

Multigrid Troubleshooting FAQ

DRAFT

The Victron Multigrid is very similar to the Multiplus. There are a few key differences that are required in some grid connected markets, and these additional features can lead to some confusion and troubles during installation, commissioning and operation.

This FAQ seeks to address the most common issues that arise, explain why they do, and how to correct them.

The first step is always to be sure that all Victron equipment is running the latest firmware versions. These are available from <https://professional.victronenergy.com>

The following information is all subject to local codes, standards, regulations and guidelines. These vary widely and it is not possible for Victron to give specific advice for your area. Your local Victron Distributor may have additional, locally specific information. IT IS THE **RESPONSIBILITY OF THE INSTALLER** to make sure that all their work is performed in compliance with their specific regional responsibilities.

This information refers to circuits that contain potentially fatal voltages and are intended for use by suitably qualified and trained professionals. Appropriate safety procedures should be followed at all times. If in doubt, do not proceed and seek the support of another technician.

Error 11.

For issues relating to # Error 11 alarms, [please read the VE.Bus Error Codes page](#).

Nuisance Tripping of Residual Current Devices (RCDs)

The test required for the Neutral Earth link introduces a small amount of Neutral Earth current leakage. This is estimated to be less than 10 mA, well below the normal RCD trip threshold of 30 mA.

However, there may be other devices on the electrical circuit which are also introducing a small 'below threshold' amount of neutral earth leakage, and the cumulative effect of the relay check can cause unpredictable nuisance tripping of RCD's.

As the Multigrid relay check is an essential safety feature, the other devices that are contributing to the total leakage about 30 mA will need to be identified and removed from the system.

Some common troublesome appliances to check and disconnect first when troubleshooting are:

- Surge Protected Power-boards
- Old refrigerator compressors
- Electric hot water units (due to their own earth differential from the main earth stake).

If removing/disconnecting those devices does not stop nuisance trips, individual load circuits will need to be megger tested for insulation leakage. Remember, even though the circuits individually may be within acceptable limits, accumulative leakage, combined with that introduced by the relay test can exceed the 30mA limit.

If multiple circuits sharing a single RCD each have a small leakage, replace it with RCBO's on each of the circuits to bring down the total to within the limits.

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