



# TechBook

in.lu.me

The most comprehensive LED system for spas



for quick, easy and clean installation

sleek cable and connector designs

made for in.mix 300 color lighting console





---

## Table of contents

Safety instructions .....	2
Warnings .....	3
Introduction .....	5
Overview .....	6
- Cable loop 8 connectors (IN.LU.ME-LOOP-8-L V2) .....	6
- Cable loop 8 corner connectors (IN.LU.ME-LOOP-8-C V2) .....	6
- Cable loop 4 connectors (IN.LU.ME-LOOP-4-L V2) .....	7
- Cable loop 1 connector (IN.LU.ME-LOOP-1-8 V2) .....	7
- Spyder cable 2 LEDs (IN.LU.ME-SPYD-2-3 V2) .....	8
- Spyder cable 4 LEDs .....	8
- Spyder cable 6 LEDs .....	9
- Splitter (IN.LU.ME-SPLIT V2) .....	9
- Cable adaptor 5' from loop to cluster (IN.LU.ME-EXT-5 V2) .....	10
- 9 LEDs cluster (IN.LU.ME-CLUS-9 V2) .....	10
Installation .....	11
- Basic configuration .....	13
- Good configuration .....	13
- Better configuration .....	14
- Best configuration .....	14
Connections .....	15
- General interconnection .....	15
Compatible keypads .....	16
Specifications .....	17



## Safety instructions



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



**CAUTION:** TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SCREWS ON THE BACK OF THE ENCLOSURE. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the service literature accompanying this appliance.



### **IMPORTANT SAFETY INSTRUCTIONS:**

For your own safety please read carefully the following important safety instructions before attempting to connect this unit to the mains power supply. They will also enable you to get the best performance from and to prolong the life of the unit:

\* READ THESE INSTRUCTIONS.

\* KEEP THESE INSTRUCTIONS.

\* HEED ALL WARNINGS.

\* FOLLOW ALL INSTRUCTIONS.

\* CLEAN ONLY WITH DRY CLOTH. BEWARE THE APPLICATION OF SOME PRODUCTS COMMONLY USED AGAINST CORROSION (SUCH AS WD-40 FAMILY PRODUCTS) AS THEY COULD DAMAGE THE ENCLOSURE, DUE TO A NEGATIVE CHEMICAL REACTION BETWEEN SOME INDUSTRIAL OILS AND ITS PLASTIC ENCLOSURE. ANY OTHER MATERIALS WHICH MAY COME IN CONTACT WITH THE ENCLOSURE MUST BE CAREFULLY EVALUATED UNDER END USE CONDITIONS FOR COMPATIBILITY.

\* DO NOT INSTALL NEAR ANY HEAT SOURCE. CLEARANCE AND MINIMUM DISTANCE BETWEEN THE VARIOUS PARTS OF THE APPLIANCE AND THE SURROUNDING STRUCTURE ARE NOT SPECIFIED AS LONG AS THEY ARE SUFFICIENT SO THAT THE AMBIENT TEMPERATURE AROUND THE APPARATUS DOES NOT EXCEED 140°F (60°C).

\* ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.

Aeware®, Gecko®, and their respective logos are Registered Trademarks of Gecko Alliance Group.  
in.mix 300™, in.lu.me™, in.k1000™, in.k800™, in.k500™, in.k330™, in.k300™, in.k450™, in.yj™, in.ye™ and their respective logos are Trademarks of Gecko Alliance Group.

All other product or company names that may be mentioned in this publication are tradenames, trademarks or registered trademarks of their respective owners.



---

## Warnings



### **WARNINGS:**

Before installing or connecting the unit, please read the following.

---

- \* DO NOT DISASSEMBLE OR ALTER THE APPARATUS.
- \* DO NOT USE FOAM TO ISOLATE THE UNIT.
- \* TURN POWER OFF BEFORE SERVICING OR MODIFYING ANY CABLE CONNECTIONS IN THIS UNIT.
- \* PRODUCT MUST BE DISPOSED OF SEPARATELY FROM NORMAL HOUSEHOLD IN ACCORDANCE WITH LOCAL WASTE DISPOSAL LEGISLATION.



### **WARNINGS:**

When this equipment is provided as an audio/video components for spas, U1563 - 6th edition requires that the following instructions (or equivalent) be provided as part of the instruction manual for the spa equipment.

---

- \* WARNING – TO PREVENT DAMAGE, FIRE AND ELECTOCUTION DO NOT CONNECT LIGHT ASSEMBLY CABLE THAT HAS NOT BEEN APPROVED BY GECKO
- \* DO NOT SERVICE THIS PRODUCT YOURSELF AS OPENING OR REMOVING COVERS MAY EXPOSE YOU TO DANGEROUS VOLTAGE OR OTHER RISK OF INJURY. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.





## in.lume

The most comprehensive LED system for spas and hot tubs.

The in.lume cables and LED lights system were designed not only to be the perfect companions to the in.mix 300 lighting console, but also to dramatically ease the whole process of installing cables, lights and other equipment necessary to seriously light up your spa.

The system consists of loop, spyder and cluster cables with high-intensity RGB LED lights.

in.lume's loop cables with 4 (at every 96") or 8 (at every 48") t-shaped connectors cleanly adapts to the contour of any size of spa. The 4 or 6 LED spyder cables and the 9 LED cluster can then be connected and positioned inside or outside the spa, in clean layouts, to create the desired light ambiance.

The cleverly designed sturdy and water resistant connectors (IPX5), spyder and cluster cables can easily be connected to loop cables. Loops eliminate the need to daisy chain cables, minimize voltage drops and guarantee optimal LED intensities. in.lume also features bigger wire gauge cables and more LEDs in spas.

Once connected to in.mix, in.lume provides the spa user complete control on colors and effects from the in.k1000 to the in.k300 keypads or a smartphone running the in.touch 2 app.

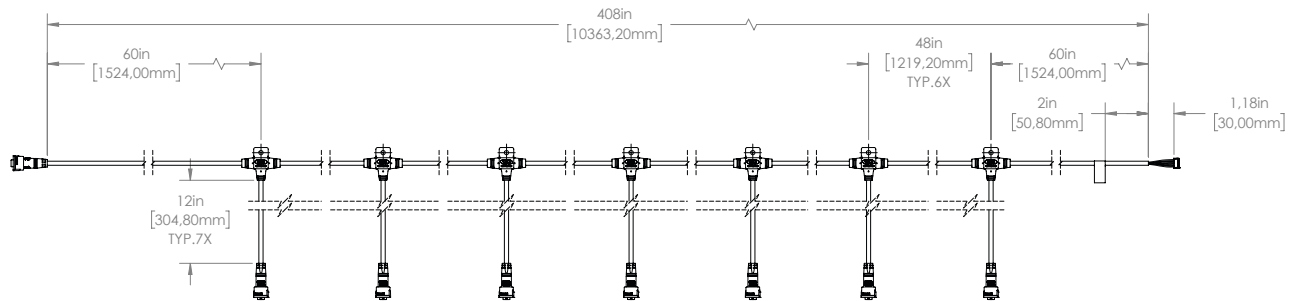


## Overview

Gecko's LED modules are driven by an in.mix-300-lu.me or the in.lu.me output of any V3 control system.

### Cable loop 8 connectors (IN.LU.ME-LOOP-8-L V2)

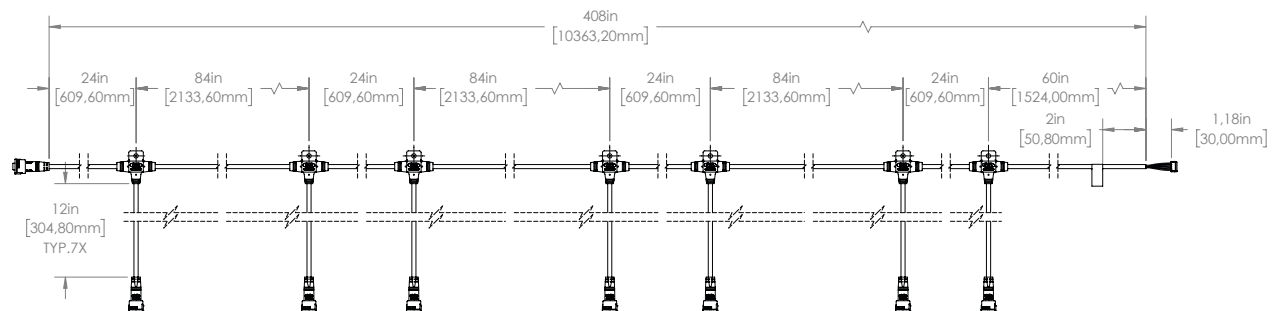
The first connector on the left is a female 4 pin connector, which connects to an in.mix-300-lu.me output or the in.lu.me output of any V3 control system. All other connectors are 4 pin circular keyed connectors.



### Cable loop 8 corner connectors (IN.LU.ME-LOOP-8-C V2)

The first connector on the left is a female 4 pin connector, which connects to an in.mix-300-lu.me output or the in.lu.me output of any V3 control system. All other connectors are 4 pin circular keyed connectors.

The difference with this corner version is that the connectors have been spaced differently in order to be installed in the corners of the spa.

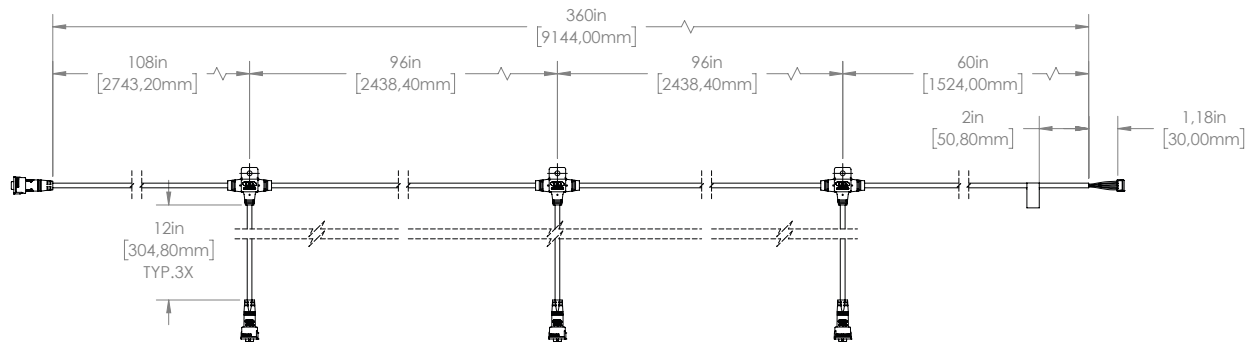




## Overview

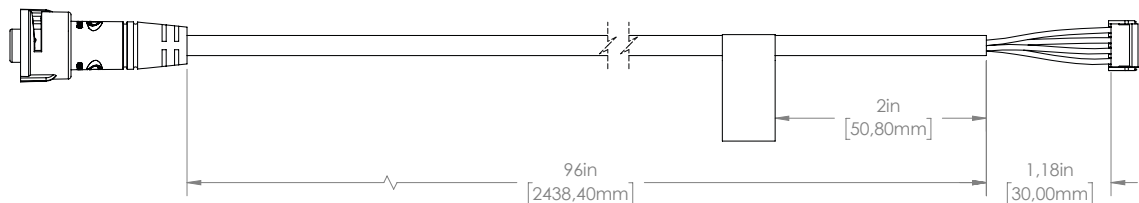
### Cable loop 4 connectors (IN.LU.ME-LOOP-4-L V2)

The first connector on the left is a female 4 pin connector, which connects to an in.mix-300-lu.me output or the in.lu.me output of any V3 control system. All other connectors are 4 pin circular keyed connector.



### Cable loop 1 connector (IN.LU.ME-LOOP-1-8 V2)

The connector on the right is a female 4 pin connector which connects to an in.mix-300-lu.me output or the in.lu.me output of any V3 control system. The connector on the left is a 4 pin circular keyed connector.



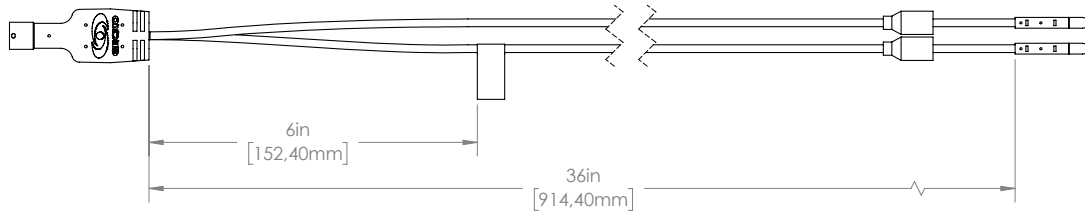




## Overview

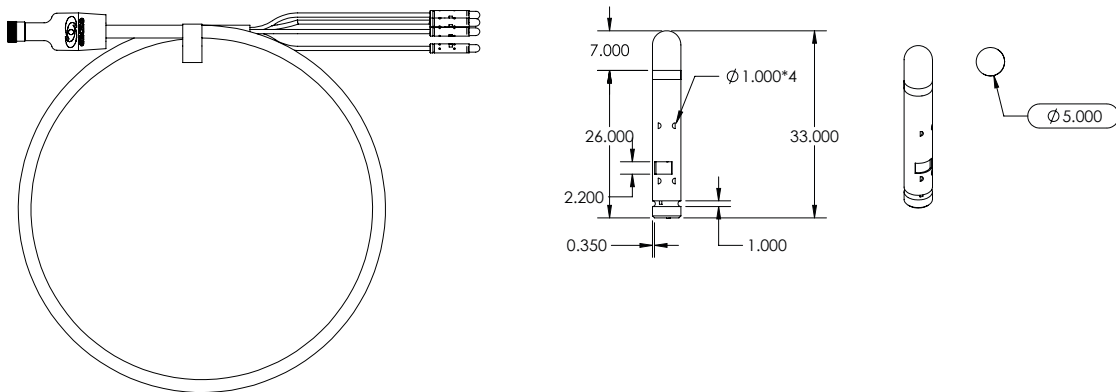
### Spyder cable 2 LEDs (IN.LU.ME-SPYD-2-3 V2)

in.lu.me-spyd-2 is a spyder module offered in a 2 LED configuration.

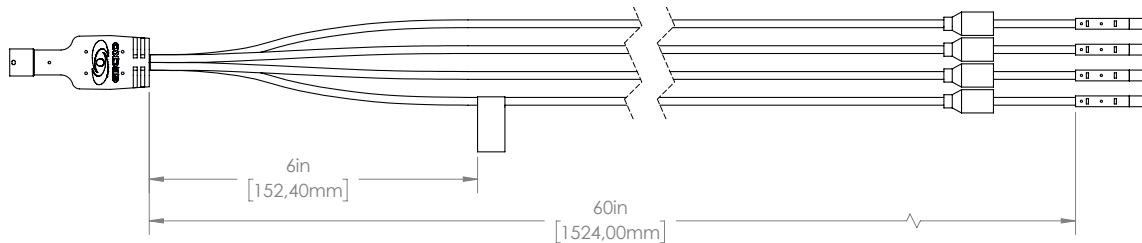


### Spyder cable 4 LEDs

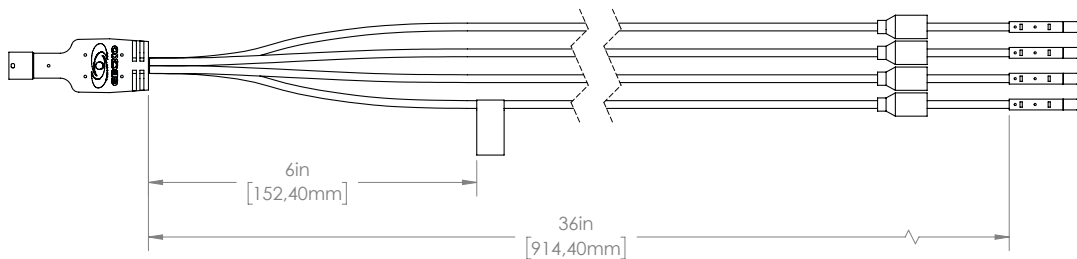
in.lu.me-spyd-4 is a spyder module offered in a 4 LED configuration.



### IN.LU.ME-SPYD-4 V2



### IN.LU.ME-SPYD-4-3 V2



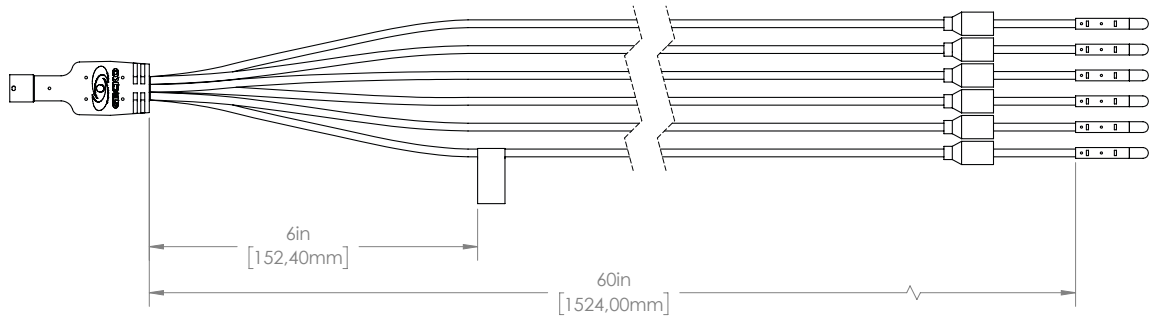


## Overview

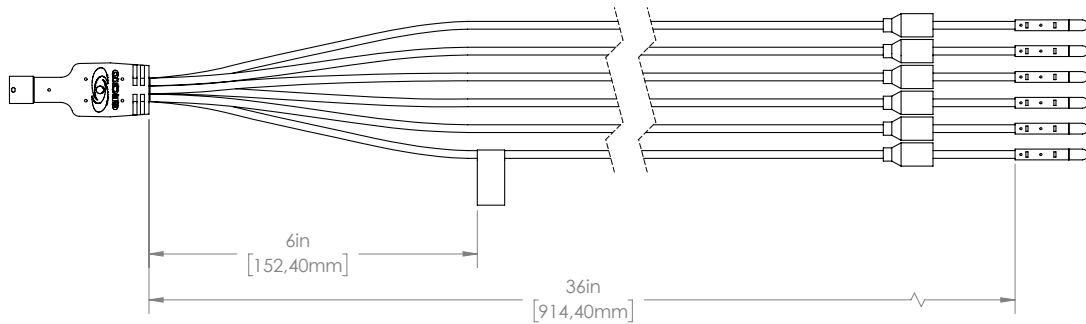
### Spyder cable 6 LEDs

in.lu.me-spyd-6 is a spyder module offered in 6 LED configuration.

#### IN.LU.ME-SPYD-6 V2

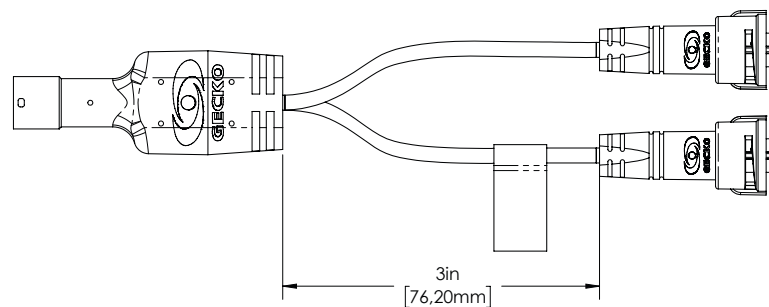


#### IN.LU.ME-SPYD-6-3 V2



### Splitter (IN.LU.ME-SPLIT V2)

Connects to any cable loop in order to split its output in two which allows one more spyder or cluster to be connected at the same location.

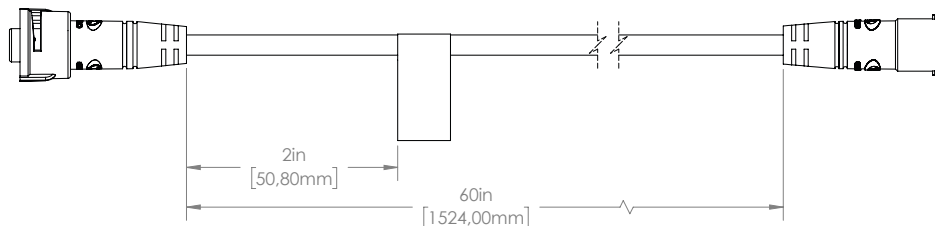




## Overview

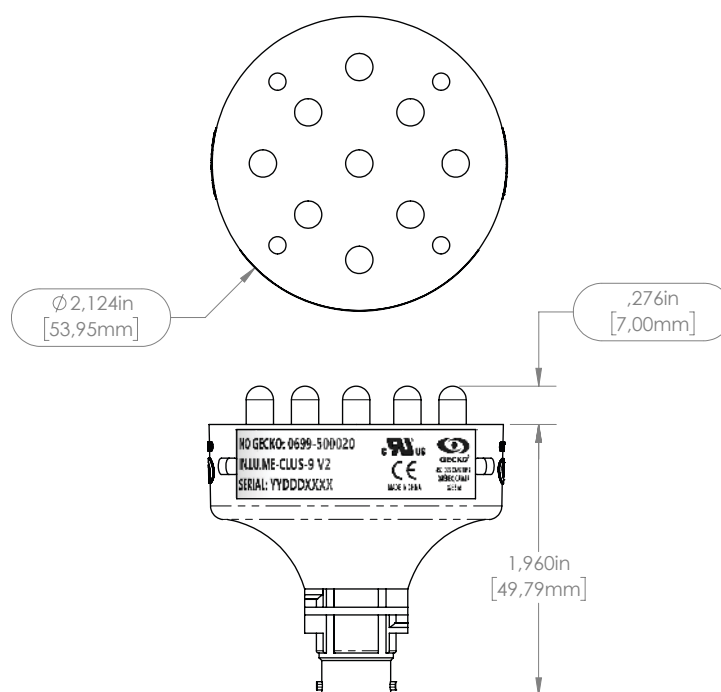
### Cable adaptor 5' from loop to cluster (IN.LU.ME-EXT-5 V2)

in.lu.me-EXT-5 is a 5 feet extension cord with circular keyed connectors at both ends.



### 9 LEDs cluster (IN.LU.ME-CLUS-9 V2)

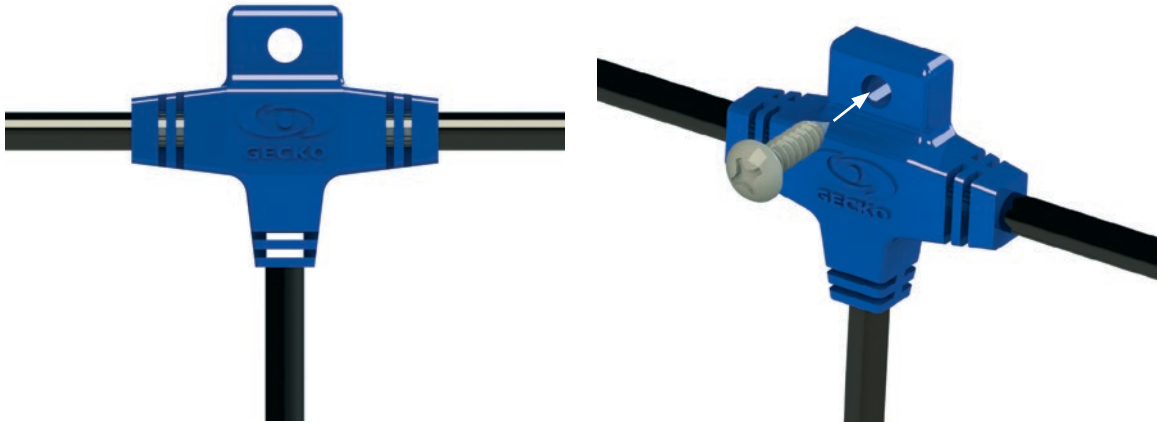
in.lu.me-CLUS-9 is a 9 LED cluster, PVC over molded that can be directly fitted in a lens/wall fitting.



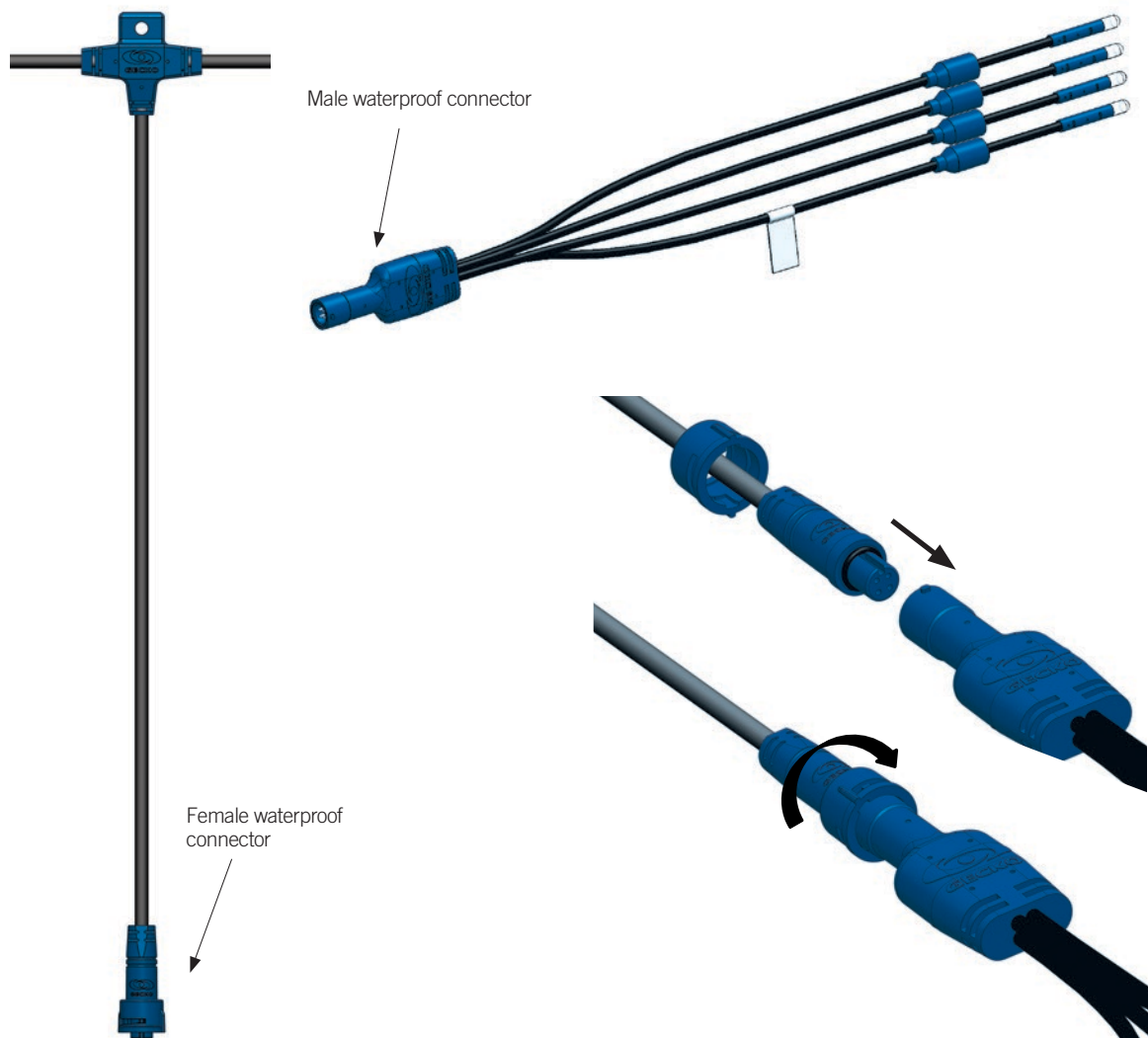


## Installation

Use a #8-3/4" length mechanical screw or a cable tie with the "T" junction to fix the loop to the spa frame.



Insert the male waterproof connector of the spyder cable or cluster in the female waterproof connector with one of the loop extension.

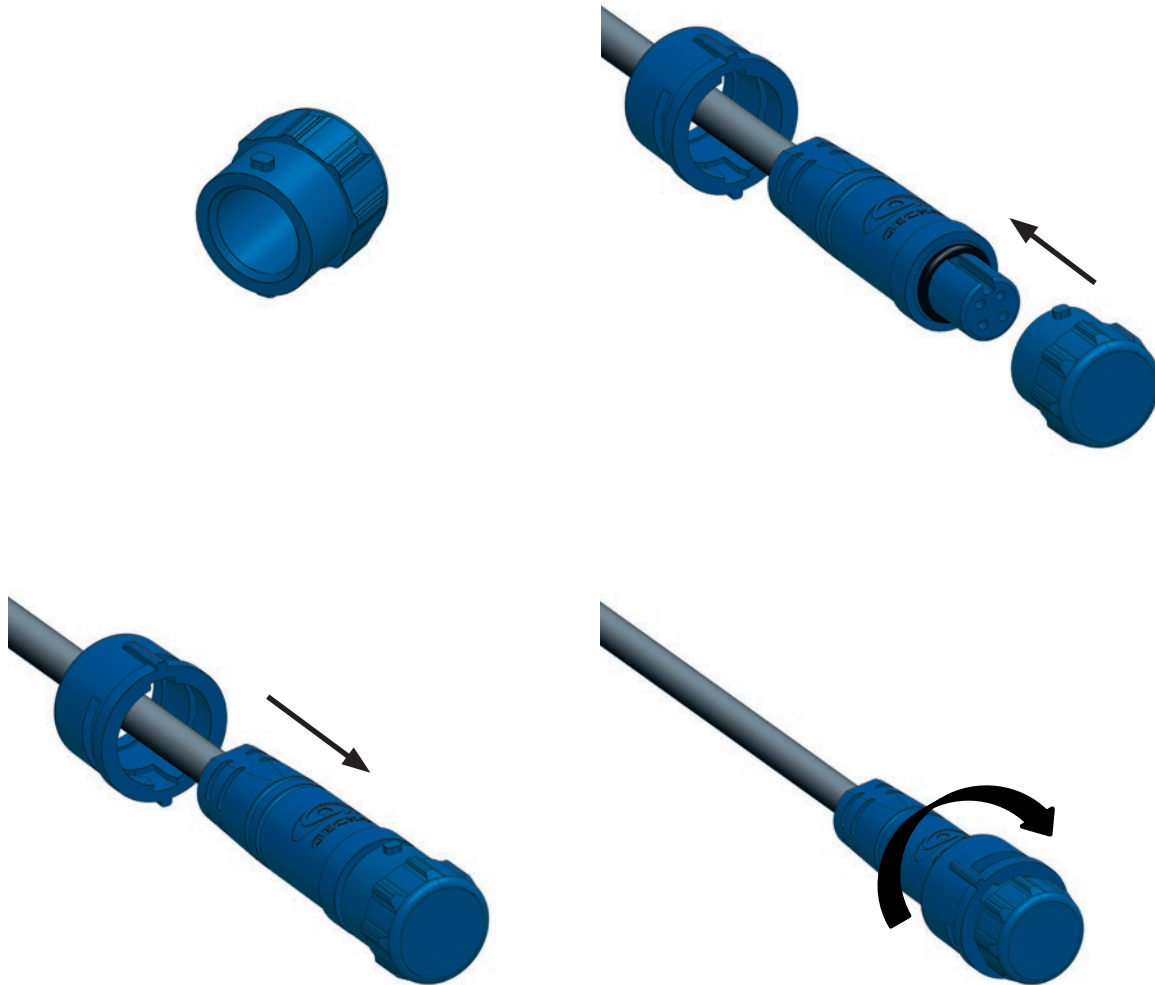




## Installation

### Protective in.lu.me cap

Make sure that any unused in.lu.me connectors are protected by a protective in.lu.me cap to prevent any malfunction due to corrosion.



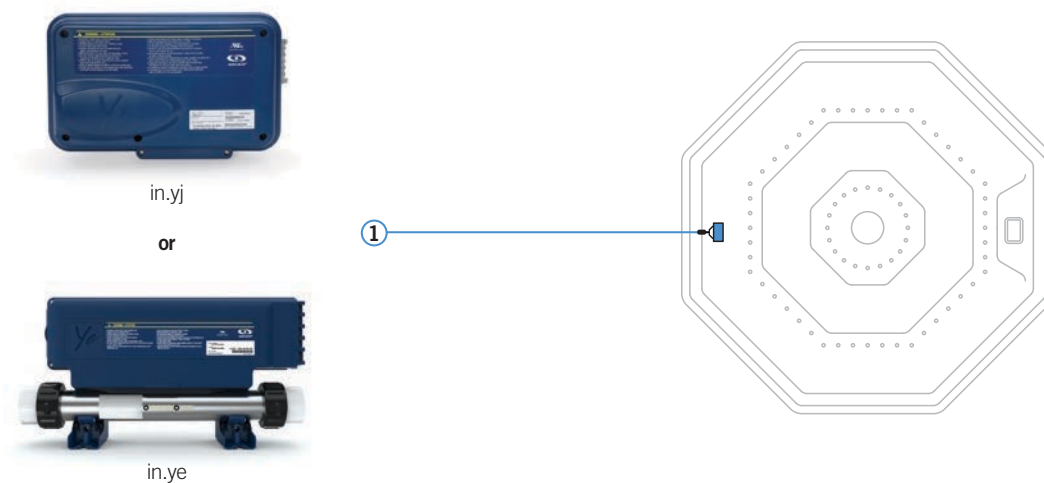


## Installation

### Basic configuration

9 LEDs cluster

1 x in.lu.me-loop-1 + 1 x in.lu.me-clus-9

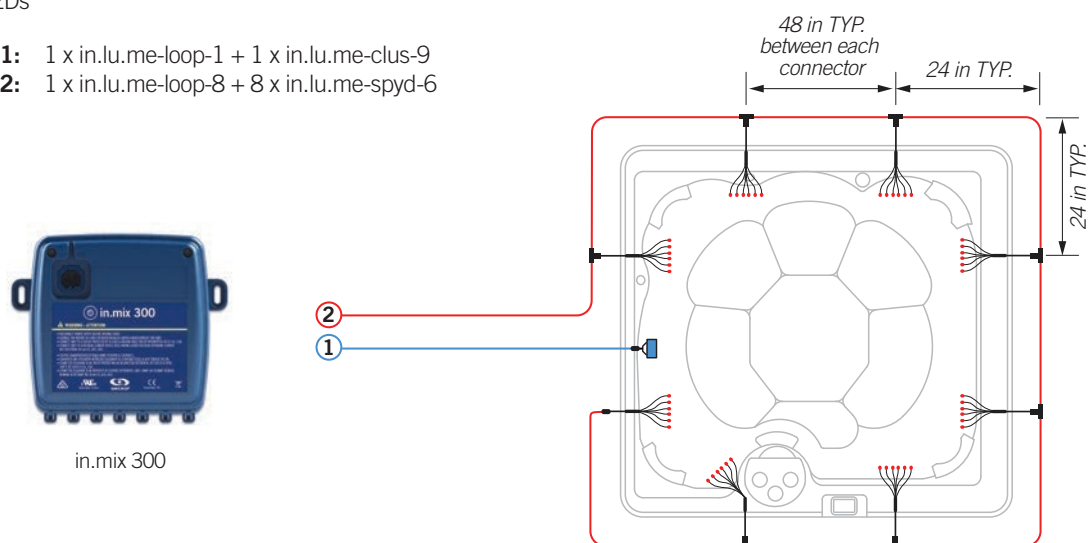


### Good configuration

57 LEDs

**OUT 1:** 1 x in.lu.me-loop-1 + 1 x in.lu.me-clus-9

**OUT 2:** 1 x in.lu.me-loop-8 + 8 x in.lu.me-spyd-6





## Installation

### Better configuration

81 LEDs

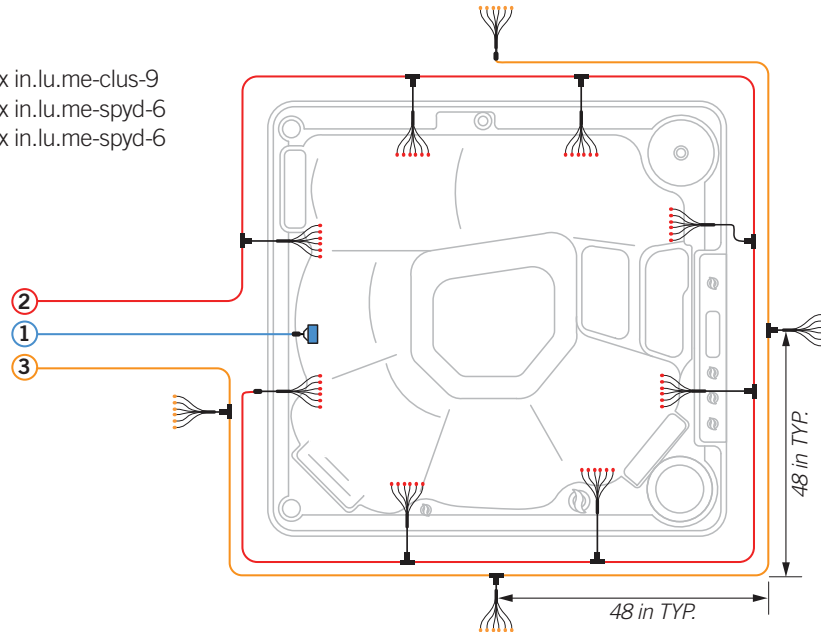
**OUT 1:** 1 x in.lu.me-loop-1 + 1 x in.lu.me-clus-9

**OUT 2:** 1 x in.lu.me-loop-8 + 8 x in.lu.me-spyd-6

**OUT 3:** 1 x in.lu.me-loop-4 + 4 x in.lu.me-spyd-6



in.mix 300



### Best configuration

120 LEDs

**OUT 1:** 1 x in.lu.me-loop-1 + 1 x in.lu.me-clus-9

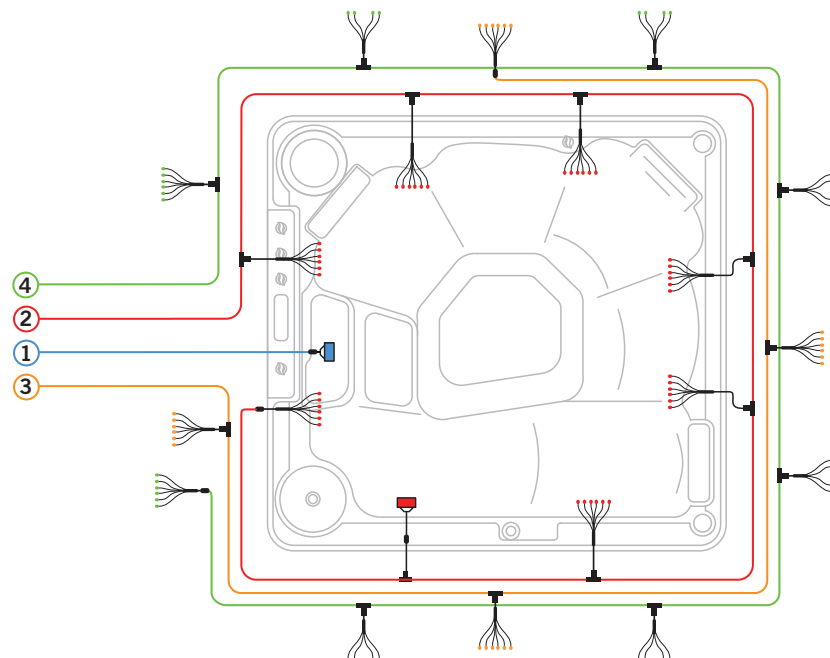
**OUT 2:** 1 x in.lu.me-loop-8 + 7 x in.lu.me-spyd-6 + 1 x in.lu.me-clus-9

**OUT 3:** 1 x in.lu.me-loop-4 + 4 x in.lu.me-spyd-6

**OUT 4:** 1 x in.lu.me-loop-8 + 2 x in.lu.me-spyd-6 + 6 x in.lu.me-spyd-4



in.mix 300

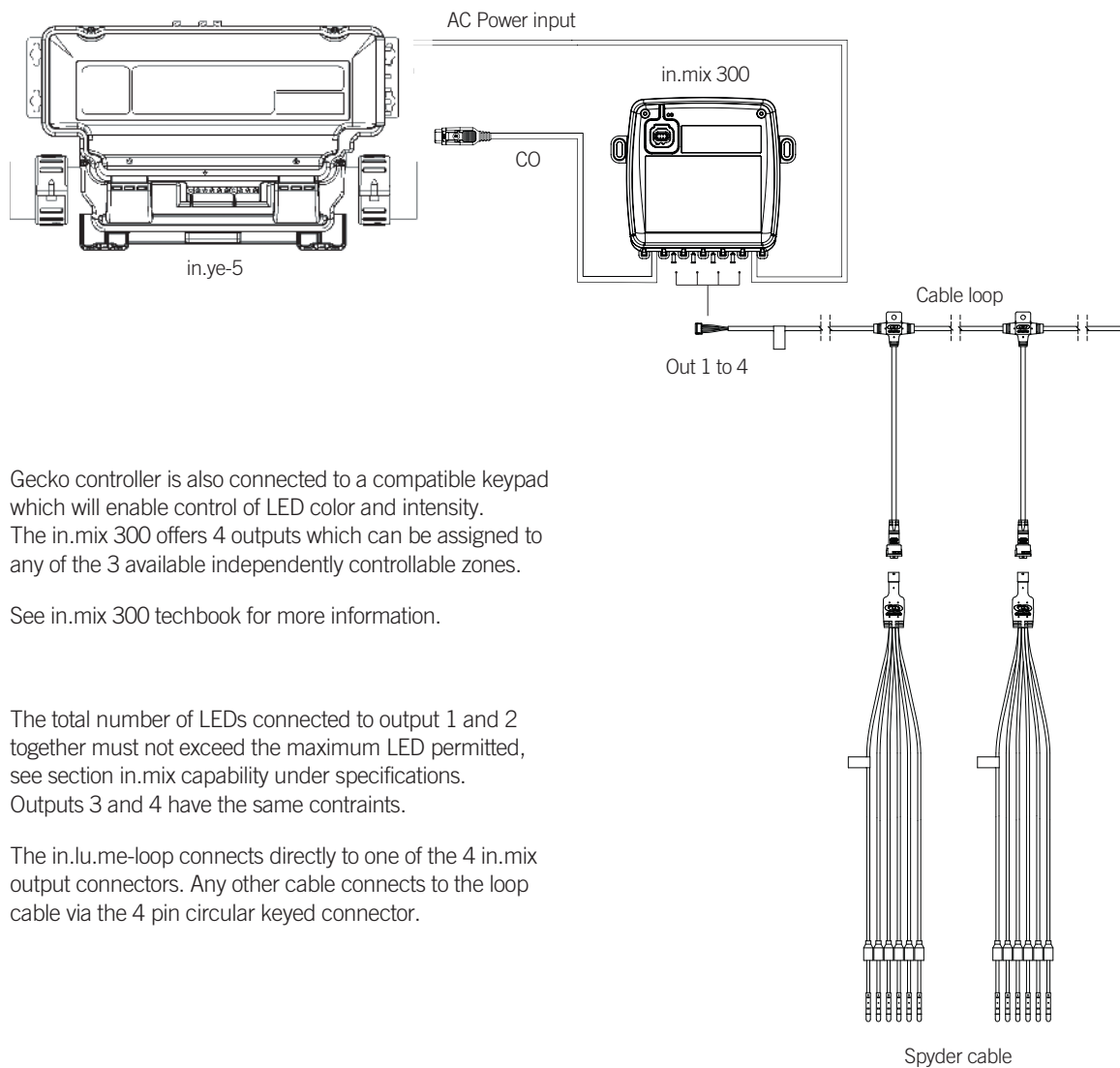


**Note:** It is recommended to fix the "T" junctions of the loop cable in the middle of each side of the spa (as illustrated above) and to tie any excess cable in each corner of the spa.



## Connections

### General interconnection



Gecko controller is also connected to a compatible keypad which will enable control of LED color and intensity. The in.mix 300 offers 4 outputs which can be assigned to any of the 3 available independently controllable zones.

See in.mix 300 techbook for more information.

The total number of LEDs connected to output 1 and 2 together must not exceed the maximum LED permitted, see section in.mix capability under specifications. Outputs 3 and 4 have the same constraints.

The in.lu.me-loop connects directly to one of the 4 in.mix output connectors. Any other cable connects to the loop cable via the 4 pin circular keyed connector.





## Compatible keypads

### List of keypads compatible with in.lu.me

For more information on the keypads compatible with your in.lu.me refer to the corresponding techbook.



[in.k300 main keypad\\*](#)

LCD display, 4 keys



[in.k330 main keypad](#)

Color LCD display, 5 keys



[in.k450 main keypad\\*](#)

ACL display, 7 keys



[in.k500 main keypad](#)

Color LCD display, 7 keys



[in.k800 main keypad](#)

Color LCD display, 10 keys



[in.k1000 main keypad](#)  
[in.k1000+ main keypad](#)

Color LCD capacitive  
touchscreen display



[in.k1001 main keypad](#)  
[in.k1001+ main keypad](#)

Color LCD capacitive  
touchscreen display

\* Only when in.lu.me is connected directly in the in.lu.me (RGB) output of the in.yj-v3.



## Specifications

Model number	Description	Distance between connectors	Total cable length	# of connectors	# of LED	Rating (MAX)
0699-500022	IN.LU.ME-LOOP-1-8 V2	-	96 in (2,44 m)	1	-	9 Vdc, 1.6 A
0699-500019	IN.LU.ME-LOOP-4-L V2	96 in (2,44 m)	360 in (9 m)	4	-	9 Vdc, 1.6 A
0699-500018	IN.LU.ME-LOOP-8-L V2	48 in (1,22 m)	408 in (10,36 m)	8	-	9 Vdc, 1.6 A
0699-500013	IN.LU.ME-LOOP-8-C V2	24 in (61 cm) & 84 in (1,22 m)	408 in (10,36 m)	8	-	9 Vdc, 1.6 A
0699-500021	IN.LU.ME-EXT-5 V2	-	60 in (1,5 m)	1	-	9 Vdc, 1.6 A
0699-500014	IN.LU.ME-SPLIT V2	-	3 in (7.6 cm)	2	-	9 Vdc, 60 mA
0699-500012	IN.LU.ME-SPYD-2-3 V2	-	36 in (91 cm)	-	2	9 Vdc, 60 mA
0699-500010	IN.LU.ME-SPYD-4-3 V2	-	36 in (91 cm)	-	4	9 Vdc, 60 mA
0699-500016	IN.LU.ME-SPYD-4 V2	-	60 in (1,5 m)	-	4	9 Vdc, 90 mA
0699-500011	IN.LU.ME-SPYD-6-3 V2	-	36 in (91 cm)	-	6	9 Vdc, 90 mA
0699-500017	IN.LU.ME-SPYD-6 V2	-	60 in (1,5 m)	-	6	9 Vdc, 90 mA
0699-500020	IN.LU.ME-CLUS-9 V2	-	-	-	9	9 Vdc, 135 mA
0699-500023	IN.LU.ME-CAP V2	-	-	-	-	-

### Environmental ratings

Operating temperature:	-4 °F (-20 °C) to 140 °F (60 °C)
Storage temperature:	-22 °F (-30 °C) to 185 °F (85 °C)
Humidity:	70% max
Water resistance:	IPX5

### Compatibility

in.mix-300-LU.ME-AMP-GE1 (0609-521009)  
b.in.mix-300-LU.ME-GE1 (use with the in.yt)  
in.yj-X-V3  
in.ye-X-V3

### in.mix capability

Maximum number of LEDs on the in.mix should not exceed 120 units  
Output 1 and 2 should have a maximum of 60 LEDs total on those two outputs  
Output 3 and 4 should have a maximum of 60 LEDs total on those two outputs

### UL & CSA certifications

UL1563 sixth ed.  
UL1081  
CSA N° 22.2 – 218.1  
CSA N° 22.2 – 218.2

### European and international standards

IEC60335-1 (EN60335-1, AS/NZ60335-1)  
IEC60325-2-60 (EN60325-2-60, AS/NZ60325-2-60)



9919-101584-C  
Rev. 08-2021

© Groupe Gecko Alliance inc., 2021  
All trademarks or registered trademarks  
are the property of their respective owners.

Gecko Alliance  
450 des Canetons, Québec (Qc), G2E 5W6 Canada, 1.800.78.GECKO  
[www.geckoalliance.com](http://www.geckoalliance.com)

Printed in Canada