Gearbox Conversion Guide for Digitalization

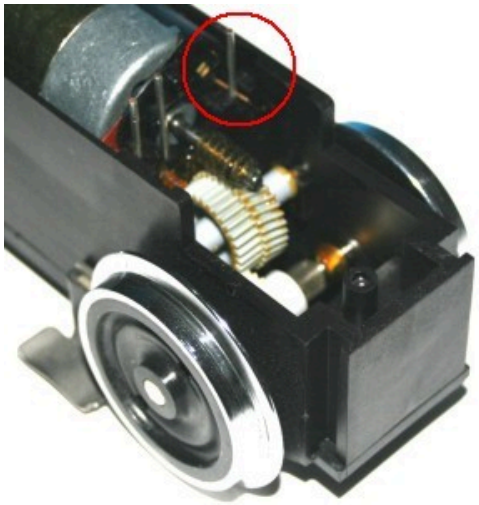
Conversion of an LGB 3-pin gearbox to digital capability

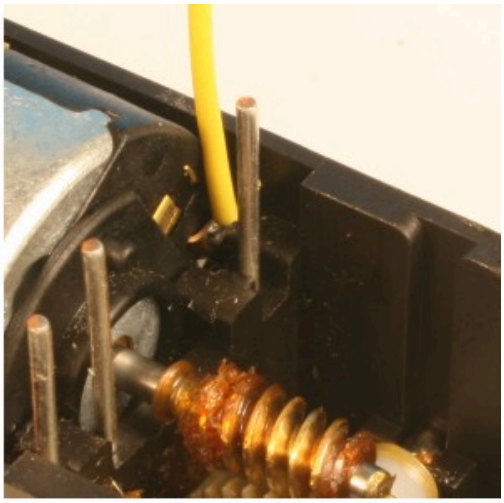
In this older type of gearbox, the track + motor connections are connected on the side of the "single" pin (ws) in the gearbox.
In digital mode, however, it is essential that the engine and track are separated from each other.

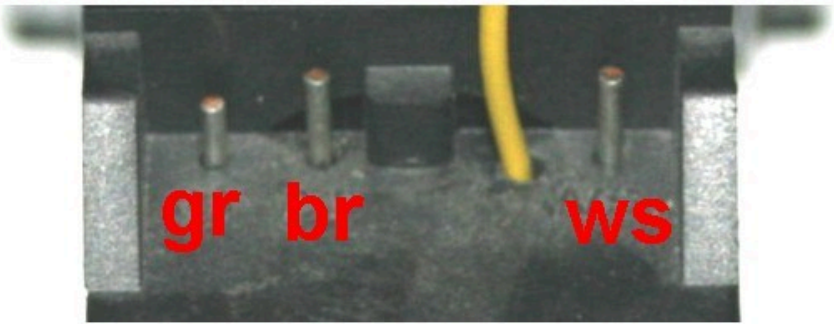
In the pictures you can see a simple conversion suggestion:

- Unscrew the gearbox and remove the engine (remember the direction!)
- Motor vane that went to the single pin cut in half.
- Bend the shortened motor flag outwards and solder the 4th cable (yellow).
- Insert the motor and check that the bent tab and the soldered cable are no longer in contact with the pin.
- 4. Drill a hole in the lid and insert additional cable through it.
- Reassemble the gearbox.

Now they have all the connections that the decoder needs.







Source: Massoth

Conversion of an LGB half-shell gearbox to digital capability

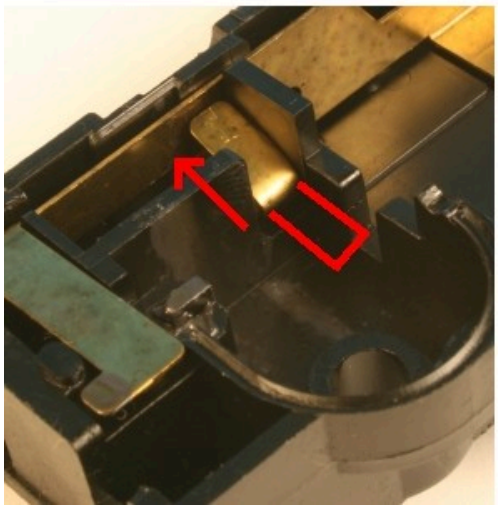
In this very old type of gearbox, the engine and track are connected in the housing on both sides.
In digital mode, however, it is essential that the engine and track are separated from each other.

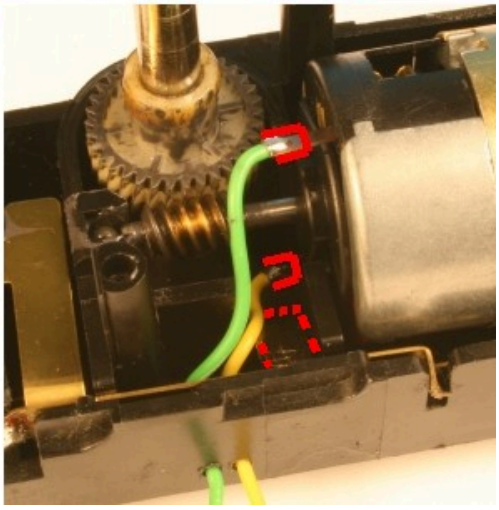
In the pictures you can see a simple conversion suggestion:

- Remove the wheels on one side where the four side screws are (Fig. 1). Beware, jumping coals!
- Unscrew the gearbox and remove the engine (remember the direction!)
- In both halves of the housing, bend the metal tabs in the middle, which contact the motor flags. (Fig. 2)
- Solder the cable (yellow+green) to both motor connection tabs. (Fig. 3)
- Insert the motor and check that the bent tabs are no longer in contact with the motor.
- Drill 2 holes in the lid and insert the additional cables.
- Reassemble the gearbox.

Now they have all the connections that the decoder needs.
The necessary routing of the additional cables may vary depending on the locomotive (check gearbox assembly).

With this drive, the load control has to be set a little more sluggishly on most decoders.
Please refer to the decoder instructions.





Source: Massoth

Digitisation of a Piko gearbox (Taurus, BR218)

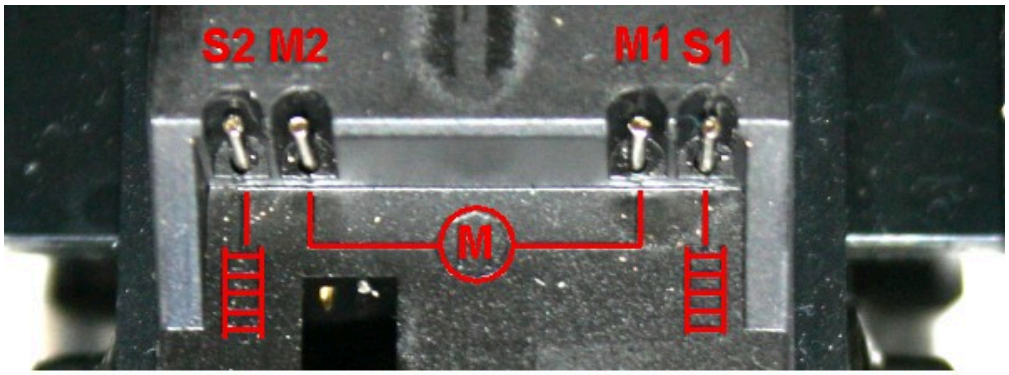
The Piko gearbox is already digitally capable out of the box.
However, there are two things to keep in mind:

- Compared to the well-known LGB gearboxes, the pins are swapped!

The siding (S1+S2) is on the outside and the engine connection (M1+M2) is on the inside.

- The pins here are arranged very close to each other.

The plugs must be insulated with heat shrink tubing or adhesive tape.


S2 M2
M1 S1
M