Replacement Manufacturer: Panasonic Replacement Part Number: ECE-A1HKS100B

Digikey Part Number: P19588CT-ND

Quantity in Assembly: 1

C32 -47uF, 10V, 20%, Axial Lead, 85 deg Replacement Manufacturer: Nichicon Replacement Part Number: TVX1A470MAD

Digikey Part Number: 493-14808-ND

Quantity in Assembly: 1

### **Low Loop PC Board**

C26 - 1uF, 50V, 20%, Radial Lead, 85 deg Replacement Manufacturer: Nichicon

Replacement Part Number: URS1H010MDD1TD

Digikey Part Number: 493-11473-1-ND

Quantity in Assembly: 1

C22, C23 -47uF, 10V, 20%, Axial Lead, 85 deg

Replacement Manufacturer: Nichicon Replacement Part Number: TVX1A470MAD

Digikey Part Number: 493-14808-ND

C21, C53 - 10uF, 35V, 20%, Axial Lead, 85 deg

Replacement Manufacturer: Nichicon Replacement Part Number: TVX1V100MAD

Digikey Part Number: 493-14419-ND

Quantity in Assembly: 2

### **High Loop PC Board**

\*\*\*17 Pin Header, Double Decker Boards \*\*\* C20 - 10uF, 50V, 20%, Radial Lead, 85 deg Replacement Manufacturer: Panasonic Replacement Part Number: ECE-A1HKS100B Digikey Part Number: P19588CT-ND

Quantity in Assembly: 1

C1, C39, C40, C41, C42, C43 - 10uF, 35V, 20%, Axial Lead, 85 deg

Replacement Manufacturer: Nichicon Replacement Part Number: TVX1V100MAD Digikey Part Number: 493-14419-ND

Quantity in Assembly: 6

C7 -47uF, 10V, 20%, Axial Lead, 85 deg Replacement Manufacturer: Nichicon Replacement Part Number: TVX1A470MAD Digikey Part Number: 493-14808-ND