SOLAR RELAY

INVERTER CONTROL
with
Growatt MIN 7-10K TL-X

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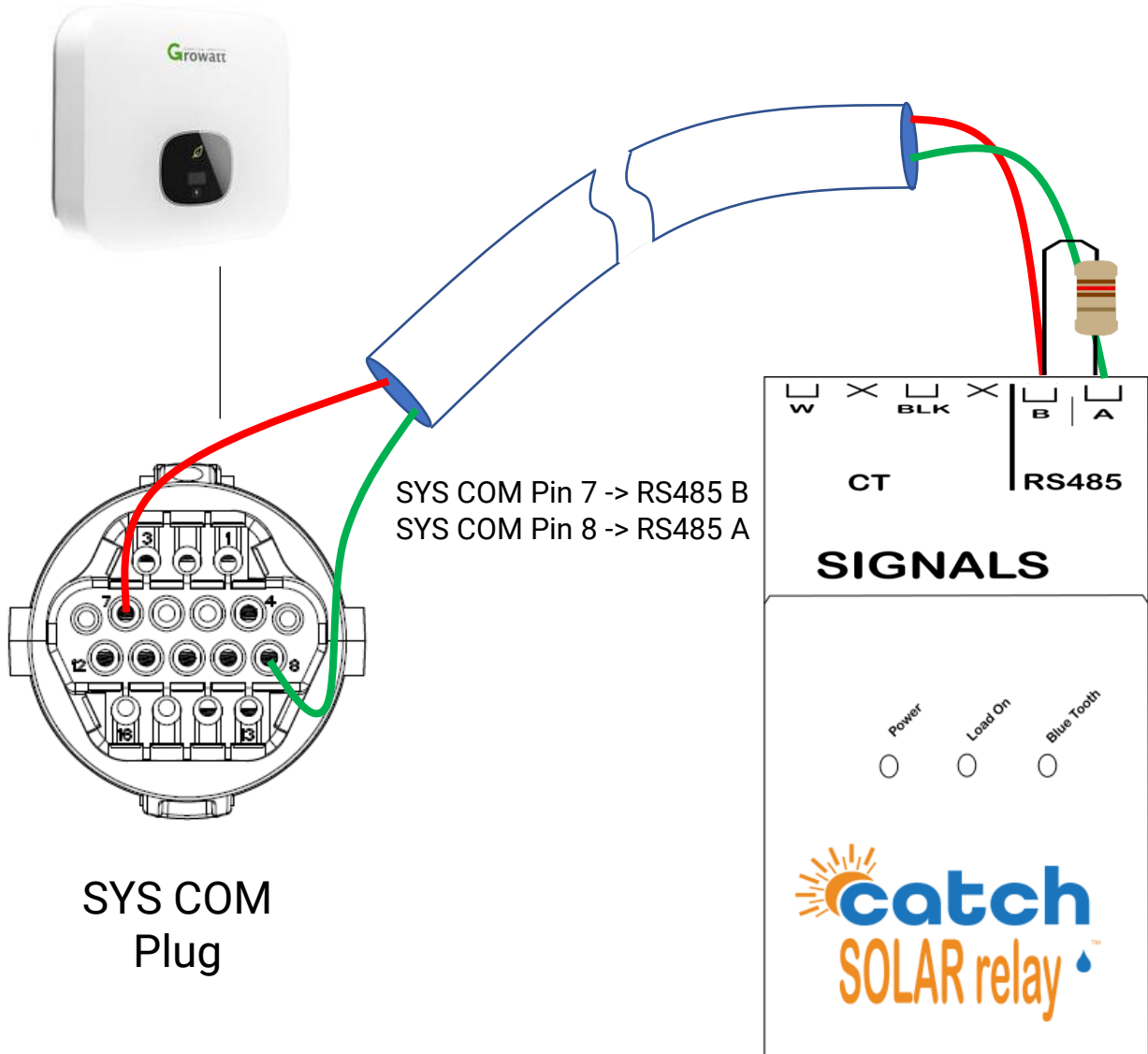E: sales@catchpower.com.au

This guide discusses the specific wiring and configuration need to implement inverter control. Ensure the installation guide for both products is also followed.

Wiring Instructions

Ensure the data cable is rated for the voltages it will be in close proximity to.
A 120 Ohm terminating resistor may be required at the CATCH Relay terminals as shown in the diagram below if the cable run is longer than 10m.

SYS COM Pin 7 -> RS485 B
SYS COM Pin 8 -> RS485 A

W   BLK   B | A

CT   RS485

SIGNALS

Power   Load On   Blue Tooth

SYS COM Plug

catch
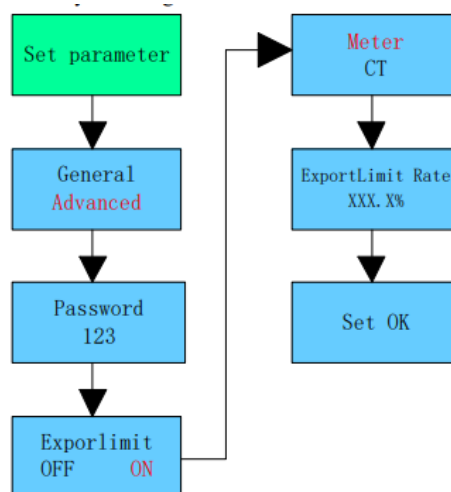**SOLAR relay**

Inverter Setup

The Growatt interface is a little hard to get used to. The basic interface functions are shown below.

Single Tap	Move forward in the menu, or increase the setting by one
Double Tap	Enter into a menu or accept a change in value
Three taps	Previous Menu

There are two things that need to be set inside the Growatt inverter.

1. The meter type
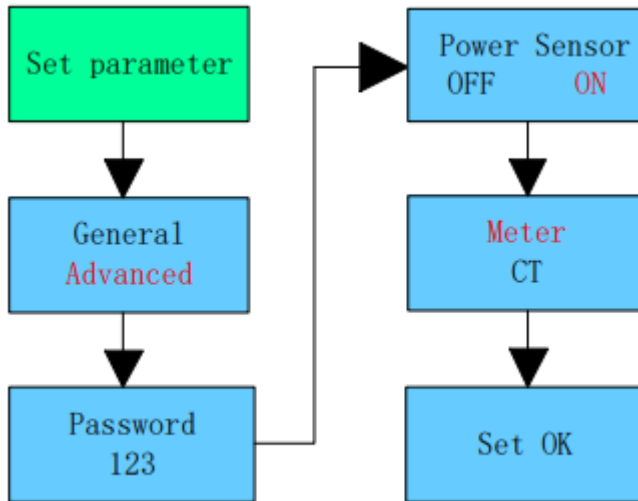
2. The amount of export allowed.

Follow the menu navigation and set the values as shown. The **">"** marker indicates the required choice.

Export Limit Rate:
As an example value for this field. If you are configuring a 5kW inverter, and the export limit is 3kW. This should be set to 100* 3kw/5kw = 60.0

Inverter Setup..Continued

SOLAR RELAY Setup

Navigate to the Configuration page, and under the Modbus configuration set the parameters as shown.

Modbus Configuration —

Emulated Meter

Growatt MIN 7000-10000 TL-X ▾

Cluster Export Limit

0

Modbus Device ID

1

Modbus Baud Rate
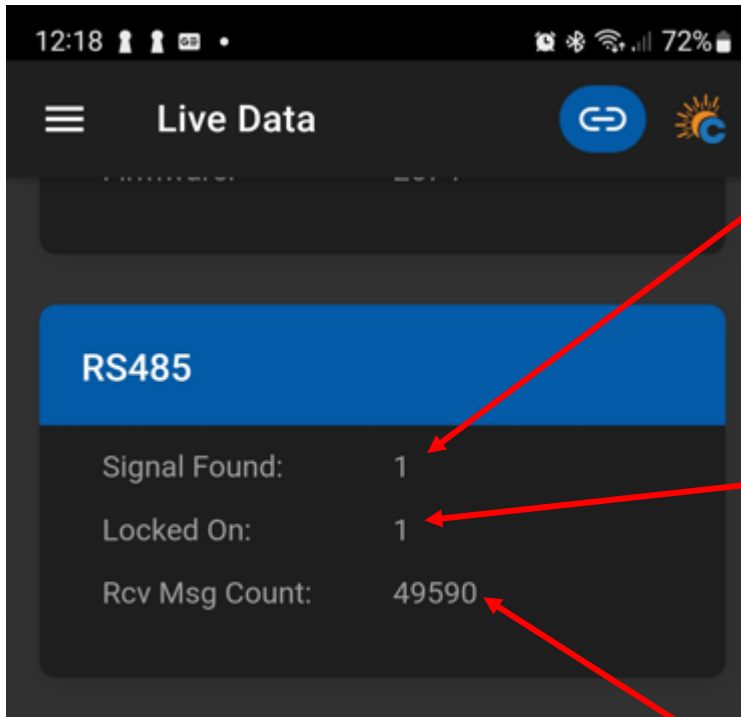
9600

Modbus Stopbits

1 ▾

Modbus Parity

None ▾

Checking the status of the RS485 interface

Within the CATCH Power app if you navigate to the bottom of the Live Data screen you will see something similar to the screen below.

The RS485 Status Can be used to confirm correct operation

Indicates the inverter is transmitting data on the RS485 cable.

If this is zero it means the inverter is not communicating or there is a break in the cable.

This indicates the inverter and the CATCH Relay are talking the same language.

If this is zero it is likely you have not chosen the correct meter when configuring the relay or the +ve and −ve wires are crossed over.

This number continually counts the number of successful messages. This number will continue to rise if communications the link is good.

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THE FOLLOWING ONLY NEEDS
TO BE FOLLOWED IF YOU ARE ENABLING
DYNAMIC / FLEXIBLE EXPORTS

RTU Control

DYNAMIC / FLEXIBLE Export Control

NO NATIVE MONITORING

If you choose to use RTU Control for this inverter, the inverter monitoring platform will not work
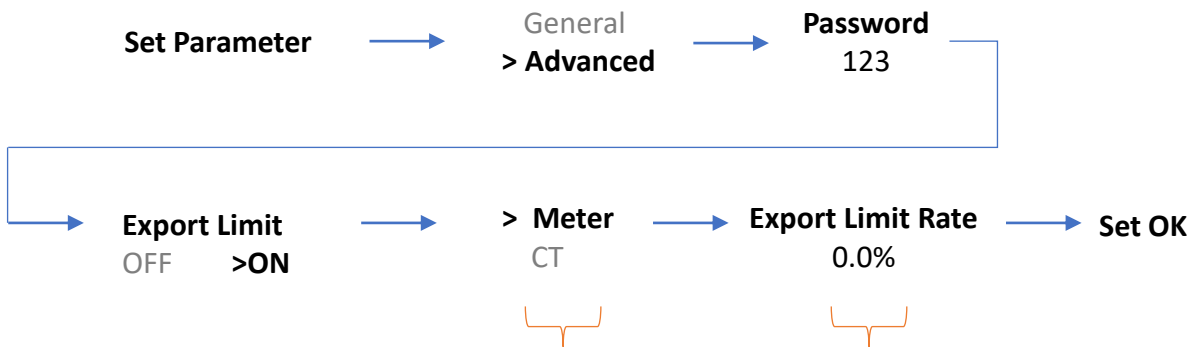
NO BATTERIES

RTU Control cannot be used on Hybrid inverters that have a battery connected.

Export limit the inverter to ZERO

Follow the menu navigation and set the values as shown. The **">"** marker indicates the required choice.

Set Parameter ⟶ General
> Advanced ⟶ **Password**
123

Export Limit ⟶ **> Meter** ⟶ **Export Limit Rate** ⟶ Set OK
OFF   **>ON**   CT   0.0%

This sets the measuring device to a RS485 Meter

Set this to Zero

SUNSPEC Configuration

GROWATT Does not support
SUNSPEC over modbusTCP

DYNAMIC / FLEXIBLE EXPORT CONTROL

DYNAMIC / FLEXIBLE EXPORT CONTROL

Follow the Configuration steps in the Electricians Guide to register the site for the MONOCLE, and for Dynamic / Flexible Exports