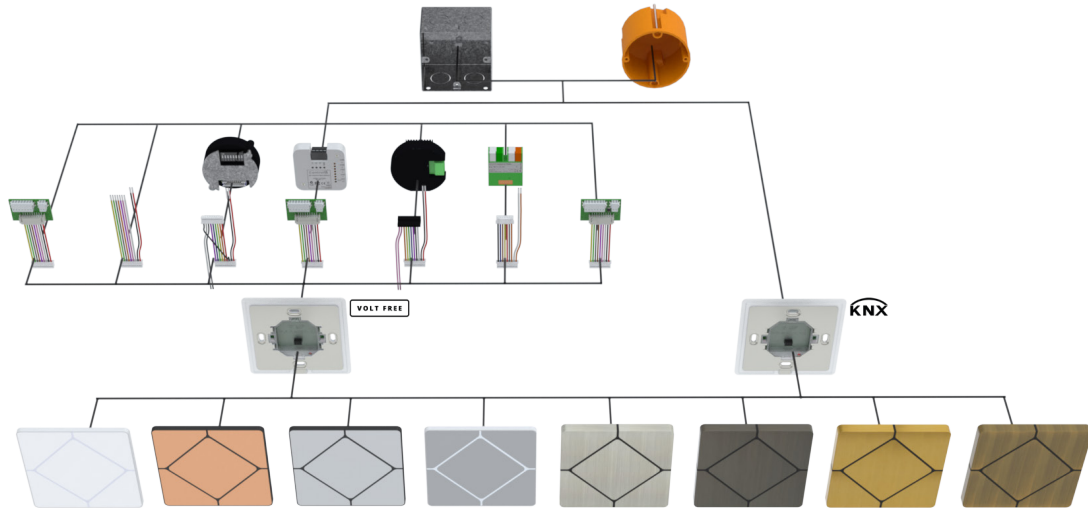# TAP RANGE - VOLT FREE (DRY CONTACT)

TAP5-XXXXX-XXX**COU-VOLF**FLY-XXXXX

FARADITE

ORDERING GUIDE

A fully installed TAP Volt Free keypad comprises of a front plate, a volt free coupler and a fly lead. The fly lead used will depend on the control system and device being used to connect the TAP Volt Free coupler to the control system. There are also universal male/female fly lead options making the TAP Volt Free range widely compatible. The diagram below shows the full TAP product range and details how the product SKU is constructed.

RANGE

TAP5-**XXXXX**-XXX**COU-VOLF**FLY-XXXXX

ΛLPHA
ALPHA

O R E
ORE

FINISH

TAP5-XXXXX-**XXX****COU-VOLF**FLY-XXXXX

ΛLPHA

BCO	BSS	BNI	MWH
Brushed Copper	Brushed Stainless Steel	Brushed Nickel	Matt White

O R E

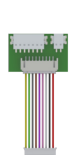| BBR	BAB	BNI	BJB
Brushed Brass	Brushed Antique Brass	Brushed Nickel	Brushed Jordan Bronze

FLY LEAD *See further details on pages 4 / 5*

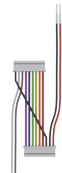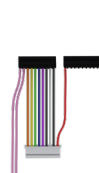TAP5-XXXXX-XXX**COU-VOLF**FLY-**XXXXX**

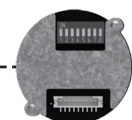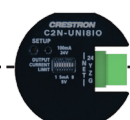| UNIV1	UNIV2	LUTR1	CRES1	LOXO1	LOXO2
					Includes 1-wire temperature sensor - for star wired Loxone systems only
NOT INCLUDED		Lutron QSE-CI-WCI	Crestron C2N-UN18IO	Loxone Nano DI Tree	

TAP RANGE - VOLT FREE (DRY CONTACT)

TAP5-XXXXX-XXX**COU-VOLF**FLY-XXXXX

FARADITE

VOLT FREE (DRY CONTACT) COUPLER - OVERVIEW

The Volt Free (Dry Contact) coupler allows the connection of any TAP-5 front plates. It provides 5 volt free / dry contact outputs compatible with a number of control systems. The 6th output will not be used for the 5 gang keypads. The coupler also has a manually adjustable halo light.
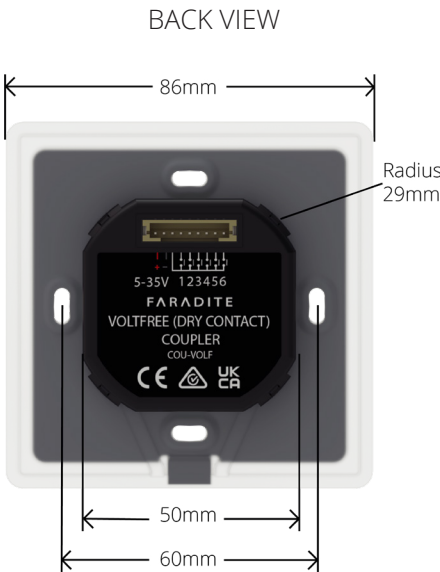
The coupler optionally confirms each press with an increase in brightness of the halo light.

Pre configured fly leads for popular control system interfaces can be specified. Alternatively there are also generic / universal fly lead options.
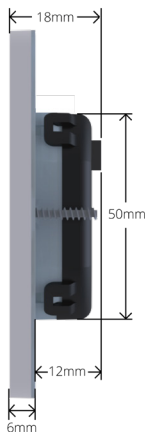
TECHNICAL DATA

Voltage	5V-35V DC
Power	See - Power Requirements
Operational Temp	Indoor only
IP rating	IP20
Fly lead connector	JST B9B-PH-SM4-TB
Solid state relay - max load current	80ma
Solid state relay - on resistance	16 OHMS
Solid state relay -off-state leakage current	1uA
Halo Light	4000k White light
Default state	Normally open
Backbox	UK or EU
Min pulse duration	80ms
Standards	EN 61000-6-1 EN 61000-6-3

DIMENSIONS

BACK VIEW

86mm

Radius 29mm

5-35V 123456

FARADITE
VOLTFREE (DRY CONTACT)
COUPLER
COU-VOLF

CE ☑ UK CA

50mm
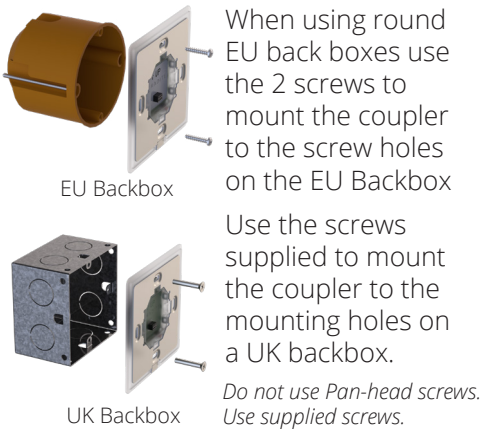60mm

SIDE PROFILE

18mm

50mm

12mm

6mm

TECHNICAL CONNECTIONS

The coupler has 6 completely silent, solid state relays that close for the duration of the press. A minimum pulse duration of 80ms has been enforced to ensure reliable detection by the control system.
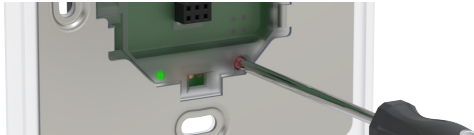
5-35V 123456

INSTALLATION

For optimum Halo Light aesthetic we advise mounting coupler using top and bottom screw holes.

EU Backbox

When using round EU back boxes use the 2 screws to mount the coupler to the screw holes on the EU Backbox

UK Backbox

Use the screws supplied to mount the coupler to the mounting holes on a UK backbox.

Do not use Pan-head screws. Use supplied screws.

Step by step installation guide:

1 - Use appropriate fly lead to connect coupler to the control system.

2 - Select the light level of the halo light by pressing and holding the button. Each press and hold will toggle between dimming the halo light up and down. Release at desired light level. Short press toggles on/off

3 - The feedback mode can be changed by a double press of the button. A LED shows the currently selected mode.

Light Blue - No Feedback
Red - Halo light pulse only

4 - Ensure correct orientation and press the front plate back on to the coupler with a moderately firm, evenly distributed press. The keypad will be disabled for the first 5 seconds after power up. Wait a further 5 seconds whilst the keypad calibrates itself before use.

POWER REQUIREMENTS

The peak power requirement is 0.4W.

Feedback Mode	Peak Power		12V	24V	35V
Light Blue - No Feedback	0.4W		33 mA	17 mA	11 mA
Red - Halo light pulse only	0.4W (Default)		33 mA	17 mA	11 mA

POWER SUPPLY LOCATION / TYPE

The TAP range of keypads feature capacitive touch technology which require a strong GND reference to operate correctly. As a result the keypad can't be powered by a battery. We recommend using a good quality AC to DC power supply, to ensure a good GND reference, the power supply has to be located at least 1m away from the keypad location.

MOUNTING AND SAFETY PRECAUTIONS

- Installation to be undertaken by a qualified professional
- Do not connect directly to mains voltage
- Keep device away from water
- Do not use for safety critical applications

RoHS C€ UK CA

TAP RANGE - VOLT FREE (DRY CONTACT)
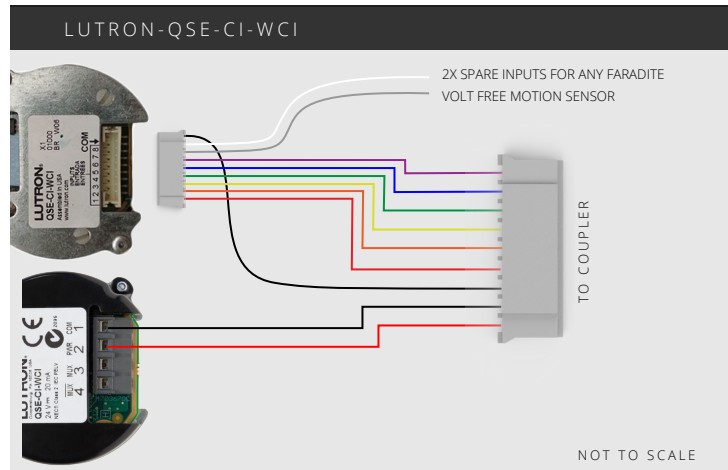
TAP5-XXXXX-XXX**COU-VOLF**FLY-XXXXX

FARADITE

FLY LEADS - OVERVIEW
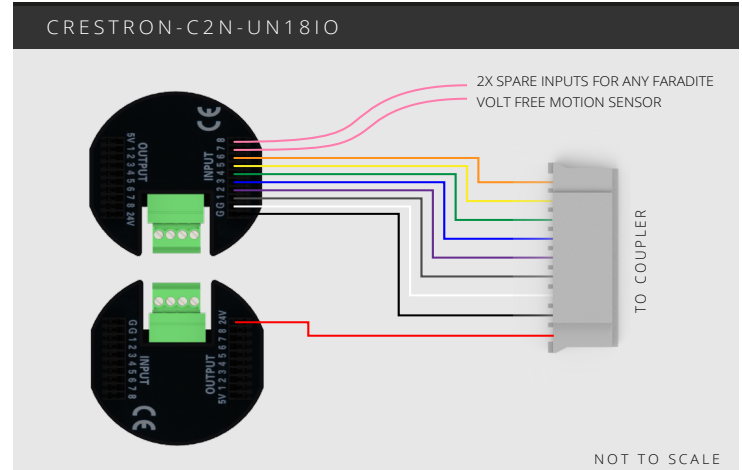
CONTROL SYSTEM SPECIFIC FLY LEADS

The generic fly leads allow connection into almost any low voltage control system that have dry contact / volt free / digital inputs, but for convenience and speed of wiring there is also a selection of fly leads that are made for specific control system modules.

FLY-LUTR1

LUTRON-QSE-CI-WCI

2X SPARE INPUTS FOR ANY FARADITE VOLT FREE MOTION SENSOR
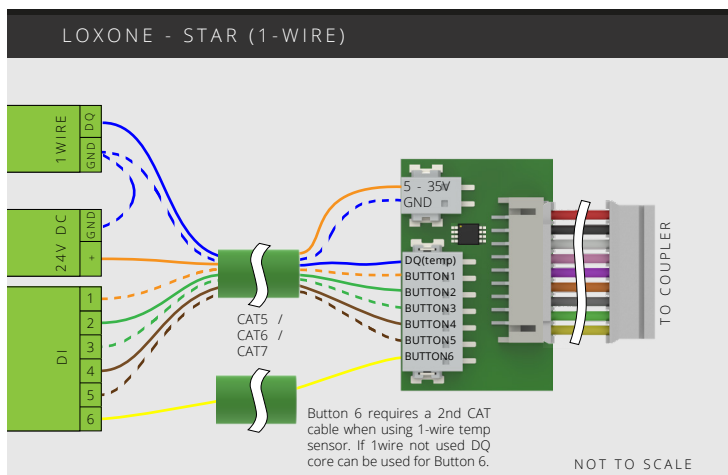
TO COUPLER

NOT TO SCALE

The Lutron QSE-CI-WCI allows for up to 8 inputs. Use the Faradite FLY-LUTR1 to connect the TAP Coupler Volt Free to the Lutron QSE-CI-WCI. Inputs 7 and 8 can be used for additional sensors such as the Faradite Motion Sensor 360 Volt Free.

FLY-CRES1

CRESTRON-C2N-UN18IO

2X SPARE INPUTS FOR ANY FARADITE VOLT FREE MOTION SENSOR
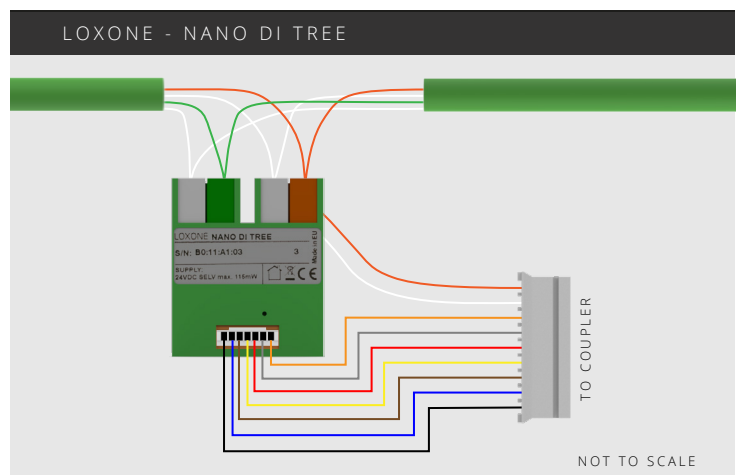
TO COUPLER

NOT TO SCALE

The Crestron C2N-UNI8IO allows for up to 8 inputs to be connected. The supplied Faradite fly lead uses inputs 1 - 6 with inputs 7 and 8 spare for external sensors such as the Motion Sensor 360 - Volt Free. Please note: This module does not support fast double click functions, only use single click functions.

FLY-LOXO2

LOXONE - STAR (1-WIRE)

1WIRE — GND DQ
24V DC — GND +
DI — 1 2 3 4 5 6

CAT5 / CAT6 / CAT7

5 - 35V
GND

DQ(temp)
BUTTON1
BUTTON2
BUTTON3
BUTTON4
BUTTON5
BUTTON6

TO COUPLER

Button 6 requires a 2nd CAT cable when using 1-wire temp sensor. If 1wire not used DQ core can be used for Button 6.

NOT TO SCALE

For Loxone systems that have been star wired the FLY-LOXO2 allows direct connection to a CAT cable. It includes a 1-wire temperature sensor. It can be used for 1-6 button keypads.

FLY-LOXO1

LOXONE - NANO DI TREE

LOXONE NANO DI TREE

TO COUPLER

NOT TO SCALE

Connecting the TAP Volt Free Coupler to a Loxone Tree bus is simple using the Nano DI Tree. Power the Coupler by connecting the loose orange and white fly leads to the orange and white terminal block.
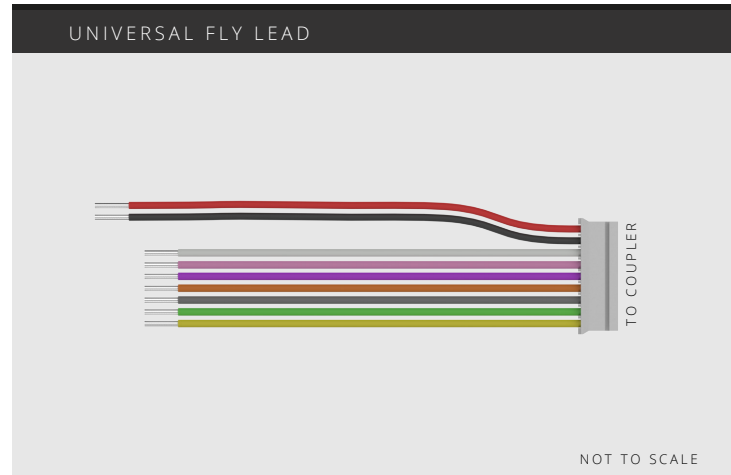
TAP RANGE - VOLT FREE (DRY CONTACT)

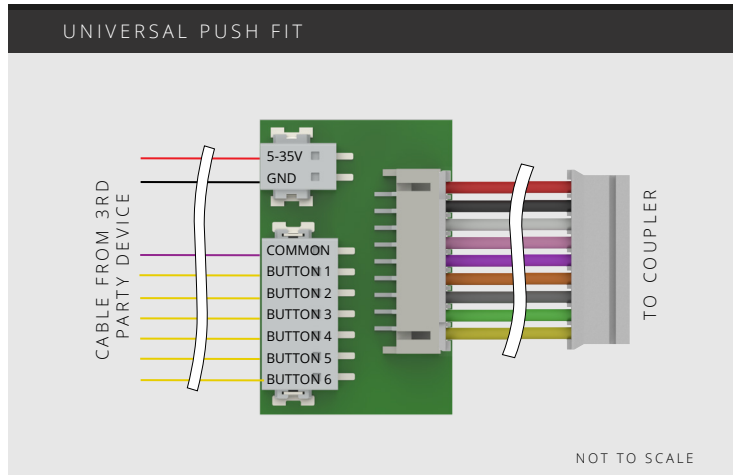TAP5-XXXXX-XXX**COU-VOLF**FLY-XXXXX

FARADITE

GENERIC FLY LEADS

The generic fly leads allow connection into almost any low voltage control system that has dry contact / volt free / digital inputs.

FLY-UNIV1

UNIVERSAL FLY LEAD

TO COUPLER

NOT TO SCALE

FLY-UNIV2

UNIVERSAL PUSH FIT

CABLE FROM 3RD PARTY DEVICE

5-35V
GND

COMMON
BUTTON 1
BUTTON 2
BUTTON 3
BUTTON 4
BUTTON 5
BUTTON 6

TO COUPLER

NOT TO SCALE

The FLY-UNIV1 connects in to the back of the Faradite TAP Coupler Volt Free and provides loose fly leads. The fly leads can be connected to any suitable input module.

For systems that require a female terminal the FLY-UNIV2 allows the connections of fly leads from any 3rd party device. Supports keypads with 1 - 6 buttons..