Website: www.4qd.co.uk

Business: We sell motor speed controllers and related accessories, with many of our sales coming via the website, and we have a mix of UK and international customers.

Website traffic: The website has about 20,000 visitors per month and around 100 esales per month.

Website hosting: The website is a wordpress website and is hosted on Siteground (GoGeek account). We use the KeyCDN Cache Enabler html caching plugin for speed. We have a staging site that can be used for development by an external developer.

Requirement: We need an interactive html form to help customers select the correct motor controller for their application. The form should be mobile responsive.

Technical approach: We think the most appropriate solution will be a custom form, rather than a plugin, using javascript/php for implementing the interactive logic.

Design: The form layouts are provided to indicate the functionality required. The actual design should fit in with the website colours/style and we are happy to consider alternative layouts/features for the best user experience.

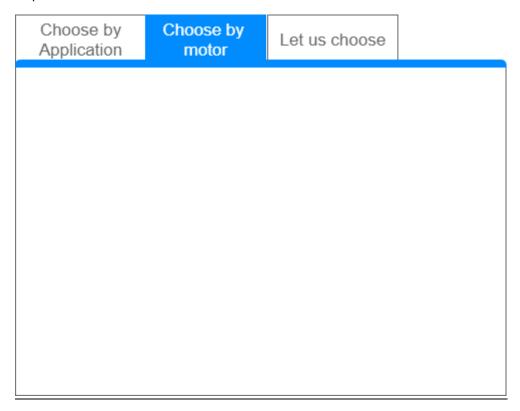
Detailed Specification

Choose a controller Page

This page has 3 tabs:

- Choose by application
- Choose by motor
- Let us choose

Each tab is a form. It should be possible to have hover over help text on the form field labels to explain the data required.



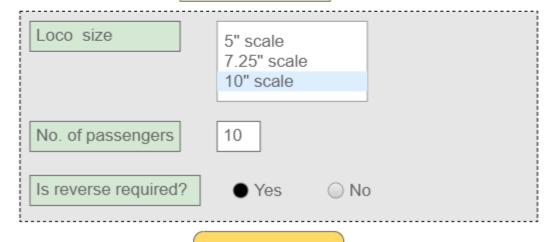
Choose by application

Choose by Application

Application

Greenpower kart
Electric vehicle
Model loco
Electric boat
Other

Application Details



Select

Suggested Controllers

PRO-160-S Standard PRO-160. Select if heavy load will be occasional

PRO-160-HC

High current PRO-160. Select if loading will be heavy over a long period of time

Application Notes

Please check our model loco page for details of accessories. The PRO-160 includes dead man handle and radio control

Data Entry Section

1. Application

A drop down box with the following application choices:

Industrial machine

Model Loco

Toylander

Greenpower kart

Electric boat

Electric kart

Golf buggy

Robot

2. Application details

This section of the form will be shown if further application details are required, and the fields displayed will depend on the application chosen.

For example, the fields required for 'Model loco' are:

Fields:

Label	Values	Notes
Loco scale	5", 7.25", 10"	
No of passengers	1 – 10, 10-20, > 20	
Is reverse required	Yes/No	

The fields for each application will be provided later.

The user will then press the **Select** button to calculate the result.

Results Section

1. Sugested controllers

The list of controllers will be selected based on the application selected, and the application details. The mapping for the controller models for each application will be provided later.

Fields:

Controller	Description	Notes
Controller name	Text description set from	The controller name should be a
	theapplication mapping	hyperlink to the controller page

2. Application notes

These notes will be set according to the selection logic

Choose by motor

Choose by Motor Rating Motor Details Voltage 12 24 36 48 Nominal motor current (A) OR Rated motor power(W) No. of motors 2 Motor Type Brushed Series wound Is reverse required? Yes O No Calculated load Maximum motor current (A) 50 Stall motor current (A) 150 Suggested Controllers Standard PRO-160. Select if heavy load will be PRO-160-S High current PRO-160. Select if loading will be heavy over a long period of time PRO-160-HC

Data Entry Section

Motor details

Fields:

Label	Values	Notes
Voltage	12,24,36,48,72,84	Discrete options or sliding scale/free format?
Rated motor	1 - 360	Either this field or the rated motor power field is
current (Amps)		required, if one is entered the other should be a
		no entry field
Rated motor power	1 - 3000	Either this field or the rated motor current field
(Watts)		is required, if one is entered the other should be
		a no entry field
No of motors	1-10	Default to 1
Motor Type	Brushed - permanent	Default to permanent magnet option
	magnet	
	Brushed - Series wound	
Is reverse required	Yes/No	Default to Yes

The user will then press the Select button to calculate the result.

Results Section

3. Calculated Load

Fields:

Label	Values	Notes
Nominal motor	(Rated motor current * no. of	Use either rated current or power
current (Amps)	motors)	depending on what user entered in
	OR	data entry section
	(Rated motor power / Voltage) *	
	no. of motors	
Likely stalled motor	Maximum motor current * 3	Typically 3-5 times nominal current
current (Amps)		

4. Sugested controllers

The list of controllers will be selected based on the motor details entered. See table 1 for the mapping between voltage/current and controller options. There will be a text description to go with the controller model number.

Fields:

Controller	Description	Notes
Controller name	Set to text which will be provided	The controller name should be a
	later for each controller	hyperlink to the controller page

Let us choose

	Let us choose
Application	Greenpower kart Electric vehicle Model loco Electric boat Other
App	Dication Details
Loco size	5" scale 7.25" scale 10" scale
No. of passengers	10
Additional information	I will be replacing a Parkside controller and want to check that it is compatible
<u>M</u>	lotor Details
Voltage 12 24 36 48	
Nominal motor current (A) 50
or Rated motor power(W)	
No. of motors	
	ushed eries wound
Is reverse required?	● Yes ○ No
Name	n Brown
Email jbro	wn@gmail.com
	you please give me a call to discuss best option
	Send Query

This tab allows the user to submit their information to us via a form. The Application data entry fields are as on the 'Choose by application' tab, and the motor data entry fields are as on the 'Choose by motor tab'

There is a contact us section at the bottom of the form. The user should enter their name, email, and a question and these should be emailed to 4qd along with the details entered in the selection form. Protection should be in place to stop spam submissions, we use askimet on the contact form in the website footer.

12-36V	36-48V	48-84V
PRO-360-HC		PRO-360-HCV
PRO-360-S		PRO-360-HV
PRO-360-S		PRO-360-HV
PRO-160-HC		PRO-160-HCV
PRO-160-S		PRO-160-HV
PRO-160-S	PRO-160-S	PRO-160-HV
PRO-150	PT-10 (If reverse not required)	
DNO-010		
PT-10 (If reverse not required)		
PRO-160-S	PRO-160-S	PRO-160-HV
DNO-005	PT-05 (If reverse not required)	
PT-05 (If reverse not required)		
	PRO-360-HC PRO-360-S PRO-360-S PRO-160-HC PRO-160-S PRO-160-S PRO-150 DNO-010 PT-10 (If reverse not required) PRO-160-S DNO-005	PRO-360-HC PRO-360-S PRO-160-HC PRO-160-S PRO-160-S PRO-160-S PRO-150 PRO-150 PT-10 (If reverse not required) PRO-160-S PRO-160-S PT-05 (If reverse not required)

Table 1 – logic for controller selection by motor current and voltage