

# Oppkobling av LV Mate



## Forberedelse

1. Batteri kapasiteten må være beregnet for å håndtere maks effekt i anlegget. Husk at maks strøm ut av hver base er 300A.
2. Minst 2 batterier pr base.
3. Maks 8 batterier pr base.
4. Maks 10 baser, altså  $10 \times 8 = 80$  batterier (400 KWH).
5. Husk at LV mate har ikke varme, så de vil ikke ta lading hvis det er kaldere enn  $0^{\circ}\text{C}$ .

# Oppkobling av LV Mate



## Oppkobling

Basen består av en bunn og topp.

Batteriene stables i høyden som anvist på bildet.

I eksemplet, er det 3 batterier og 1 base.



# Oppkobling av LV Mate

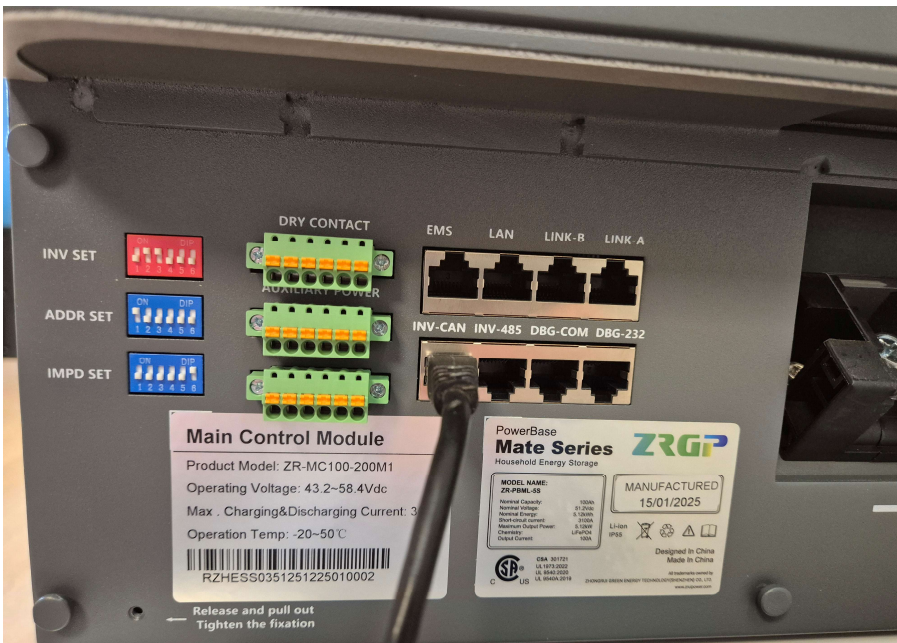


## DIP Switcher

INV SET = 011000 (For Victron).

| Address Coding | Dial Code Switch Position |     |     |     |     |     | Definition                      |
|----------------|---------------------------|-----|-----|-----|-----|-----|---------------------------------|
|                | #1                        | #2  | #3  | #4  | #5  | #6  |                                 |
| 0              | OFF                       | OFF | OFF | OFF | OFF | OFF | Monitoring Software settingmode |
| 1              | ON                        | OFF | OFF | OFF | OFF | OFF | ZRGIP                           |
| 2              | OFF                       | ON  | OFF | OFF | OFF | OFF | Studer_Xtender                  |
| 3              | ON                        | ON  | OFF | OFF | OFF | OFF | Sofar_LV                        |
| 4              | OFF                       | OFF | ON  | OFF | OFF | OFF | Solis_LV                        |
| 6              | OFF                       | ON  | ON  | OFF | OFF | OFF | Victron_color control           |
| 7              | ON                        | ON  | ON  | OFF | OFF | OFF | SMA_LV                          |
| 8              | OFF                       | OFF | OFF | ON  | OFF | OFF | Sermatec_LV                     |
| 9              | ON                        | OFF | OFF | ON  | OFF | OFF | Reserved                        |
| 10             | OFF                       | ON  | OFF | ON  | OFF | OFF | Growatt_SPF                     |
| 11             | ON                        | ON  | OFF | ON  | OFF | OFF | Li_PLUS                         |
| 12             | OFF                       | OFF | ON  | ON  | OFF | OFF | Schneider_Gateway               |
| 13             | ON                        | OFF | ON  | ON  | OFF | OFF | SOL-ARK_LV                      |
| 14             | OFF                       | ON  | ON  | ON  | OFF | OFF | Phocos-AnyGrid                  |
| 15             | ON                        | ON  | ON  | ON  | OFF | OFF | AFORE-LV                        |
| 16             | OFF                       | OFF | OFF | OFF | ON  | OFF | Voltronic Power                 |
| 17             | ON                        | OFF | OFF | OFF | ON  | OFF | DEYE                            |
| 18             | OFF                       | ON  | OFF | OFF | ON  | OFF | Growatt_SPH                     |
| 19             | ON                        | ON  | OFF | OFF | ON  | OFF | Reserved                        |
| 20             | OFF                       | OFF | ON  | OFF | ON  | OFF | Reserved                        |
| 21             | ON                        | OFF | ON  | OFF | ON  | OFF | SAJ-LV                          |
| 22             | OFF                       | ON  | ON  | OFF | ON  | OFF | SMA-LV                          |
| 23             | ON                        | ON  | ON  | OFF | ON  | OFF | Reserved                        |
| 24             | OFF                       | OFF | OFF | ON  | ON  | OFF | Fronius                         |
| 25             | ON                        | OFF | OFF | ON  | ON  | OFF | Lux                             |
| 26             | OFF                       | ON  | OFF | ON  | ON  | OFF | Reserved                        |
| 27             | ON                        | ON  | OFF | ON  | ON  | OFF | GreenCell                       |
| 28             | OFF                       | OFF | ON  | ON  | ON  | OFF | Reserved                        |
| 29             | ON                        | OFF | ON  | ON  | ON  | OFF | Must                            |
| 30             | OFF                       | ON  | ON  | ON  | ON  | OFF | MEGAREVO-LV                     |
| 31             | ON                        | ON  | ON  | ON  | ON  | OFF | Aiswei-LV                       |

|    |     |     |     |     |    |     |             |
|----|-----|-----|-----|-----|----|-----|-------------|
| 21 | ON  | OFF | ON  | OFF | ON | OFF | SAJ-LV      |
| 22 | OFF | ON  | ON  | OFF | ON | OFF | SMA-LV      |
| 23 | ON  | ON  | ON  | OFF | ON | OFF | Reserved    |
| 24 | OFF | OFF | OFF | ON  | ON | OFF | Fronius     |
| 25 | ON  | OFF | OFF | ON  | ON | OFF | Lux         |
| 26 | OFF | ON  | OFF | ON  | ON | OFF | Reserved    |
| 27 | ON  | ON  | OFF | ON  | ON | OFF | GreenCell   |
| 28 | OFF | OFF | ON  | ON  | ON | OFF | Reserved    |
| 29 | ON  | OFF | ON  | ON  | ON | OFF | Must        |
| 30 | OFF | ON  | ON  | ON  | ON | OFF | MEGAREVO-LV |
| 31 | ON  | ON  | ON  | ON  | ON | OFF | Aiswei-LV   |



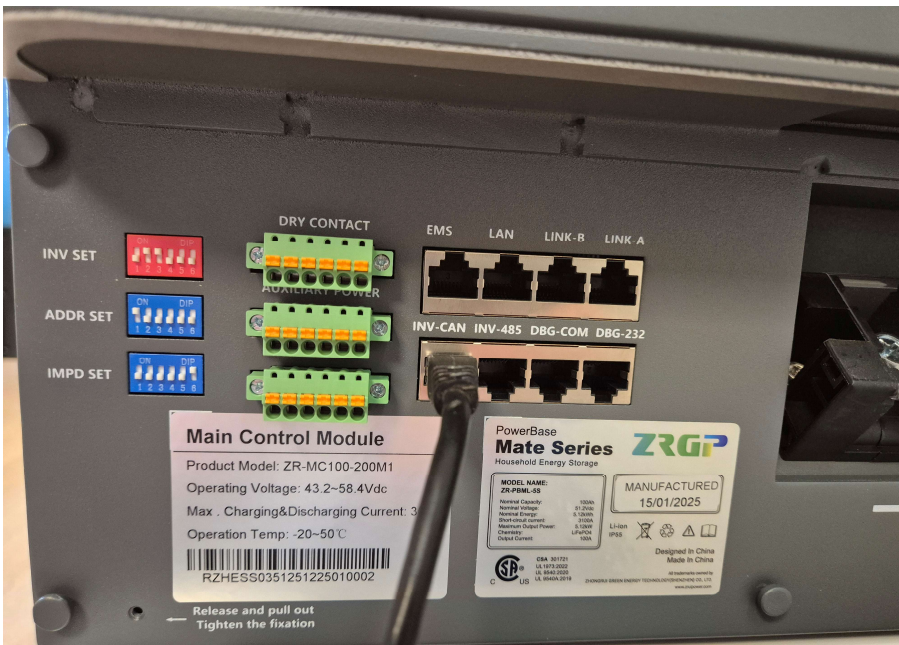
# Oppkobling av LV Mate



## DIP Switcher

ADR SET = 100000

Ved flere baser, se tabell til høyre.



| Address Coding | Dial Code Switch Position |     |     |     |     |     | Definition   |
|----------------|---------------------------|-----|-----|-----|-----|-----|--|
|                | #1                        | #2  | #3  | #4  | #5  | #6  |  |
| 1              | ON                        | OFF | OFF | OFF | OFF | OFF | The host computer can monitor the operation of other systems by setting the main package |
| 2              | OFF                       | ON  | OFF | OFF | OFF | OFF | Set to the slave Cluster 2   |
| 3              | ON                        | ON  | OFF | OFF | OFF | OFF | Set to the slave Cluster 3   |
| 4              | OFF                       | OFF | ON  | OFF | OFF | OFF | Set to the slave Cluster 4   |
| 5              | ON                        | OFF | ON  | OFF | OFF | OFF | Set to the slave Cluster 5   |
| 6              | OFF                       | ON  | ON  | OFF | OFF | OFF | Set to the slave Cluster 6   |
| 7              | ON                        | ON  | ON  | OFF | OFF | OFF | Set to the slave Cluster 7   |
| 8              | OFF                       | OFF | OFF | ON  | OFF | OFF | Set to the slave Cluster 8   |
| 9              | ON                        | OFF | OFF | ON  | OFF | OFF | Set to the slave Cluster 9   |
| 10             | OFF                       | ON  | OFF | ON  | OFF | OFF | Set to the slave Cluster 10  |

# Oppkobling av LV Mate



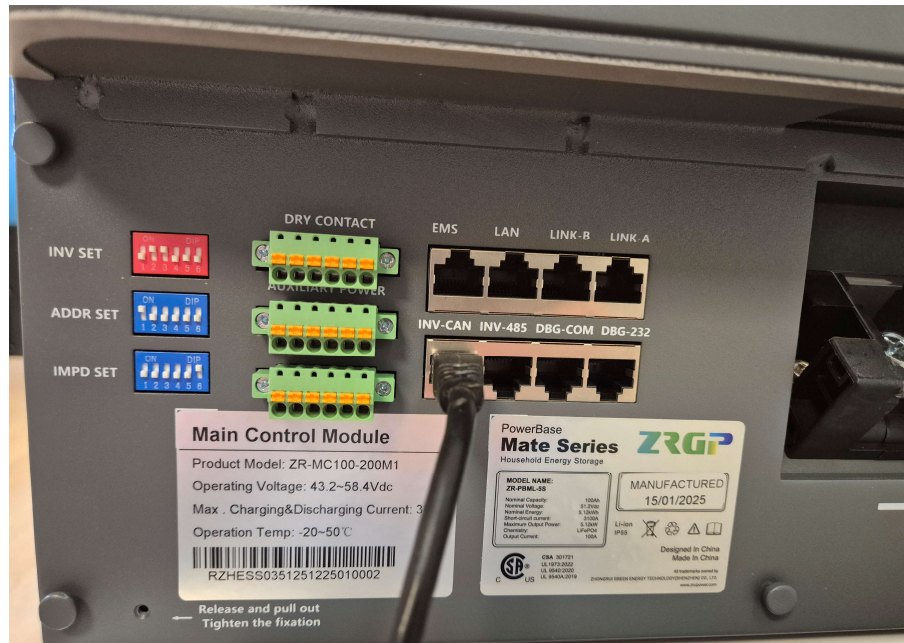
## DIP Switcher

IMPD SET = 000001

IMPD SET regulerer impedansen i nettverket mellom baser.

I oppsett med 1 base skal den stå til 000001

I oppsett med 2 eller flere baser, skal første og siste base i nettverket stå til 000001, og de i mellom 000000.



# Oppkobling av LV Mate



## DIP Switcher

Kommunikasjonen mellom batteriene og basen foregår internt. Men man må adressere batteriene med ID.

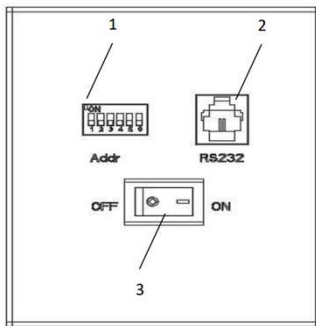


Figure 3.3. Battery module interface definition

| No. | Instructions                          | NO. | Instructions |
|-----|---------------------------------------|-----|--------------|
| 1   | Address Dial Switch of Battery Module | 3   | Power switch |

| AddressCoding | Dial Code Switch Position |     |     |     |     |     | Definition              |
|---------------|---------------------------|-----|-----|-----|-----|-----|-------------------------|
|               | #1                        | #2  | #3  | #4  | #5  | #6  |                         |
| 1             | ON                        | OFF | OFF | OFF | OFF | OFF | Set to the slave Pack1  |
| 2             | OFF                       | ON  | OFF | OFF | OFF | OFF | Set to the slave Pack2  |
| 3             | ON                        | ON  | OFF | OFF | OFF | OFF | Set to the slave Pack 3 |
| 4             | OFF                       | OFF | ON  | OFF | OFF | OFF | Set to the slave Pack 4 |
| 5             | ON                        | OFF | ON  | OFF | OFF | OFF | Set to the slave Pack 5 |
| 6             | OFF                       | ON  | ON  | OFF | OFF | OFF | Set to the slave Pack 6 |
| 7             | ON                        | ON  | ON  | OFF | OFF | OFF | Set to the slave Pack 7 |
| 8             | OFF                       | OFF | OFF | ON  | OFF | OFF | Set to the slave Pack 8 |

# Oppkobling av LV Mate




## DIP Switcher

Når alt er montert og konfigurert riktig, er det viktig at basen forstår hvor mange batterier er installert.

Slå på alle batteriene og basen.

Sett INV SET til 111111, la den stå slik i 1-2 minutter før du setter den tilbake til 011000 (Victron).

|    |   |                             |  |  |
|----|---|-----------------------------|--|--|
| 63 |  | Module<br>Detection<br>mode | Let the BMS detect how many modules is installed | 1) detection may take up to 1 min<br>2) please wait for at least 25 seconds before changing back to normal mode, otherwise it won't be affected. |
|----|---|-----------------------------|--|--|

# Oppkobling av LV Mate



## Kommunikasjon mot GX

Kommunikasjon mot GX enhet kobles til INV CAN

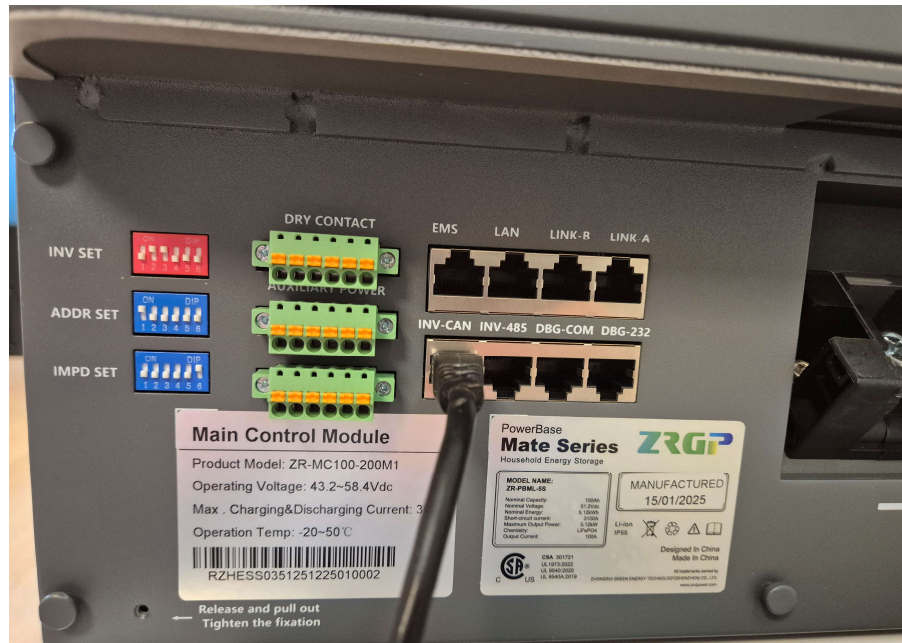
I esken følger det med en hvit kommunikasjons hub.

Sett DIP switchene som følger:

CAN 7 HØY

CAN 8 LAV

Resten skal stå i midt stilling.



# Oppkobling av LV Mate

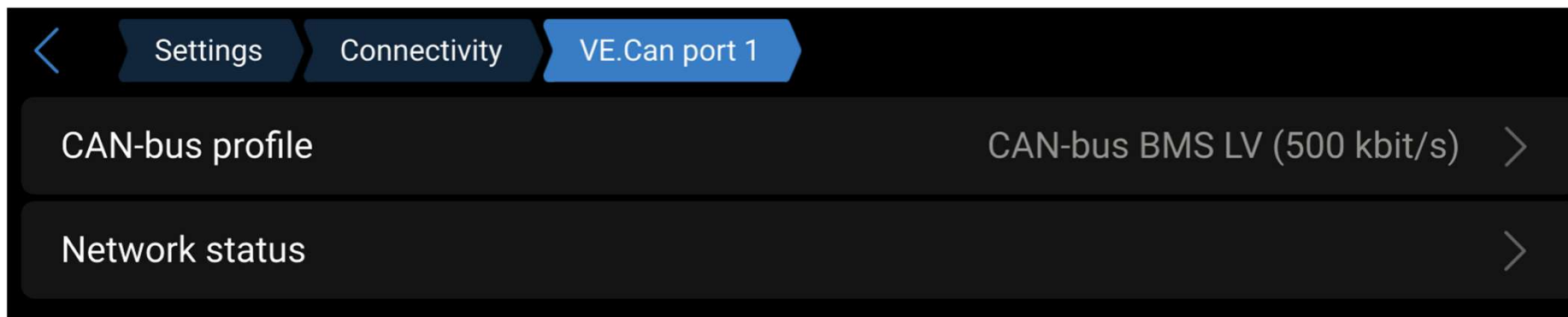


## Oppkobling

Oppsett Victron GX.

CAN bus skal termineres med endemotstand, så normalt sett skal det stå en CAN bus i Cerbo.

Sjekk at CAN-bus profil er CAN-bus BMS LV (500 kbit/s).



# Oppkobling av LV Mate



## Oppkobling

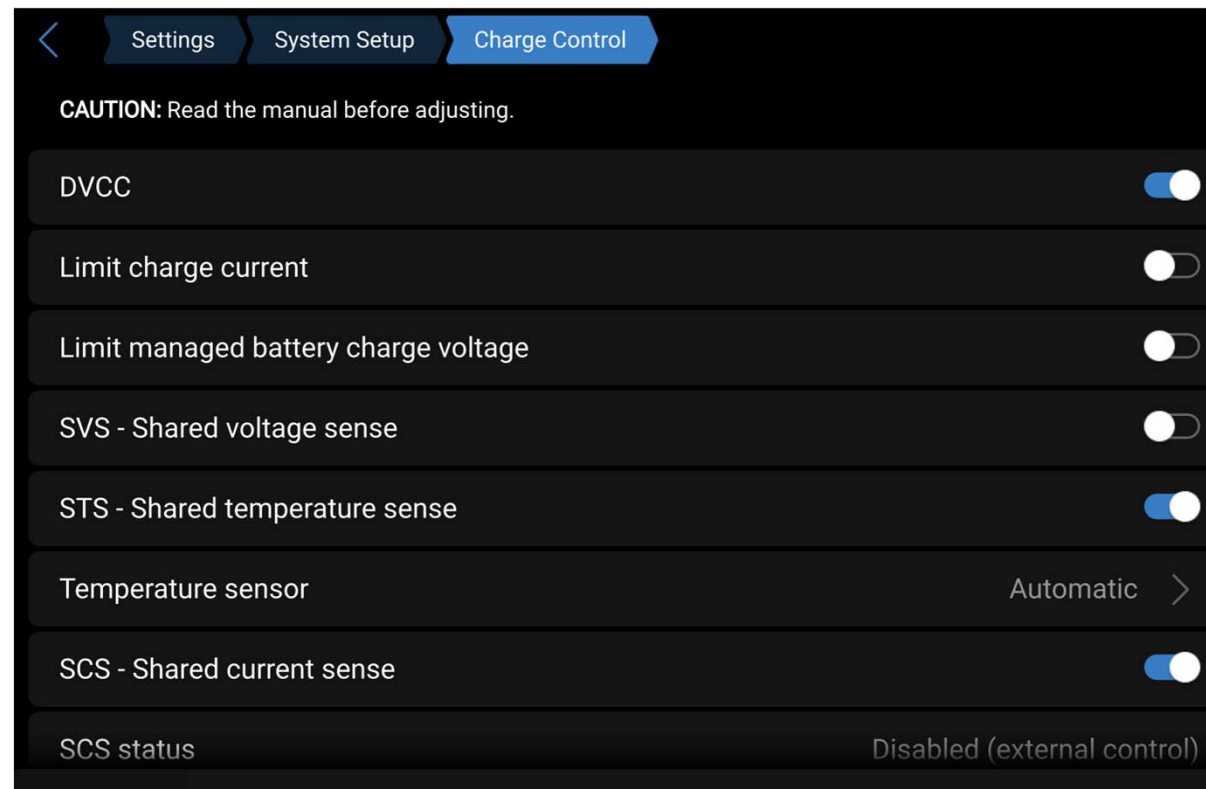
Slå på DVCC.

Anbefalte innstillinger:

SVS-Shared voltage Sense = OFF.

SVS-Shared temperature sense=ON.

SCS-Shared current sense=ON.



# Oppkobling av LV Mate



Oppsett mot WIFI

Sett på den medfølgende WIFI antennen, bak på basestasjonen.

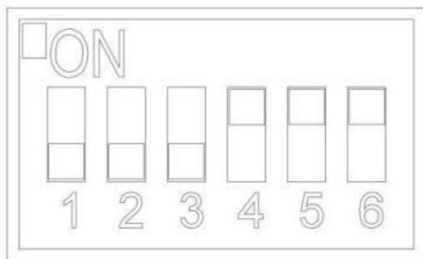


# Oppkobling av LV Mate



## Oppsett mot WIFI

Sett INV type DIP switch til 000111.  
Dette aktiverer det innebygde WIFI  
access punktet



| Code | Dial Switch | Mode              | Explanation  | Remarks  |
|------|-------------|-------------------|--|--|
| 56   |             | Wi-Fi Config Mode | The hotspot of the device will be turned on under this mode and will be off after exiting this mode.<br>0 means the hotspot is being turned on<br>1 means the hotspot is on and you can find it on your phone<br>2 means the Z-Cloud APP has connected to the device<br>3 means the Wi-Fi name and password has been received from the APP | 1) It may take up to 1 min from 0 to 1<br>2) It will go back to 0 if no phone is connecting to the hotspot for too long, you need to exit and enter this mode again<br>3) When you push Wi-Fi info from the APP, the screen will show 3 for 1 second and then jump to 0 quickly, this is normal. |
| 60   |             | Wi-Fi Status mode | Check the WIFI status:<br>0 means the device is not connected to any Wi-Fi router<br>1 means the device is connected to the Wi-Fi router<br>2 means the device is connected to the server  | 1) It may take up to 1 min from 0 to 1<br>2) It may take up to 5 min from 1 to 2   |

# Oppkobling av LV Mate



Oppsett mot WIFI

Installer APP for Android eller Apple Store, «Z-cloud».

Kontakt oss for innlogging, og tildeling av enheter.



# Oppkobling av LV Mate



Oppsett mot WIFI

Etter innlogging, gå til Toolbox, velg «Network».



# Oppkobling av LV Mate

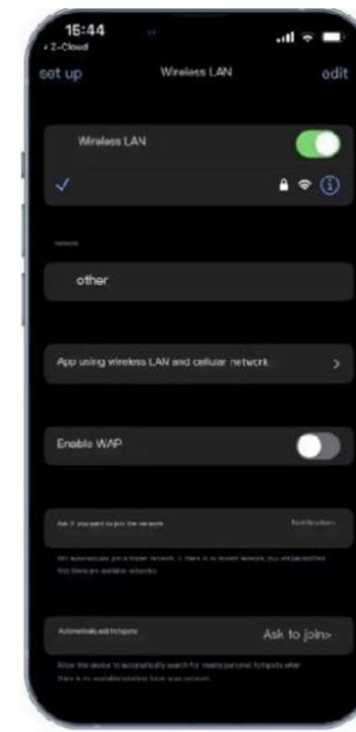


Oppsett mot WIFI

Følg veiledningen.

Koble til WIFI accesspunktet til batteriet.

Passordet er 12345678.



# Oppkobling av LV Mate



Oppsett mot WIFI

Tast inn WIFI SSID og passord til ditt private nett.



# Oppkobling av LV Mate



Oppsett mot WIFI

Sjekk at batteriene dukker opp som Online.

Sett DIP switch tilbake til 011000.

Gjenta prosessen til alle batteriene er online.

