

# AN04 - Two Fogrods with One LIT

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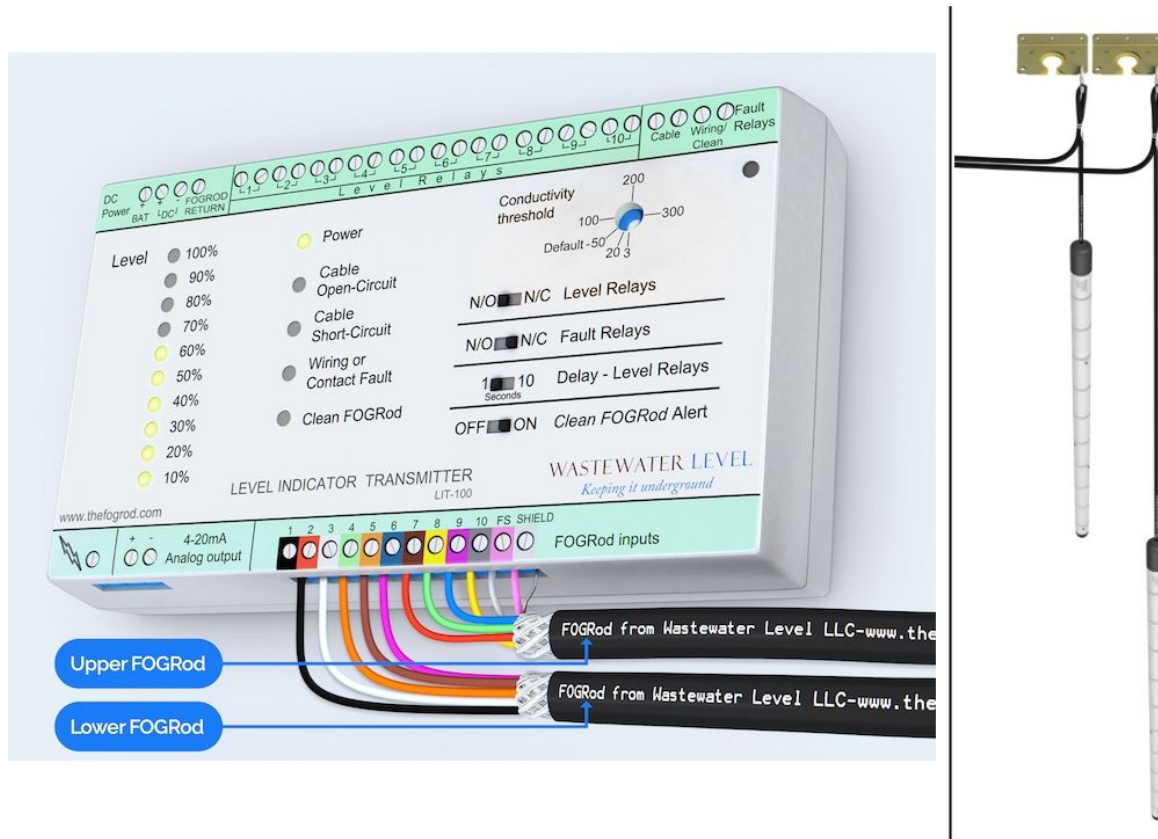
Wastewater Level manufactures 3ft, 5ft and 7.5ft Fogrods. A small percentage of customers want a longer Fogrod, say 10ft or 15ft. We support this by selling 2 Fogrods and 1 LIT.

*It works out more cost-effective than manufacturing very long Fogrods - shipping 10ft or 15ft items is very expensive and it is harder to make something as tough as the Fogrod once it gets to 10ft and longer.*

The LIT has 10 Fogrods inputs (plus an input FS for the cable integrity check and an input for the cable shield). Two Fogrods have 20 wires. How do we install the Fogrods and connect them into the LIT?

## Wiring in the Panel & Installation in the Wetwell

Here is one example:



This makes the bottom contact of the lower Fogrod turn on relay 1 (e.g. for Pump Off). Contact 3 of the lower Fogrod will turn on relay 2, contact 5 will turn on relay 3, and so on for the lower Fogrod.

Then contact 2 of the upper Fogrod will turn on relay 6, contact 4 will turn on relay 7 and so on up to the top contact turning on relay 10.

With 2x 5ft Fogrods the effective spacing is every 12", and with 2x 7.5ft Fogrods the effective spacing is every 18".

The wiring in this case is:

#### Lower Fogrod

- a. black wire into black (1) input
- b. white wire into red (2) input
- c. orange wire into white (3) input
- d. brown wire into green (4) input
- e. purple wire into orange (5) input

#### Upper Fogrod

- a. red wire into blue (6) input
- b. green wire into brown (7) input
- c. blue wire into yellow (8) input
- d. yellow wire into purple (9) input
- e. gray wire into gray (10) input
- f. pink wire into pink (11) input
- g. the bare drain wire into the Shield input (labeled as 'GND' in older LITs)

You don't have to do it exactly like this - the three rules are:

- Connect all LIT inputs
- The wiring should be in sequence - for example, it is ok to have 1, 3, 5 etc into inputs 1, 2, 3 but you can't have 1, 5, 3 into inputs 1, 2, 3 otherwise the LIT will detect a dry contact below a wet contact and trigger the *Wiring or Contact Fault* alarm.
- Connect the gray and pink wire of the upper Fogrod into gray and pink (10 & FS) so that cable problems are detected

Note that it is also fine to have any size gap between the top of the lower Fogrod and the bottom of the upper Fogrod.

So, for example, you could hang 2x 5ft Fogrods with a 5ft gap between them, and use the bottom 8 contacts of the lower Fogrod and the top 2 contacts of the upper Fogrod.

### How to Order

If you want to order a "10' Fogrod with 50' cable" and an LIT - The system can be ordered as:

- Level-10-50
- or
- Level-5-50 + FOG-5-50

In both cases we ship the same items - 2x 5' Fogrods with 50' cable (each with a mounting/cleaning bracket) and 1x LIT.

Likewise for other systems:

Level-10-100 **or** Level-5-100 + FOG-5-100

Level-15-50 **or** Level-7.5-50 + FOG-7.5-50

Level-15-100 **or** Level-7.5-100 + FOG-7.5-100

Contact us: [sales@wastewater-level.com](mailto:sales@wastewater-level.com) or 406 545 3023. Visit our website: [wastewater-level.com](http://wastewater-level.com)