# **Assembly Notes**

# Stainless Steel Case For Nixie Clock Type Spectrum 18 / 1040



Stainless Steel Case - Spectrum 18 / 1040 Issue 2 (20 July 2021) www.pvelectronics.co.uk

# **REVISION HISTORY**

Issue Number	Date	Reason for Issue
2	20 July 2021	New case with tower bases
1	20 July 2016	New document

# **1. APPLICABILITY**

This case is suitable for the following versions of the Spectrum Nixie clock:

Spectrum 18: PCB date 1 October 2015, Assembled according to Issue 8 instructions
Spectrum 1040:PCB date 5 November 2015, Assembled according to Issue 8 instructions

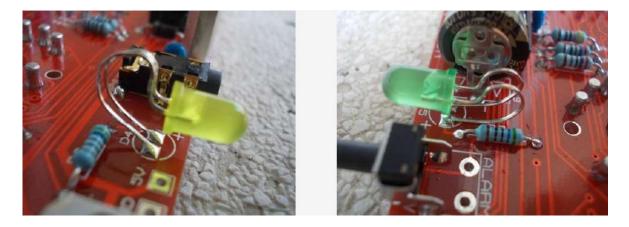
# **2. PACK CONTENTS**



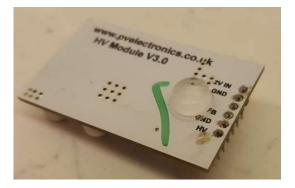
# 3. ASSEMBLY GUIDE

# 3.1 Prepare the PCB D4, D6 (5mm Yellow LED) D5 (5mm Green LED)

LEDs D4, D5 and D6 need to be mounted as shown below (your PCB may look a little different, but note the bending of the LED leads). The originally longer lead goes to the pad marked +.



Place a self adhesive rubber foot on the base of the HV module as shown, to prevent any possibility of contact with the metal case

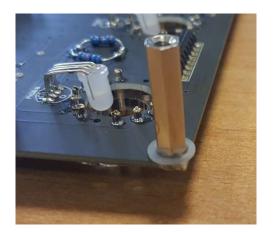


#### **3.2** Prepare the Case

Carefully remove all protective film from the stainless steel case components. Peel from one corner.

#### 3.3 Mount the PCB spacers on the PCB

Mount the components onto the PCB as shown below using the M3 X 6mm screws. Do this for all six PCB mounting holes.



# 3.4 Place PCB in case

Start by feeding both neons into their holes in the top part of the case. Then you can tilt the PCB forwards so that the front hex spaces clear the case. Push forwards, and then tilt the PCB back again and the rear hex spacers will clear the case. At this point, the PCB will be loosely in the case top part.

It is now necessary to work the 3 LEDs into their respective holes. Temporarily secure the PCB in the correct position by using 4 of the 6mm screws to attach the 20mm hex spacers to the top case part.



When the LEDs are in their holes, you can remove the screws but do not allow the PCB to move with respect to the case, or the LEDs will come out of their holes. If you grip the assembly as shown below, you can keep the PCB in the correct position whilst you remove the screws and move to the next step:



# **3.5** Place base component

Keeping the PCB in position, place the base component, and then secure using the six M3 6mm screws. Do not overtighten the screws. Place the four rubber feet at the corners of the underside of the case.

# 3.6 Apply rear legend

Remove the film from the adhesive side and attach the legend as shown. At the end of the case assembly, also remove the front film from the legend.



# **3.7** Assembling the Colon Towers and bases

Peel one backing layer from the torus shaped adhesive pieces and apply carefully around the two neon apertures as shown below:



Then peel the upper protective layer from the adhesive circles, to reveal the clear adhesive film. Slide the tower bases over the neons and press firmly into the adhesive.



The two glass neon cover tubes can now be placed, however it's a good idea to insert the tubes first. The glass covers can be sealed with a tiny drop of silicone sealant, but this prevents easy disassembly – we recommend they are held in place solely by gravity!

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The completed clock – Enjoy!