HM10 SERIAL PRO

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# Replacement Board Overview of Commands

To control the board commands are defined, these are sent via Bluetooth connection from the app to the board.

Android has a matching app that controls communication with the board.

For iOS, the app is in work. To still control the board with an iOS device, the app HM10 Serial Pro is used.

#### Command list

Values in <> brackets must be specified. Values in {} brackets can be specified.

### Commands for Prototype, Series 1, Series 2

Command	Description	Note	
c: <channell#>{<channel#><channel#>}{&amp;}</channel#></channel#></channell#>	Channel <channel#> on / off</channel#>	Channel counting starts at 0! channel 1 = c:0&	
con{&}	Switch on channels 1-10		
coff{&}	Switch channels 1-10 off		
f: <channel#y{&}< th=""><th>Channel <channel#> flicker</channel#></th><th></th></channel#y{&}<>	Channel <channel#> flicker</channel#>		
b: <channel#>:<blinkon>:<blinkoff>{&amp;}</blinkoff></blinkon></channel#>	Channel <channel#> flash with frequency BlinkOn / BlinkOff</channel#>	Flashing frequency is given in milliseconds	
s: <soundnumber>{&amp;}</soundnumber>	Play sound file <sound#> from directory MP3 play</sound#>	only with optional sound module	
s: <folder><soundnumber>{&amp;}</soundnumber></folder>	Play sound file <sound#> from folder <folder></folder></sound#>	only with optional sound module	
r{&}	Ramp open/close		
n{&}	Engine on/off		
ne{&}	Engine effects on/off	only with optional Neopixel module	
nc{&}	Command ne off: engine colour white or blue	only with optional Neopixel module	
nc{&}	Command ne on: Change effect	only with optional Neopixel module	
q:<1/2>	Fire Quadgun Type 1 or 2	Sound file 2 or 3 from Folder 99 will be played	
V:<-/+>{&}	Volume down (-) or up (+)		
V: <value>{&amp;}</value>	Set volume to value	Values between 1 and 30 allowed	

#### Command syntax and combinations

#### The basic syntax of the commands is

commando:parameter1:parameterN&

Kommandoblock	Bedeutung
Command	Command letter(s)
Parameter1N	Command parameter
&	command end character

The individual command blocks are separated by means of the colon.

The & -sign ends the command, after which another command block can be entered.

There are commands without parameters, the parameter block is omitted.

By means of the command end character it is possible to enter several commands in one line. The end character is not necessary for one command per line.

Example:

Channel #1 with sound #1 from folder MP3	c:0&s:1&
Channel #1 with Sound #1 from folder #1	c:0&s:1:1&

Channel 1 is switched on or off (depending on the current channel status) by means of this command series and the sound file 1 is played from Folder MP3 or Folder 01. A maximum of 20 characters per line is allowed.

Example of a command sequence

Command	comment
V:15&	Volume to 15 (half volume) set
s:99:4&	Play File #4 from Folder #99
c:0123&s:1:1&	Switch channels #1-4 and play sound #1 from folder #1
r&	Move ramp
c:4&s:5:1&	Switch channel #5 and play sound #1 from folder #5

## HM10 Serial Pro - Establish connection

	17.94	
 	Bluetooth Serial	
	[TV] UE48J6350 Services: n11 Manufacturer: 0x7500420401808C3801959017A7FEF13669E6450100000000000 R55: 12708	() >
all	BT05 Services: FFE8 Manufacturer: n11 RSS:640	(i) >
	tion Scanning	

Figure 1 establish a connection

Activate the Bluetooth function on the iphone / ipad.

After starting the HM10Serial Pro app and the board is switched on, the Bluetooth module is displayed. Mostly with the name BT05 or CC41-A

Tapping the module name will make the connection and show the console of the app.

### HM10 Serial Pro Console

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Console Functions	≫ 🗊 🖞
001 11:52:29 S:000000000000000000000000000000000000		
Enter Message		

Figure 2 console

The console of the app displays all information sent by the board - the status information.

Also, appropriate commands can be sent to the board.



Button disconnects the Bluetooth connection



Button allows configuration and adding buttons



Button deletes the console output



Button allows the export of the console output to a text file

× ·	Console Functions	× 🗊 🖞
Quadgun 1	Quadgun 2	Engine
Engine Color	Engine Effect	

# HM10 Serial Pro - Define Function Button

Figure 3 command buttons

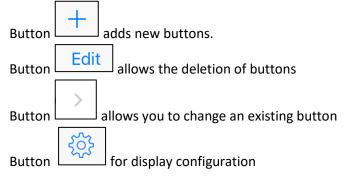
For quicker sending of commands, you can define suitable buttons.

These then send the appropriately configured command sequence to the board.

×		Console Punctions			× 0 1
Quadgun 1		Quadgun 2		Engine	
Engine Color	Done Quadgun 1 Extion Quadgun 2 Extism Engine Extism Engine Color Extism Engine Effect Extism Engine Effect Extism	Functions			
	+		Edit		

Figure 4 Button configuration (part 1)

The button Functions (A) takes you to the function config window.



	Console Functions	× 0 Ó
	Quadgun 2	Engine
Functions	Channel 1	
Name	Channel 1 💿	
Message	C:0& UTF8	
Repeat	Don't Repeat >	
	messane will be sent repeatedly while the button is kent	
pressed down.		
	Name Message Repeat Color	Quadgun 2         Functions       Channel 1         Name       Channel 1         Message       c: 0& UTF8         Repeat       Don't Repeat         Color       Image: Color is set, the message will be sent repeatedly while the button is kent

Figure 5 button configuration (part 2)

The button configuration is the same for new and existing buttons.

The following values can be adjusted:

Name	Button Name	
Message	command(s)	Change input format from HEX to UTF-8
Repeat	Don't Repeat	
Color	Button color	

Via the HEX button one comes to the selection of the input format:

UTF8	
Hexadecimal	
Decimal	
Octal	
Binary	

Select the UTF8 format to enter the command as text.



Figure 6 button configuration (part 3)