

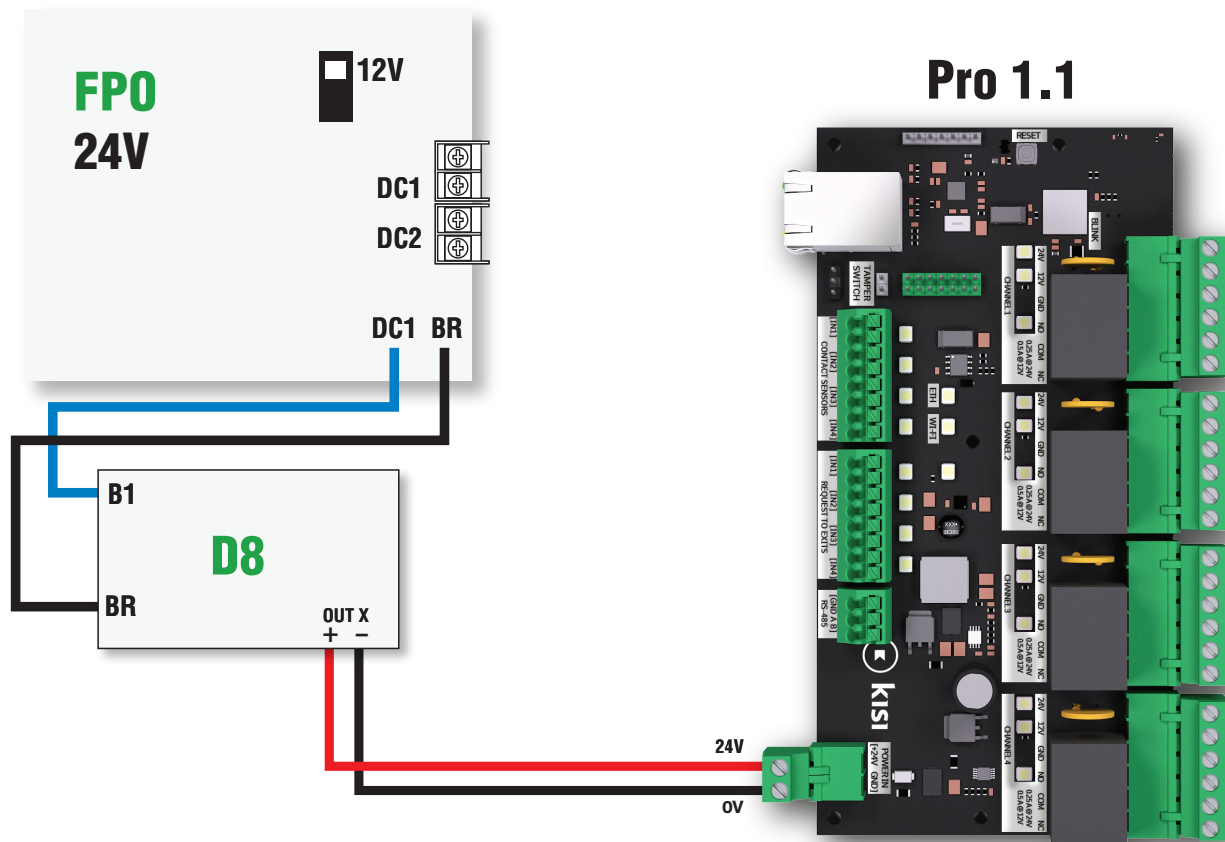
## OVERVIEW

The LifeSafety Power KZCLASS line of Unified Power Systems was designed as an all in one solution, providing power to KISI controllers, locks, and auxilliary devices while also providing predrilled holes for mounting the controllers within the same enclosure, simplifying and streamlining the installation. This application note will cover the basic wiring required between the power system and the KISI Controller Pro 1.1 controllers and assumes a basic working knowledge of LifeSafety Power equipment and KISI control panels.

## CONTROLLER POWER

KISI Controller Pro 1.1 boards require a 24VDC source for power. Ensure the FPO being used to power the KISI controller is set to 24V and that the D8 board's output jumper is set for the 24V buss.

Power for the Pro 1.1 controller boards should ideally be taken from an available D8 output, or if necessary directly off the FPO board's DC1 output terminals



### LOCK POWER

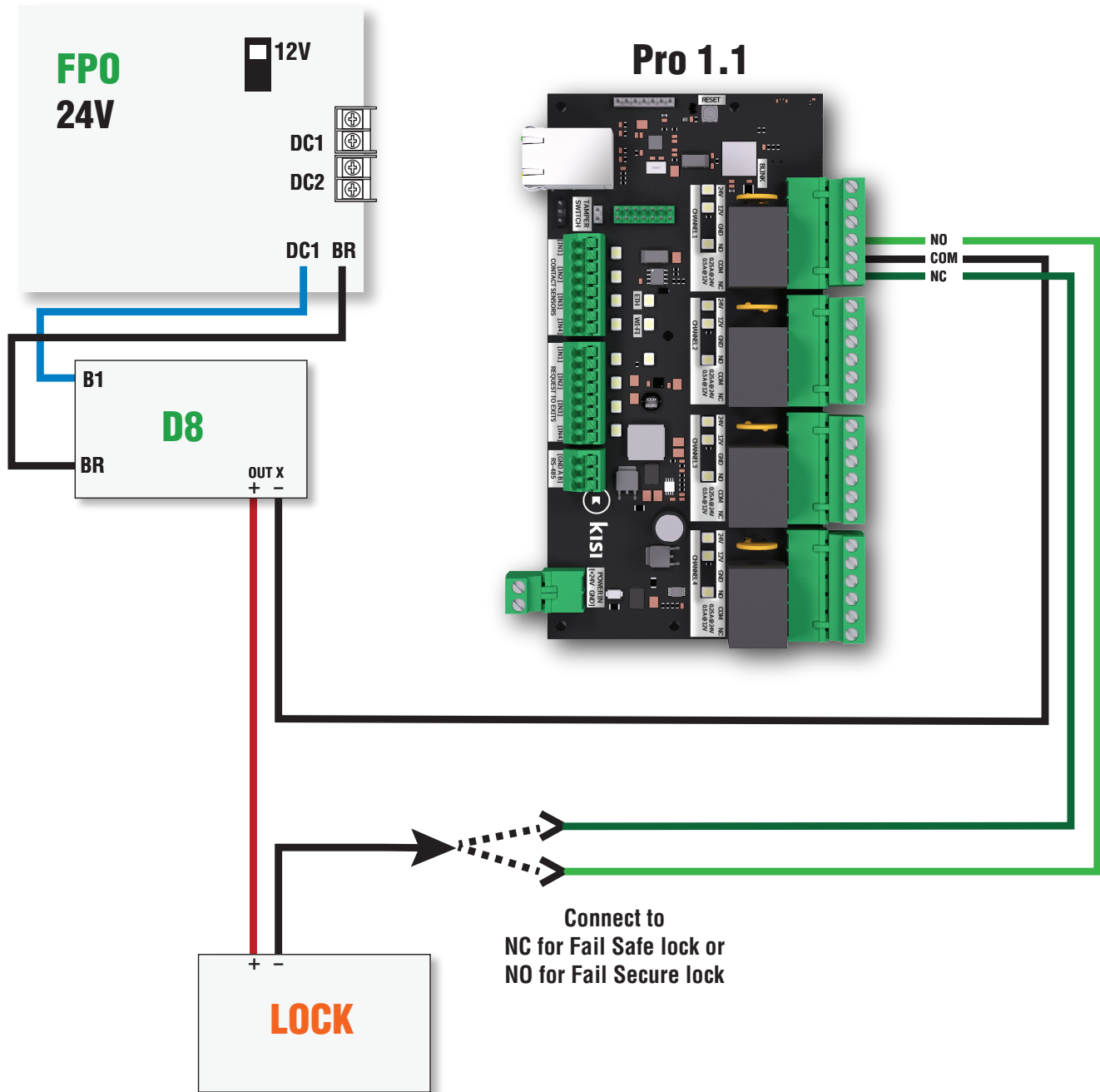
The Pro 1.1 controllers provide dry relay outputs for controlling locks along with a dedicated 12V and 24V power output for each lock. When using an LSP power system, a D8, F8, C8, or M8 may alternatively be used to supply lock power as shown below.

#### Locks Powered by a D8 Module

For the lowest-cost solution, the output relays of the Pro 1.1 modules may be used to directly control the locks, using a D8 for power.

In single-voltage systems, each D8 output may be selected for constant, or FAI controlled voltage.

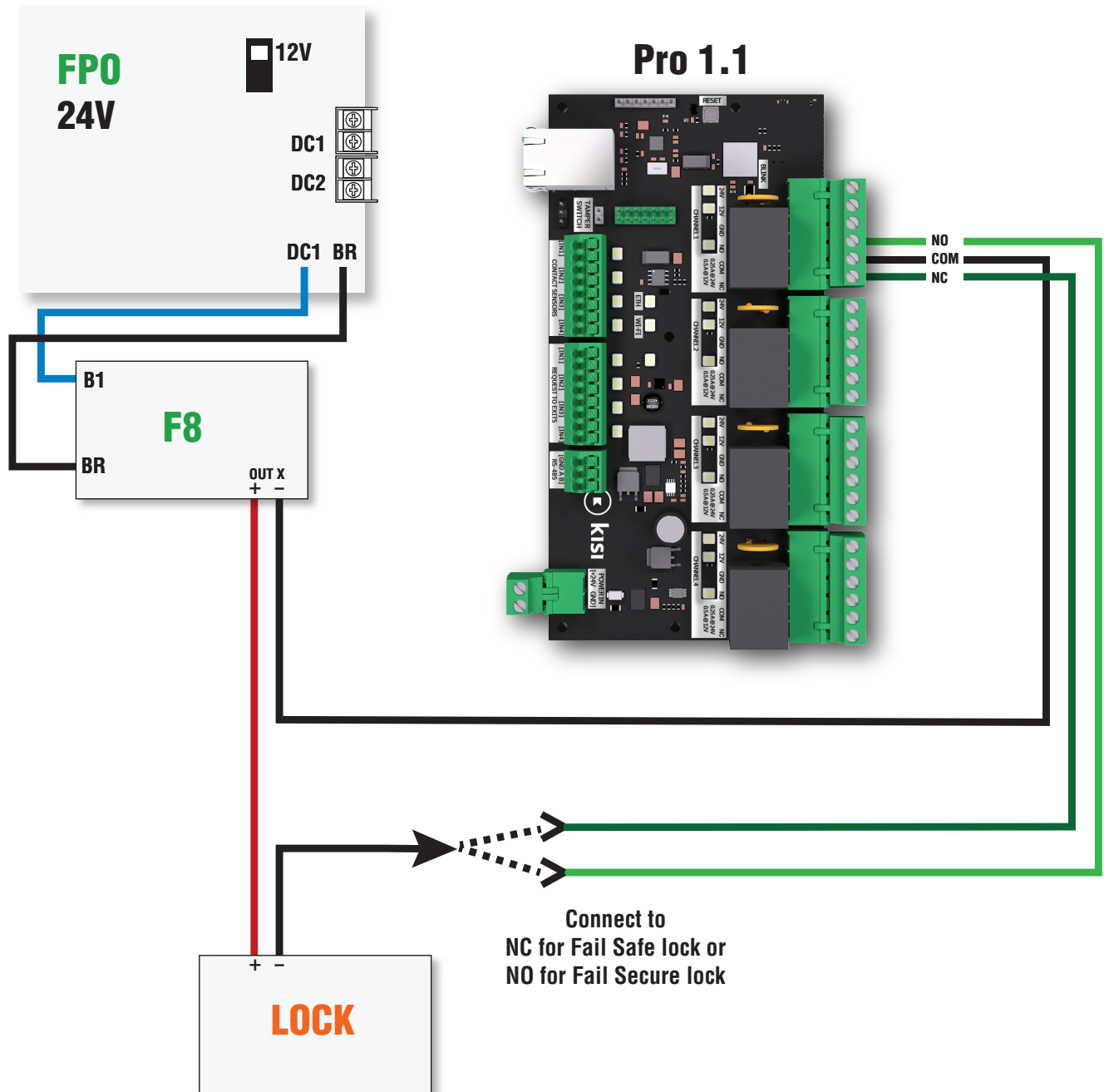
In dual-voltage systems, each D8 output may be selected for 12V or 24V.



### Locks Powered by an F8 Module

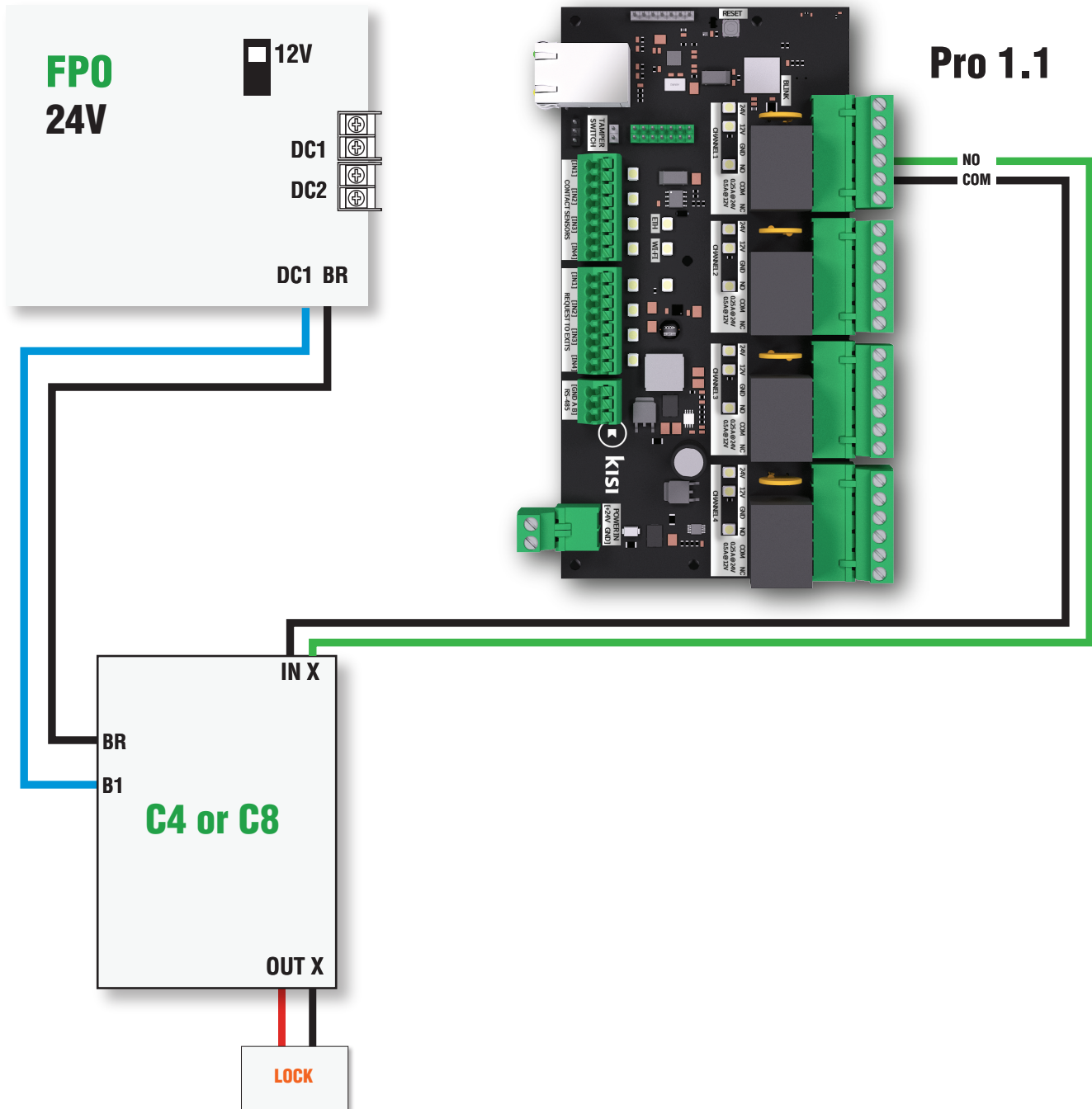
If FAI control of the locks is desired in a dual voltage system, an F8 module may be used.

Each output of the F8 may be selected for constant output, or FAI controlled output at either 12V or 24V (when used with a dual voltage system).



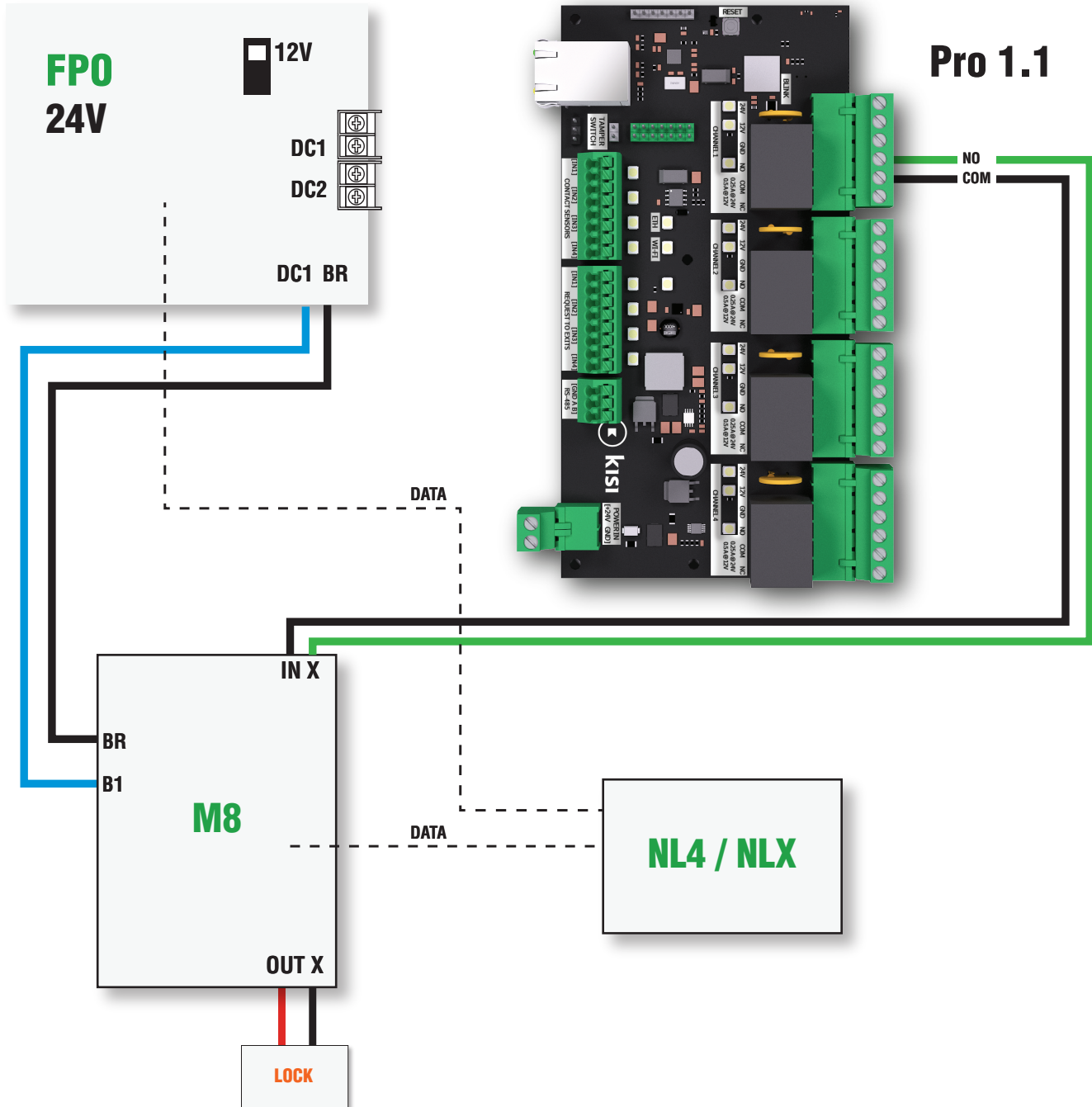
### Locks Powered By A C4 or C8

The C4 or C8 board acts as a "buffer" between the KISI output relays and the high current locks. In this scenario, the KISI controller only switches the low-current input of the C4/C8, while the high current switching is handled by the C4/C8, prolonging the life of the relays in the KISI controller. Wiring of each of these boards is the same.



### Locks Powered By An M8

Like the C8 board, the M8 board acts as a "buffer" between the KISI output relays and the high current locks. The M8 adds remote monitoring and control of each output, allowing the user to view voltage, current, and output status, and also to remotely power cycle each output to reset a frozen device or override a door. The M8 requires a NetLink NL4 or NLX network module which also provides remote monitoring of the power supply and battery set. The NetLink also adds the ability for remote battery testing, email alerts on fault conditions or service due, and more.



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