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Kinetik Labs
KLIR-SM1KIT
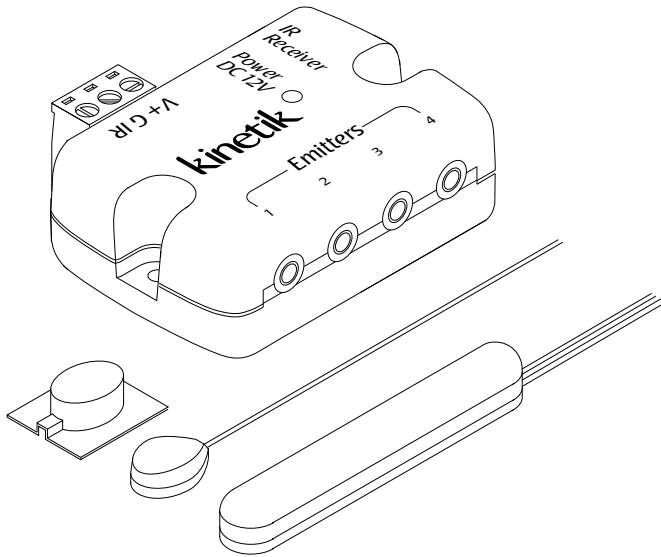
Surface Mount IR Kit
Instruction Manual

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Kinetik Labs　　　　　　　　　　　*Surface Mount IR Kit*
KLIR-SM1KIT

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Introduction

Thank you for purchasing this Kinetik Labs Infra Red distribution kit. Please read these instructions carefully to complete your installation quickly and efficiently for trouble free installation.

Safety Instructions

- Keep this product away from small children and animals as it contains small parts.

- Keep this product away from naked flames and sources of ignition.

- **Warning:** Although the voltages used are very low in the system care should be taken not to touch bare wires as they may be live.

- **Warning:** Do not expose this product to liquids as this may cause fire or electrical shock.

- **Caution:** Installation should be carried out and checked before providing power to the system. Damage caused by improper wiring is not covered by the warranty.

Description

The KLIR-SM1KIT is an Infra Red (IR) signal transport device. It is designed to extend the communication between an IR remote control and respective AV equipment e.g. Blu-ray player, set-top box, amplifier etc, which can be in a different room or hidden location. The IR receiver can be surface mounted for optimal and versatile positioning (on a TV bezel for example).
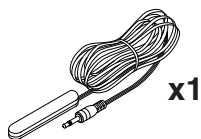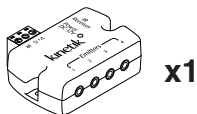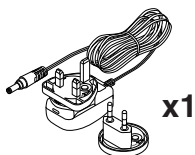
KLIR-SMR1 Surface mount receiver   x1

KLIR-CB1   IR connection block   x1

KLIR-PS1 UK/Europe power supply   x1

KLIR-IRE2   Dual visible IR emitter   x2
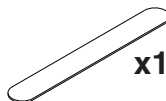
KLIR-EC   Emitter covers   x4

MONO JACK Mono jack to jack cable   x2

Instruction manual for KLIR-SM1KIT   x1

Receiver double-sided stick pad   x1

Replacement emitter adhesive tabs   x4

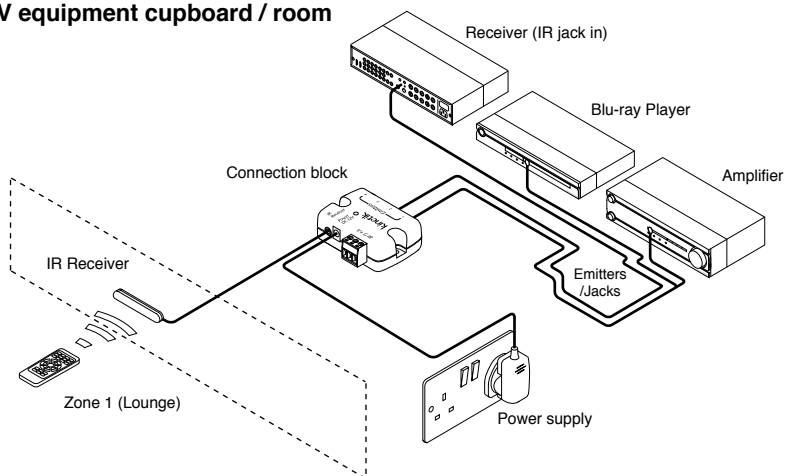Replacement pads for emitter covers   x4

Please note: For full installation details please also read the 'Advanced Installation' and 'Troubleshooting' sections.

1. Apply the sticky tabs to the base of the receiver and place it in the desired location with the rounded surface pointing into the room. Be sure to position it in clear line of sight of where the remote controls will be pointing.

2. Plug the IR receiver jack securely into the connection block input indicated 'IR Receiver'.

3. Clean the source equipment surfaces over the IR pick ups, remove the backing from the emitter heads and stick them over each IR pick up.

4. Plug the emitter jacks into any of the connection block outputs marked 'Emitters 1,2,3 or 4'.

5. Attach the correct UK / Europe plug adaptor onto the power adaptor. Connect the adaptor to the connection block input labelled 'Power 12V DC' and plug it into the mains. Now switch on the mains supply.

The red LED power indicator should now be lit and the emitters and receiver will flash when passing an IR signal to show the system is working. Once you are happy the system is working correctly stick the supplied emitter covers over the emitters.

Single Zone System Wiring Diagram

AV equipment cupboard / room

Receiver (IR jack in)

Blu-ray Player

Amplifier

Connection block

IR Receiver

Emitters /Jacks

Zone 1 (Lounge)

Power supply

Multi Zone System Wiring Diagram *(requires additional receivers)*

AV equipment cupboard / room

Receiver (IR jack in)

Power supply

Blu-ray Player

Amplifier

IR Receiver

Emitters /Jacks

Connection block

Zone 1 (Lounge)

Zone 2 (Bedroom)

Zone 3 (Kitchen)

See 'Receiver wired connection' diagram in the 'Advanced Installation' section

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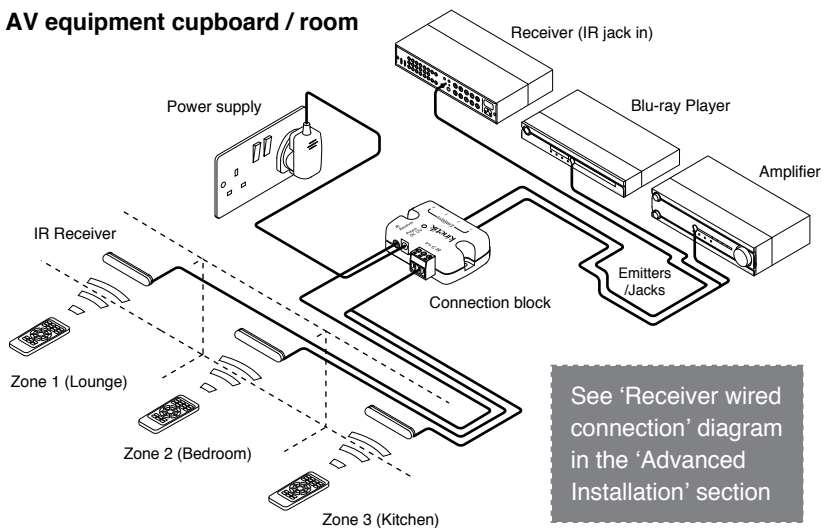
Cable extension

The IR receiver and emitter cables can be extended to custom lengths if required. It is recommended that two strands of CAT5 are used per signal.

To do this, firstly you need to determine the length of the run and cut that amount. Now cut the receiver / emitter cable and use the CAT5 to extend the cable length.

You must ensure you connect the identical cores as this may potentially damage the components and the system will not work.

It is not necessary to use the receiver's jack termination when you have cut the cable. You can instead use the connection block's black Phoenix connector.

Receiver wired connection

It is possible to connect and power up to 3 IR receivers simultaneously

V + G IR

Solid line : 12V DC
Black : Ground
Striped : IR
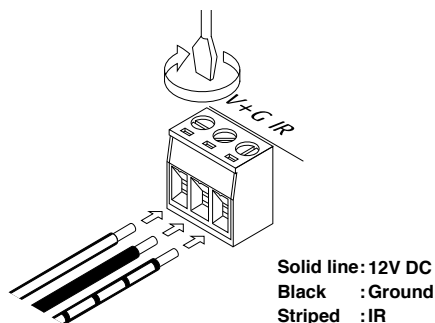
Finding IR pickups

Please note: This process is likely to require two people

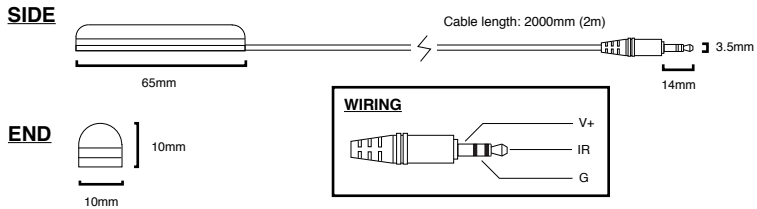You may occasionally come across equipment without a visible IR pick up.

If this is the case, set up the system as described in the main instructions but do not stick the emitter on that unit. Turn the IR kit on and fire a remote control button (of a code you'll see the unit respond to e.g. power on / off etc.) repeatedly at the IR receiver, but not allowing the remote control line of sight of the source equipment. While doing this the emitter should be guided over the front of the equipment until it responds to the relevant code. Once this is found the emitter should be attached there.

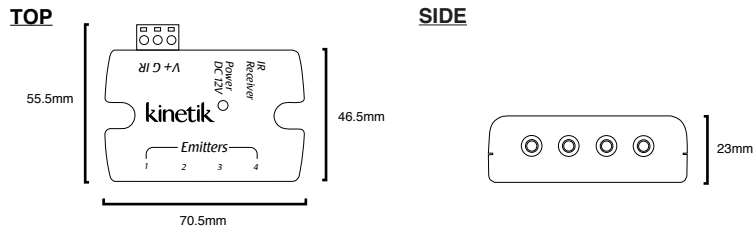| Symptom	Check	Problem / Solution
No operation.	The connection block power LED is off.	Connection block is not receiving power. Check mains supply is on.
No operation. Connection block LED is on.	Connect all components and power system. Meter from Phoenix connector 'V+' and 'G' to check it's a steady 12V. Always meter 'under load'.	System is receiving incorrect power. Try another power supply.
No operation. IR receiver LED constantly red.	Block ambient light to the sensor to see if light goes out. If it does...	The receiver is being exposed to excess light. Install away from light sources.
No operation. IR receiver LED constantly red.	Block ambient light to the sensor to see if light stays on. If it does...	It's likely to be a wiring fault. (See 'Receiver wired connection' section)
No operation. Emitter lights not responding.	Check wiring and power	Correct wiring / power
No operation. System LEDs responding.	Location of emitters on front of AV equipment.	Equipment might be receiving excess IR. Correct placement should solve this.
Strange / partial operation of equipment	Equipment pick ups may be receiving mixed signals, often occurring from reflective surfaces.	Put on IR emitter covers supplied.

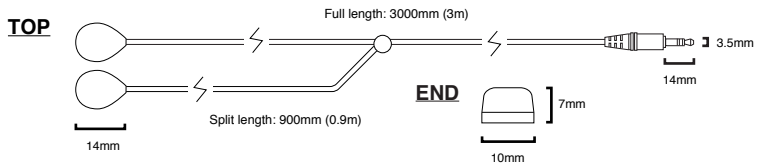## KLIR-SMR1 Surface Mount Receiver

SIDE

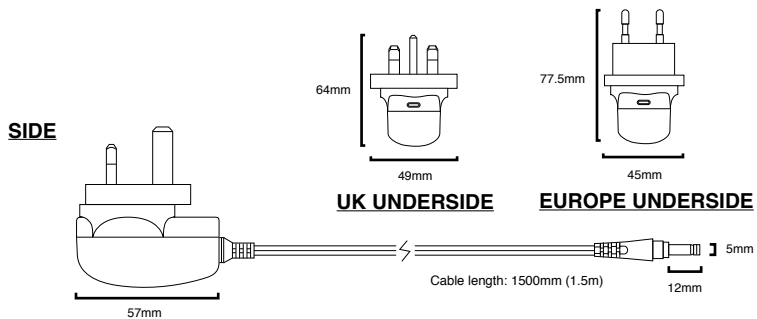Cable length: 2000mm (2m)

65mm

3.5mm

14mm

END

10mm

10mm

WIRING

V+

IR

G

KLIR-CB1 Connection Block

TOP

SIDE

55.5mm

IR
Receiver

V+ G IR

Power
DC 12V

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Emitters
1   2   3   4

46.5mm

70.5mm

23mm

KLIR-IRE2 Dual Visible Emitters

TOP

Full length: 3000mm (3m)

3.5mm

14mm

Split length: 900mm (0.9m)

END

7mm

14mm

10mm

KLIR-PS1 Power Supply

64mm

77.5mm

SIDE

49mm

45mm

UK UNDERSIDE

EUROPE UNDERSIDE

5mm

Cable length: 1500mm (1.5m)

12mm

57mm

Specifications

General

Model Number:	KLIR-SM1KIT
Components:	1x KLIR-SMR1 IR receiver
	1x KLIR-CB1 connection block
	2x KLIR-IRE2 dual IR emitters
	2x MONO JACK 3.5mm jack to jack cables
	4x KLIR-EC emitter covers
Additional accessories:	4x replacement emitter sticky tabs
	4x replacement emitter cover adhesive tabs
	1x surface mount receiver double-sided stick pad
	1x instruction manual
IR frequency bandwidth:	38kHz +/- 2kHz
Control range:	15m (6m in direct sunlight)
Reception angle:	+/- 45 degrees

Connectivity

Connection block inputs:	1x 12V DC
	1x 3.5mm jack IR
	1x Phoenix connector (12V DC / Ground / IR)
Connection block outputs:	4x 3.5mm jack IR

Expandability

Max. number of IR emitters:	8 (4x dual emitters)
Max. number of IR receivers:	3
Max. cable distance - receiver to block:	300m
Max. cable distance - block to emitter:	10m

Mechanical

Power (supplied adapter):	12V DC, 660mA
Power consumption (stand by):	13mA
Power consumption (in use):	40mA (approximate)*
Weight:	650g

Dimensions

KLIR-SMR1 (HxWxD):	10 x 65 x 10 mm (cable length 2m)
KLIR-CB1 (HxWxD):	23 x 70.5 x 55.5 mm
KLIR-IRE2 (HxWxD):	7 x 10 x 14 mm (x2) (cable length 3m)
KLIR-PS1 (HxWxD):	57 x 49 x 64 mm (with UK plug)
	57 x 45 x 77.5 mm (with EU plug)

*Power consumption can vary with system size, combined IR equipment and signal variations.

Limited Warranty

This Kinetik Labs product is warranted free of defects in workmanship and materials on purchase. If the goods are found to be defective within the warranty period, they will be repaired or replaced, at AWE Europe Ltd's option, without charge on return to the vendor upon satisfactory proof of purchase from the vendor and date of purchase. This warranty does not apply if, in the judgement of AWE Europe Ltd, the product fails due to damage from shipment, handling, storage, accident, abuse, or misuse, or if it has been used or maintained in a manner not conforming to product manual instructions, has been modified in any way, or has had any serial number removed or defaced. Repair by anyone other than AWE Europe Ltd or an approved agent will void this warranty. The maximum liability of AWE Europe Ltd under this warranty is limited to the purchase price of the product covered by the warranty. AWE Europe Ltd shall not under any circumstances be liable to any person for any special, incidental, indirect or consequential damages, including without limitation, damages resulting from use or malfunction of the products, loss of profits or revenues or costs of replacement goods, even if AWE Europe Ltd is informed in advance of the possibility of such damages.

In the first instance consumers should contact their vendor.
Territorial distributor details can be found at www.kinetiklabs.com

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