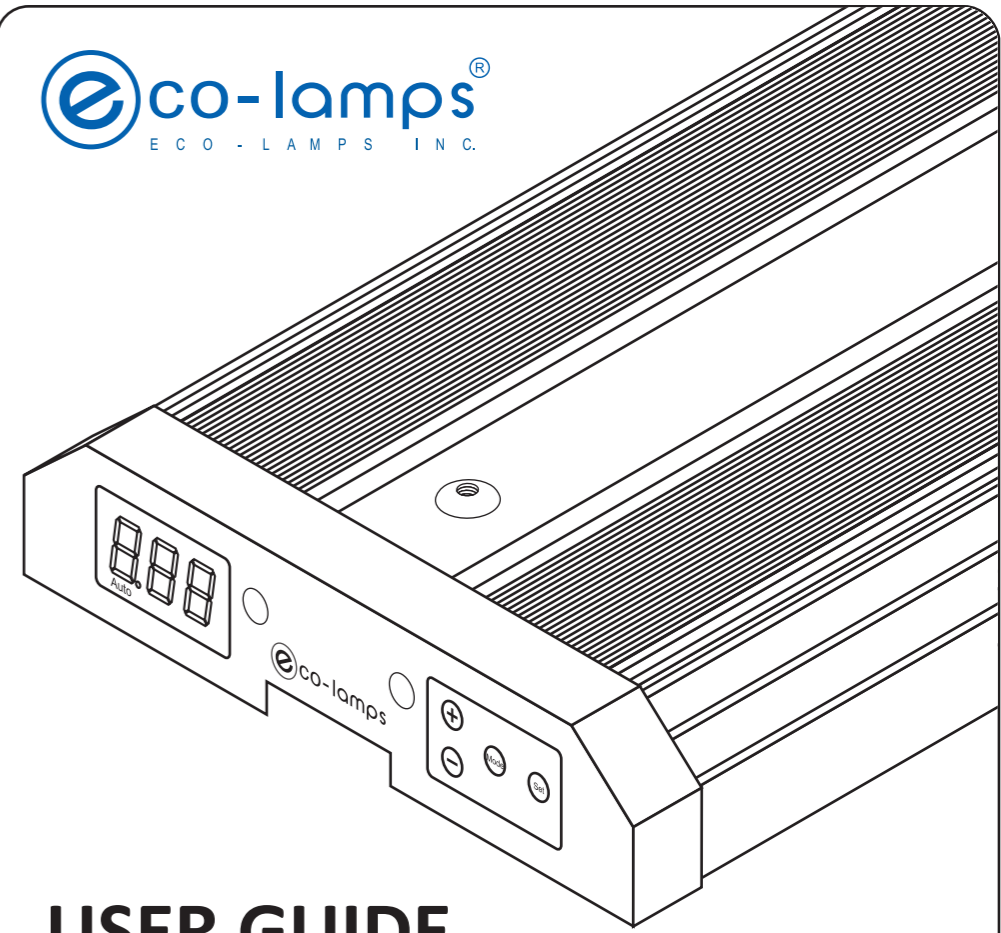
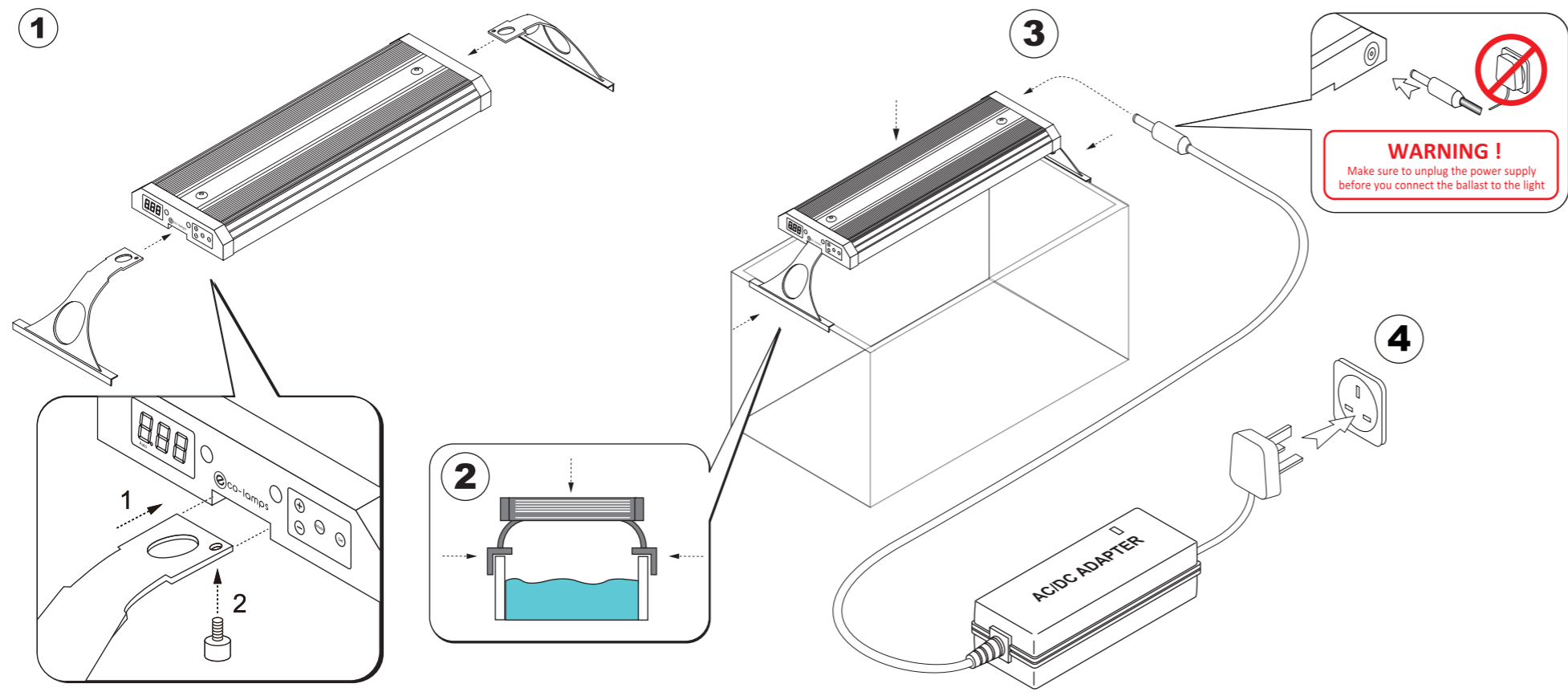
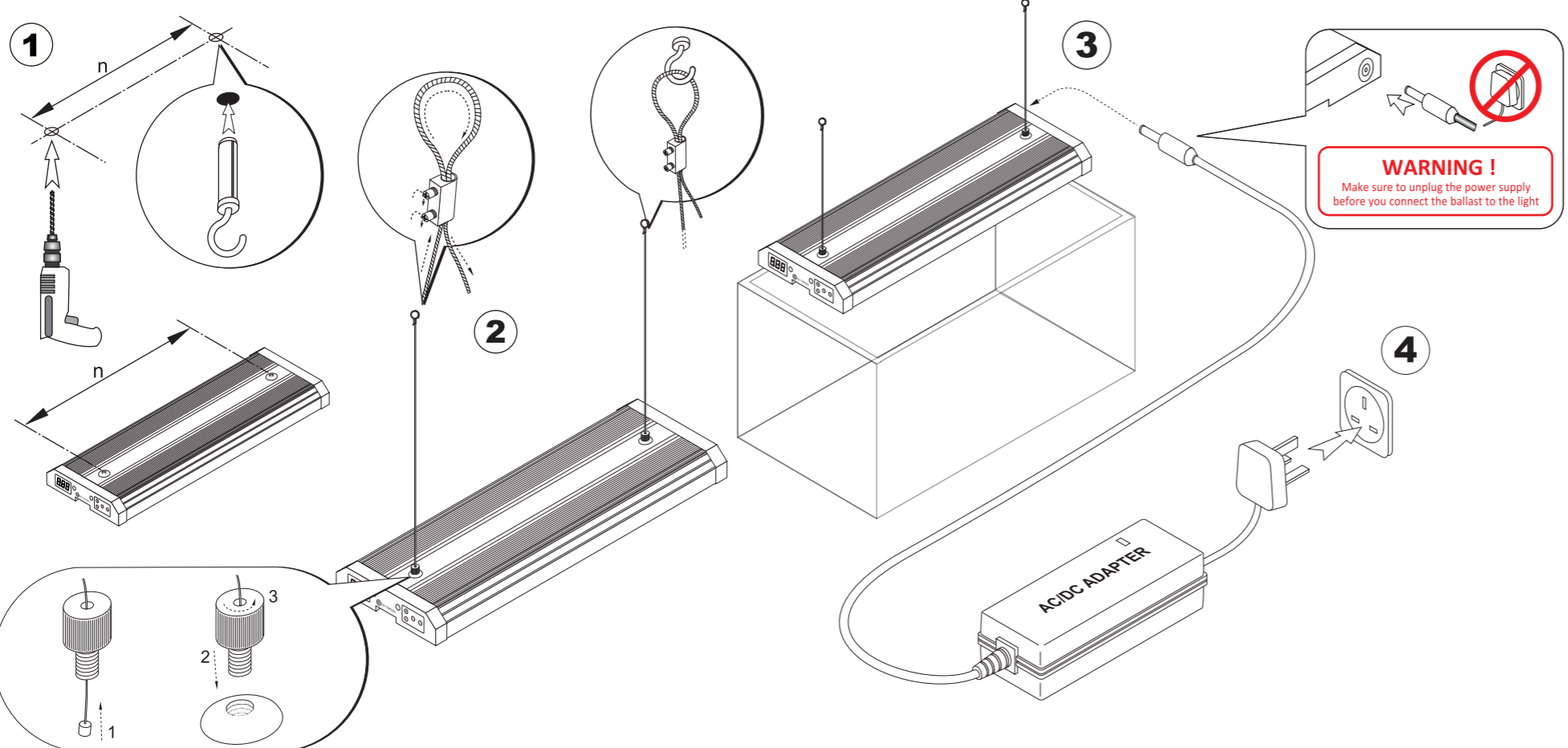


Installation method 1. Adjustable width tank mounts



USER GUIDE
KR90 / KR90DR / KR90FW

Installation method 2. Ceiling mounts



FEATURES

- Heat is radiated away from water
- Fluorescent light / Metal Halide replacement
- Reliable, advanced and efficient aquarium illumination
- Specific LED light penetration
- Long life time, energy saving

SAFETY INSTRUCTIONS

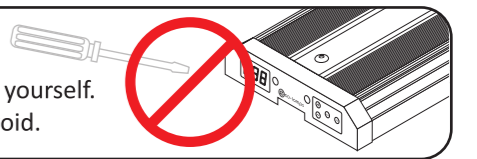
- Make sure the power cord meets all relevant local safety standards
- Place the light near a wall outlet where the power cord can be easily unplugged
- Do not let the power cord become damaged or frayed
- Do not place the light near heaters
- Do not extend the wire. Doing this might affect the operation of the light
- Do not expose to direct sunlight or excessive heat

WARNING

- To prevent electrical shock, make sure you have unplugged the power cord from the electrical socket before cleaning the light
- To avoid electric shock, please do not touch the cord with wet hands

CAUTION

DO NOT attempt to service the fixture yourself. Doing this may render this warranty void.

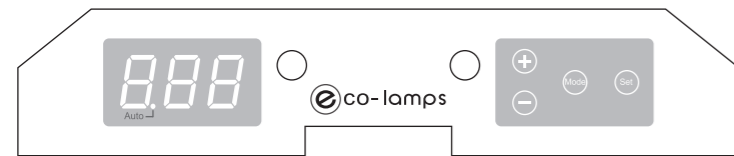


USER'S GUIDE

KR90/KR90DR/KR90FW
(Version 1.50E)

Control panel overview

The KR90 / KR90DR / KR90FW control panel keys

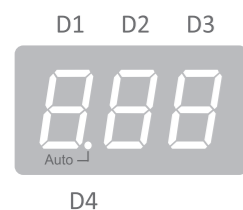


1. Four functional keys

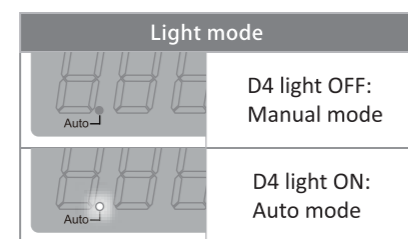
- **+** or **-** Press to scroll through the menus and options
- **Mode** Use this key to change the light between Manual mode or Auto mode
- **Set** Use this key to confirm or enter

2. LED display

■ D1, D2, D3 LED



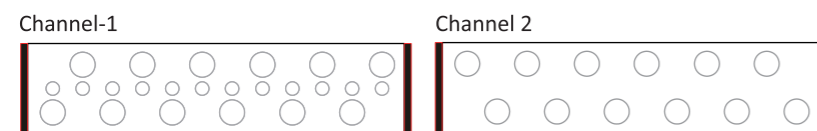
■ D4 LED



Note

The LED display hour (eg. **H21**) and minute (eg. **M05**) alternate in 3s.

Light Channel



Manual mode setting	
H=0	Off mode : Press "Set" for time setting. Read Note M-1 for details
H=1	The intensity setting : The Light channel-1 & channel-2 can programmed from 0 - 99% Read Note M-2 for details
H=2	
H=3	
H=L	Lightning mode : The fixture will constantly produce lightning
H=d	Demo mode : Read Note M-3 for details

The Default Settings (Auto mode "d.EF")			
Time Stage	Begin Time	Channel-1 (%)	Channel-2 (%)
.t1	01:00	05	10
.t2	08:00	10	20
.t3	09:00	50	50
.t4	11:00	80	80
.t5	17:00	50	80
.t6	18:00	10	80
.t7	21:00	00	50
E.nd	23:59	-	-
L-n	(12:00)	-	-



Note M-1 : How to set the clock?

- 1) Switch to Manual mode by pressing the "Mode" button (D4 light OFF).
- 2) Press "+/-" to select light mode "H-0".
Click "Set".
- 3) Press "+/-" to edit the time (Hour).
Click "Set".
- 4) Press "+/-" to edit the time (Minute).
Click "Set" to complete the time setting.



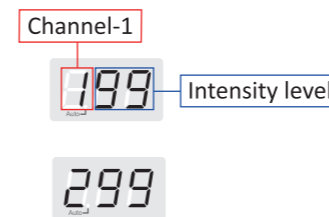
Manual mode

- 1) Switch to manual mode by pressing the "Mode" button (D4 light OFF).
- 2) Press "+/-" to select a light mode.
 - ▷ Light mode "H-1" ~ "H-3" setting, read **Note M-2** for details
 - ▷ Lightning mode, the fixture will constantly produce lightning
 - ▷ Demo mode, read **Note M-3** for details



Note M-2 : How to set the intensity level?

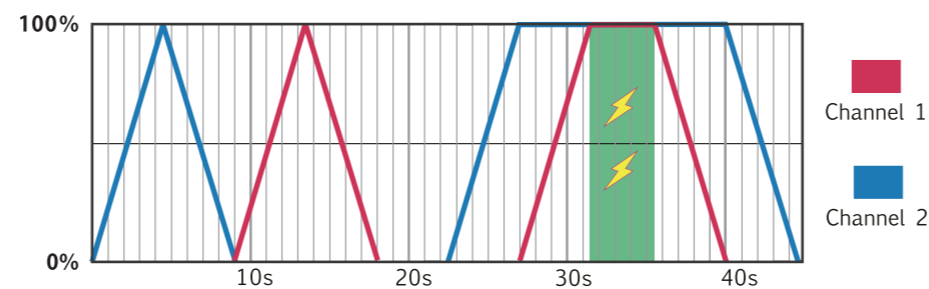
- 1) Press "Set", LED will display "100" (Channel-1).
Press "+/-" to edit the intensity level (00 ~ 99%).
- 2) Press "Set", LED will display "200" (Channel-2).
Press "+/-" to edit the intensity level (00 ~ 99%).
- 3) Press "Set" to save and complete the setting.



Note M-3 : Demo mode

"HA-d" is Demo mode, cycle will keep repeating as follows.

1. **Channel-2** 0% → 100% → 0% (9s)
2. **Channel-1** 0% → 100% → 0% (9s)
3. **Channel-2** 0% → 100% (4.5s)
4. **Channel-1** 0% → 100% (4.5s)
5. **Lightning** (4s)
6. **Channel-2** 100% → 0% (4.5s)
7. **Channel-1** 100% → 0% (4.5s)



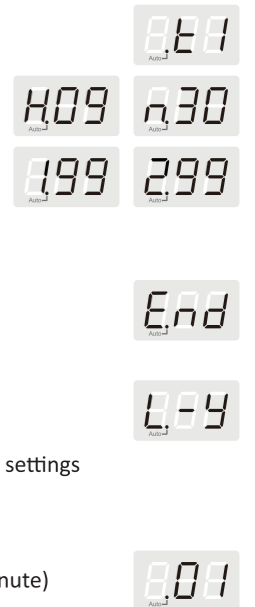
Auto mode

- 1) Switch to Auto mode by pressing the "Mode" button (D4 light ON).
Click "Set" to edit the setting of Auto mode.
- 2) Press "+/-" to select default settings "d.EF" or User settings "U.SE".
Click "Set" to confirm.
 - ▷ "d.EF", the factory default program will be started.
 - ▷ "U.SE", please move on to the next step to set the timer and lightning.



User settings "U.SE"

- 1) Press "Set" to set time stage ".t1"
Press "+/-" to edit the begin time of ".t1"
Hour "H.00" → Minute "n.00", Press "Set"
Press "+/-" to edit the intensity level (00 ~ 99%)
Channel-1 "1.99" → Channel-2 "2.99"
*Repeat setting for time stage "t.2" ~ "t.7".
- 2) Press "Set" to set End time "E.nd"
Press "+/-" to edit the end time of the light.
- 3) Press "Set" to set lightning mode.
Press "+/-" to select "L-y" or "L-n".
 - ▷ "L-n", Lightning mode OFF. Click "Set" to complete all settings
 - ▷ "L-y", Lightning mode ON.
→ Click "Set" to set the begin time of lightning mode
→ Click "Set" to set the lasting time of lightning (in minute)
→ Click "Set" to save and complete all settings.



Note

- The brightness of each light may take a few seconds to several minutes to reach the set of intensity level after switching the timer
- Press "Mode" to exit during the setting
- Press "Mode" and hold for 7seconds to go back to the **factory default setting**

Error set up

".t1" setting: 09:00

".t2" setting: 11:00

".t3" setting: 10:00

In this case, time stage ".t2" will be skipped.

ACCESSORIES

