

Comark RF400

## Comark RF400 Help Guide – Troubleshooting

### Forced Connection and Transmission







It's possible to get the RF400 Logger to reconnect to a network and upload any unsent readings to the Comark Cloud. To do this hold down the button on the front of the RF400 Logger and it will beep once. Keep the button pressed until the RF400 Logger beeps again then release the button. This will force a connection and transmission.

### Signal Strength






The RF400 Logger reports its current signal strength to the Comark Cloud every time it communicates. It is possible to get real time signal strength from the RF400 Logger to aid installation issues. To do this hold down the button on the front the RF400 Logger and it will beep once. Keep the button pressed until the RF400 Logger beeps two more times, then release the button. The RF400 Logger will start beeping in relation to the signal strength. Fast beeping is a good signal, slow beeping is a poor signal. In addition, the LED on the button will flash green indicating a good signal, orange indicating a medium signal and red for a poor signal. Press the button once more to end signal test. Signal strength will only work if the RF400 Logger has been set up to talk to the Comark Cloud. Signal strength test will automatically end after 1 minute.



### LED & Buzzer Patterns During Normal Operation

	<b>Quick Green LED every 5 seconds</b>	<b>Normal operation – battery power</b>
	<b>Solid Green LED</b>	<b>Normal operation – external power</b>
	<b>Red LED every 5 seconds</b>	<b>Alarm Active</b>
	<b>Quick Red LED every 5 seconds</b>	<b>Alarm mute</b>
	<b>Quick Orange LED (short beep every 30 min)</b>	<b>Generic Fault e.g. Lost network connection or missing probe – battery power</b>
	<b>Solid Orange LED (short beep every 30 min)</b>	<b>Generic Fault e.g. Lost network connection or missing probe – external power</b>

## LED & Buzzer Patterns During Setup

	Orange LED blinks once every 2 seconds	RF400 is in Setup and waiting for an App to connect to it
	Orange LED blinks twice every 2 seconds (quick beep)	The App has connected to the RF400 and is waiting for setup information
	LED Flashing Orange and Green	Setup in progress. Attempting connection with network and Comark Cloud Server
	LED steady green for 5 Seconds (two tone beep)	Setup complete
	LED steady orange for 5 seconds (and 3 beeps)	Setup fail

### Is there PC Software to setup RF400?

No, RF400 Loggers are setup using an App, either on Android or iOS. Please visit the App Stores and Search for 'Comark Cloud' to download and install the app on your phone or tablet.

### Network Connections

The RF400 Logger needs unrestricted access to the internet to allow it to communicate with the Comark Cloud. The RF400 Logger requires access to <https://comark.wifisensorcloud.com/> which currently resides at address 78.136.35.241

It uses TCP ports 443 and 14354 only. The RF400 Logger will use a DNS server to resolve the Comark Cloud URL.

### NFC – Near Field Communications – Android Only

The RF400 Logger has an NFC interface to allow for quick display of the current status. This feature is only available on Android devices. The NFC antenna is located at the bottom right corner of the RF400 Logger. The App will verify that the RF400 Logger is registered to the Comark Cloud account, which the user has signed into, before showing any information. This is a security feature to prevent anybody with an App reading any RF400 Logger. When the RF400 Logger detects the NFC from the device it will beep once.

### If I have a power cut or my WiFi network stops working, will I lose any of the data from my RF400 Logger?

No, even if your WiFi network has failed, the device will continue logging at the sample rate that you have set. When your WiFi network is restored, the device will automatically sync data to the Cloud. No data is lost.

### How can I (Factory) Reset my RF400 Logger device?

To Reset a RF400 LOGGER device you will have to unscrew the back and remove it to expose the battery bay of the device. Then you will need a paperclip or a pen to press the black reset button located centrally within the compartment. One press and release of this button will reset the device, this is confirmed by a two-beep signal once the button has been released. The device will retain all settings but will lose any data that had not been transferred to the Comark™ Cloud. It will continue to be connected to the account it was set-up with and will simply start a new recording session.

If necessary, a full factory reset can also be performed by holding the button for 10 seconds until you hear a two-beep signal that repeats until the reset button is released. Doing this will return the device to the factory state,

deleting all settings and clearing any remaining data. The device will no longer be connected to any network or Comark Cloud account. IT IS RECOMMENDED THAT YOU ARCHIVE THE DEVICE ON YOUR COMARK CLOUD DEVICES PAGE BEFORE UNDERTAKING A FACTORY RESET.

### [How do I turn my RF400 LOGGER device off?](#)

The device will remain on permanently unless the battery runs out. Removing the battery will switch off the logger.

### [My RF400 LOGGER device will not connect to the wireless network, what can I do?](#)

You can try any, or all, of these steps to help with this problem

- 1) Check that the password being entered is correct.
- 2) Check if 802.11b is enabled on the access point or router and consider switching it off.
- 3) Ensure MAC filtering is not switched on in the access point or router. If it is switched on, only known devices will be able to connect to your router. Ensure that the MAC Address of your RF400 Logger is entered on the Router.
- 4) Check that your network has an internet connection.
- 5) Check that the device is in range of the router.
- 6) Check to see if the router has the latest firmware.
- 7) If the access point or router has WEP Encryption ensure that the HEX key is being entered rather than the password. You can find the HEX key in the internal settings of your access point or router. Alternatively, search the web for resources to help convert your password to a HEX key.
- 8) Check that DHCP service is running. This allows the device to be allocated an IP Address. Normally, the DHCP service runs in either your router or on a network server. Make sure that the configured DHCP IP address range allows the addition of new devices; if not, then extend the range.
- 9) If your wireless network uses WPA Enterprise, make sure that the correct authentication type is selected from the drop-down box. Only the types listed are supported.
- 10) If your access point or router has a wireless mode setting, this must be set to 'Mixed', not 'GreenField'.
- 11) Make sure that the SSID name does not contain spaces.

### [Will the RF400 Logger device work with a VPN \(Virtual Private Network\)?](#)

This is technically possible, provided that the VPN can allow the device internet access via TCP port 14354.

### [How do I determine signal strength for my RF400 Logger device? Duplicate](#)

The RF400 Logger reports its current signal strength to the Comark Cloud every time it communicates. It is possible to get real time signal strength from the RF400 Logger to aid installation issues. To do this hold down the button on the front of the RF400 Logger and it will beep once. Keep the button pressed until the RF400 Logger beeps two more times, then release the button. The RF400 Logger will start beeping in relation to the signal strength. Fast beeping is a good signal, slow beeping is a poor signal. In addition, the LED on the button will flash green indicating a good signal, orange indicating a medium signal and red for a poor signal. Press the button once more to end signal test. Signal strength will only work if the RF400 Logger has been set up to talk to the Comark Cloud. Signal strength test will automatically end after 1 minute.

### If my RF400 LOGGER device's battery runs out, will I lose all of my data?

The device will not take readings when there is no power but all readings it has taken prior to the loss of power will be synchronised. Once the batteries have been replaced, the device will reconnect to the Comark Cloud, start a new recording session and continue recording.

You must set suitable sample and transmission rates as these will affect your battery life.

### If I have a power outage, will I lose any of the data logged by my RF400 Logger?

As the device is powered by battery, the device will always continue recording at the sample rate you have set. If a power outage occurs, the device will continue to attempt to connect to your network until power returns and the access point or router becomes available again. The device then synchronises all remaining data with the Comark Cloud. No data is lost.

### How do I change the batteries in my RF400 Logger device?

Your RF400 LOGGER data Logger is provided with 4 x 1.5V AA Alkaline cells. To change the batteries, you will need to unscrew the two screws of the battery cover. For a diagram, please refer to your Quick Start Guide, which is also available from the product's page on our website. Always use good quality cells and always replace all cells together.

### Can I permanently power my RF400 Logger device?

Yes, you can, the RF420 mains power adapter for the device is sold separately.

### What does a green flashing light mean?

A green flashing light with no buzzer noise indicates that your RF400 Logger is running on battery power, is not in alarm or fault state and connection to the Cloud has been established.

### What does a solid green light mean?

A solid green light with no buzzer noise indicates that your RF400 Logger is running on external power, is not in alarm or fault state and connection to the Cloud has been established.

### What does a flashing red light and beeping mean?

This means that your RF400 Logger is in Alarm state, a High or Low Alarm on any channel has been triggered and has not yet been Muted or Reset.

### What does a flashing red light and no beeping mean?

This means that your RF400 Logger is in Alarm state - a High or Low Alarm on any channel has been triggered and has been muted. The alarm can be muted from the button or from the Cloud.

### What does an orange flashing light and beeping mean?

If a device is flashing once every 5 seconds it means the device has a fault, if it is flashing 4 times in quick succession that means you could have a critical fault. To clear we advise resetting your device using the reset button. If the fault persists then please contact technical support.

### What does a flashing orange light and no beeping mean?

This indicates that the device is in setup mode and awaiting a connection, this will have been caused by the setup button located in the battery compartment being pressed.

### What does a flashing red and orange light and beeping mean?

This means that the device is in alarm and also has a fault. The alarm can be reset from the Cloud, to fix the fault you may want to try resetting the device, if the fault persists please contact technical support.