



Philips Wake-Up HF3520 Power supply repair

Flashing or flickering light when using radio can be caused by a malfunctioning switchmode power supply IC.

Written By: Thomas Widmaier



INTRODUCTION

The IC (chip) inside the lamp seems to die slowly resulting in flickering/flashing lamp operation when using the radio. Also the buttons may become unresponsive.

The problem occurs specifically when the device is cold and/or humid. Heating up the IC makes it work again.



PARTS:

- [New Item \(1\)](#)

Step 1 — Disassembly



- Disassemble according to this guide:
- <https://de.ifixit.com/Anleitung/Philips+...>

Step 2 — Replace IC



- On the main PCB with the power-jack, replace the MTX2410 switchmode regulator IC (SO-8 Package).
- There is a pin-compatible device from Quorvo (ACT4060ASH-T) which has a different internal voltage reference but otherwise works fine. Only a resistor must be changed for this to work.

Arbeite die Schritte in umgekehrter Reihenfolge ab, um dein Gerät wieder zusammenzubauen.