APPLICATION BEHAVIOR ON FOREGROUND

Bluetooth powered On	Application state		
	Works after bluetooth is Powered On		
✓	Works		

APPLICATION BEHAVIOR ON BACKGROUND

Application in memory	Bluetooth powered On	Application state	
		Doesn't work	
\checkmark	Partially	Works after bluetooth is Powered On	
	⋖	Works	
✓		Works after bluetooth is Powered On	
✓	Partially	Works after bluetooth is Powered On	
✓	✓	Works	

BLUETOOTH STATES

State	Application state	Notes	Control Center
Powered off	Works only if App remains in memory (suspended state)	Toggle Bluetooth power either through Settings, or via Airplane mode	(* %)
Partially on	Works after bluetooth state is changed to Powered On	Toggled in Control Center	→ (P)
Powered on	Works		+ (H)

APPLICATION RESTORATION ON BACKGROUND (IF APP WAS REMOVED FROM MEMORY)

State	Application works	Notes
Application quit by system	✓	
Application quit by user		
Application crashed	✓	
Bluetooth power toggled		Toggle Bluetooth power either through Settings, or via Airplane mode
Airplane mode toogled	✓	Only if bluetooth power is not toggled
Device restarted	⋖	If the device requires a passcode to unlock, apps will not be relaunched until the device is unlocked for the first time after a restart

KNOWN ISSUES

Issue	State
App bluetooth state might be incorrectly set to Powered Off after toggling Airplane mode	Reported to Apple

REFERENCES

	Link
Use Airplane Mode on your iPhone, iPad, iPod touch, and Apple Watch	https://support.apple.com/en-us/HT204234
iOS 11 Beta bluetooth state issue	https://forums.developer.apple.com/thread/83852
Conditions Under Which Bluetooth State Restoration Will Relaunch An App	https://developer.apple.com/library/content/qa/qa1962/_index.html
Core Bluetooth Programming Guide	https://developer.apple.com/library/content/documentation/NetworkingInternetWeb/Conceptual/CoreBluetooth_concepts/AboutCoreBluetooth/Introduction.html