

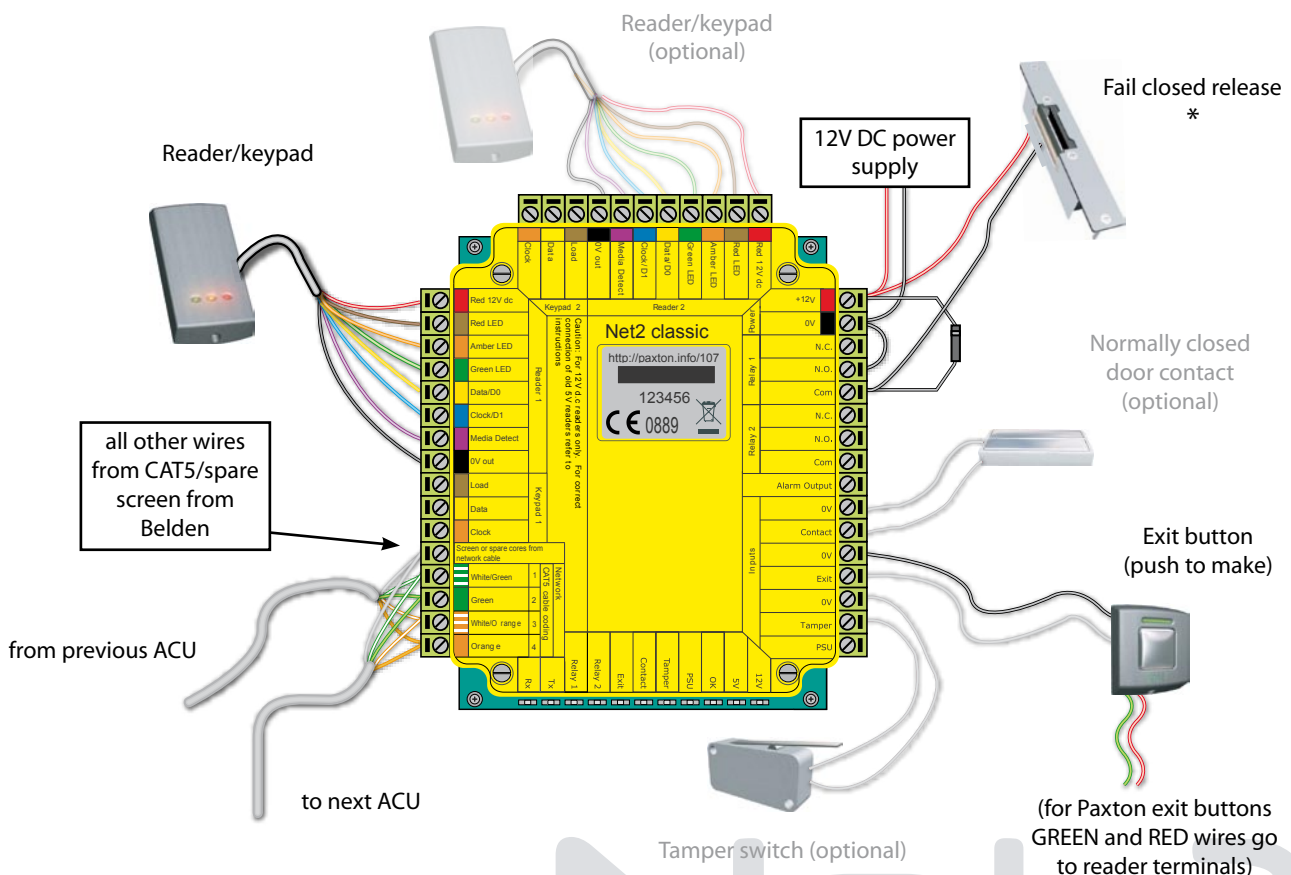
AN1012 - Installing a Net2 classic control unit

Net2 classic installation

The correct installation of Net2 classic control units (ACU's) is essential to the success of the system. A fault introduced at the early stages of installation can cause delays later in the project.

The diagram below shows the general wiring layout for a classic ACU. Not all of the equipment shown needs to be installed on every door, when using Timesheet, for example, it is not necessary to install anything but a reader and the data line.

Special attention should be paid to the installation of the lock to ensure correct operation, either fail open or fail closed. Care should also be taken when installing readers; the correct supply voltage should be checked for each reader as different models in the Paxton Access range have different requirements. Exit buttons must always be of the 'push to make' variety. Door contacts, tamper switches and PSU monitoring circuits should all be normally closed, going open on alarm.



* For a fail open lock (Maglock), the 0V link wire must be connected to the "N.C." terminal.

Data line connection

By far the most common cause of problems, with Net2 installations, is incorrect wiring of the data line. It is extremely important that the following simple rules are followed for each controller on the line and that the line is terminated correctly.

For full details of the data line refer to: *AN1040 - Installing the Net2 data line.* < <http://paxton.info/877> >



The data line must loop in and out of each controller using the same coloured cores for each unit; CAT5 colour codes are shown on the controller's wiring label. The controllers must be installed in one continuous daisy chain with 120 ohm termination resistors installed across both pairs at each end.



Any spare cores and the cable screen must be connected to the network screen terminal; this provides a common reference for all of the controllers on the data line.



A single 120-ohm resistor should be wired across each data pair at either end of the data line, a total of four resistors should be fitted. One between Orange-white and Orange, and one between Green-white and Green, at each end of the line. If the PC is fitted in the middle of the data line a termination should not be fitted at the RS232-485 converter, only at the two end ACU's.

When using 12V readers

12V readers are wired into the appropriate coloured terminals on the controller's reader port.

When using 5V readers

For systems where 5V readers are to be used, readers must not be connected to yellow label controllers until the jumper setting has been changed on the controller. The jumpers on Net2 controllers can be found under the wiring label. Once the jumper is changed to the 5V position the reader can be wired colour to colour but the 'Red' terminal will now output 5V.

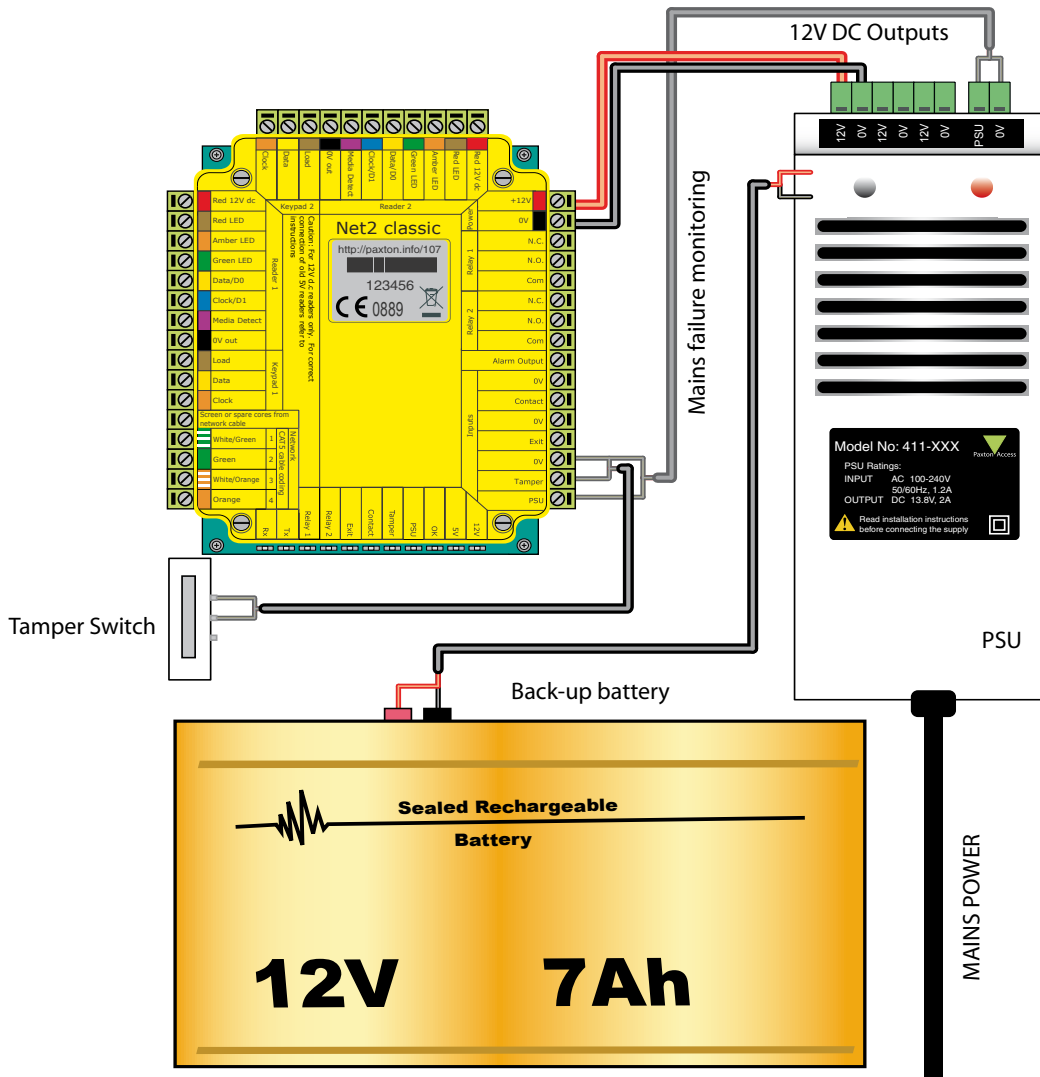
Installation of a Net2 classic in a PSU enclosure

The best way to install a classic ACU is in the specially designed Paxton power supply enclosure. This unit contains a Net2 ACU, a 2A 12V d.c. power supply, with an output in the event of mains failure. A charging circuit for the addition of battery back up and an enclosure tamper switch.

The following diagram below shows the arrangement of an ACU installed in the enclosure.

Alarm messages will be reported to the Net2 server if, the lid of the ACU is opened (tamper) or if the mains supply to the unit fails (this alarm will only work successfully if battery back up is fitted).

Net2
V4



NOTE: The Tamper switch type and position will vary due to the different case styles.

Fitting multiple control units in the box

Two access control units (ACU) may be mounted within the housing.

Remove the ACU and platform from the box. Discard the platform and the ACU wiring label with its posts. Clip the ACU directly into the base of the box (INNER holes.)

With the supplied standoffs, mount the second ACU above (OUTER holes). Net2 plus requires longer standoffs supplied in kit 'fk1-091'

The plastic housing can also take a single ACU with a hands free interface above it. Remove the ACU and discard the platform. Re-fix the ACU with its wiring label to the box. Sticky feet are provided with the interface to fix it to the ACU wiring label.

