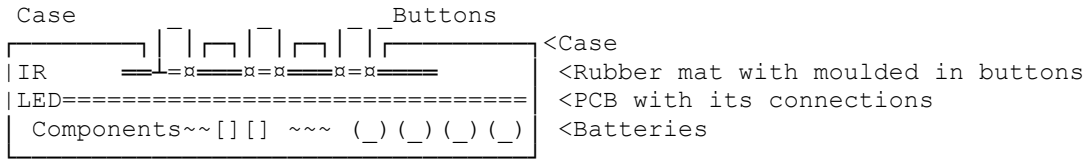
IR Remote control failures

By G8MNY (New Apr 06)

(8 Bit ASCII Graphics use code page 437 or 850)

Although universal replacements are available most do not offer the full set of functions. So you may loose essential buttons like setup, or they may be quite complex to get that mode out of the universal remote control. Because of this it is worth while having a good go at a proper repair.

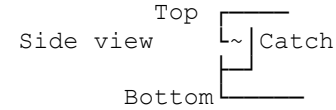
TYPICAL REMOTE



Each button has a conductive tip (=) that bridges 2 PCB tracks.

OPENING

One of the main problems is opening a control, some have screws (eg. in battery compartment) as well as many hidden catches all the way around that require top (or bottom) of the case to be bigger, so that the case catches can be released.



It is not easy to release all the catches on all sides without marking the case while levering it, or breaking the odd catch by not levering it in the right place.

REMOVING LIQUIDS

These rubber pad devices often fail due to liquid getting trapped under the rubber mat. Coffee, Tea, Sweet, will never dry out on it own between the mat & the PCB. So open it up & carefully remove the PCB & then the rubber mat. If is has sold plastic buttons as well leave them in place. Wash the mat & PCB in hot water & thoroughly dry. This should leave the contacts clean & fully functioning. If there were plastic buttons over the mat now clean them making sure you doe not rearrange them if they are engraved. Put back the rubber noting any alignment points. Put back the PCB.

TESTING IR CONTROLS

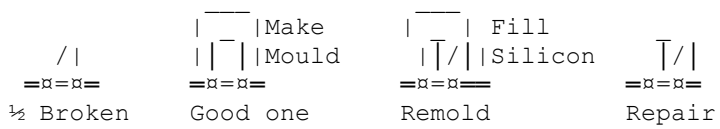
Before you click back the case if you can test it. This used to be difficult if there was not a telltale LED on the remote, but nowadays most TV camera can see IR to some extent, so it can be easier to hook up a camera to see the action of all the buttons rather than test with RC main item.

BATTERY CONNECTIONS

These are often wire or thin plate. If a quality unit they may be made of stainless steel. Often the failure is in the connections, either not enough pressure or corroded contacts. Too much pressure or dropping can weaken the spring metal, if to the point of fatigue use added tin can/sponge to extend contact life. If corroded but still intact then wash parts with hot water & dry. Grease up the parts (inc battery) to stop all further corrosion. If the parts are too far gone replace wit paper clips/tin can etc.

BROKEN BUTTONS

These can be repaired by taking a plastseen/wax mould of good one, then cooling it to harden (fridge) & using silicon rubber sealant in the empty mould, & pressing it into a broken button.



When set (24 hours) warming up the mould, so it can be removed. Trim away any spill with a sharp modelling knife. Paint the button if you can to match.

If the button contact is warn away either on the rubber or PCB sometimes a repair is possible with silver conductive paint.

Why Don't U send an interesting bul?

73 de John G8MNY @ GB7CIP