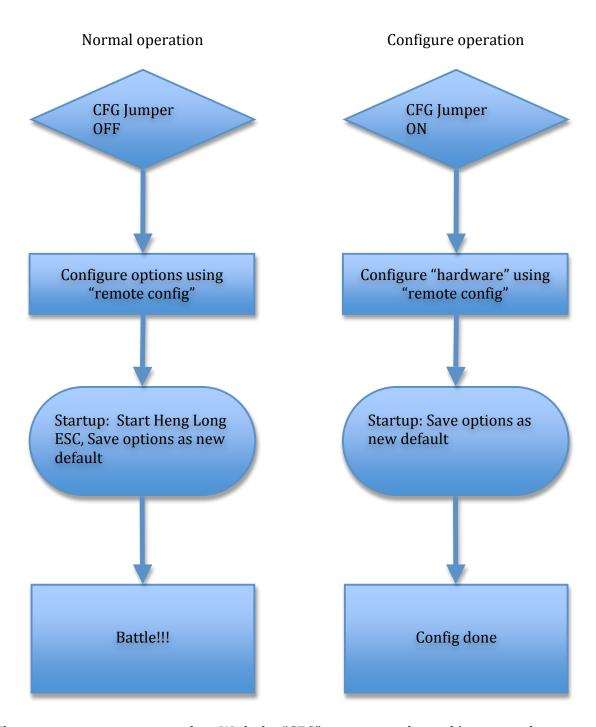
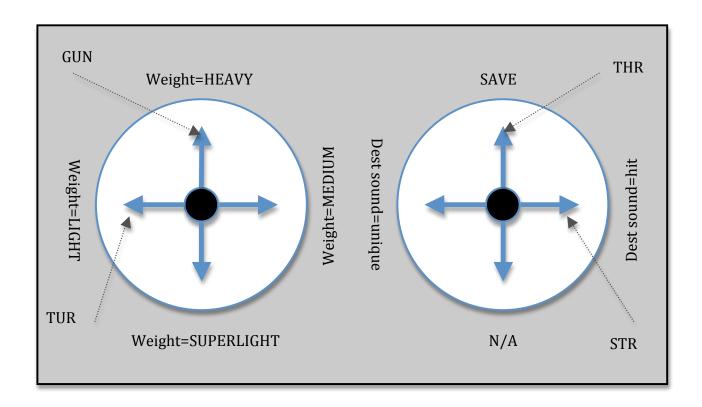
# **DBC-RC2HL Operation manual**



There are two operation modes. With the "CFG" jumper on, the tank's size can be configured. As well, the DBC can be programmed to play the "Hit" sound for both hits and the final death hit (useful with only 1 sound card).

With the "CFG" jumper off, the tank is in normal operation mode.

## Remote "Hardware" configuration



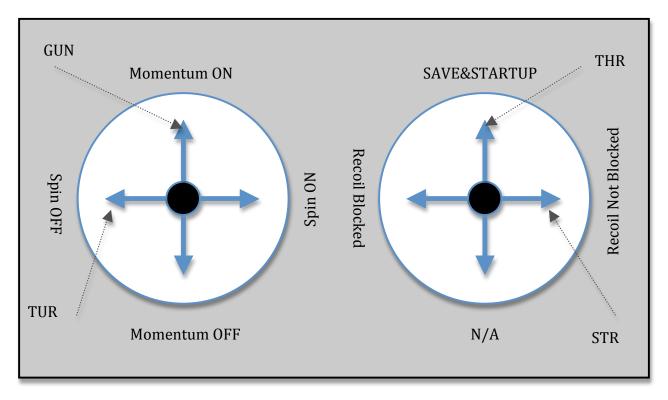
If the "CFG" jumper is present, the DBC will perform "hardware" configuration. Here you can set the tank mass (affect battle hits, reload times, and momentum), as well as configure the DBC to play the hit sound when "destroyed" during battle. This is useful if you only have 1 sound card and want the other sample to be a fire sound.

The diagram indicates the config options, assuming you're using the Recommended Initial Channel mappings:

Tank function	Airplane	Futaba	JR	Spektrum
	function	Channel	Channel	Channel
Throttle (THR)	Elevator	2		ELE
Steering (STR)	Aileron	1		AIL
Turret (TUR)	Rudder	4		RUD
Gun (GUN)	Throttle	3		THR
Option (OPT)	N/A	?	?	?

Once you push the "THR" channel all the way up, it saves the current features to the chip and exits the config mode. The DBU (if attached) will light up and stay on. The tank will need to be turned off, the jumper removed, and turned back on.

### Normal operation: Remote config



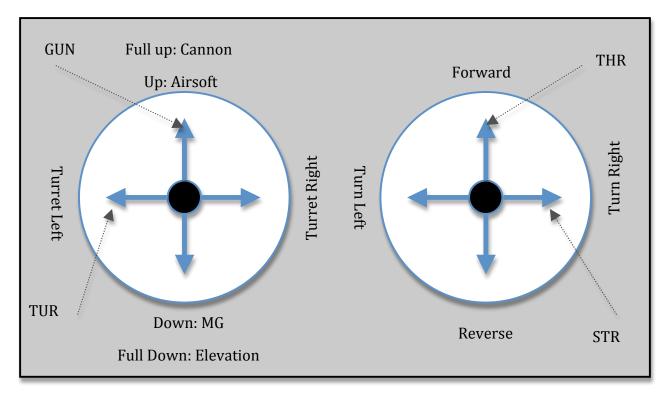
If the "CFG" jumper is not present, the DBC will enter "normal" mode. The first step of normal mode is "remote config", which allows the operator to change the settings to suite different terrain or battles. The previous settings are automatically loaded first, then changes can be made (or not), then the THR channel is advanced to the top to start the tank (and save any changes).

The diagram indicates the config options, assuming you're using the Recommended Initial Channel mappings:

Tank function	Airplane	Futaba	JR	Spektrum
	function	Channel	Channel	Channel
Throttle (THR)	Elevator	2		ELE
Steering (STR)	Aileron	1		AIL
Turret (TUR)	Rudder	4		RUD
Gun (GUN)	Throttle	3		THR
Option (OPT)	N/A	?	?	?

Each change in a config option will cause the DBU to briefly light up (if equipped).

## **Normal operation: Operating**



After exiting the "remote config" mode and starting the tank, the four channel controls are as shown, assuming you're using the Recommended Initial Channel mappings:

Tank function	Airplane	Futaba	JR	Spektrum
	function	Channel	Channel	Channel
Throttle (THR)	Elevator	2		ELE
Steering (STR)	Aileron	1		AIL
Turret (TUR)	Rudder	4		RUD
Gun (GUN)	Throttle	3		THR
Option (OPT)	N/A	?	?	?

The optional fifth channel is as follows (may need reversing):

#### Full UP:

- Gun Full UP = Cannon
- Gun Full DOWN=Elevation

Middle: (if available, e.g. on a 3 position switch or pot)

- Gun Full UP = Airsoft
- Gun Full DOWN = MG

Down: Shutdown Tank

The DBC offers two shutdown options:

- 1. For radio systems without failsafe (e.g. 75 mhz PPM), simply turn off the TX. Note that in some very noisy environments, cheaper RXes may pickup enough signal to cause erratic movement of the tank with the TX off. I don't recommend leaving the tank in this state any longer than absolutely required.
- 2. For radio systems with failsafe (e.g. 75mhz PCM, 2.4ghz), you must be using the five channel mode, and flip the fifth channel (OPT) to full down. Toggling this feature while the tank is in the middle of starting up or shutting down may cause a loss of sync (see below). You should only trigger shutdown when the tank is in normal operation, or **immediately** after the last hit.

#### Loss of sync

In some circumstances, extremely intermittent radio reception or rapidly flicking either the TX power or the OPT channel may cause the DBC to get out of "sync" with the Heng Long ESC, resulting in a DBC thinking it's moving and battling, but the ESC is off and the tank won't move (or vice versa). Rapidly turn the tank off then on, or repeat the "flicking" operation on the TX power or OPT channel to return the two components to "sync".