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Title –Radcom Loggers – LX LED flashes	
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Radcom loggers – explanation of Multilog LX LED flashes

Below is an explanation of what the LED indications on a Multilog LX mean, when you can expect to see them and how this affects communications between you and the logger.

In normal, low power, "standby" mode the logger flashes the RED LED every 8 seconds.

1) **GPRS UDP data call** -

a. Initially the LED will be flashing RED every 8 seconds

b. At call time + up to 2 mins the LED will continue to slowly flash RED. During this time the logger is connecting to the GPRS network and you will not be able to communicate with the logger.

c. Once network registration has completed the LED will flash GREEN every 4 seconds until all its data has been sent. It will then hang up and the LED will return to standby indication mode.

2) **SMS call**

a. Initially the LED will be flashing RED every 8 seconds.

b. At call time the LED will begin to flash RED rapidly (twice a second) while it is registering with the network. This can last up to; BUT NOT BEYOND, 2 minutes.

c. When the logger has registered onto the network the LED will then rapidly flash YELLOW whilst it is sending the message.

d. Once the SMS has been sent, the logger will then hang up and the LED will return to standby indication mode.

3) **GPRS/SMS Manual activation (Magnet swipe)**

a. Initially the LED will be flashing RED every 8 seconds.

b. Immediately after the swipe the LED will start flashing rapidly YELLOW to acknowledge the command to start a power window.

c. The LED will then begin to flash RED rapidly while it is registering with the network.

d. The LED will then begin to flash YELLOW slowly indicating an initial scan to check for waiting SMS messages. During this time you may see rapid YELLOW flashes as it communicates with the SMS message centre.

e. The LED will then settle to flashing **GREEN** every 4 seconds to indicate that the power window is now open. During this time you can communicate with the logger through the IR link or via SMS text message commands.

f. The window will stay open for 10 minutes after which time the logger will hang up and the LED will return to standby indication mode.

4) **Daily Engineering power window (Modem active for 10 mins at 15:00 GMT)**

a. Initially the LED will be flashing **RED** every 8 seconds.

b. At 15:00 GMT the LED will start flashing rapidly **YELLOW** to acknowledge the command to start a power window.

c. The LED will then begin to flash **RED** rapidly while it is registering with the network.

d. The LED will then begin to flash **YELLOW** slowly indicating an initial scan to check for waiting SMS messages. During this time you may see rapid **YELLOW** flashes as it communicates with the SMS message centre.

e. After about 10 seconds the LED with then briefly flash rapidly **RED** again to indicate the software is letting go of the modem.

f. The LED will then settle to flashing **GREEN** every 4 seconds to indicate that the power window is now open. During this time you can communicate with the logger through the IR link or via SMS text message commands.

g. The window will stay open for 10 minutes after which time the logger will hang up and the LED will return to standby indication mode.

For a video demonstration of the LED sequence (4) above, please see:-

http://lgrudp.hwm-water.com/Movies/LX/SB019-LEDexplanation.mp4

Local Communication restrictions:-

- Whilst the LED is slowly flashing **RED** every 8 seconds you are able to communicate with the logger via the IR communication cable only.
- Whilst the LED is slowly flashing **GREEN** every 4 seconds you are able to communicate with the logger via the IR communication cable AND via SMS test messages.

- Whilst the LED is rapidly flashing (twice per second) RED or YELLOW or slowly flashing YELLOW you cannot communicate with the logger as it is busy communicating with the modem. Wait until the LED returns to either of the two slow flashing status modes.

NOTE: In **call frequency** mode there is an offset applied to the start of the GPRS UDP call based on the serial number of the logger, this helps to avoid overloading the network at call in time. This can delay the call start time by up to **8** minutes from the expected call time. Therefore if you cannot immediately communicate with the logger you should wait for **2** minutes (the connection period) to confirm if the logger is calling in. For the 15 minute frequency setting, the call time begins on the quarter hours (xx:00, xx:15, xx:30 & xx:45) + offset time. For the 30 minute frequency setting the call time the call time begins on the half hour (xx:00 & xx:30) + offset time.

Document History:

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