Buildings Switch over Motors Control

Smart G4 (Installer Bible Collection)

Introduction:

This manual is made to explain the types of switch over Motors. what is switch over.

and how to control each type of these motors regardless

What is Switch Over motorization?

It is the type that controls reversible function like:

-Open-Close
-Up-Down
-Right-Left

What is Interlocking motorization function?

Interlocking function is control for multiple motors where the second motor do not function until first motor completes its cycle to fully secured position.
For example for secure anti invasion single vehicle entry under interlocking function:
for Gate 1 to open, Gate 2 must close first fully, then gate 1 is allowed to open, after that Vehicle can enter, then gate 1 must close fully, entrapping vehicle between the 2 gates, then gate 2 can open to allow secure entry.

How to control these Motors?

There are several ways to control these motors for Drive, Stop, Reverse.
for presets, zones and Groups or all.
Based on Timer, Logic, occupancy, Sun position, ambiance needs, manual control, or other function need.

Manual operation Example for (Open/Close) options only:
- Single Button (one click open, another click stop, another click close)
- single button or 2 button (Press and hold to open, press and hold to close, release any stop)
- 2 Button or 3 Button (click1 open, click1 again stop, click2 close, click2 again or stop to stop)

Blinds, Drapes & Curtains

There are many types of motors to control Windows for privacy, security, sun shading, and elegance.
Smart G4 can handle all these types in efficient ways.

Some of the Motorized curtains, drapes and blinds like the following:

Horizontal Blinds

Roller Drapes & Blinds

Roman Drapes & Blinds

Curtains and Sheer

Vertical Blinds

Motorized Shutters

Track, roller, multi action motor types

Integrated Nature

More types of motorized Shading and privacy

See following examples:

Track Covers

Solar Shading

Motorized Canopies

Motorized Sky-Light

Motorized Shading Louvers

Pool Cover and Pool Floors

Smart Controlled function motors

Motorized Limitation

and more motor applications in buildings and access

see the following examples:

Gate Barrier or Turnstile

Garage Motor

Swing and sliding Gate motors

Road Bollard

Interlocking Entry Control

Parking Turn Table

Special Building Motorized Access

Media & Comfort

more motor applications in Media controlled devices

and in delivery comfort . See the following examples:

TV Lift

Motorized TV Art work

Projector lift

Projection Screen

Elevators and Escalators

Dumb waiter

Motorized Media and Delivery

Motor control Types

There are several types of Motors. and the control of these different motors depends on ts type.

Examples of motor types:

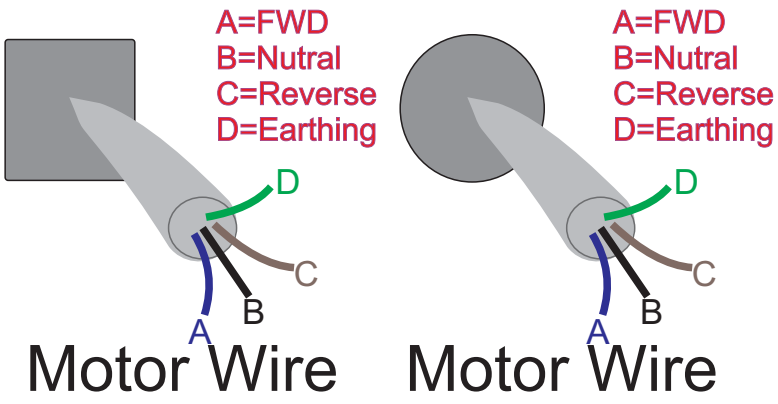
110/220VAC Direct Motor Phase Polarity Control (Has 3 Electric wires: #1+#3 Phase, #2 is Nutral)
AC/DC Type NO/NC controlled Motor (comes with built in dry contact controller with 2 or 3 ports per function)
RS-232 controlled Type motor (comes with serial port and protocol for function and presets)
Infra red IR Controlled Motor type
Closed RF remote controlled motor type

In the following few pages, we shall explain every type and how to connect and control it using different SBUS-G4 products like: 2R mini, 3R mini or 2R-TC, or 3R-TC, or by DIN Modules, IR-emmitters, or RSIP serial interface

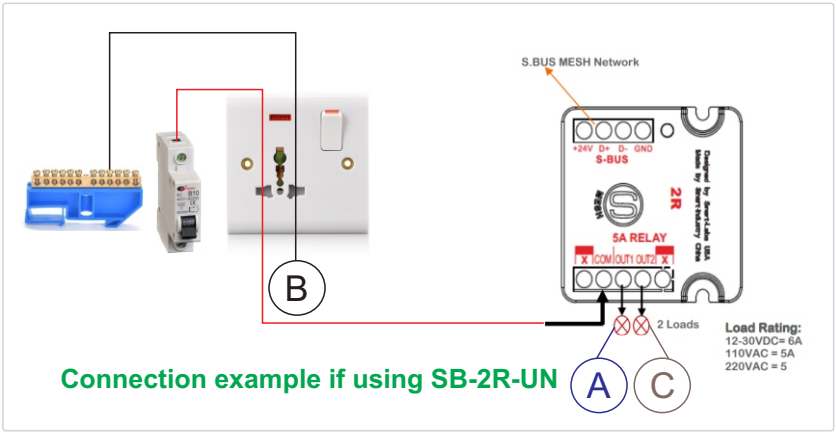
In addition, we shall also explain how to create presets using timers, or using limit sensors, or in built motor preset limiters and more. Also how to control automatically using logic and other.

Smart G4 Can do That all

110V/220V AC Direct Motor

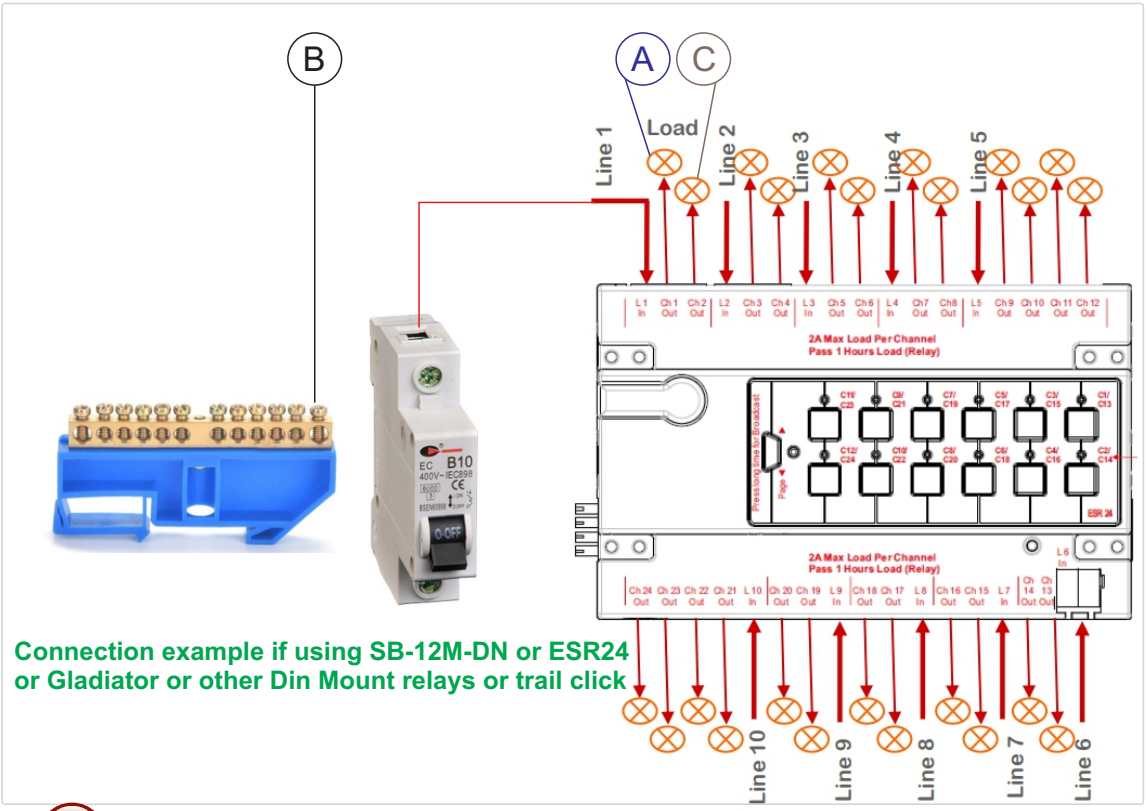


Continuos connect to operate function
for open = relay A on
for stop Both A and B off
for close = Relay C on

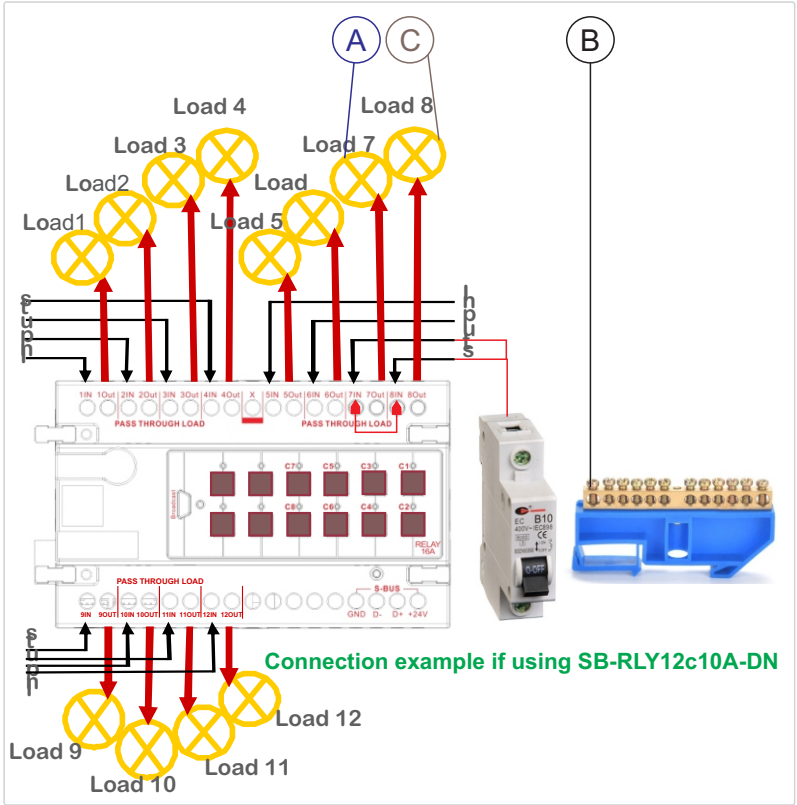


Connection example if using SB-2R-UN

Warning: Make sure that you program and test the SBUS module before connecting to motor.
Program it as switch-over with delay for protection against spark or burning-up by mistake connection



Connection example if using SB-12M-DN or ESR24
or Gladiator or other Din Mount relays or trail click

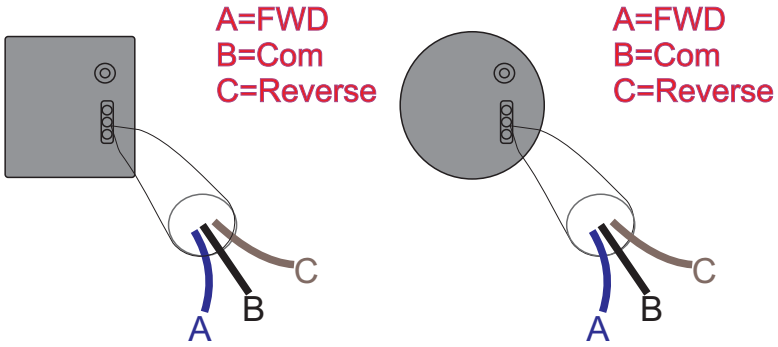


Connection example if using SB-RLY12c10A-DN

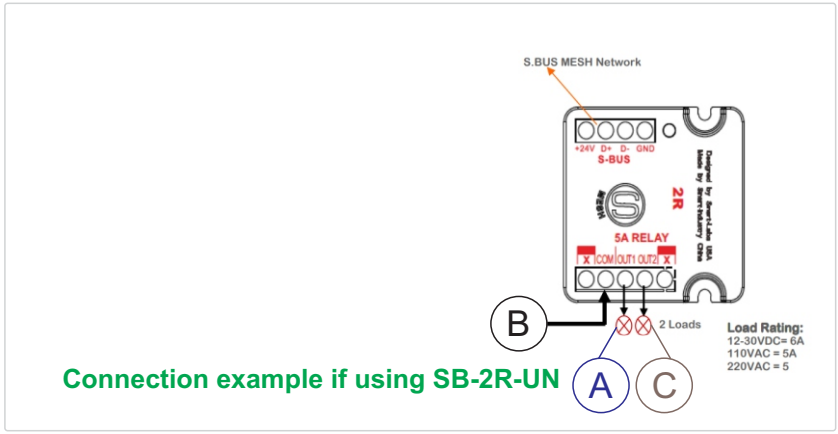
2X NO/NC Motor Type

Continuos connect function
for open = relay A on
for stop Both A and B off
for close = Relay C on

Momentary single touch dual function
for open = touch relay A
for stop. touch again A or B
for close = ouch relay C



Motors Connections



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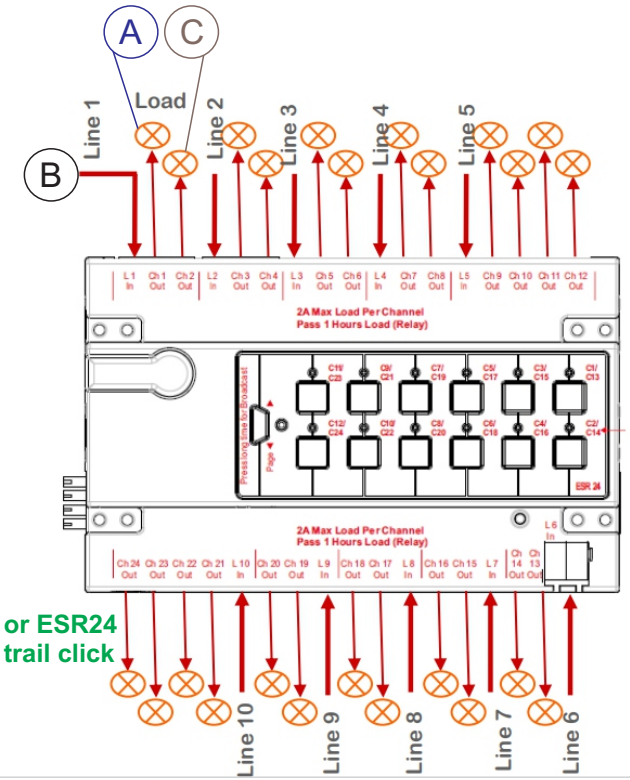

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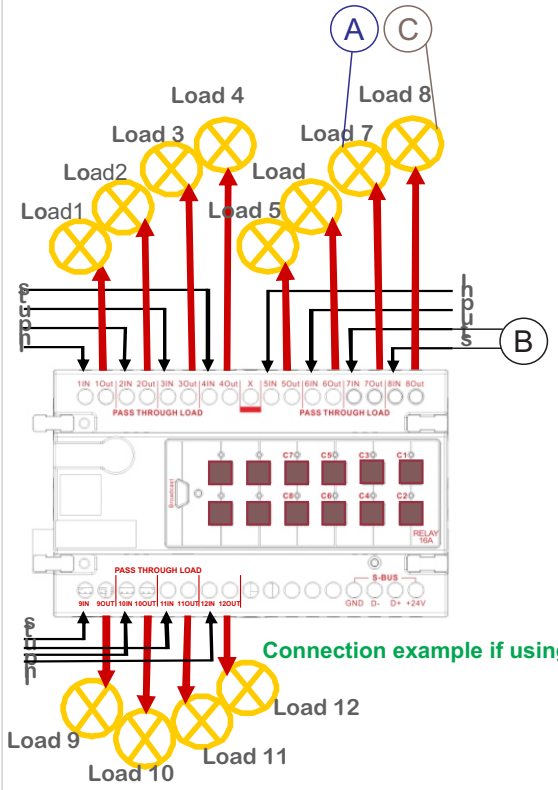
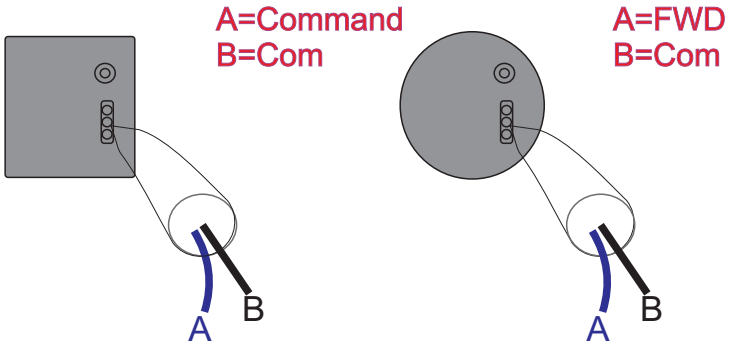


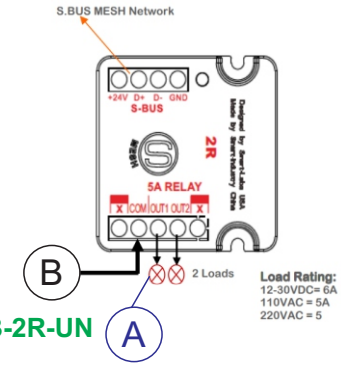
Connection example if using SB-RLY12c10A-DN

1X NO/NC Motor Type

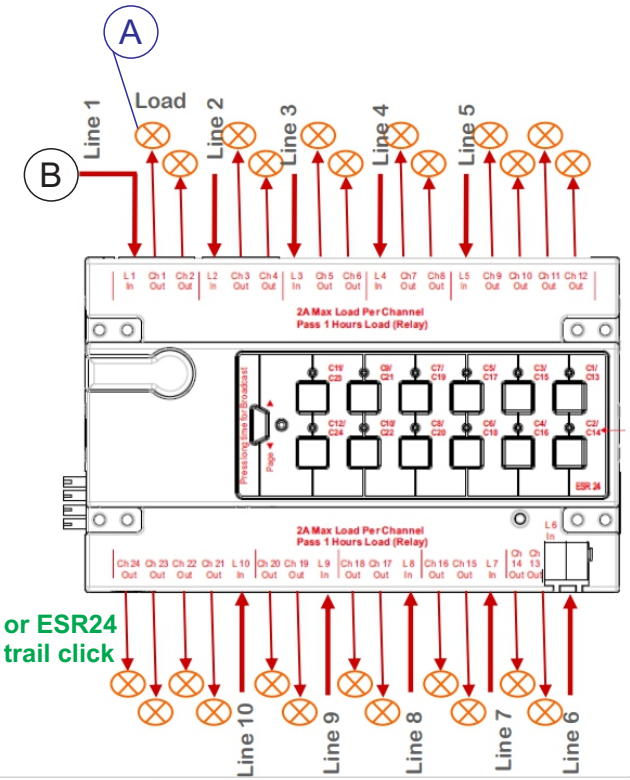
Momentary single touch triple function
for open = touch relay A
for stop. touch again A
for close = touch relay A



Motors Connections



Connection example if using SB-2R-UN



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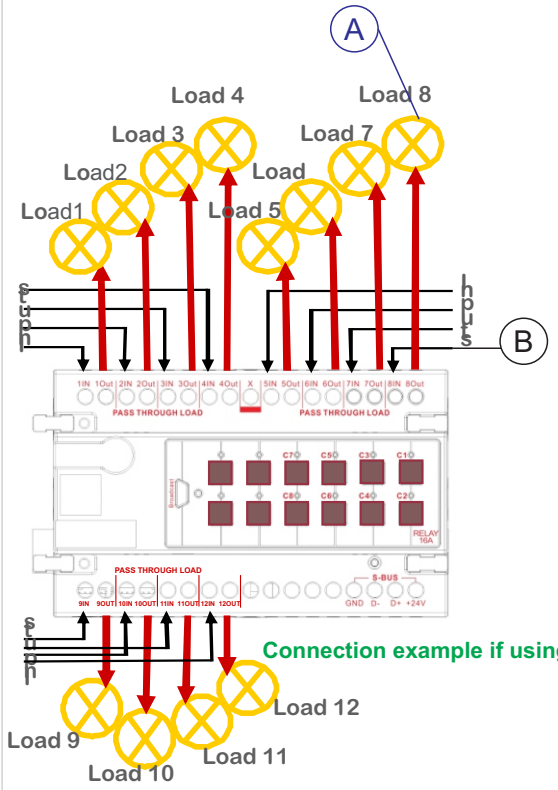
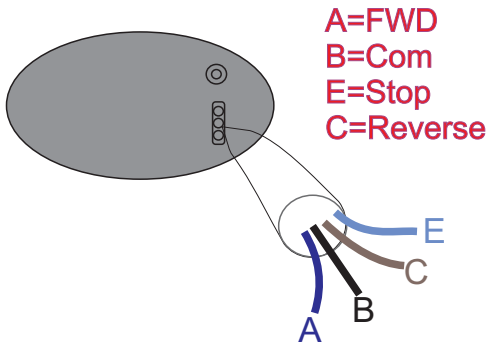


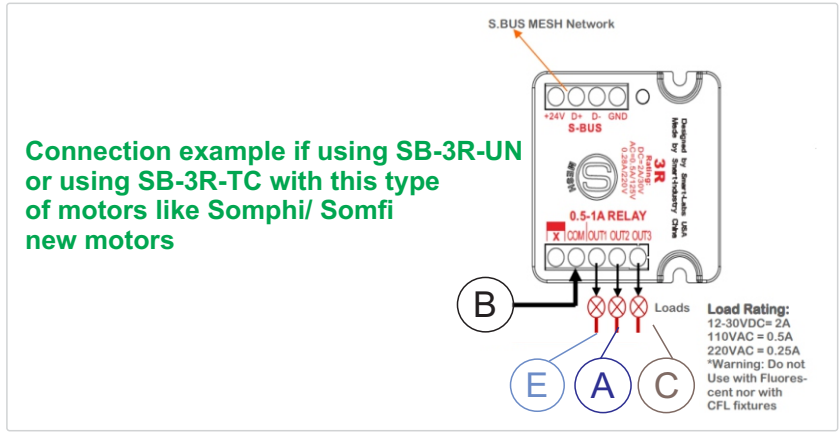
Connection example if using SB-RLY12c10A-DN

3X NO/NC Motor Type Somfi

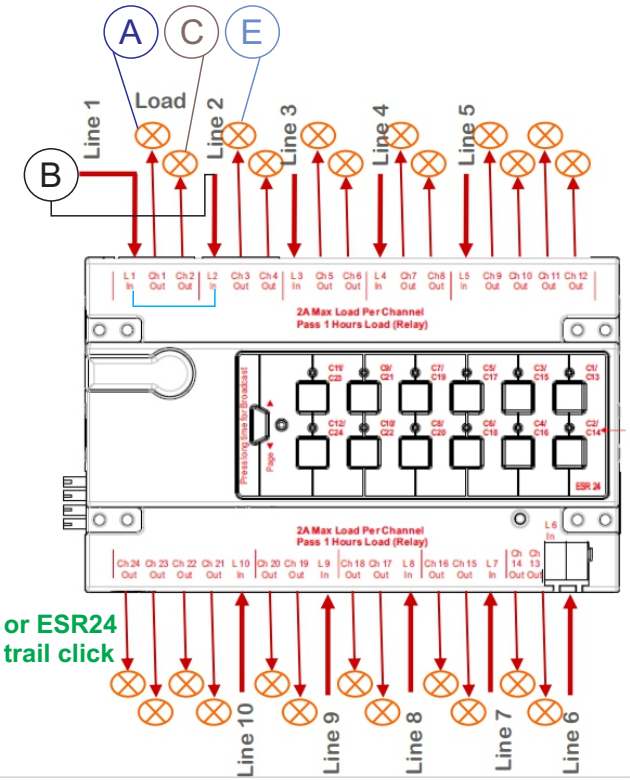
Momentary single touch dual function
for open = touch relay A
for stop. touch relay E
for close = ouch relay C



Motor Connection



Connection example if using SB-3R-UN or using SB-3R-TC with this type of motors like Somphi/ Somfi new motors



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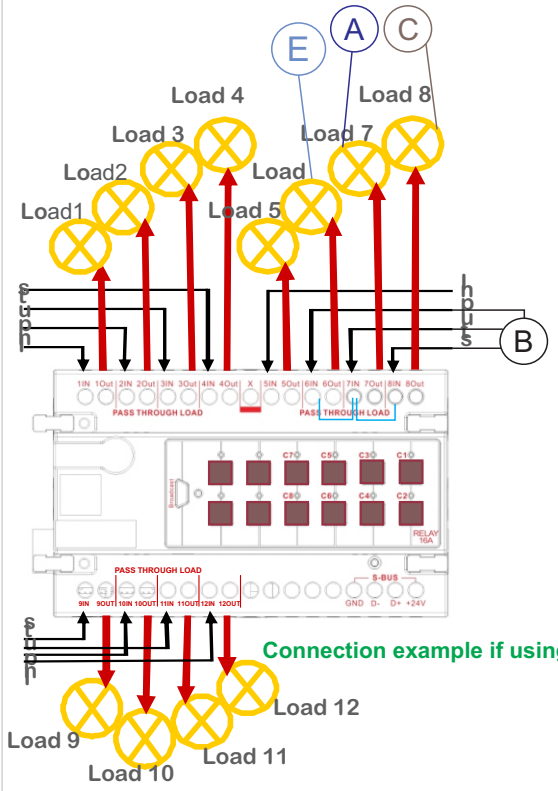
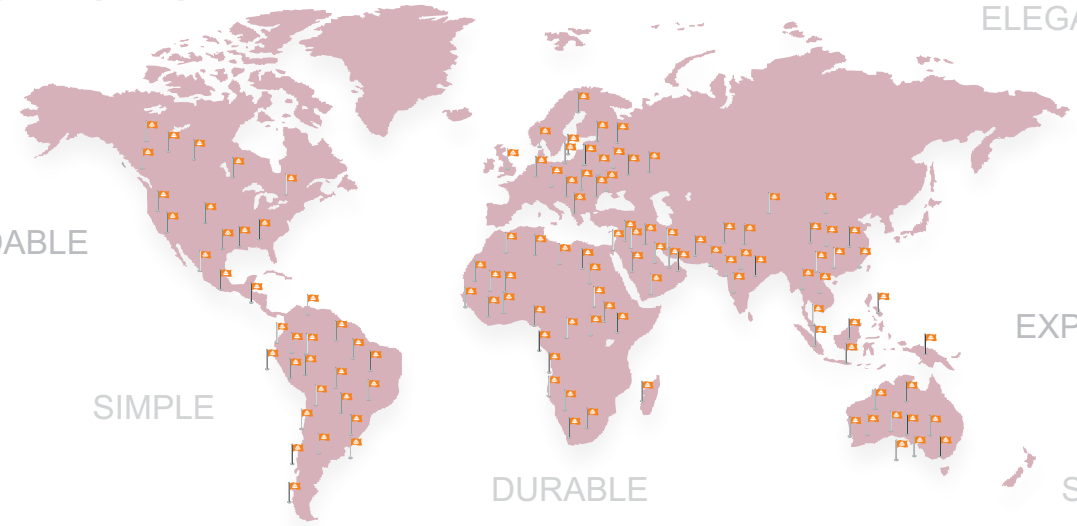


Connection example if using SB-RLY12c10A-DN

G4s

CUTTING EDGE

ELEGANT



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