



1 Overview

Congratulations on purchasing the latest revision to SparkFun's version of the Rotary Phone! The Bluetooth Rotary is an original rotary phone that has been retrofitted to use Bluetooth hands-free technology. The original SparkFun Rotary Phone used a cellular module and required a phone's SIM card to work; we wanted to make the phone easier to use and allow people who use cell phones that don't have SIM cards to use the rotary phone. The Bluetooth Rotary will work with any Bluetooth enabled phone that supports the hands-free profile.

The Port-O-Rotary has a functional rotary dial, rings the original, loud metallic bells when a call is received, and even has a dial tone! We are sure you will enjoy this dependable phone and the looks you'll receive from co-workers and friends when you use it. This short user's manual will walk you through the basics of using your new cellular phone.

2 Basic Operation

Caution: Be careful when opening the phone – the shell is attached to the base.

2.1 Powering Up the Bluetooth Rotary

Each phone ships with easy to remove screws on the bottom of the phone; removing these two screws will allow access to the power switch. Once the screws have been removed, carefully pull the plastic cover of the phone away from the base. With the shell of the phone removed, locate the slide switch near the edge of the PCB; slide the switch to the ON position to power up the phone.

After sliding the power switch on, wait for about 10 seconds. After this period of time, the phone should give a short ring indicating that it is powered up and ready for a Bluetooth connection. If the phone does not give a short ring then the battery is likely dead. Plug the included charging cable into the phone to charge the battery. Warning: the phone is not equipped to handle a charge current greater than 5V, do not plug in another charge cable other than the included one unless you are absolutely certain the cable's supply voltage is 5V. The phone will power up and give the short ring when the phone is plugged in, and will simultaneously charge the battery. The phone will be fully charged in 5 or 6 hours, after which you may unplug the phone from the charger.

After powering up the phone and hearing the short ring, ensure the green status LED is blinking. If the LED is not blinking, try turning the phone off and then back on. If the LED is blinking, go ahead and put the phone's cover back on, and put the screws back into the bottom of the phone. Your Bluetooth Rotary is now ready for a Bluetooth connection.

2.2 Connecting to the Bluetooth Rotary

The Bluetooth Rotary uses a Bluetooth protocol called the Hands-Free Profile. Any mobile phone (or any Bluetooth device for that matter) that supports the Hands-Free Profile can connect to the Bluetooth Rotary. To connect to the Bluetooth Rotary, navigate to the Bluetooth menu of your cell phone. Once you've opened the Bluetooth menu there will be an option to search for Bluetooth devices that are within the range of the phone (make sure that you and your cell phone are within 100 feet of the Bluetooth Rotary). After you search for Bluetooth devices in range, the Bluetooth Rotary will show up as a device named "SPARKY." Connect to this device. When you are prompted for a security code, enter "1234." After entering the code, your phone will be paired with the Bluetooth Rotary. Note: some phones still require the user to connect after the pairing process. If this is the case simply highlight "SPARKY" and choose to connect to the device).

Now that you have paired with the Bluetooth Rotary, the phone will remember your phone's address. Whenever your phone comes within range of the Bluetooth Rotary, the Bluetooth Rotary will automatically reconnect to your phone as long as Bluetooth is enabled on your phone. For example, if you connect to the Bluetooth Rotary and then leave the house your connection with the Bluetooth Rotary will be lost. This is because the range of the Bluetooth Rotary is only about 100 feet. However, when you return to your house, the Bluetooth Rotary will automatically reconnect to your phone without you having to go through the connection process again.

While the automatic reconnection is convenient, it is important to realize that the Bluetooth Rotary can only be connected to one phone at a time, and it will only attempt to reconnect to the last phone it was paired with. If you want to pair another phone to the Bluetooth Rotary after you've already connected your phone, you will have to first ensure that the Bluetooth Rotary is not connected to your phone (it's OK if it's still paired with your phone, it just can't be connected). To do this you can simply turn the Bluetooth feature of your phone off, or go to "SPARKY" and disconnect from the device. Once you have disconnected your phone, the Bluetooth Rotary will start to search for your phone again, but it will also listen for new connections. If a new phone attempts to connect to the Bluetooth Rotary, the Bluetooth Rotary will require a password again. Enter the code "1234" on the new phone and it will now be connected.

2.2.1 Quick Start Guide to Connecting

- 1) Turn the Bluetooth feature of your phone on.
- 2) Search for Bluetooth devices
- 3) Pair with "SPARKY"
- 4) Enter the code "1234" when prompted
- 5) Connect to "SPARKY"

2.3 Receiving Calls

Give it a try! Once the unit has been powered on and you've connected to it with your phone, call your cell number from another phone. The Bluetooth Rotary phone will ring the vintage bell ringer quite loudly. Picking up the handset at any time will connect the call as normal. If you'd like to transfer the call to your cell phone, there should be an option on your phone to do so. Just put the phone back on the hook to end the call. If you don't pick up the phone, the call will be forwarded to your voice mail. The ring volume can be adjusted by the dial on the bottom of the phone.

If you don't want to receive calls on the Bluetooth Rotary, but you'd like to stay connected to it, just take the phone off the hook. Calls will not be received on the Bluetooth Rotary and you will receive them as normal on your cell phone.

2.4 Placing Calls

You can pick up the handset at any time to hear the dial tone. The Bluetooth Rotary will accept as many numbers as you enter, and dialing is finished when you don't press another number for 4 seconds. So, dial your number, wait 4 seconds, and then you'll be connected. You dial just like you would on your cell phone. So, you don't need to precede your number with a "1" unless your phone calls for it. If you dial a wrong number, simply press down on the handset for a second and release; any previously dialed number will be lost and you can start again (If you don't hear the dial tone when you pick the phone back up, you didn't leave it on the hook long enough to reset the number. Try again!)

Be sure to have your number handy before you begin dialing. If you pause for more than 4 seconds while dialing the number, the phone will try to make the call before you finish dialing the complete number!

2.5 Phone Power

The Bluetooth Rotary phone uses an advanced battery chemistry called Lithium-Ion Polymer. These new batteries pack quite a bit of energy into a very small space. The batteries will last approximately 30 hours between charges.

If the Bluetooth Rotary is not ringing when you receive calls on your cell phone, and you are still paired with SPARKY, or if you do not hear a dial tone when you pick up the phone even though your cell phone is paired with SPARKY, then the battery in the Bluetooth Rotary is probably dead and you'll need to plug in the charge cable to charge the battery.

LiPoly batteries are quite finicky when it comes to charging:

- Never use a charger other than the one provided to you by SparkFun Electronics
- Never use this battery in anything but the Bluetooth Rotary phone
- Do not dispose of Lithium Batteries in normal trash, instead find an electronics recycling facility to take care of this for you.

These cells are quite hardy and can be recharged and used reliably for over three years. To charge the Lithium Polymer in your phone, please use the included charger (5V regulated 1A center positive). The charger plugs into any North American outlet and inserts into the back of the Bluetooth Rotary phone.

That's it! Please feel free to email support@sparkfun.com if you have any questions about how to use your phone.

The looks from family, friends and even bartenders as the Bluetooth Rotary phone rings has given us endless amounts of entertainment. We hope you enjoy using your new phone!

