

## UNICARD and controllers **Easy**, **Expert**, **Expert+** and **Z-series**

All controllers TMM<sup>®</sup> Expert and Z-series line and Easy are possible programming by transmitter and by PC (exclude Easy). In this manual is describing connection and programming by programming card UNICARD.

### A) Controllers **Expert+** and **Z-series** (BEC version)

Newest controllers (except 7A and 12A versions and Easy line) may be programming via **ICS** connector with the connection cable CC\_02 only. Programming via servocable is not supported. The cable is inserted in a special **ICS** connector which is a part of the controller. In this case it is not necessary to disconnect the controller from the receiver each time which significantly simplifies the whole process. Connection makes by picture **A**, see below. We recommend turn on your transmitter during programming (during communication) – servos not jerk (receiver and servos are supply from controller's BEC). You can controller on after connecting to UNICARD. See also UNICARD and controller manuals.

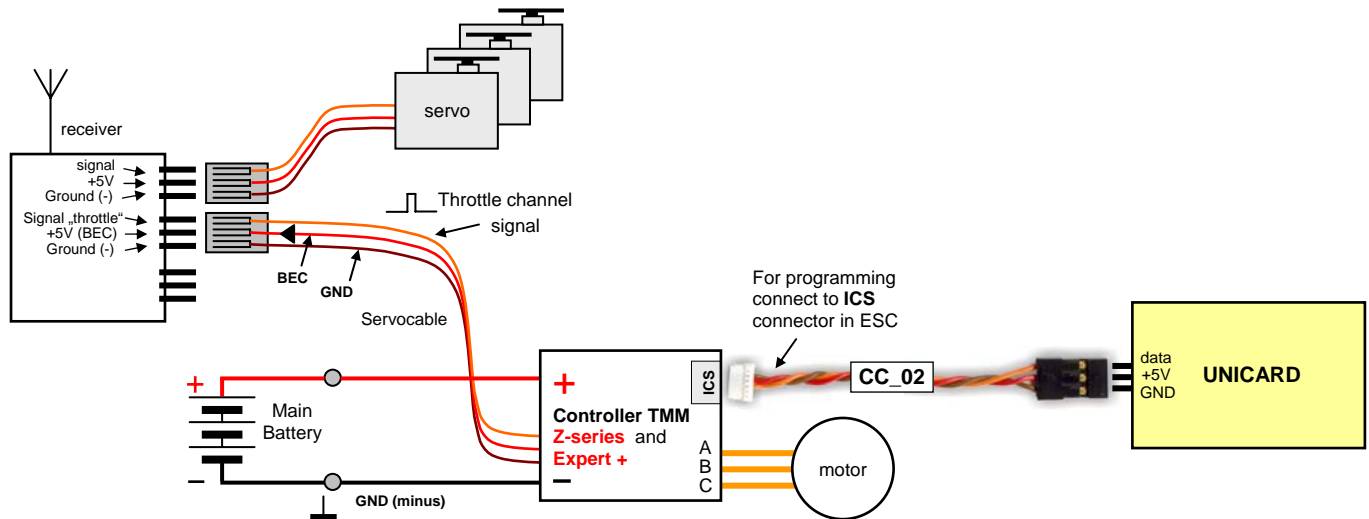


Fig. A Connection to the controllers Expert+ and Z-series with BEC

### B) Controllers **Expert+** and **Z-series** (OPTO version)

Newest controllers may be programming via **ICS** connector with the connection cable CC\_02 only. Programming via servocable is not supported. The cable is inserted in a special **ICS** connector which is a part of the controller. In this case it is not necessary to disconnect the controller from the receiver each time which significantly simplifies the whole process. Connection makes by picture **B**, see below. We recommend turn off your receiver during programming (during communication) – servos not jerk. You can controller on after connecting to UNICARD. See also UNICARD and controller manuals.

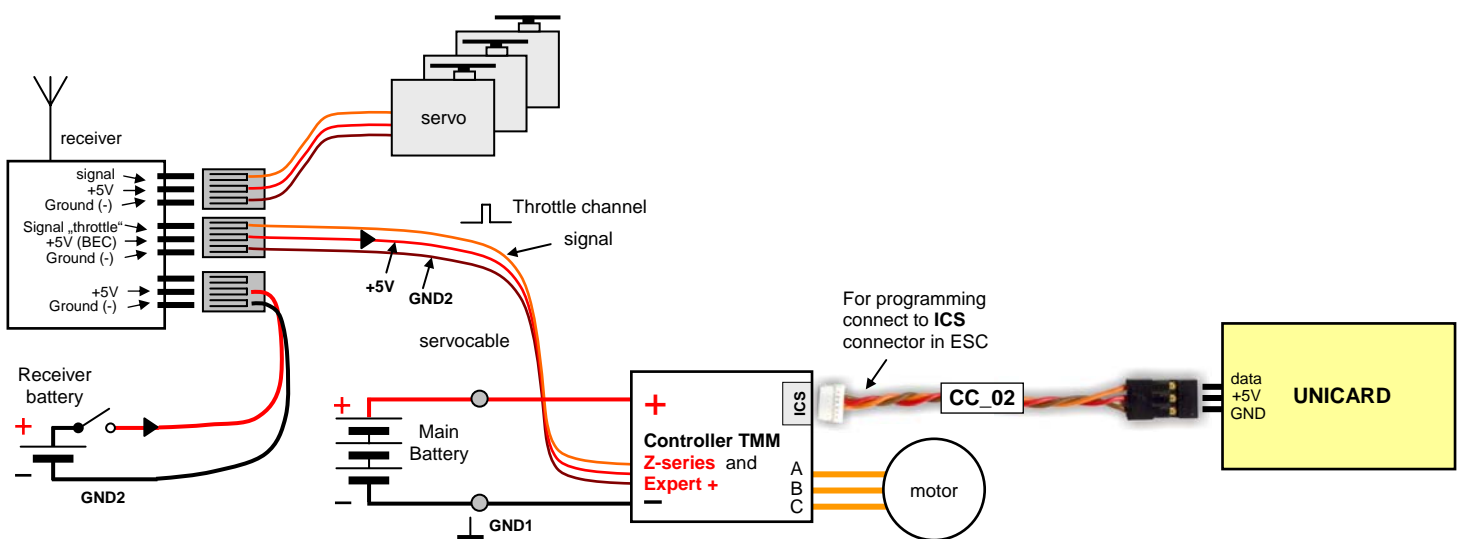


Fig. B Connection to the controllers Expert+ and Z-series, OPTO versions

C) Older versions of the controllers **Expert, Expert+ (BEC version) and Easy**

Older version of controllers **Expert** and controllers **Easy** and **Expert 7A** and **12A** are possible programming by servocable also. Connection makes by picture **C**, see below. You can controller on after connecting to UNICARD. See also UNICARD and controller manuals.

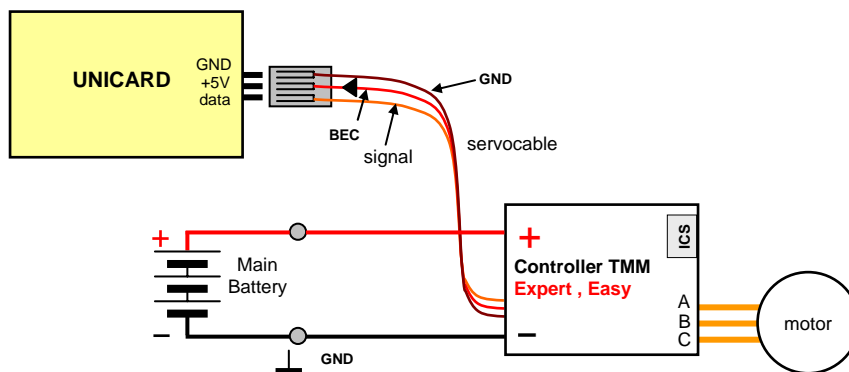


Fig. C Connection to the controllers Easy, Expert 7A and 12A and older version of Expert with BEC

D) Older versions of the controllers **Expert OPTO**.

Older version of OPTO controllers are possible programming by servocable also. It is necessary use „Y“ cable for connecting. Connection makes by picture **D**, see below. It is necessary connect (switch on) receiver battery first (4 Nixx battery, **voltage of receiver battery cannot be higher than 5.5V**), and main battery connect (or switch ON) as 2<sup>nd</sup>. Time for connecting main battery is max. 5 second after receiver battery. See also UNICARD and controller manuals. Significantly simpler is use connection „B“ with ICS connector.

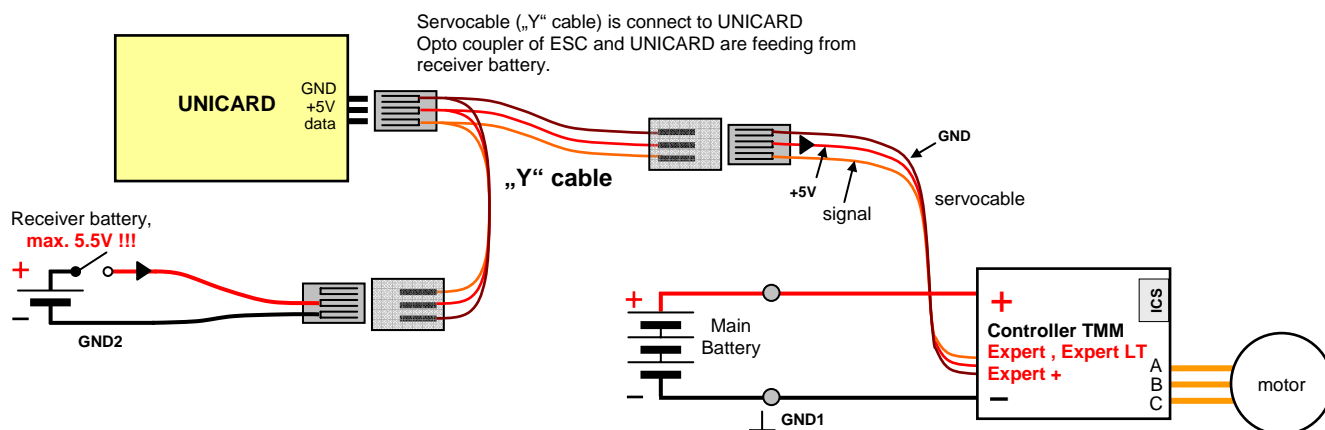


Fig. D Connection to the older version of controllers Expert OPTO