# Kit 27. 1W TDA7052 POWER AMPLIFIER

This is a 1 watt mono amplifier Kit module using the TDA7052 from Philips. (Note, no suffix.) It is designed to be used as a building block in other projects where a battery powered, audio amplifier is required.

The kit is constructed on a single-sided printed circuit board (PCB). Protel Autotrax and Schematic were used to design the board.

## ASSEMBLY INSTRUCTIONS

Assembly is straight forward. Make sure you get the integrated circuit and the capacitors are the correct way around. The electrolytic capacitors are polarized; they have a + or - marked on them and they must be inserted correctly into the PCB.

#### **CIRCUIT DESCRIPTION**

The data sheet contains all the necessary information about the TDA7052. You may download it from the software download page on our website at

# http://kitsrus.com/soft.html

Here are the main points:

- the module has a low component count
- no external heatsink is needed
- it is short circuit protected
- ideal for 3V 15V battery operation into an 8 ohm speaker

# **COMPONENTS**

| Capactors:                  |   |
|-----------------------------|---|
| 2.2uF electrolytic C1       | 1 |
| 100nF ceramic/mono C2       | 1 |
| 100uF electrolytic C3       | 1 |
| Kit 27 PCB                  | 1 |
| 10K Piher log potentiometer | 1 |
| 1K resistor 5%, 1/4W R1     | 1 |
| Spindle for potentiometer   | 1 |
| TDA7052 chip                | 1 |
| 8 pin IC socket             | 1 |
|                             |   |

