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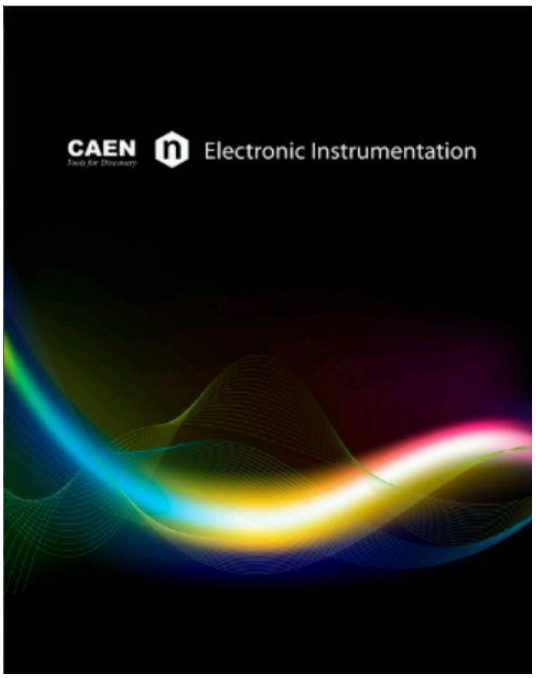

A4534 10.4" LCD Touchscreen color Display Unit Control Software

Rev. 1 - 20 October 2021

Purpose of this User Manual

This User's Manual contains the full description of the **A4534 10.4" LCD Touchscreen color Display Unit Control Software**

Change Document Record

Date	Revision	Changes
20 March 2019	0	Preliminary
20 October 2021	1	Removed A4537 and A5534 support

Reference Documents

SY4527 User's Manual

SY4527 Quickstart Guide

CAEN S.p.A.
Via Vetraia, 11 55049 Viareggio (LU) - ITALY
Tel. +39.0584.388.398 Fax +39.0584.388.959
info@caen.it
www.caen.it

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1 Introduction

The LCD HV Control Software is an application that allows to manage all the System, Board and Channel parameters related to the SY4527 power supply system, via the A4534 - SY4527 10.4" LCD Touchscreen color Display Unit

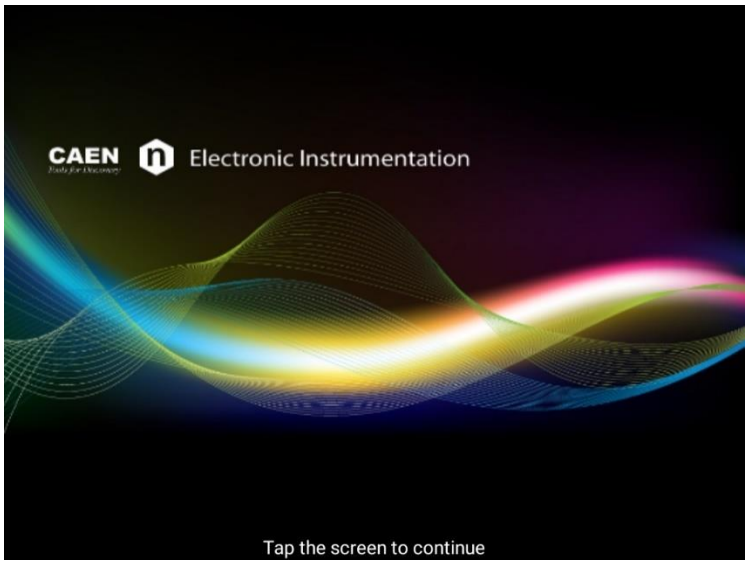
No software installation procedure is required.

System requirements

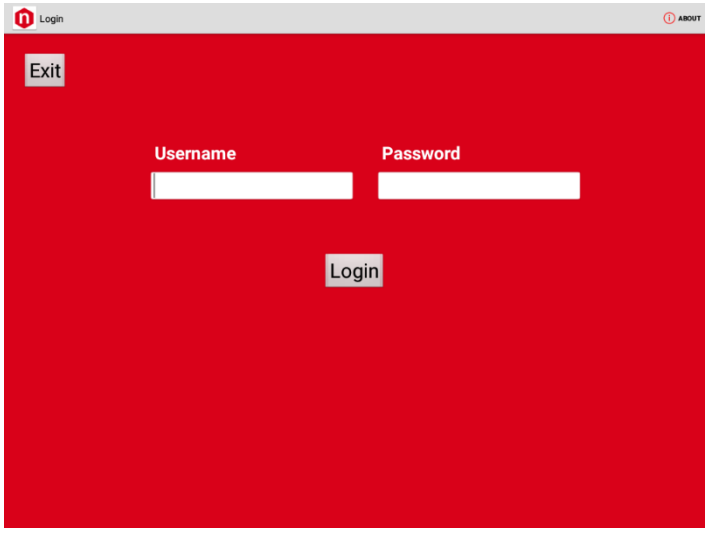
SY4527 Power Supply System with A4534 - SY4527 10.4" LCD Touchscreen color Display Unit installed.

2 System Log-in

At System turning On, the following screen is displayed:



Tap the screen and the log-in form will be shown:



Touch the screen to launch the virtual keyboard, then type

User name: admin (default)

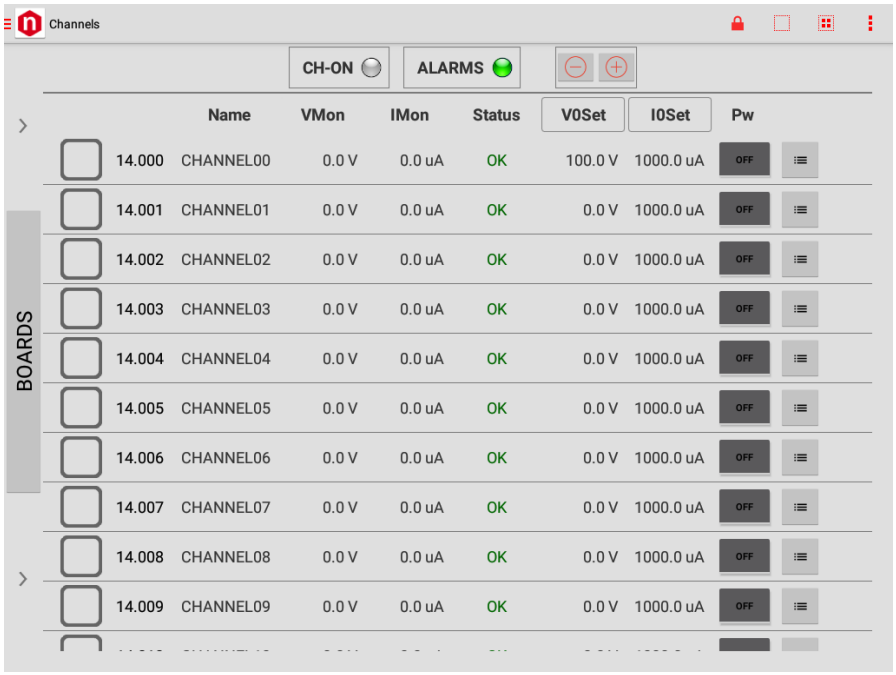
Password: admin (default)

tap Log In and the Channels options tab will be shown

3 System management

Channels Tab

After successful log in, the available Channels options tab is shown:



Channels options tab shows the channels address (slot and number) and a set of available parameters. The tab can be scrolled both horizontally and vertically to view all channels and parameters.

Tool bar

The tool bar includes the following options:

CAEN Logo: allows to go to channels tab

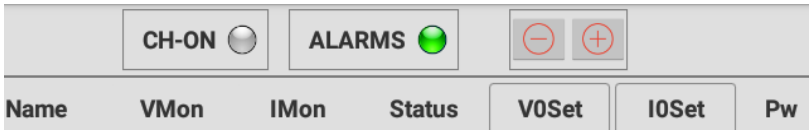
Lock: allows to unlock/lock channels setting

Select all channels: All channels are selected for Group settings; see p. 9

De-select all channels

Column: access to other options: Sessions, Upgrade, About, Logout (see SYx527 manual for description)

Parameters row



This row shows the channels parameters; the boxed parameters can be changed, by tapping on them and choosing from the displayed list; two more columns can be added or deleted, by tapping the [+] and [-] symbols.

Channel row

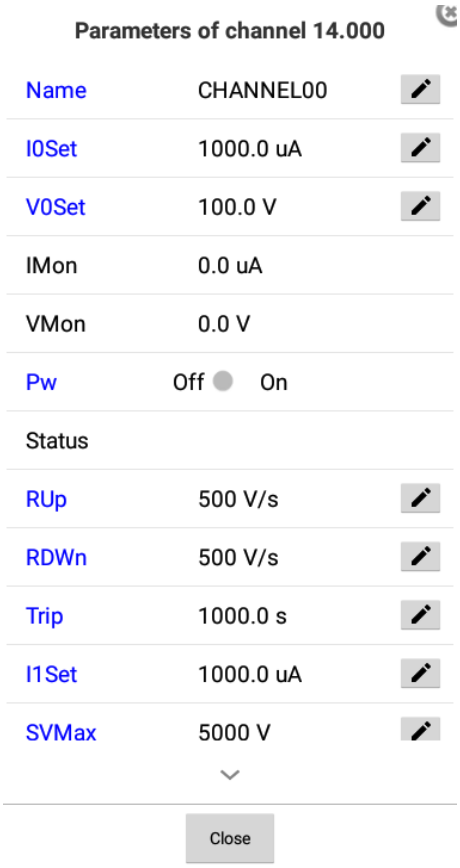
This row shows the channels parameters values; and three boxes:

The Selection box on the left allows selection for Group settings (tap row to deselect)

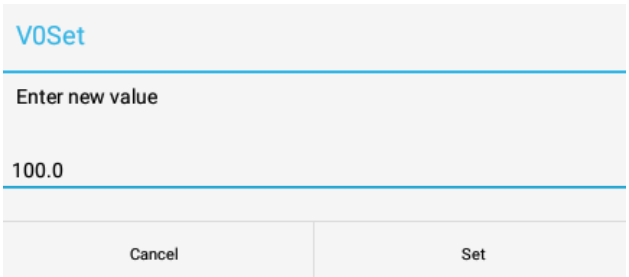
The ON/OFF button allows individual channel ON/OFF

The parameters button allows to access to parameters setting

When the parameters button is tapped, the channel menu will be displayed:



Settable parameters are in blue; tap on the pencil icon to edit the value (for example V0Set):



Enter the value with the keypad, then confirm with “Set”, or go back with “Cancel”.

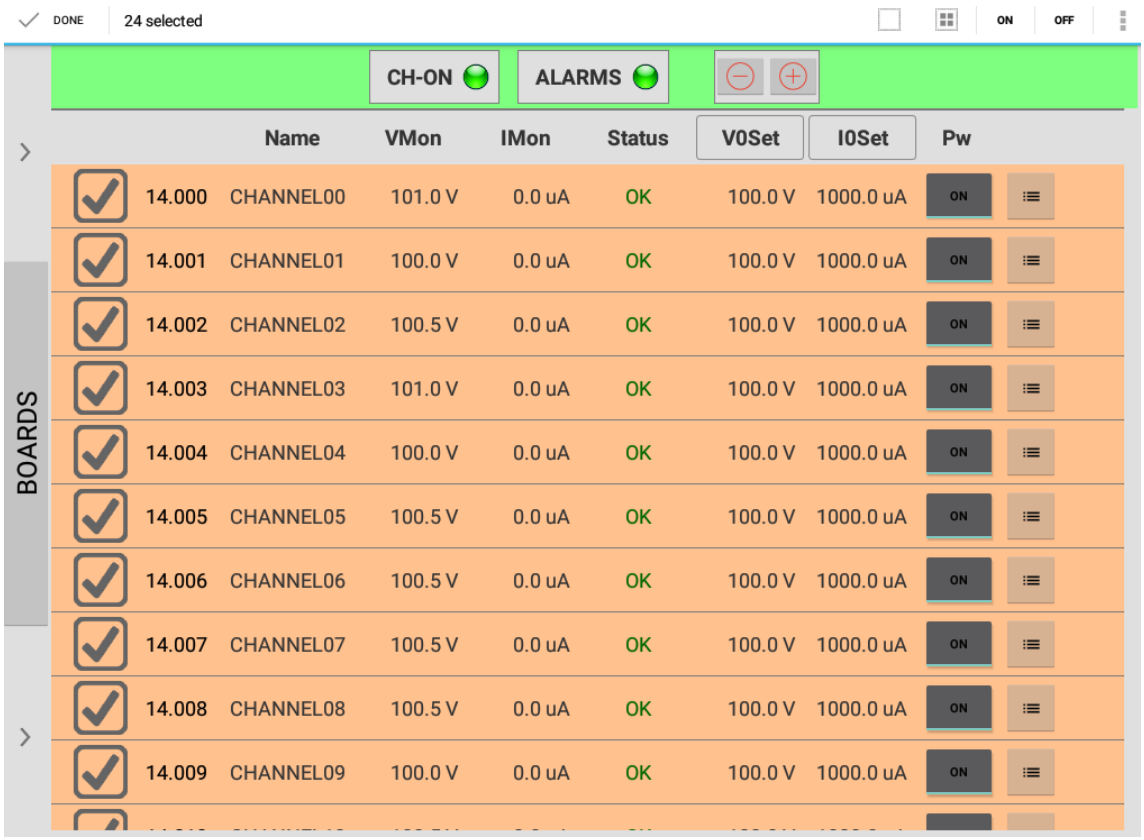
The following table describes the available parameters (note that some boards can have a slightly different parameter list):

Parameter	Descritpion
CHANNEL NAME (settable):	descriptive name for the relevant channel
V0SET (settable):	the first of the two allowed voltage programmable values.
I0SET (settable):	the first of the two allowed current limit programmable values
V1SET (settable):	the second of the two allowed voltage programmable values
I1SET (settable):	the second of the two allowed current limit programmable values
RUp (settable):	the Ramp-Up parameter value, i.e. the maximum voltage programmable increase rate.
RDWn (settable):	the Ramp-Down parameter value, i.e. the maximum voltage programmable decrease rate.
TRIP (settable):	the TRIP parameter value, i.e. the maximum time an Over Current condition is allowed to last.
SVMAX (settable):	maximum voltage value programmable for the channel. If the value set as SVMAX is less than the value of the V0SET/ V1SET parameter, the latter will automatically decrease to the SVMAX value.
VMON (monitor):	monitored voltage value
IMON (monitor):	monitored current value
STATUS (monitor):	it displays the channel status.
PW (ON/OFF):	the Power parameter shows the ON/OFF channel status. As this parameter is set ON, the channel is switched on (if the INTERLOCK is not active and if the channel is enabled either locally or remotely).
POn (EN/DIS):	Power-On option, which can be enabled or disabled. If this option is enabled, at Power-On or after a Restart each channel is restored in the same condition (defined by Power parameter) it was before the Power-Off or Reset. If this option is disabled, at Power-On or after a Restart all channels are off, independently from the condition in which they were before the Power-Off or Reset.
PDwn (Kill/Ramp):	Power-Down option, which can be set as KILL or RAMP. It affects the way the channels react at a Power-Off command caused by a TRIP condition. If the KILL option is selected, the relevant channel will be switched off at the maximum rate available. If the RAMP option is selected, the voltage will drop to zero at a rate determined by the value of the Ramp-Down parameter programmed for that channel.
TripInt	2N-bit word (Dec. 0÷2^2N-1), where N is the number of the board's Internal Trip Bus lines. Bits [0;N-1] allow the channel to sense the trip status from the corresponding lines when set to one; in the same way, bits [N;2N-1] allow the channel to propagate the trip status over the Trip Bus: bit N on line 0 and so on (see SYX527 User's manual)
TripExt	Must be set in the 0÷255 range. Bits [0;3] allow the channel to sense the trip status from the corresponding lines when set to one; in the same way, bits [4;7] allow the channel to propagate the trip status over the trip bus: bit 4 on line 0 and so on (see SYX527 User's manual)

Group Mode

This mode allows to set the parameters on a selection of channels. First, add channels to the Group logic, by using either the Selection box (see p.7) or the Select all button in the tool bar (see p.6):

The relevant rows become orange:



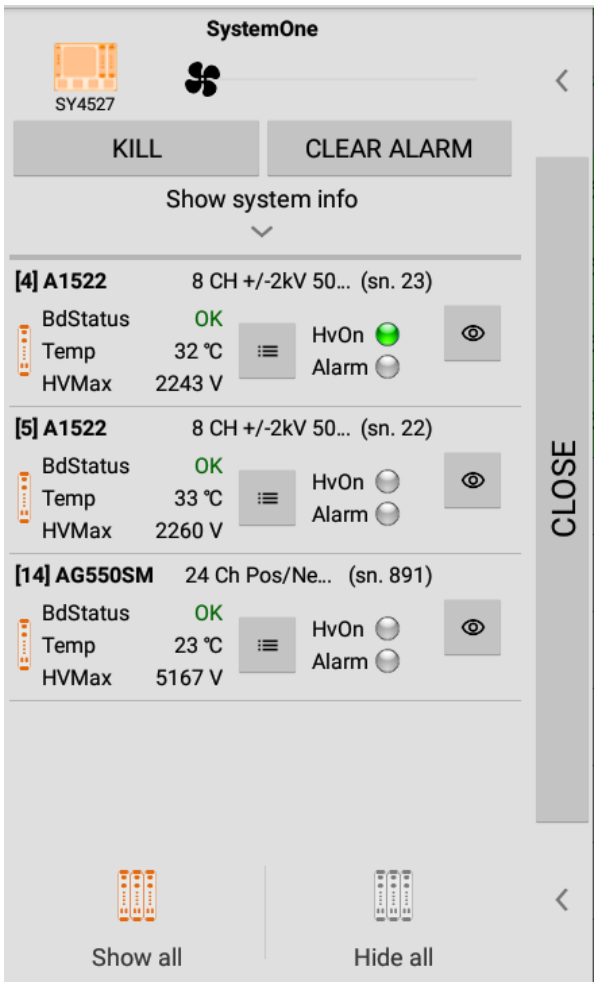
The Tool Bar will show the Group settings:

ON/OFF buttons allow to turn ON/OFF all selected channels;

The column button allows to access parameters settings, that will apply to all selected channels.

System and Boards Tab

On the left of the Channels tab, two thumbnails allow to view/hide the System and Boards Tab:

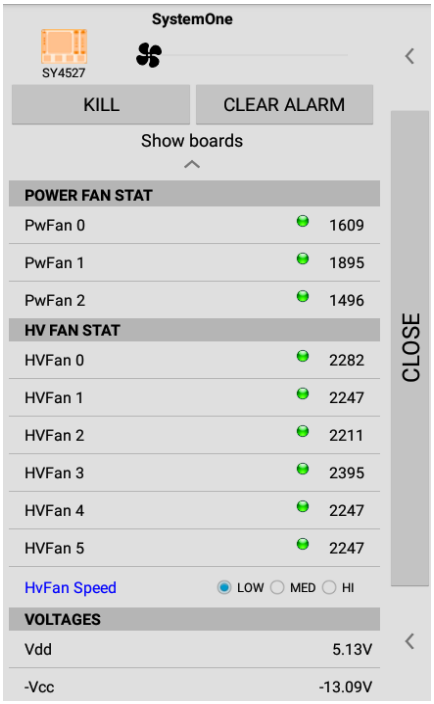


This tab shows the features of the boards present in the system;

The “eye” button allows to view/hide the corresponding channels in the channels tab; the “Show all” / “Hide all” options at the bottom allows to view/hide all channels.

The Parameters button allows to read the Board parameters.

The Show System Info thumbnail allows to monitor the status of the Mainframe:



The KILL and CLEAR ALARM buttons allow to:

KILL	As Kill is selected, the pop-up window shown below will appear: if you want to forward the KILL command, select the YES button
CLEAR ALARM	The Clear Alarm command allows to remove all the alarm conditions which appeared in the Channel Status column of the Channel Window. This operation automatically resets the alarm conditions without requiring the power on of the channels. Moreover, it sets the TRIP counter again to its initial programmed value, so that the TRIP counter will start again from the programmed TRIP value as soon as another Over Current condition occurs.

Other Options

Sessions

The Session option shows the parameters of the connected Users sessions

Upgrade

The Upgrade option allows to update the sotware version of the LCD TOUCH SCREEN; to do this:

- Connect the USB memory storage device containing the upgraded software version to the LCD TOUCH SCREEN
- Select “upgrade”
- Browse the updated software and select “upload”

About

Provides software version and agreement licence.

Log out

It allows to disconnect from the System.

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CAEN S.p.A.
Via Vetraia, 11
55049 Viareggio
Italy
Tel. +39.0584.388.398
Fax +39.0584.388.959
info@caen.it
www.caen.it

CAEN GmbH
Klingenstraße 108
D-42651 Solingen - Germany
Phone +49 (0)212 254 4077
Fax +49 (0)212 25 44079
Mobile +49 (0)151 16 548 484
info@caen-de.com
www.caen-de.com
CAEN GmbH

CAEN Technologies, Inc.
1140 Bay Street - Suite 2 C
Staten Island, NY 10305
USA
Tel. +1.718.981.0401
Fax +1.718.556.9185
info@caentechnologies.com
www.caentechnologies.com

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