

YMD-DDMTC-65A Controller (24x IRFP2907), existing and new (optional) wires:

Colour	Function/Connection name on controller
BLK	GND
RED	+5V
WHT	TS (Throttle 0-5V)
PRP	Comes in on one wire, then exits to purple on another connector
ORA	Key (Ignition?)
YEL	To thermal switch on heatsink (overtemp indicator?) and BKH via diode

New wires:

2-conductor cable exiting with +BAT supply:

BLU	XS (Extra speed? Floating state: 0.8V.) Full throttle when connected to +5V
BRN	SD (Floating state 5V) Seems to toggle between at least 3 max speeds when earthed briefly – 45km/h, 70km/h, max?

Cable exiting with –BAT supply:

BLU	EBK (Electronic brake, floating state 5V) When grounded and either BKH or BKL asserted, switches on full electronic brake with regen.
BRN	REV1 (Floating state 5V) motor controlled by throttle in reverse at low speed when grounded. Switchover between directions only occurs when motor stationary.

Single wire:

BLU	BKL (Brake low, floating state 5V) Switches off motor drive when grounded, additionally switches on electronic braking if EBK is grounded.
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