Engineering Change Notice (ECN) 004

Audyn Film Coupling Cap Update

Dyna-70 /-120 Ultimate Amplifier Engineering Update

Part/System: Dyna-70 & Dyna -120 Ultimate Upgrade / Circuit Card Assembly
Applicability: Automatic & Manual Bias Amplifiers
Effectivity: October 21, 2024 (original release)
Priority: **Required**; an update to the Dyna-70/120 amplifier is **required** for amplifier performance & reliability.

Introduction

This ECN addresses a **required update** to the Dyna-70/-120 Ultimate Upgrade amplifier. As a part of our continuous product & process improvement efforts, Miller Audio LLC (MALLC) recommends all owners and users of Dyna-70/-120 amplifiers update their amplifier with a higher voltage rated film coupling cap for C8/C9/C10 & C8L/C9L/C10L on the main Dyna-70/-120 PCB. This update is applicable to all Dyna-70 / -120 amplifiers, whether automatic or manual bias equipped.

This update does not impact newly built Miller Audio LLC Dyna-70 Ultimate Upgrade ST-70 amplifiers. We build all new amplifiers with the newest and latest components in use at time of order.

This upgrade is required for ALL Dyna-70 /-120 auto bias and manual bias amplifier systems. There is no defect or fault in the Dyna-70-120 amplifier, the Dyna-70/-120 Printed Circuit Board (PCB), the completed Dyna-70/-120 Circuit Card Assembly, or in its design. This is a part replacement necessary to increase amplifier reliability and improves the operational safety margin of the original film capacitors used in the Dyna-70/-120.

ECN004 introduces new parts addressing the Audyn-brand film coupling capacitors, used in the front-end and the outputs to the power tubes. With the release of ECN004, all Dyna-70/-120 Ultimate Upgrade Kits or factory-built amplifiers will include these new higher voltage film capacitors at no charge.

Background

Miller Audio offers 3 “standard” grade Polypropylene film capacitors used in its production of Dyna-70 / -120 amplifiers and amplifier Kits. We use all three brands interchangeably (however, we do not mix brands together) with Audyn, Solen and Mundorf film capacitors in both 0.10 and 0.22uF values.

Normally these caps are rated @ 630 VDC, however we have instances when a 400 VDC cap was used in the Audyn brand caps. We’ve traced this to an order discrepancy in early 2024, when we placed a stocking order for Audyn film capacitors with our supplier.

This ECN highlights this low voltage deficiency of the Audyn caps. There is nothing wrong with the 400 VDC Audyn film capacitors. However, we must have a greater safety margin to address the high turn-on voltages in our Dyna-70/-120 amplifier at start-up. There is no deficiency of the 630V Solen or Mundorf caps. If your Dyna-70 / -120 has Mundorf or Solen caps, they are already rated for 630VDC and are safe to use as is; continue to use and enjoy your Dyna-70 /-120 amplifier.

However, if your film coupling capacitors are the Red, Audyn branded caps, check to see they are 630VDC rated capacitors. If not, replace with the Solen or Mundorf caps. ANY film coupling capacitor that is not rated for 630 VDC, needs to be upgraded from a 400 VDC rated part to a 630 VDC rated part (this also applies to owner-supplied custom parts applications).

MALLC has received no feedback to date of failed amplifiers due to this oversight. However, **if you find you have Red Audyn 400 VDC film caps please contact us and we will replace your caps free of charge**. We will require a sales receipt, or some method of Proof-of-Purchase to verify you have a Dyna-70/-120 amplifier with the incorrect parts.

- MALLC will update the Dyna-70 Ultimate Upgrade Kit Assembly Manuals to reflect this change.
- MALLC will post this ECN in its' website documentation pages for consumer reference.

NOTE: Miller Audio LLC reserves the right to make design changes, parts replacement, substitutions and specification revisions at any time and without notice. If you have questions about these updates, please contact us.

DESIGNED & MADE IN THE U.S.A.
Assembled in the U.S.A from Components Sourced Internationally

END