

5-Button Remote Control

Model: HALORC5

Datasheet V1.0

Model	Description
HALORC5	A portable beacon product with a white housing, a metal middle frame, five external buttons, and a blue LED light.(based on BLE 5.0 technology)

The HALORC5 is an intelligent, lightweight positioning beacon utilizing Bluetooth Low Energy (BLE) 5.0 technology. Integrated with Halo's smart dog collar, it enables: canine training assistance, real-time location tracking, and instant lost-pet alerts.

HALORC5 beacon advertises standard iBeacon and Eddystone (UID, INFO, TLM) simultaneously. The user can configure HALORC5 beacon via configuration app BeaconSET+ as well.

Moreover, HALORC5 beacon device enables users to transmit distinct Bluetooth Low Energy (BLE) broadcast packets via five dedicated tactile buttons, each short button press activates the integrated blue LED for operational confirmation, alternates the BLE PHY broadcast rate between 125K (Long Range) and 1M (Standard) modes, and emits scenario-specific RSSI calibration parameters unique to each button, where paired Halo dog collars execute corresponding commands upon receiving these broadcasts to accommodate diverse use cases, with additional functionality available for custom implementation based on specialized requirements.



FEATURE

- Advertise iBeacon & Eddystone simultaneously
- White colors by standard, other colors also can be customized
- Portable with key-chain hole
- Shutdown functionality is supported via the BeaconSET+ APP
- Five consecutive presses of the dot button activate fast broadcast mode for rapid device connection
- Long press the 'dot' button to power on the device
- Support OTA function (nRF52833 chipset)
- Easy to print customized logo

APPLICATION

It can be easily attach to daily items, such as smartphones, wallets, keys, handbags and suitcases etc.

ACTIVATE/TURN OFF HALORC5

- Pressing the 'dot' push button and keeping on 3 seconds;
- LED lights on 5 seconds then off, the device be activated on;
- The HALORC5 Beacon also can be turned off by BeaconSET+ app;

CONFIGURATION TOOL

- BeaconSET+ (iOS & Android);

CERTIFICATION

- FCC Regulation (FCC Rule Parts 15C)
- CE Regulations (Included EN300328/301489/62368/62479)
- NCC Certification
- IC Certification
- CA65(Basic)-Common
- PFAS (Basic)-Common
- REACH/RoHS/UL 4200A-2023

ELECTRONIC PARAMETERS

Item	Value	Remarks
Battery Model	1*CR2032	Coin battery, replaceable
Operation Voltage	3V	DC
Transmission Range	Up to 500m on LOS	In open field
Net Weight	17.7g	With battery
Color	White	Null
Size	45*45*10.94mm	Null

BEACON PRE-CONFIGURATIONS

Parameter Configuration							
HALORC5 5-Button Remote Control			Basic Parameter Configuration (Disabled by default, used solely for setting initialization parameters during burning).		Trigger Parameter Configuration (Initially hard-coded by firmware, adjustable via APP connection after burning).		Remark
iBeacon (Slot1-OFF)	UUID		Adv. interval		Adv. interval		
	Major		RSSI @ 1m		RSSI @ 1m		
	Minor		Radio Txpower		Radio Txpower		
UID (Slot2-OFF)	NameSpaceID		Adv. interval		Adv. interval		
	InstanceID		RSSI @ 0m		RSSI @ 0m		
			Radio Txpower		Radio Txpower		
UID (Push-Button UID)	NameSpaceID	cd944bbdc0d4a1b40e47	Adv. interval	200ms	Adv. interval	200ms	'Push-Button' UID (Button Trigger) Lightly pressing any of the 5 buttons simultaneously triggers both the UID frame and INFO frame. The blue LED flashes once (approx. 400ms). Approximately 100ms after the blue LED turns off: UID frame: Alternately broadcasts for 2s under trigger parameters (4dBm, 200ms). The distance calibration value displayed in the UID frame corresponds to the pressed button: Button 1: 1dBm Button 2: 2dBm Button 3: 3dBm Dot Button: 4dBm Middle Button: 5dBm (These calibration values are fixed in the firmware). INFO frame: Alternately broadcasts for 1s under trigger parameters (4dBm, 200ms).
	InstanceID	the same with MAC Address	RSSI @ 0m	1/2/3/4/5dBm	RSSI @ 0m	1/2/3/4/5dBm	
			Radio Txpower	4dBm	Radio Txpower	4dBm	
INFO (Push-Button UID)	Device Name	Halo-RC5	Adv. interval	1000ms	Adv. interval	200ms	
	Battery Level (%)	default	RSSI @ 0m	/	RSSI @ 0m	/	
	MAC Address	Unique for each device, provided by Mibew	Radio Txpower	4dBm	Radio Txpower	4dBm	
TLM (Slot5-OFF)	Battery Voltage(mV)		Adv. interval		Adv. interval		
	TURN ON TIME		RSSI @ 0m		RSSI @ 0m		
	PDU packets		Radio Txpower		Radio Txpower		
Empty (Slot6-OFF)							
Bonding Key(Password) : Hal0T3at			Advertising Name(Device Name) : Halo-RC5				

PACKAGING DETAILS



Details	Carton
Quantity	200pcs per carton
Net Weight	3.54kgs
Gross Weight	7.9kgs
Size	32 x 23.5 x 40 cm



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC warning:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

IC warning

- English:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

- French:

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) L'appareil ne doit pas produire de brouillage;
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

L'appareil a été évalué pour répondre aux exigences générales d'exposition aux RF. L'appareil peut être utilisé sans restriction dans des conditions d'exposition portables.