

E-Maxx

THE INSTALLATION GUIDE



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INTRODUCTION

The E-Maxx is a microcontroller for remote monitoring, controlling and configuration of Selectronic Inverters (SP PRO series 1 or 2).

E-Maxx enables the connection of up to three SP PRO inverters to the internet and makes them available via an app. There are four main functions:

1. App. based viewing access via Android or Apple smart devices
2. Generator remote start
3. Remote control of SP PRO outputs
4. Remote programming via SP LINK

The E-Maxx operates without any custom setup of the internet connection and reports via a publicly available app called OpenHAB.

When purchasing an E-Maxx, specify a 1, 2 or 3 phase unit (E-Maxx 1, E-Maxx 2 or E-Maxx 3) and which power supply option is required. Power supply options are via a 240VAC to 5VDC plug pack or a 12VDC to 5VDC adaptor which can be powered from the SP PRO's 12VDC internal supply. Older SP PRO inverters can be connected with the approved RS232 to USB adaptor from Aten, model US-232A. The unit can be configured by the user without assistance from the installer if:

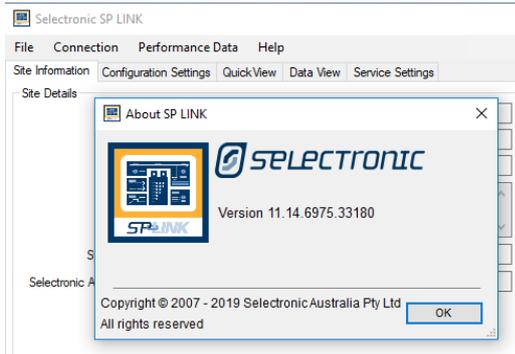
1. The plug pack option is selected (as the SP PRO doesn't need opening).
2. The customer can access www.myarvio.com.au and the relevant app store to set up their account and download and install the OpenHAB app.
3. An RJ45 internet connection is available near the inverter.

If a hardwired connection is not available, alternate network extender connections should also work such as EOP (Ethernet Over Power) kits or Ethernet to WIFI extenders. Arvio cannot assist with ethernet reliability issues associated with third-party ethernet extenders, please choose reputable brands and ensure that they are reliable in the event of power on/off/on issues.

Once an E-Maxx is connected to the SP PRO inverter/s and to the internet connection, an installer can be set up to access and program the SP PRO inverter/s on sites which are assigned to them via the www.myarvio.com.au webpage using SP LINK V11.14 or a newer version released by Selectronic on or after 7/2/2019.

To make the deployment of E-Maxx smoother it is recommended to download and install the latest software release versions before going to the site:

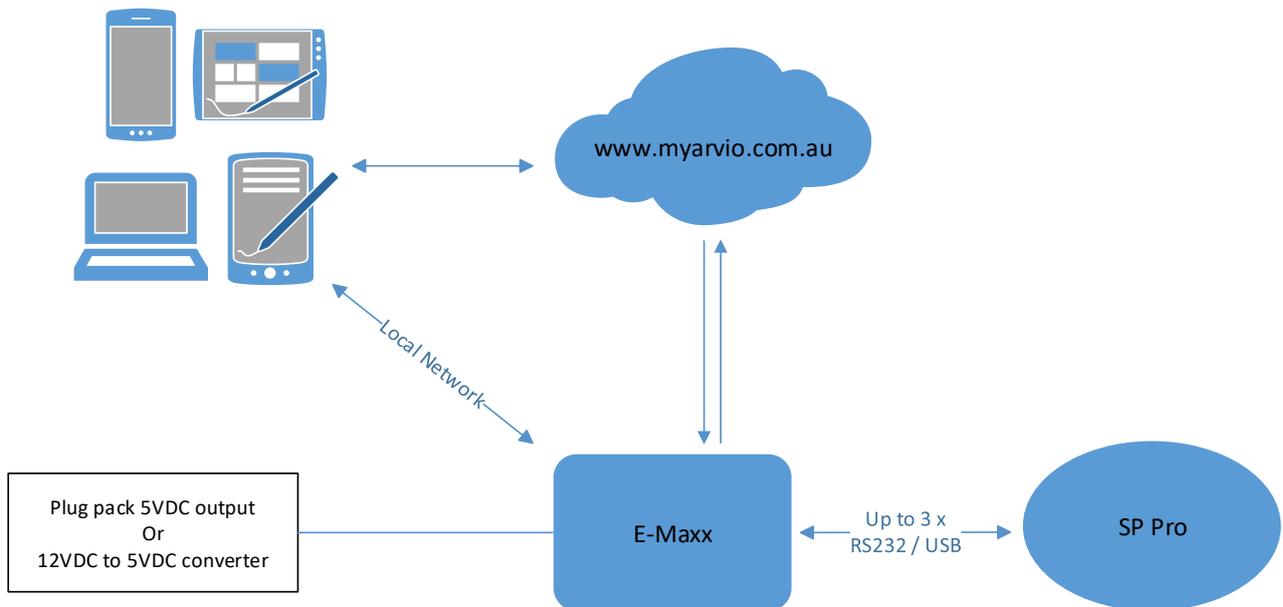
- SP LINK from <http://www.selectronic.com.au/sppro/splink.htm>
- E-Maxx plugin <https://www.myarvio.com.au/Download> (note that login credentials are required to access this download)



The SP LINK version installed can be checked by opening SP LINK on the Windows PC and pressing Help/About SP LINK.

Multiple inverters can be accessed remotely through additional simultaneous sessions of SP LINK. Remote access via the app and webpage continues while programming such that there is no downtime for the user.

SYSTEM DIAGRAM



As a link between the inverter and any internet enabled modem router, the E-Maxx creates a gateway to run SP LINK from any location. Expandability with many automation and future control options are provided.

SAFETY

Prevent contact with water and dust as damage caused by environmental conditions may void the warranty. Do not use another power supply other than the approved options.

Ensure that there is reasonable ventilation available to the E-Maxx. If installing within an enclosure, please choose an enclosure which has at least 4 x the volume of the E-Maxx.

MODELS

Current models include:

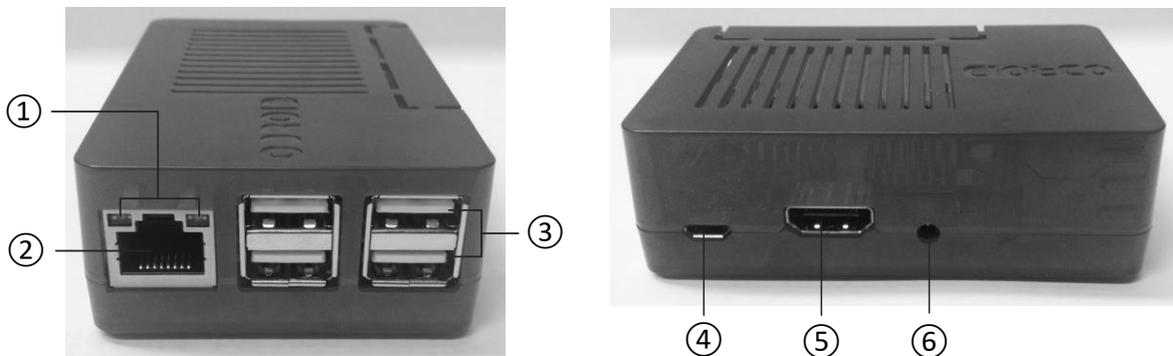
E-MAXX 1 – Single phase for one SP PRO

E-MAXX 2 – Dual phase for two SP PROs

E-MAXX 3 – Three phase for three SP PROs

UNPACKING & INSPECTION

Carefully inspect the shipping packaging before beginning the installation.



① Control LED

③ USB 2.0 Ports

⑤ HDMI Port

② Ethernet Port

④ Mini USB Port

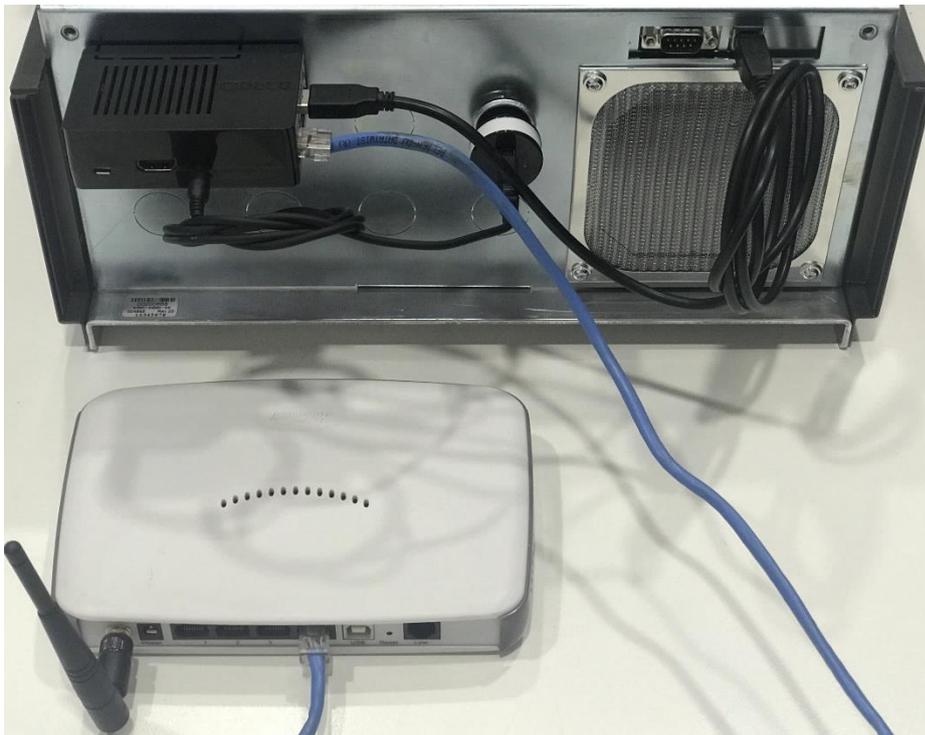
⑥ Power Supply Inlet

MOUNTING & WIRING

If the 12VDC adaptor has been supplied with the E-Maxx, open the SP PRO by removing the two screws on either side of the cover as shown below, knock out one round tab and fit the socket. If the green 12VDC port is already occupied on the PCB, the new wires can be screwed in parallel with the existing wires using a small blade screwdriver. Be sure to match the red with the positive terminal.



Use the magnetic strip to attach the E-Maxx to the inverter or near the inverter. Ensure that connection ports of the E-Maxx are accessible.



Mount as shown here such that the LEDs on the E-Maxx are visible to the owner to aid with future support if required.

Alternatively, an enclosure with a clear lid and quick release buckles can be fitted to the wall with the E-Maxx inside it to provide IP protection and maintain accessibility and visibility.

It is not recommended that the E-Maxx be fitted inside the SP PRO as viewing the indicator LEDs is useful for support and this could affect the SP PRO warranty.

USB comms Cable

Plug the standard “square to rectangle” USB cable supplied with the SP PRO in one of the four USB Ports ③. Connect the other end of the USB cable/s to the inverter/s. For older inverters use an approved adapter USB-to-RS232 to establish the connection.

The E-Maxx series can connect to up to three SP PRO inverters. Ensure that the correct E-Maxx model (1,2 or 3) is used to match the number of inverters.

Multiphase support choice

Both methods of connecting to 2 and 3 phase inverter setups are supported. The original method uses three USB cables to reach each SP PRO (green comms card). The new way uses one USB cable to access the Master SP PRO which communicates with the other SP PRO inverter/s (blue comms card setup with a 2 or 3 phase Master/Slave configuration). For more information about multiphase options, please contact Selectronic.

LAN Cable

Insert the LAN cable between the internet modem and the Ethernet Port ② of the E-Maxx. The cable is placed right with a click sound. Internet modem configuration such as port forwarding is generally not needed for any modem configured with default settings. If a laptop PC can browse the web on the LAN cable used the E-Maxx should work automatically.

USB Power Cable

The E-Maxx can be powered by the approved 240VAC to USB plug pack or approved DC to DC converter. Plug the USB to mini DC power cable between the power outlet of either the 240VAC or 12VDC power supply and the power supply inlet ⑥ and establish a connection.

Wiring Check

The wiring has been successful if a green/yellow LED at the Ethernet Port and a red LED near the Power Supply Inlet is turned on. The E-Maxx is operating when the blue LED is blinking.

Third party Ethernet extension systems may be used with discretion. For example, EOP kits or Ethernet to WIFI modules. Arvio does not offer support for these extension kits.

For older inverters with no USB port, the approved USB to RS232 converter is by ATEN model UC-232A can be used.

OPERATION

No further configuration is required. A red LED indicates that the E-Maxx is on. While starting, the E-Maxx has a solid blue light. This changes to a flashing (heartbeat) blue light after the starting process is complete and the E-Maxx is running.

A green LED flashes when there is 100 Mbps connectivity. A yellow LED flashes when there is 1000 Mbps connectivity.

SETUP FOR ALL USER TYPES

Ensure that the SP PRO being configured has the default name and password set. Details other than the SP PRO defaults are not yet possible with E-Maxx, this feature will be released in a future version.

Using a web browser, log in to www.myarvio.com.au.

Create a new user or log in with the details provided.

There is a serial number printed on the E-Maxx. Within the www.myarvio.com.au web page, check to see if the E-Maxx serial number is already listed. This may already have been entered here by the supplier. Units can also be added manually by following the prompts.

Assign a unique name to each E-Maxx and each inverter here and configure the unique menu descriptions in the “remote control” section of the OpenHAB app if required.

As an Installer, Owner or Guest, access is available to the SP PRO through OpenHAB on a smartphone or tablet. OpenHAB can be downloaded from the App Store (iOS) and Google Play (Android). Enter these details in OpenHAB once opened.

Turn off “Demo mode”

Remote URL <https://myarvio.com.au:8444>

User name _____

Password _____

Turn off “Ignore SSL certificates”

Save

This provides access to information about the SP PRO inverters, allows activation of remote controls and viewing of various graphs through OpenHAB depending on the permissions granted.

Purchaser

Purchaser is the entity which bought the E-Maxx from Arvio. A purchaser can only register a Principal Installer for an E-Maxx. By default, a purchaser does not have any further rights to configure or use an E-Maxx.

Principal Installer

A Principal Installer is the main entity responsible for the E-Maxx. Besides managing owners and guests a Principal Installer can create other installers for a site. There can only be one Principal Installer per E-Maxx. The Purchaser can be registered as the Principal Installer as well.

Installer

On top of what an Owner is permitted to do, an Installer can create Owners for a site if the Installer is granted access by Principal Installer.

A site can have 0, 1 or many Owners.

An Installer cannot execute commands, e.g. turning on / off generator, unless granted access by the Owner. Access to execute commands can be granted to the Installer by the Owner through the OpenHab app in the settings menu.

Owner

The Owner is the person who owns the E-Maxx.

The Owner is the only authority who is permitted to execute commands, e.g. turning on generator, turning lights on / off.

An Owner can create Guests for a site.

An Owner can change settings, e.g. change the name of the site

An Owner can grant access to execute command to Installer.

An Owner cannot be a Guest at the same time.

Guest

This user is a read-only user, has no right to create clients or change settings for a site.

Support / Admin

These roles can impersonate any user and act on their behalf without knowing their password. This allows Support/Admin to simulate what a user is experiencing without knowing their login password.

SETUP FOR INSTALLERS & OWNERS

Download and install the latest versions:

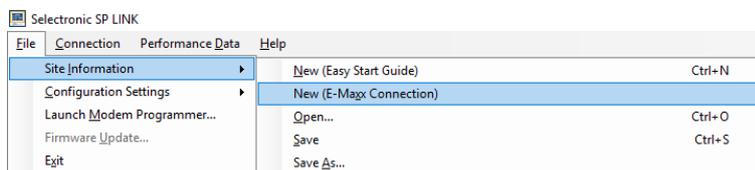
- SP LINK from <http://www.selectronic.com.au/sppro/splink.htm>
- E-Maxx plugin <https://www.myarvio.com.au/Download> (note that login credentials are required to access this download)

For initial SP PRO setup, temporarily remove the USB cable from each SP PRO and connect the Installer's PC directly to each SP PRO and configure them using the SP LINK Site Configuration Wizard. Retain the default user name and passwords. Then "configure" each SP PRO. Once all SP PRO units are configured, reconnect each USB cable to the E-Maxx unit and reboot it by unplugging the USB power lead, waiting 5 seconds and then reconnecting it.

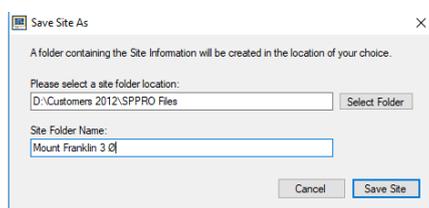
Ensure that there is reliable internet connection at both the E-Maxx site and the remote site to minimise the risk of a programming or firmware upgrade fault caused by poor internet connectivity. Ensure that there is reliable power at the remote site to ensure that the PC remains on during any programming or upgrade.

Open Selectronic SP LINK from the Desktop of the PC:

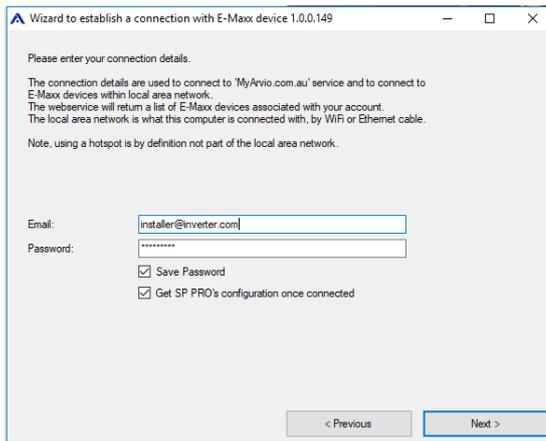
1. Version 11.14 or higher should appear in starting yellow dialogue window
2. Choose File/Site Information/New (E-Maxx Connection)



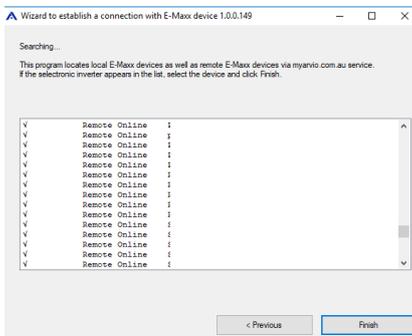
3. Select or create a folder to save this site into
4. Name the site to make it easy to identify the saved programming files, note that this name does not change the name of the site established in the www.myarvio.com.au setup. Press Save Site.



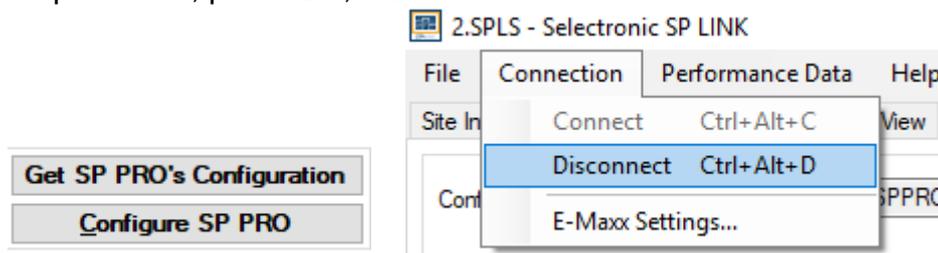
5. Enter the user name and password provided and press Next.



6. Select a site from the list and press Finish.



7. Only a Certified SP PRO programmer should make changes to the SP PRO settings. When complete, to save changes, press Configure SP PRO, enter the password, press OK, then Disconnect.



8. When reconnecting to the same site, simply choose Connect and the last site opened will be opened once more without having to use the File/Site Information connection method.

An E-Maxx enabled SP PRO can accept multiple simultaneous connections. SP LINK can be opened and used more than once on a PC by opening the SP LINK multiple times. The E-Maxx system allows “many to many” connections. This can be helpful when programming and receiving external support. It can help when comparing site settings and performance.

Configuring an SP PRO should only be completed by a qualified and Certified Selectronic SP PRO installer. Arvio can take no responsibility for changes made to SP PRO inverters using the E-Maxx.

Check the www.myarvio.com.au website before upgrading the firmware of an SP PRO to ensure that the new firmware is supported by the E-Maxx. After an SP PRO firmware upgrade, the SP PRO will restart, and power may be lost from the E-Maxx power supply and the internet modem temporarily. Reconnection to the site is required following a reboot. Allow a few minutes before attempting to reconnect.

SP PRO PROGRAMMING

For normal operation, there is no special programming required within the SP PRO for the E-Maxx to operate.

SP PRO ACCESS VIA OPENHAB APP FOR SMART PHONES

Solar	Settings
 Combined Energy Graph	>
 System Voltage Graph	>
 Inverter 1	>
 Inverter 2	>
 Inverter 3	>
Total Energy Used	7.8 kWh
Overall Power Used	794.6 W
Total Energy Generated	2.8 kWh
Overall Power Generated	2658.9 W
State of Charge	92 %
Average AC Voltage	126.3 V

Select combined graphs and zoom into each of the site's SP PRO inverters.

The average AC voltage is calculated by adding the voltage of each phase and dividing by the number of phases. If one phase is turned off, the average will reflect this.

SP PRO PROGRAMMING SPECIAL FEATURES

Within OpenHAB, the user has the ability to control up to 6 function switches per SP PRO which are connected to up to three outputs on that SP PRO.

Solar		Inverter 1	Settings
Energy Used		7.8 kWh	
Power Used		794.6 W	
Energy Generated		2.8 kWh	
Power Generated		2658.9 W	
State of Charge		100 %	
AC Input kWh Acc		4.2 kWh	
Batt In kWh Acc		0.0 kWh	
Batt Out kWh Acc		0.0 kWh	
AC Voltage		252.6 V	
Service Messages			
Generator Status		AC Source Present	
Generator Start Reason		Manual	
Export Power		2042.5 W	
Export kWh Acc		1.1 kWh	
 Generator Power		<input type="checkbox"/>	
 Schedule 1		<input type="checkbox"/>	
 Schedule 2		<input type="checkbox"/>	
 Schedule 3		<input type="checkbox"/>	
 Schedule 4		<input type="checkbox"/>	
 Water Pump		<input type="checkbox"/>	
 Inverter 1 Status		online >	
 Inverter 1 Energy Graph		>	

Outputs

1. Generator Power emulates the Generator Start function on the SP PRO front panel. For configuration of the Generator Start feature, consult the SP PRO installer manual. If the Generator Start button functions on the front panel of the SP PRO, then the OpenHAB Generator Start should function.

2. Schedules 1 to 4. Within SP LINK, there are four schedules which can be programmed and assigned to one output which is selectable as a relay or digital output. The installer can set this up to perform the function of switching as per the SP PRO manual. Turning on and off these four schedules will cause the nominated output to obey the active schedule or schedules. For example, setting and selecting schedule 1 to be 7am to 10am and schedule 2 to be 2pm to 4pm will turn on the output during these time periods.

3. Water Pump is simply an on or off output which can be assigned within SPLINK in the Digital Control section on the same configuration screen as the schedule set up as above. This can be used to switch other equipment if desired.

This programming can be repeated in each SP PRO connected to the E-Maxx.

BROWSER VIEW - www.myarvio.com.au

The web page www.myarvio.com.au allows viewing of E-Maxx units remotely in a similar way to the OpenHAB app with some additional features as follows.

CREATING GRAPHS

(Available soon for certain user types)

With access as an installer or a higher level, graphs can be created and customised and made visible to various levels of users. Arithmetic can be entered into the graphing tool to combine metrics. For example, multiply current by voltage to get power. The graphs are retrospective. When a new graph is made and previous periods viewed, the data will appear as all data is collected from all SP PRO metrics all the time.

SETTINGS

The settings tab allows control access to the E-Maxx.

SELECTRONIC SP PRO SETTINGS

The screenshot shows the 'Settings' page for 'Selectronic SP PRO'. The navigation bar includes 'E-Maxx', 'Graphs', 'Admin', 'Dashboard', 'Settings', and 'Help'. A user profile 'Hello' and a 'Log off' button are visible. A dropdown menu is open under 'Settings', showing 'Selectronic SP PRO', 'Generic', and 'E-Maxx Devices'. The page title is 'Settings Selectronic SP PRO'. Below the title, there are four settings sections: 1. 'Remote SP PRO support by Installer' with a toggle set to 'ON'. Description: 'Remote SP PRO support enables the installer to monitor and support your Selectronic SP PRO. An email will be sent to dia@arvio.com.au when this setting changes'. 2. 'Remote SP PRO support by Selectronic' with a toggle set to 'OFF'. Description: 'Remote SP PRO support enables selectronic to support your Selectronic SP PRO. An email will be sent to dia@arvio.com.au when this setting changes'. 3. 'Refresh Interval SP PRO' with a dropdown menu set to '15'. Description: 'Data collection interval in seconds for your Selectronic SP PRO. The default is 15 seconds'. 4. 'Reset Generic settings' with a 'Reset' button. Description: 'Reset all selectronic settings to factory default'. At the bottom, there is a copyright notice: '© 2018 - Arvio Pty Ltd'.

GENERIC SETTINGS

The screenshot shows the 'Settings' page for 'Generic'. The navigation bar is the same as the previous page. The dropdown menu is open, showing 'Selectronic SP PRO', 'Generic', and 'E-Maxx Devices'. The page title is 'Settings Generic'. Below the title, there are five settings sections: 1. 'Internet blackspot' with a toggle set to 'OFF'. Description: 'Turn on if internet is unreliable for long periods, e.g. houseboats. By default E-Max restarts if internet is unavailable for one hour'. 2. 'Remote E-Max support' with a toggle set to 'ON'. Description: 'Remote E-Max support enables to monitor and support your E-Max. An email will be sent to dia@arvio.com.au when this setting changes'. 3. 'Data upload' with a toggle set to 'ON'. Description: 'Data upload enables to view data via webservice and is used for notification purposes. An email will be sent to dia@arvio.com.au when this setting changes'. 4. 'Enable control for installer' with a dropdown menu set to 'ON'. Description: 'Allow installer to execute commands on E-Max. An email will be sent to dia@arvio.com.au when this setting changes'. 5. 'Data upload interval' with a dropdown menu set to '5'. Description: 'Data upload interval in minutes determines the granularity of viewing the data in webservice. The default value is 5 minutes'. At the bottom, there is a 'Reset Generic settings' button with a 'Reset' label and a description: 'Reset all generic settings to factory default'. At the bottom, there is a copyright notice: '© 2018 - Arvio Pty Ltd'.

DEVICES SETTING - NAMING AND VIEWING A SITE

Each owner can have multiple E-Maxx units. Each must have a unique name. To see how many SP PRO inverters are connected to each E-Maxx check under Settings/Devices. In the example below, the first three “Selectronic” are inverter phases 1,2 & 3. The fourth one is with combined values from the first three.

SITE ACCESS - CREATING USERS

Add a user and give them an appropriate role for each E-Maxx (depends on operator’s role).

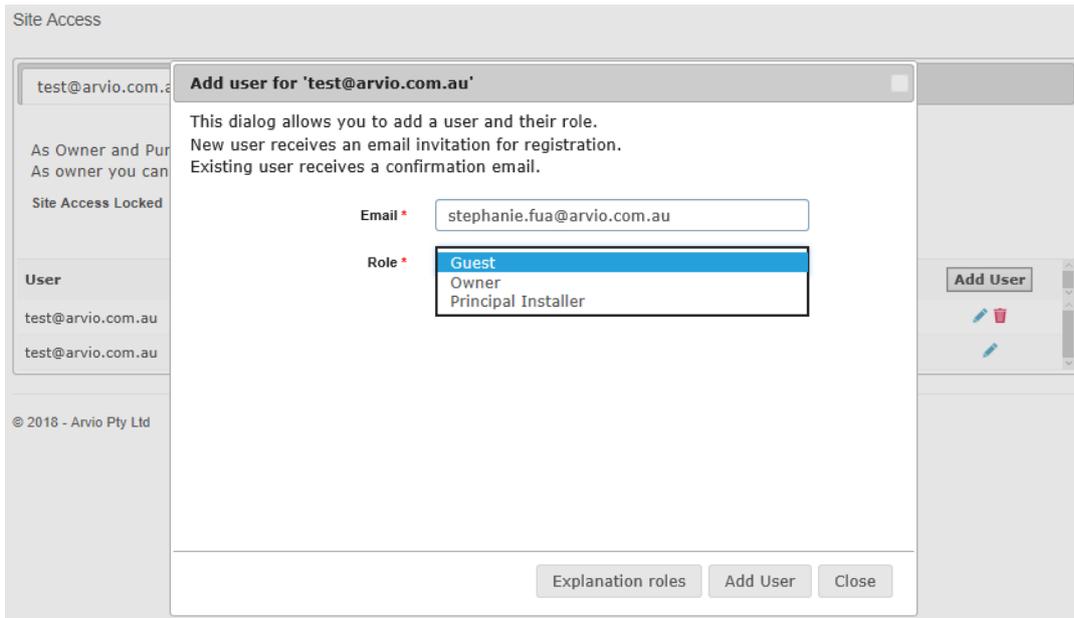
Select Settings/Site Access. Click Add User button

Site Access

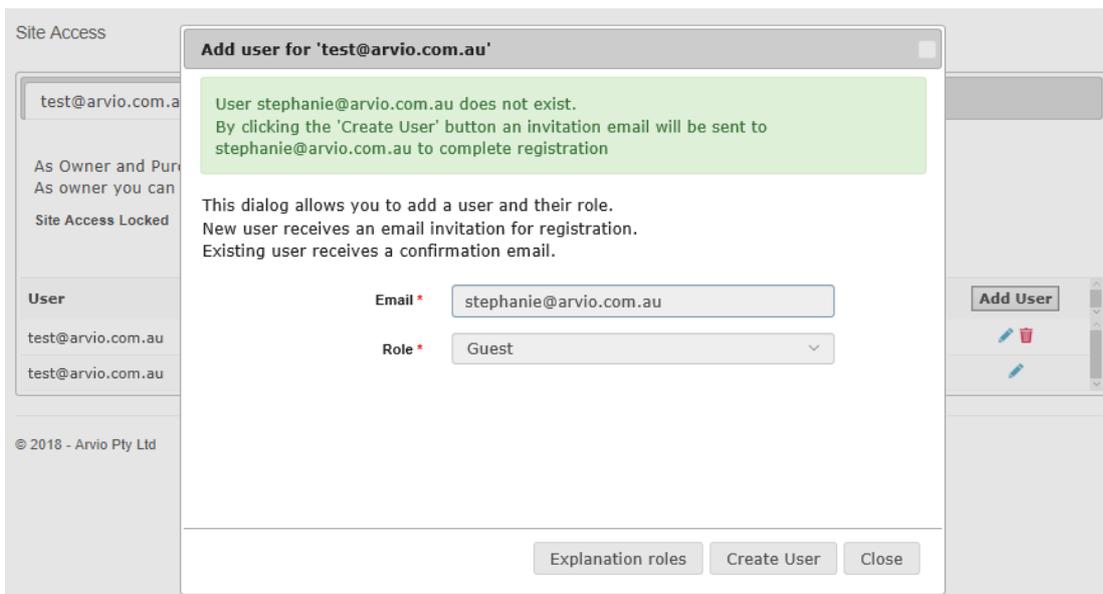
User	Role	Status	Add User
test@arvio.com.au	Owner	25/05/2018	
test@arvio.com.au	Purchaser	25/05/2018	

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In the ‘Add user for <site name>’ pop up screen, type in the email address of the new user and select the appropriate role from the drop-down box. Click on the Add User button. If further explanation is needed of the roles, click on the Explanation roles button



If the user does not exist, the following message will appear. Click on the Create User button. The user will be sent an email with instructions to set their password and the appropriate links



Once the user sets the password by following the link in the email, the user can log in to www.myarvio.com.au and view the E-Maxx that they have been given access to.

ONGOING FEES

Unless otherwise agreed, a small quarterly fee will be chargeable to the purchaser, owner or installer after the initial 12-month period to retain access to the E-Maxx. This fee is for Arvio to continue to provide the web service, data storage and offer support and further upgrades and enhancements. An invoice will be sent to the Owner on an annual basis unless otherwise agreed.

SECURITY & PRIVACY

The E-Maxx is designed with a high level of security to prevent unauthorised remote access.

For on-going support, the E-Maxx is equipped with the capacity for remote upgrades and the SP PRO inverters are capable of remote programming. This is only possible through Arvio, the software development company, so it is inherently secure. By default, the unit is set to allow remote upgrades and programming. If it is the preference to disable this feature, please contact the computer technician or internet service provider and block outgoing ports in the internet modem's menu:

Outgoing Port/s	Function	Importance
443	Uploading E-Maxx collector data to www.myarvio.com.au	Essential
8003	Remote programming of SP PRO	Recommended
8011	E-Maxx configuration	Recommended
8012	Update service to install new binaries through www.myarvio.com.au	Recommended
8013	Steward service for remote support	Recommended
8070	Broker for establishing connection without static IP requirement	Recommended

Disabling these ports will also prevent support being available from Arvio or the accredited installer.

By default, the data will be available to Arvio and Selectronic for maintenance and support as required. The data will be treated with privacy and will not be shared with third parties without consent.

TROUBLE SHOOTING

If E-Maxx is not contactable, check that

1. The red light is on for power
2. The blue light is blinking as the E-Maxx heartbeat
3. The network lights are on
4. The internet service is active on a PC on the same network cable (confirms access to the web)

SPECIFICATIONS

ODROID-C1+ (hardware device)

- Amlogic ARM® Cortex®-A5(ARMv7) 1.5Ghz quad core CPUs
- Mali™-450 MP2 GPU (OpenGL ES 2.0/1.1 enabled for Linux and Android)
- 1Gbyte DDR3 SDRAM
- Gigabit Ethernet
- 40pin GPIOs + 7pin I2S
- eMMC4.5 HS200 Flash Storage slot / UHS-1 SDR50 MicroSD Card slot
- USB 2.0 Host x 4, USB OTG x 1 (power + data capable)
- Infrared(IR) Receiver
- Ubuntu or Android OS
- 16GB SD
- Power consumption 1W (approximately)

H*W*L

90x59x28mm

Weight

75g approx.

E-MAXX SOFTWARE (programs on Odroid)

* O/S Ubuntu

* E-Maxx data collector uses OpenHAB open source framework

* www.myarvio.com.au for remote support

OpenHAB (app on smart device)

* Refer to www.openhab.org for details

DISCLAIMER

Arvio Pty Ltd has developed the E-Maxx for remote access to Selectronic SP PRO inverters and to provide other additional features. Should the owner or the owner's agent upgrade the SP PRO/s to have newer firmware releases which are not tested or approved with the E-Maxx and the E-Maxx is consequently unable to operate or function diminishes in any way, additional charges may apply to rectify remote access and provide support. Please consult the website www.myarvio.com.au for supported SP PRO software versions before attempting a firmware upgrade.

Remote access to the SP PRO via SP LINK is possible as described in this manual. Due to E-Maxx's reliance on the internet being available and reliable, while E-Maxx provides the facility, it cannot guarantee the success of any remote access programming or SP PRO firmware upgrades undertaken by the E-Maxx owner or owner's agent. All care should be taken when upgrading and programming SP PRO inverters remotely. Arvio is not liable in any way for any costs associated with events relating to remote access failure or remote access operation.

TERMS & CONDITIONS

THESE Arvio TERMS & CONDITIONS ("Agreement" or "Terms") GOVERN YOUR ACQUISITION AND USE OF Arvio's SERVICES. BY ACCEPTING THIS AGREEMENT, EITHER BY CLICKING A BOX INDICATING YOUR ACCEPTANCE OR BY EXECUTING AN ORDER FORM THAT REFERENCES THIS AGREEMENT, YOU AGREE TO THE TERMS OF THIS AGREEMENT. IF YOU ARE ENTERING INTO THIS AGREEMENT ON BEHALF OF A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT THAT YOU HAVE THE AUTHORITY TO BIND SUCH ENTITY AND ITS AFFILIATES TO THESE TERMS, IN WHICH CASE THE TERMS "YOU" OR "YOUR" SHALL REFER TO SUCH ENTITY AND ITS AFFILIATES. IF YOU DO NOT HAVE SUCH AUTHORITY, OR IF YOU DO NOT AGREE WITH THESE TERMS, YOU MUST NOT ACCEPT THIS AGREEMENT AND MAY NOT USE THE SERVICES.

Arvio reserves the right to change these Terms or any Services at any time, effective upon the posting of modified Terms or Services on the Website, and Arvio will make every effort to communicate these changes to You via email or notification via the Website. It is likely that the Terms will change over time. It is Your obligation to ensure that You have read, understood and agree to the most recent Terms available on the Website.

This Agreement was last updated on the 7th February, 2019. It replaces any prior agreement(s) and is effective between You and Arvio as of the date of You first executing an Order Form subscribing for the Services.

1. DEFINITIONS "Agreement" or "Terms"

means these Arvio Terms and Conditions.

"Billing Contact"

means Your nominated contact entity and address for billing purposes.

"Confidential Information"

includes all information exchanged between the parties to this Agreement, whether in writing, electronically or orally, including the Services, but does not include information which is, or becomes, publicly available other than through unauthorised disclosure by the other party.

"Data"

means any data inputted by You or with Your authority into the Arvio Software.

"E-Maxx"

Means the hardware provided by Arvio for the purposes described in the relevant manual for data collection, automation or control.

"Intellectual Property Right"

means any patent, trademark, service mark, copyright, moral right, right in a design, know-how and any other intellectual or industrial property rights, anywhere in the world whether or not registered.

"Invited User"

means any person or entity, other than the Subscriber, that uses the Services with the authorisation of the Subscriber from time to time.

"Services"

means the ... performance monitoring and controlling of the equipment attached to the equipment provided by Arvio

"Subscriber"

means the person who registers to use the Services and, where the context permits, includes any entity on whose behalf that person registers to use the Services and is permitted to do so under this Agreement.

"Arvio"

means Arvio Pty Ltd which is registered in Australia and all current and future global subsidiaries of Arvio Pty Ltd.

"Website"

means the Internet site at the domain www.arvio.com.au or any other site operated by Arvio.

"You"

means the Subscriber, and where the context permits, an Invited User. "Your" has a corresponding meaning.

"Your Organisations"

means an organisation that You have added to the Services or that have been added with Your authority or as a result of Your use of the Services.

Any reference to "includes" or "including" is on a without limitation basis.

2. END USER LICENSE AGREEMENT (USE OF SOFTWARE)

Arvio grants You the right to access and use the Services via the Software. This right is non-exclusive, non-transferable, and limited by and subject to this Agreement. You acknowledge and agree that, subject to any applicable written agreement between the Subscriber and the Invited Users, or any other applicable laws:

- a. the Subscriber determines who is an Invited User and what level of user role access to the relevant organisation and Services that Invited User has;
- b. the Subscriber is responsible for all Invited Users' use of the Service;
- c. the Subscriber controls each Invited User's level of access to the relevant organisation and Services at all times and can revoke or change an Invited User's access, or level of access, at any time and for any reason, in which case that person or entity will cease to be an Invited User or shall have that different level of access, as the case may be; and
- d. if there is any dispute between a Subscriber and an Invited User regarding access to any organisation or Service, the Subscriber shall decide what access or level of access to the relevant Data or Services that Invited User shall have, if any.

3. YOUR OBLIGATIONS

3.1. Payment obligations:

An invoice for the Access Fee will be issued monthly, quarterly or annually in advance (depending on your subscription type) at the beginning of each monthly, quarterly or annual subscription period for which You have subscribed for in an Order Form. All invoices will include the Access Fee for the corresponding period of use (including any one-time-service fees that shall be payable in lump sums). Arvio will continue invoicing You monthly, quarterly or annually in advance (as the case may be) until this Agreement is terminated in accordance with clause 8.

All Arvio invoices will be sent to You, or to a Billing Contact whose details are provided by You, by email. You must pay or arrange payment of all amounts specified in any invoice within 5 days of the invoice date. You are responsible for payment of all taxes and duties in addition to the Access Fees.

3.3. General obligations:

You may use the E-Maxx that may be released and Software on behalf of others or in order to provide services to others but if You do so you must ensure that You are authorised to do so and that all persons for whom or to whom services are provided comply with and accept all terms of this Agreement that apply to You.

3.5. Access conditions:

- a. You must ensure that all usernames and passwords required to access the Services are kept secure and confidential. You must immediately reset your password in case of any unauthorised use of Your account or any other breach of security.
- b. As a condition of these Terms, when accessing and using the Services, You must:
 - i. not attempt to undermine the security or integrity of Arvio's computing systems or networks or, where the Services are hosted by a third party, that third party's computing systems and networks;
 - ii. not use, or misuse, the Services in any way which may impair the functionality of the Services or other systems used to deliver the Services or impair the ability of any other user to use the Services, including by misusing the Services in a manner that materially exceeds reasonable usage or use patterns over any month or by using the Services in a malicious, fraudulent or unlawful manner;

iii. not transmit, or input into the software, any: files that may damage the E-Maxx or Software v. not attempt to modify, copy, adapt, reproduce, disassemble, decompile or reverse engineer any computer programs used to operate the E-Maxx or Software.

3.8. Communication Conditions:

3.9. Indemnity:

You indemnify Arvio against: all claims, costs, damage and loss arising from Your breach of any of these Terms or any obligation.

4. CONFIDENTIALITY AND PRIVACY

4.1. Confidentiality:

Unless the relevant party has the prior written consent of the other or unless required to do so by law:

a. Each party will preserve the confidentiality of all Confidential Information of the other obtained in connection with these Terms. Neither party will, without the prior written consent of the other, disclose or make any Confidential Information available to any person, or use the same for its own benefit, other than as contemplated by these Terms.

b. Each party's obligations under this clause will survive the termination of these Terms.

c. The provisions of clause 4.1 shall not apply to any information which:

- i. is or becomes public knowledge other than by a breach of this clause 4.1;
- ii. is received from a third party who lawfully acquired it and who is under no obligation restricting its disclosure;
- iii. is in the possession of the receiving party without restriction in relation to disclosure before the date of receipt from the disclosing party; or
- iv. is independently developed without access to the Confidential Information.

4.2. Privacy:

Arvio maintains a privacy policy that sets out the parties' obligations in respect of personal information. You should read that policy at www.myarvio.com.ay and You will be taken to have accepted that policy when You accept these Terms.

5. INTELLECTUAL PROPERTY

5.1. General:

Title to, and all Intellectual Property Rights in the Services, the Software and any documentation relating to the Services remain the property of Arvio.

5.2. Ownership of Data:

Title to, and all Intellectual Property Rights in, the Data remain Your property.

5.3. Backup of Data:

Arvio adheres to its best practice policies and procedures to prevent data loss, including a daily system data back-up regime, but does not make any guarantees that there will be no loss of Data. Arvio expressly excludes liability for any loss of Data no matter how caused.

5.5. Accuracy of Data:

When You input any Data into the Software You agree and acknowledge that You are responsible for ensuring the accuracy of such Data.

6. WARRANTIES AND ACKNOWLEDGEMENTS

7. LIMITATION OF LIABILITY

7.1. To the Maximum extent permitted by law, Arvio excludes all liability and responsibility to You (or any other person) in contract, tort (including negligence), or otherwise, for any loss (including loss of information, Data, profits and savings) or damage resulting, directly or indirectly, from any use of, or reliance on, the Services or Software.

8. TERMINATION

9. HELP DESK

9.1. Technical Problems:

In the case of technical problems, You must make all reasonable efforts to investigate and diagnose problems before contacting Arvio. If You still need technical help, please email us at support@arvio.com.au. Arvio will endeavour to address all queries and requests for assistance received through the Website or via email as promptly as reasonably possible, but does not warrant that support will be immediately available.

9.2. Service availability:

Whilst Arvio intends that the Services should be available 24 hours a day, seven days a week, it is possible that on occasions the Services may be unavailable to permit maintenance or other development activity to take place. Should there be an outage, the E-Maxx will buffer information for long periods and upload once the servers can be reached once more.

10. GENERAL

10.1. Entire agreement:

These Terms supersede and extinguish all prior agreements, representations (whether oral or written), and understandings and constitute the entire agreement between You and Arvio relating to the Services and the other matters dealt with in these Terms.

10.2. Waiver:

A waiver of any breach of any provision in these Terms shall not be effective unless that waiver is in writing and is signed by the party against whom that waiver is claimed. If either party waives any breach of these Terms, this will not constitute a waiver of any other breach. No waiver will be effective unless made in writing.

10.3. Delays:

Neither party will be liable for any delay or failure in performance of its obligations under these Terms if the delay or failure is due to any cause outside its reasonable control. This clause does not apply to any obligation to pay money.

10.4. No Assignment:

You may not assign or transfer any rights to any other person without Arvio's prior written consent.

NOTES

Installation Guide Revision 5.4

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