

## ELV-PRO EQUIPMENT UPDATE

### Electrical Protection

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The ELV-PRO relay is a successor to the VSD-Guard, a premium Earth Leakage Relay providing users with a greater visibility and insight into the earth leakage currents within their system. In recent months a number of concerns have been raised regarding the relay experiencing nuisance tripping.

The concerns identified with the product do not prevent the ELV-PRO detecting Earth Leakage faults; rather users may experience nuisance tripping. The relay does not present a safety risk with all trips / failures resulting in a safe failure condition.

- Fail to retrieve logs from the on board memory card.
  - o Some relays failed to retrieve the data from internal memory. The issue has now been resolved with the latest firmware resulting in greater robustness for retrieval and storage of logs.
- Ethernet connection loss
  - o The original ELV-PRO Ethernet implementation restricted the number of allowable connections and imposed restricted access to the relay. This resulted in network dropouts. Increased internal resourcing has been allocated to the communications protocol, significantly increasing the relay's Ethernet robustness.
- Nuisance rebooting
  - o A resulting impact of the network issues mentioned above, some relays would not recover resulting in a system restart. This in turn would force the protection function to reboot resulting in a nuisance trip. The new implementation has resulted in greater reliability preventing nuisance reboot trips.
- Webpage errors
  - o The icon, text and button issues identified to date have been resolved with the latest website revision.
- CT Detect faults
  - o Ampcontrol has been made aware of relays experiencing occasional CT Detect faults. The fault condition is initiated via noise coupled into the CT detect circuit. The latest release has shifted the CT Detect signal to 25kHz while also increasing the sampling robustness, both of which have been seen to significantly increase the immunity of the ELV-PRO relative to the noise coupling rejection.

### ACTION

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Ampcontrol will warrant all ELV-PRO relays with a free Firmware upgrade. Given that not all relays may be experiencing the identified issues or nuisance tripping in their current application, the urgency of individual relays requiring upgrades will need to be determined by the customer.

An EL CT Detect trip can be confirmed by connecting to the relay and reviewing the event logs from ELV-PRO interface screens. The trip will be identified as an EL CT Detect Trip. If this is the case than the trip can be reset where possible. If the relay reports a genuine EL trip, standard site investigation processes should be carried out before resetting the trip.

### WHAT DO I NEED TO DO

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Ampcontrol recommends that all ELV-PRO relays are returned for a firmware upgrade when possible. Scheduling of relay removal will vary from installation to installation. Customers will need to manage the timing impact and removal of relays on site to suit their needs. Ampcontrol will work with customers to reduce the impact of the repair on site where possible.

## SERIAL NUMBERS EFFECTED

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At the time of printing, all ELV-PRO relays may be susceptible to a noise induced EL-CT fault and should be returned for a firmware update where possible. The relays not experiencing EL CT faults may still be affected by the other issues outlined.

The below serial numbers should be returned for a firmware update when suitable.

Serial Number
1712001333
1712001334
1806000728
1806000729
1809001939
1809001940
1809001942
1809001943
1909000554
1909000555
1911000919
1911000923

Serial Number
1912000724
1912000725
1912000726
1912000727
1912001210
1912001211
1912001213
2004000638
2005001909
19090005565
1912001214

## FIND OUT MORE

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For more information on this product, please contact Ampcontrol Customer Service on +61 1300 267 373 or [customerservice@ampcontrolgroup.com](mailto:customerservice@ampcontrolgroup.com) or visit the Ampcontrol website: [www.ampcontrolgroup.com](http://www.ampcontrolgroup.com)

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