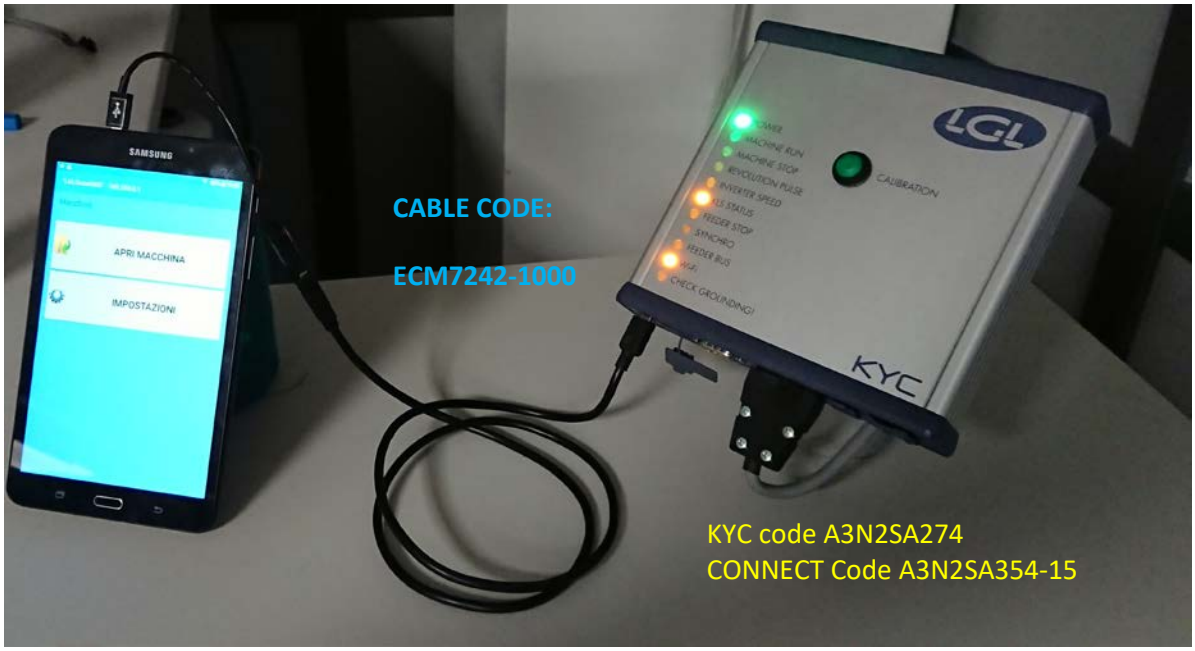
Index

1. General Information

This applet works with android system (from Android version 4.0).

WIFI connection

USB connection

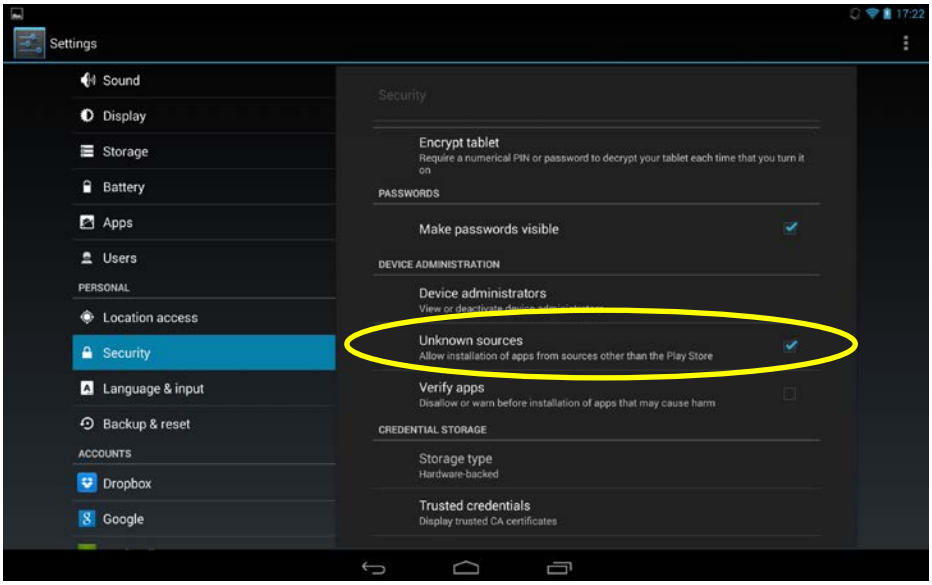


USB Connection

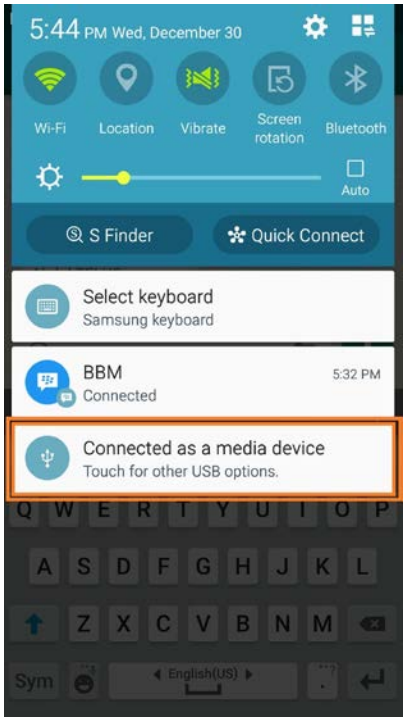
NOTE: The USBCONNECT device works with USB cable only.

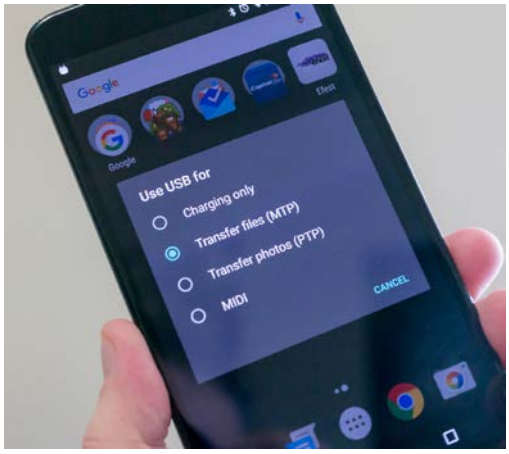
2. Installation

Warning: If an old version of the LGL app is installed, please uninstall it.
The files in the folder: Android/data/it.lgl.android/cache will be deleted, so if you saved files in this folder, copy them in another folder before uninstalling the app.
“Unknown sources” must be selected on the android device. (Settings → Security → Unknown sources Allow installation of apps from sources other than play store)



Connect your tablet with USB cable to the PC.





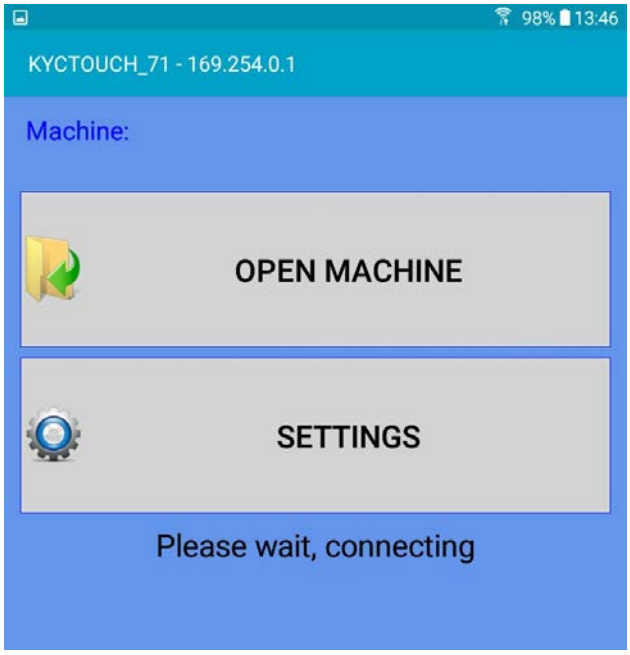
Copy xxx.apk file to your device (telephone, tablet, ecc.. ,download folder or any other folder), double click to install the application.

3. Start

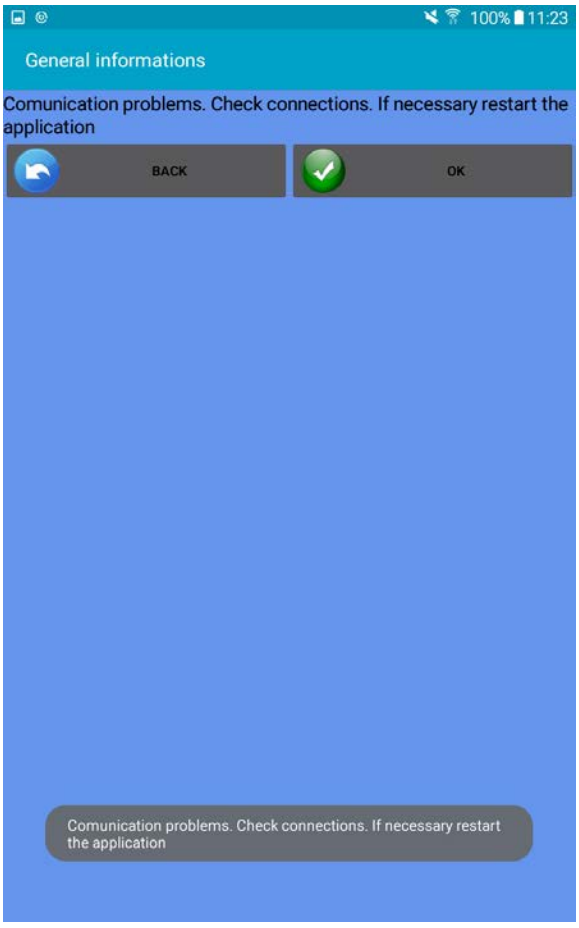
Press on LGL applet icon

HOME screen appears (pic. 1)

The following screen appears:

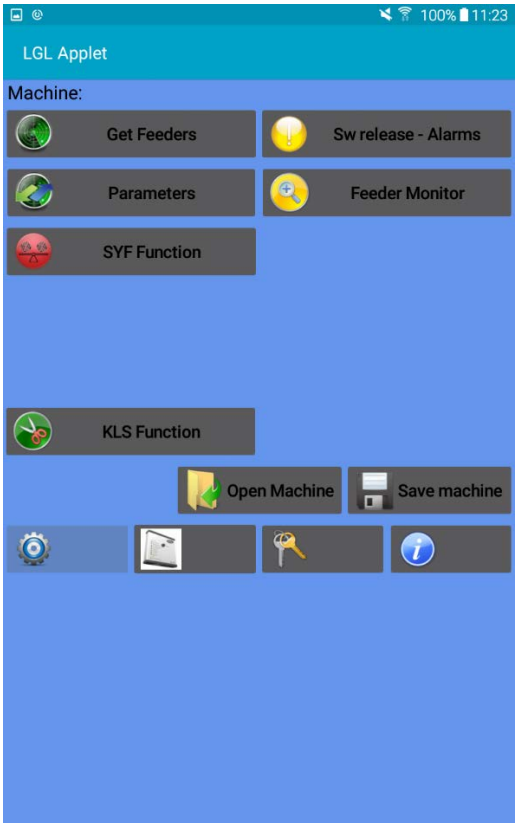


If the connection is successful, the screen on page 10 appears, and you can proceed directly to page 10. If, however, the connection does not occur, a second screen will appear after a few seconds:



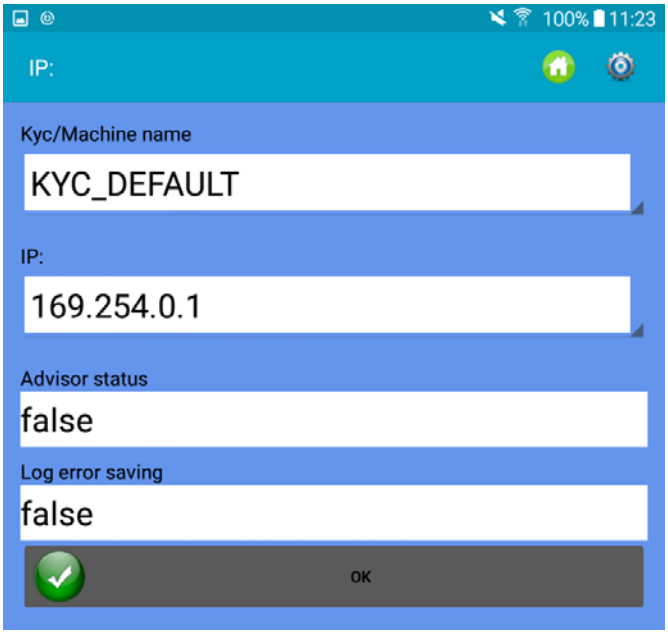
Press OK. The previous screen will appear.

Press SETTINGS.



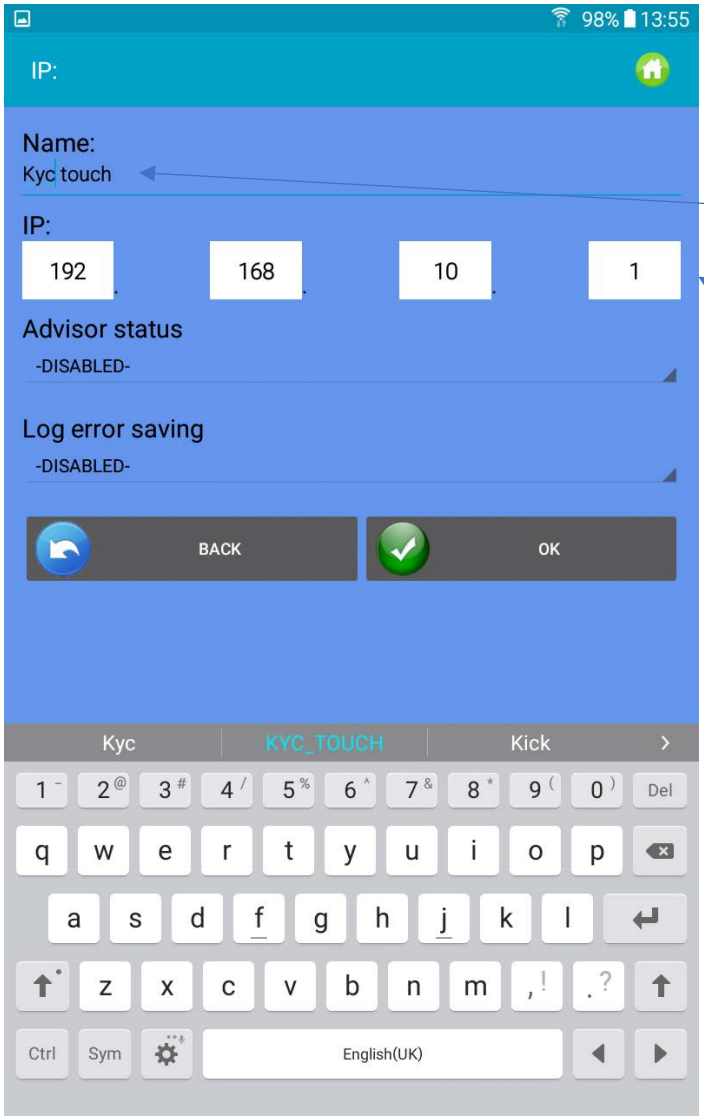
Not all icons appear on the screen because there is no connection between the app and the KYC device.

Press 



Press 

Press 



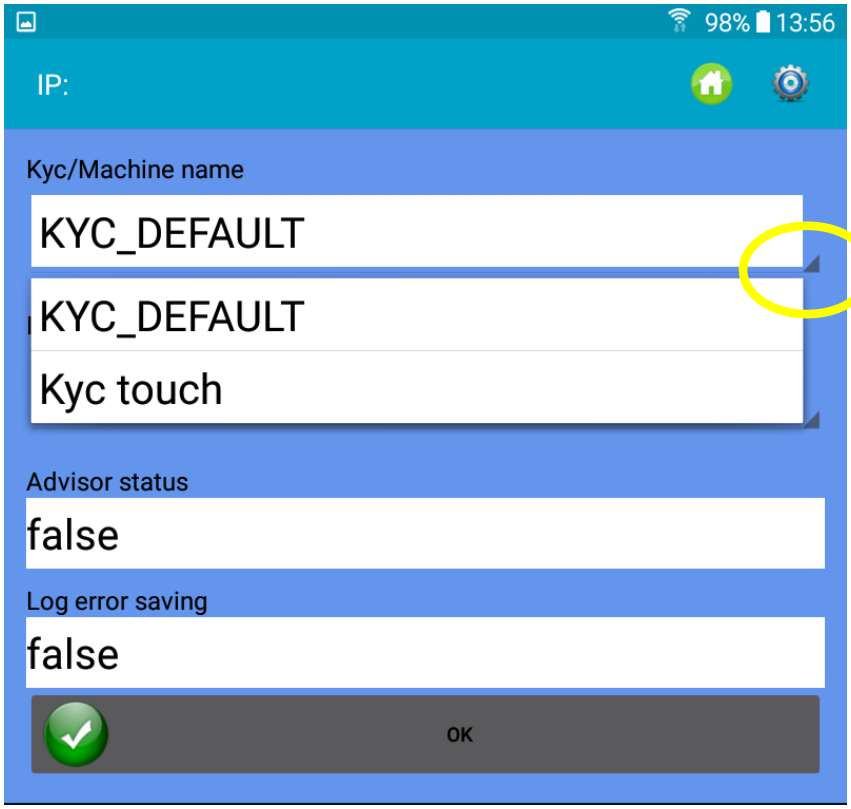
Enter:

1. The desired name for the KYC device you want to connect to.

2. The IP address of the KYC device you want to connect to.

3. Finally, press OK.

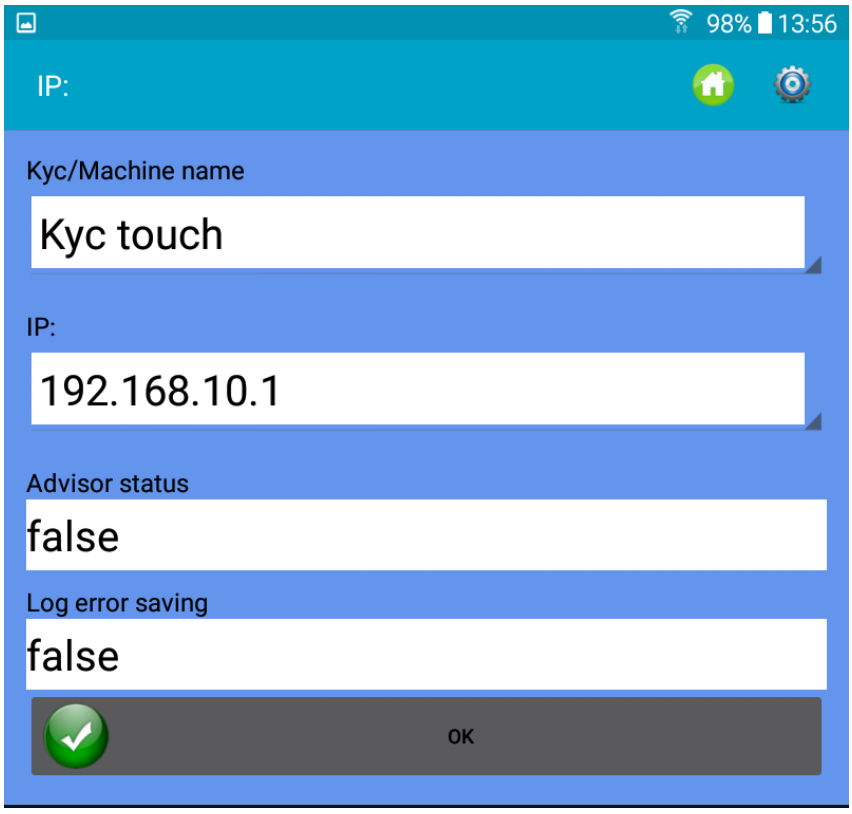
The following screen appears:



Press the drop-down menu in the yellow circle.

KYC_DEFAULT (which is the factory setting) and the newly created device (Kyc Touch in this case) will be displayed.

Select Kyc Touch: the newly set IP address will also appear (see the following screen).

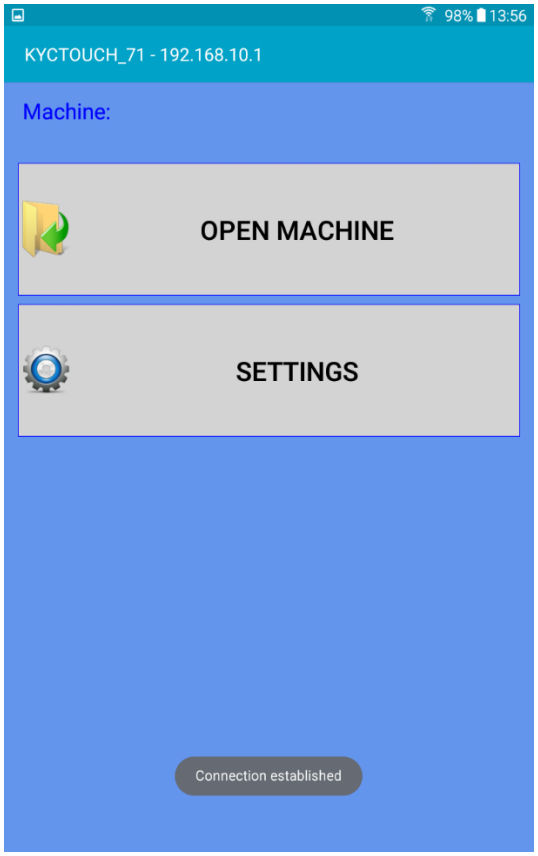


New IP address

Press OK.

Close the app.

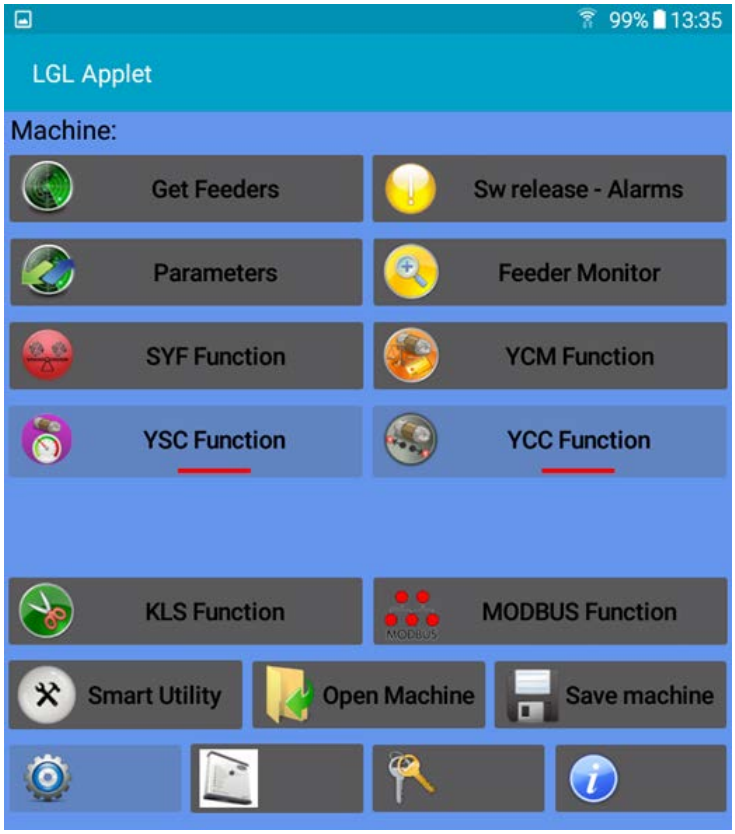
Reopen the app.



The correct IP address is now displayed at the top, and the connection is established. By pressing SETTINGS, all the icons of the app will be displayed.

To recall an existing machine configuration, press "Open Machine" (see section 11.2).

If no configuration has been saved yet, press "Settings". The following screen will appear.

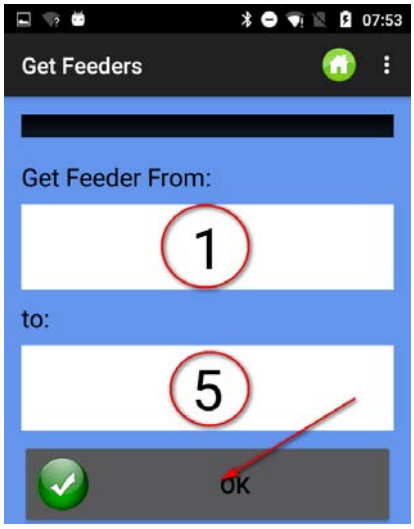


3.1 Get Feeders

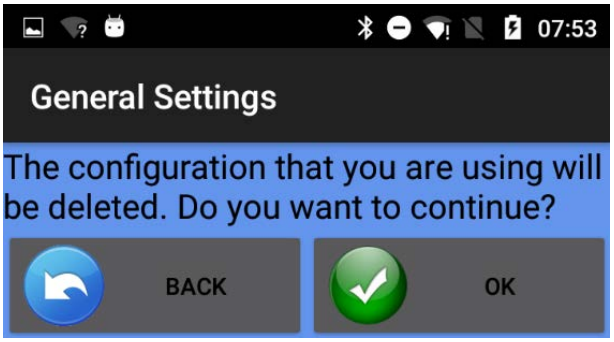
Press "Get Feeder" button to get communication with feeders, Pic.3 appears.

NOTE: If a configuration is already present, Pic.3a will appear. By pressing OK, the existing loaded configuration will be unloaded (it remains in the database ready to be loaded later) and the system will prepare to get the new configuration.

Insert values and press OK.

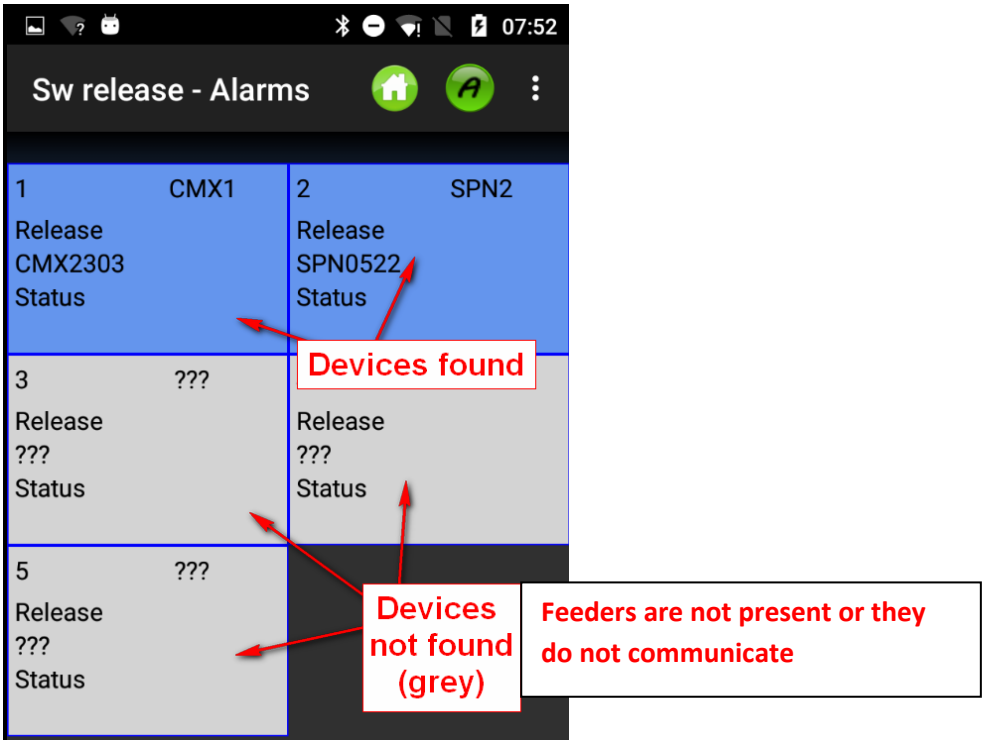


Pic.3



Pic.3a

As soon as the feeders scan on the bus is over, Pic.4 appears.



Pic.4

Press  to go back to home screen.

Press  to read software release for the selected feeders.

Press  to read alarms from the selected feeders.

Press  to search for connected feeders (Get feeders) .

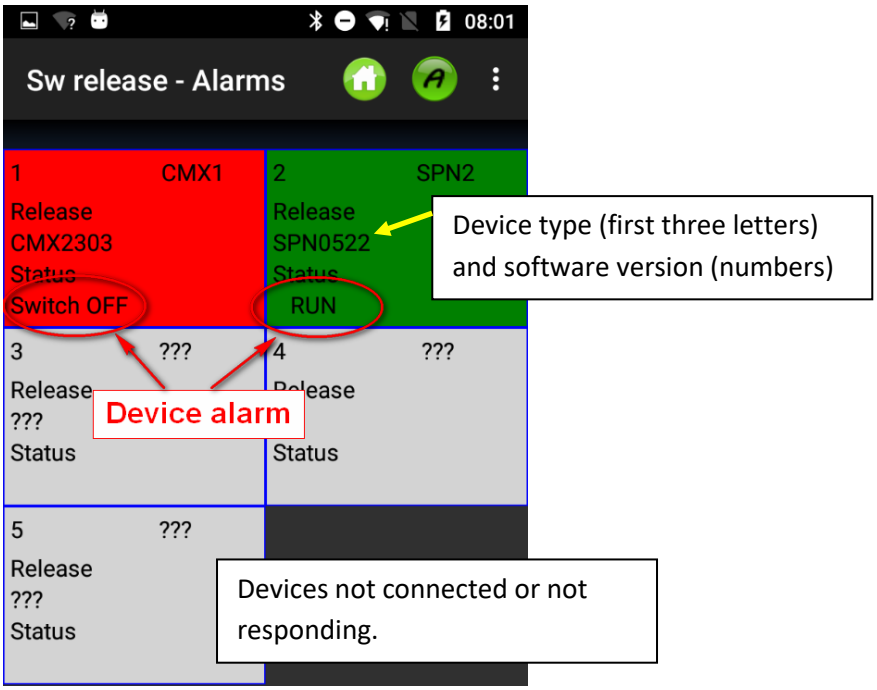
Press  to go to feeders parameters screen.

If some of the above icons do not appear, press  (MORE), a drop down menu will list all the functions.

3.2 Software Release and Alarms

It is possible to read software release and alarms of the selected feeder.

Press on “Sw release - Alarm” button on settings screen (Pic.2) to get to Pic.5.



Pic. 5

The background color of each square changes according to the alarm.

If status is “RUN” or “OK” the background color will be green, in the other cases it will be red.

Here below there is the alarm list for storage feeders:

ALARM	MEANING	ACTIONS
AC PWRFAIL	Phase number 2 (blue) and / or phase number 3 (yellow) are missing.	Check input voltage and feeder connection on the flat cable.
YARN BREAK	Yarn broken before the feeder.	Repair the yarn.
MOTOR LOCK	Yarn entangled somewhere between the bobbin and the feeder.	Check yarn passage between bobbin and feeder.
HIGH TEMPERATURE	Too high temperature on the feeder electronic.	1. Reduce input tension on the yarn. 2. Check that the flywheel turn freely. In case disassemble spool body and remove dust and/or yarn residual.
TIME ERROR	The feeder takes too much time to wind up the yarn on the spool body at the start up.	Stop the yarn on the spool body with one finger to help yarn reserve filling procedure.
VB MOT FAIL	DC voltage on the motor too low.	Check connections on the power transformer primary voltage winding.
AC1PWRFAIL	Phase number 1 (black) is missing.	Check input voltage and feeder connection on the flat cable.
SWITCH OFF	ON OFF switch in position OFF.	Switch ON the feeder (see also EN OFF STP parameter page pagina 22).
TENSMTRERR	The feeder can’t reach the preset tension value within a preset time (see also TensTMOut parameter page pagina 22).	Check the following: 1. The yarn is passing on the load cell. 2. The TWM brake and springs are suitable to reach the desired tension. 3. OFFSET of the load cell.
OYB ERROR	Yarn broken after the feeder (or yarn consumption too low).	Repair the yarn.
ELBRK OPEN	Brake open (ATTIVO).	Close it by pressing the related button located on the ATTIVO blck support.
PREWINDERR	Only during winding up phase of the spool body, during the start up or after a yarn break.	It tells that during spool body filling up, the machine cannot run.
I2T ERROR	I2T protection.	1. Reduce input tension on the yarn. 2. Check that the flywheel turn freely. In case disassemble spool body and remove dust and/or yarn residual.

Concerning other feeders models, please refer to the dedicated instruction manual

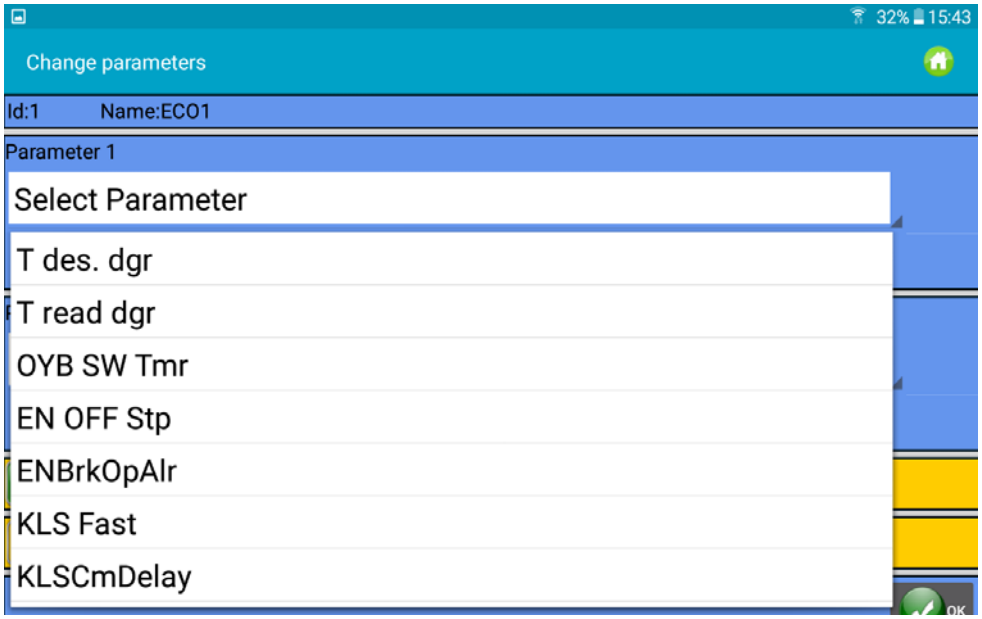
3.3 Parameters

After having performed “Get Feeder” function, you can read parameters of selected feeders.

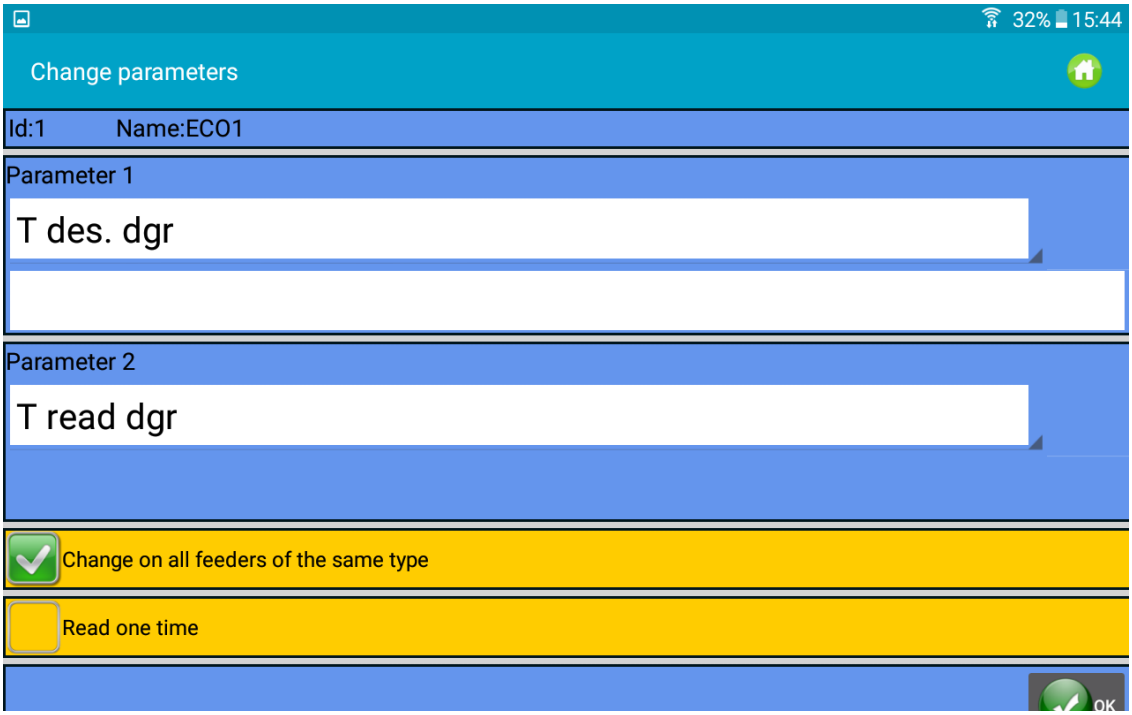
Press on “Parameters” button (in main screen Pic.2) to get Pic.6.

Pic.6

Press on “select parameter” to display the parameters list (below the one of a storage feeder):



In the example parameter Tdes. Dgr has been selected as first choice, and parameter T read dgr has been selected as second one. T des dgr is read/write, Tread is read only.



Select “Change on all feeders of the same time” to read the parameters from all feeders.
In case of “T des dgr”, it is possible to write a new value in the pertinent space below the parameter name.
Select “Read on Time” to avoid continuous reading. The parameter will be read one time and then the system will stop reading.
Press OK button.

1- ECO1 T des. dgr 28 T read dgr 11	2- ECO2 T des. dgr 24 T read dgr 23	3- ECO3 T des. dgr 28 T read dgr 20	4- ECO4 T des. dgr 24 T read dgr 10	5- ECO5 T des. dgr 28 T read dgr 10	6- ECO6 T des. dgr 24 T read dgr 26
7- ECO7 T des. dgr 28 T read dgr 18	8- ECO8 T des. dgr 24 T read dgr 16	9- ECO9 T des. dgr 28 T read dgr 8	10- ECO10 T des. dgr 24 T read dgr 17	11- ECO11 T des. dgr 28 T read dgr 15	12- ECO12 T des. dgr 24 T read dgr 19
13- ECO13 T des. dgr 28 T read dgr 8	14- ECO14 T des. dgr 24 T read dgr 12	15- ECO15 T des. dgr 28 T read dgr 15	16- ECO16 T des. dgr 24 T read dgr 20	17- ECO17 T des. dgr 28 T read dgr 16	18- ECO18 T des. dgr 34 T read dgr 26
19- ECO19	20- ECO20	21- ECO21	22- ECO22	23- ECO23	24- ECO24

The above picture shows a continuous reading of the two selected parameters. The movement of the green bar tells that the system is reading.

NOTE. TOP Menu items:

If “Read one time” is selected, the communication stops after one reading.

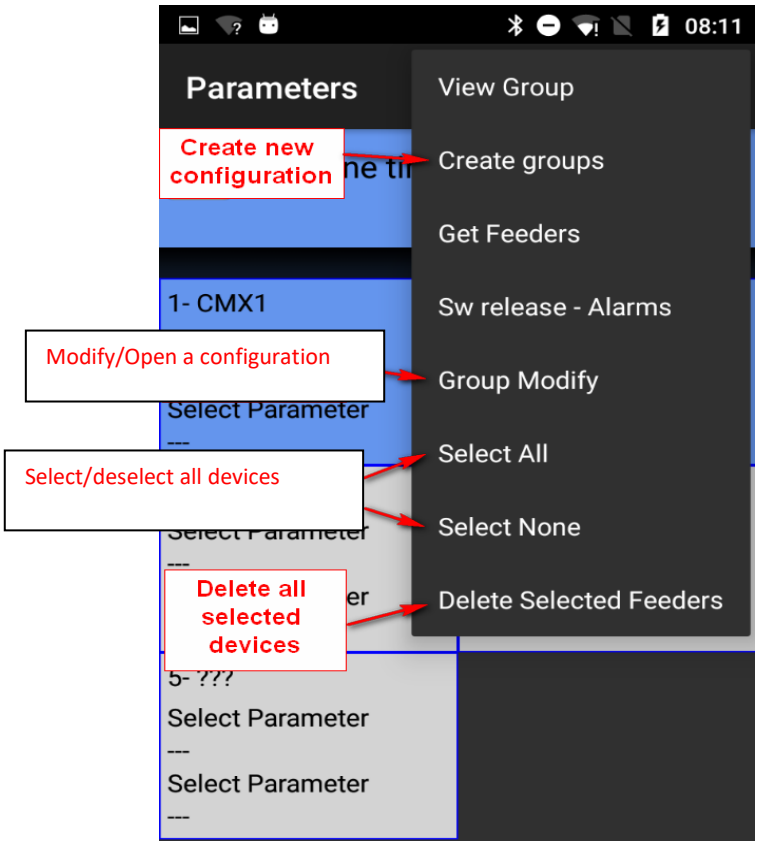
Press  to start communication (possible if there is at least one parameter selected).

Press  to stop communication.

Press  to create a new machine configuration (i.e. create groups of feeders according to the yarn, to be able to work on each group independent from the others).

Press  to select the feeders group to show (in case the machine configuration is already present).

If some of the above icons do not appear, press  or “MORE” to get further options (Pic.10).



Pic. 10

To select or deselect the feeder, press and hold 3 seconds the feeder square. If the background square becomes grey, the feeder has been deselected.

Here below a list of parameters of storage feeders (Ecompact and Ecopower) with their meaning:

Tdes dgr (read/write):
This is the desired tension in tens of grams.

Tread dgr (read only):
It is the actual tension read from the load cell of the ATTIVO (in tens of grams).

ENBrkOPAlr (read/write):
if it is =1, when the ATTIVO brake is completely open (open with the pertinent button on located on the ATTIVO support) the feeder send an alarm and the machine cannot start.
If it is =0, when the ATTIVO brake is completely open the feeder does not send any alarm and the machine starts.

EN OFF Stp (read/write):
if it is =1, when one feeder is switched off, it sends an alarm to the machine and the machine cannot start.
If it is =0, no alarm is sent and the machine will start.

Following parameters are available on the ECOMPACT from software ECM2012, on the ECO- POWER from ECO2018:
RotS/Z Src (read/write):
RotS/Z Src =1 the sense of rotation is set by DS1 on the feeder
RotS/Z Src =0 the sense of ratation is set by paramter RotS/Z

RotS/Z (read/write):
RotS/Z=1 S rotation
RotS/Z=0 Z rotation
Note: if RotS/Z src=1, RotS/Z loses any meaning.

SensFtcSrc (read/write):
SensFtcSrc=1 sensitivity of the feeder optical sensors is set by DS2 on the feeder
SensFtcSrc=0 sensitivity of the feeder optical sensors is set by parameter SensFtc

SensFtc (read/write):
SensFtc=1 standard sensitivity (yarn count > 40Den) SensFtc=0 high sensitivity for very fine yarns
Note: if SensFtc src=1, SensFtc loses any meaning.

See next chapter for KLS parameters OYB SW Tmr, KLSfast and KLSCmDelay.

The list of parameters for TWIN feeder is the following:
T des. Dgr (Read/write):
tension reference.
Tread dgr (read only):
It is the actual tension read from the load cell of the ATTIVO (in tens of grams).
YR-YarnRig (Read/write):
yarn rigidity.
For elastic yarns a low “YR” value is advisable, whereas for rigid yarns a high “YR” value is recommended.
Note: yarn rigidity may depend on yarn type and item pattern. This value can be set from 1 to 5. The default setting is 1.
BR-BrkRate (Read/write):
Brake rate. Motor brake strength when tension becomes 0. The greater their value, the greater the braking strength.
Minimum braking = 0
Medium braking = 1
Maximum braking = 2
YB-YnBreak
Yarn break alarm. When enabled, it stops the machine if the tension read falls below a given threshold, for a time calculated as a function of the machine speed.
0 = Disables the alarm.

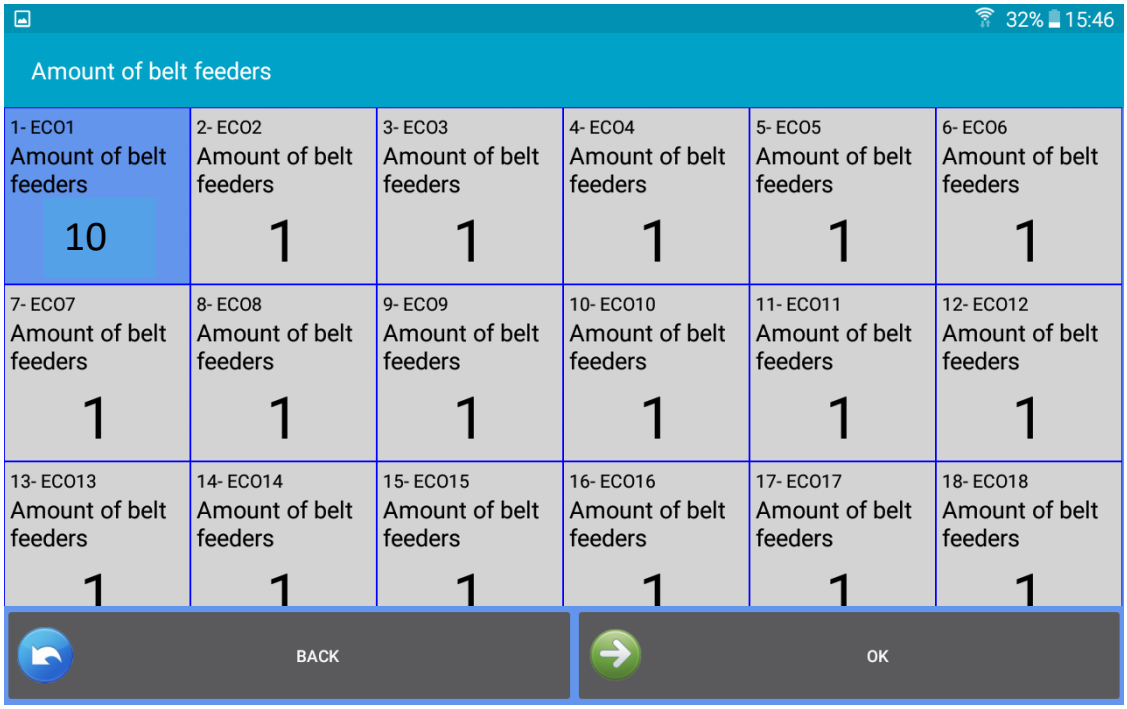
1 to 5 (positive values) = Automatic alarm reset
Da -1/-5 (negative values) = Manual alarm reset
N.B: the tripping time goes from slow to fast moving from 1 upwards, until 5.
TE-TensErr (Read/write):
it is the maximum yarn tension tolerance allowed during device operation, as to the set tension.
If one or both parameters between "TE-TensErr" and "TA-TimeAlr" is at 0, the alarm is disabled.
0 = disables the alarm.
If > 0 = enables the alarm with tension threshold (in tenths of a grams).
If < 0 = enables the alarm with percent threshold (%) of the reference tension (0% to 100% of the reference tension).
TA-TimeAlr (Read/write):
Minimum time during which the tension of the yarn must exceed the set tolerance to generate the "Tension Error" alarm.
If one of the two parameters between "TE-TensErr" and "TA-TimeAlr" is at 0, the alarm is disabled.
0 = disables the alarm.
If > 0 = enables the alarm with Automatic Reset. The alarm resets automatically when the tension of the yarn ranges within the tolerance thresholds.
If < 0 = enables the alarm with manual Reset. Once occurred, the alarm can only be reset by the user, by pressing the blue button.

The list of parameters for SPIN1 feeder is the following:
T des. Dgr (Read/write):
tension reference.
Tread dgr (read only):
It is the actual tension read from the load cell of the ATTIVO (in tens of grams).
YR-YarnRig (Read/write):
yarn rigidity.
For elastic yarns a low "YR" value is advisable, whereas for rigid yarns a high "YR" value is recommended.
Note: yarn rigidity may depend on yarn type and item pattern. This value can be set from 1 to 5. The default setting is 1.
BR-BrkRate (Read/write):
Brake rate. Motor brake strength when tension becomes 0. The greater their value, the greater the braking strength.
Minimum braking = 0
Medium braking = 1
Maximum braking = 2
TE-TensErr (Read/write):
it is the maximum yarn tension tolerance allowed during device operation, as to the set tension.
If one or both parameters between "TE-TensErr" and "TA-TimeAlr" is at 0, the alarm is disabled.
0 = disables the alarm.
If > 0 = enables the alarm with tension threshold (in tenths of a grams).
TA-TimeAlr (Read/write):
Minimum time during which the tension of the yarn must exceed the set tolerance to generate the "Tension Error" alarm.
If one of the two parameters between "TE-TensErr" and "TA-TimeAlr" is at 0, the alarm is disabled.
0 = disables the alarm.

3.3.1 Machine Configuration: Create/View groups

The target of this function is to allow the operator to work on groups of feeders instead of single feeders. In this way a parameter change could be performed on the feeders of a group all together at the same time.
Moreover the yarn consumption utility, which gives the yarn composition of a pattern, is based on feeders groups, where each group processes one specific yarn.

From main menu click on “Parameters” button and then on  icon or “Create groups”:



Pic.12

The first operation to perform concerns the belt driven feeders on large diameter machines (picture 12). There must be some belt driven devices installed on the machine together with LGL feeders, when the belt driven devices are involved in the pattern, the fabric composition is influenced by these devices, and so they need to be included in the system.

If this function is not required, press  without selecting any device.

To include the yarn consumption coming from the belt driven devices into the system, one LGL feeder (with or without ATTIVO) needs to be installed at the entrance of one belt driven feeder involved in the pattern. The system multiplies the yarn consumption of this LGL feeder by the number of belt devices involved in the pattern.

Starting from picture 12, select the feeder address which is deputed to calculate the yarn consumption of the belt driven feeders (i.e. the LGL feeder where the yarn going out of the feeder enters one belt feeder).

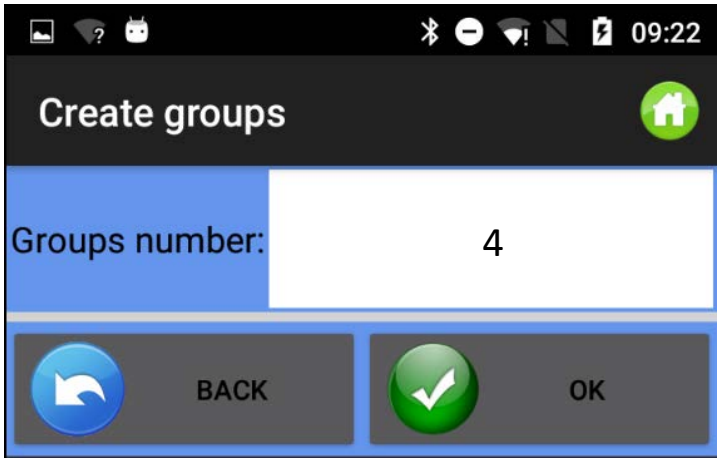
In Picture 12, feeder number 1 is placed at the entrance of one belt feeder, and the amount of belt feeders involved into the pattern is 10. The yarn consumption measured by feeder number 1 will be multiplied by 10, to get as a result the total yarn consumption of 10 belt feeders.

By pressing the square, select the belt feeder; moreover the following screen appears:.

Pic.13

Insert the number of the belt driven feeders involved in the pattern, then Press  .

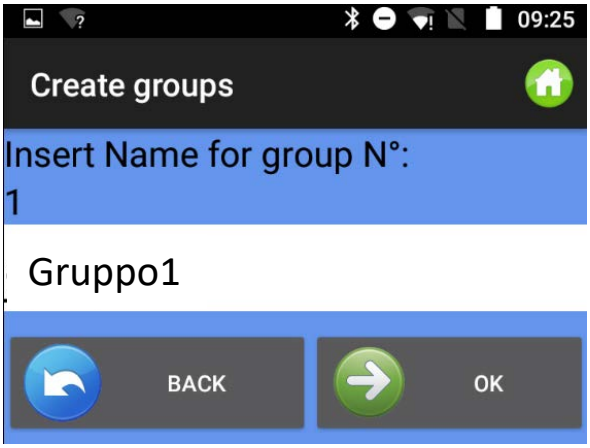
At the end press  , to continue the feeders groups creation.



Pic.14

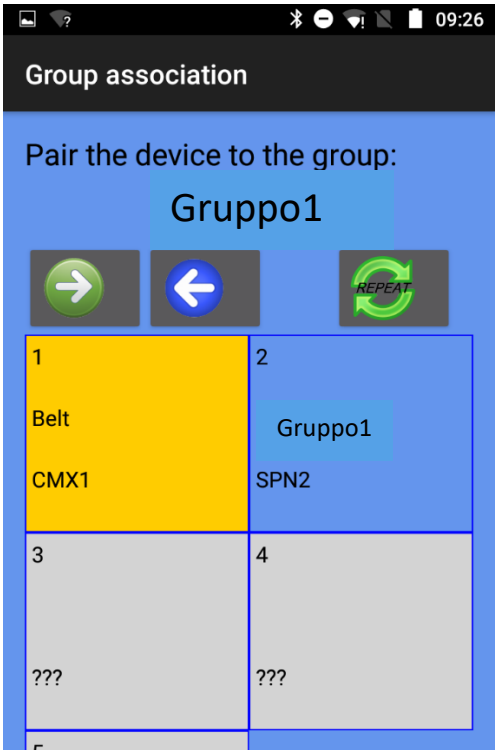
Insert the groups number and press  . Normally each yarn corresponds to one group. So the number of groups to insert is equal to the number of different yarns present in the pattern.

Pic.15 appears for each group, where the operator has to insert the specific group name (it can be the name of the yarn for example):



Pic.15

Press  to insert next group name or  to re-insert the previous group name. After the name of the last group has been inserted, Pic.15 disappears, leaving the place to picture 16:



Pic.16

On top of the picture there is the name of the group ("gruppo1" in this case); touch the feeder square to include the first feeder into this group. Background color changes, and each group is characterized by a different background color.

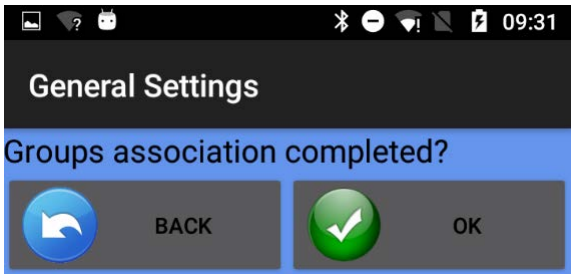
It is not necessary to touch all feeders which belong to one group in order to include them in the group. There is the chance to create the sequence with the first feeders of each group and then use the repeat  command.

Press  icon, in order to repeat the sequence on all the remaining feeders.
For example the below picture shows 4 groups:
Gruppo1: feeder 1, feeder 5, feeder 9 and so on. Color=yellow
Gruppo2: feeder2, feeder6, feeder10 and so on. Color=light blue
Gruppo3: feeder3, feeder7, feeder 11 and so on. Color=green
Gruppo4: feeder4, feeder8, feeder 12 and so on. Color=Blue

Pic 17

Press  for the next group. By  you can re associate devices to previous groups.

When this operation is over, press  untill Pic. 18 appears.

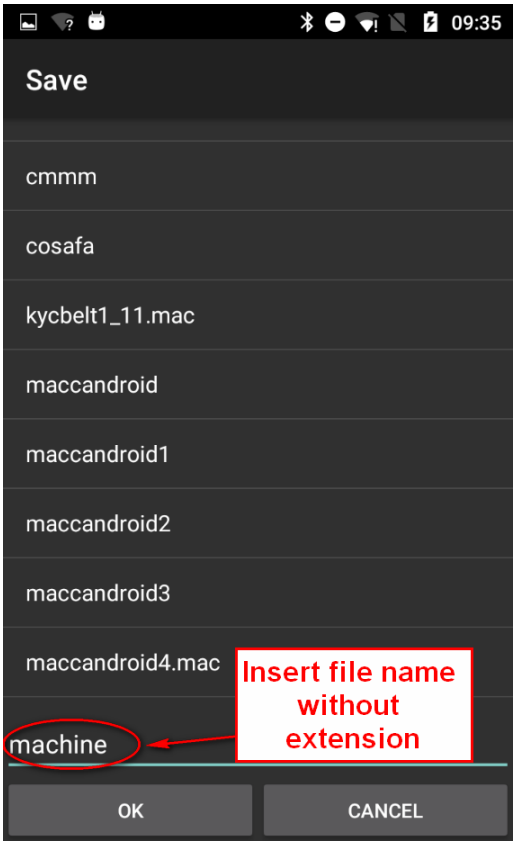


Pic.18

Press  to confirm or  to return to group association (Pic.16)

In order to view all feeders or each group, use  button.

In order to save the just created draw configuration, go back to HOME and press  “Save Machine”. Pic.19 appears



Pic.19

Insert configuration name and press OK. The machine configuration file is a .mac file that can be stored in the memory of the tablet or of the phone and recalled later. This file saves the groups created for a specific pattern. We suggest to give the machine configuration the same name of the pattern it has been created for, and store it in a database.

4.YCM function (large diameter machines)

YCM (yarn consumption) system is able to supply the amount of yarn consumed by each feeder during one pattern.

By inserting yarns types and counts, it is possible to get the fabric composition easily.

As the system calculates yarn consumption based on revolution, it requires a revolution signal coming from the machine.

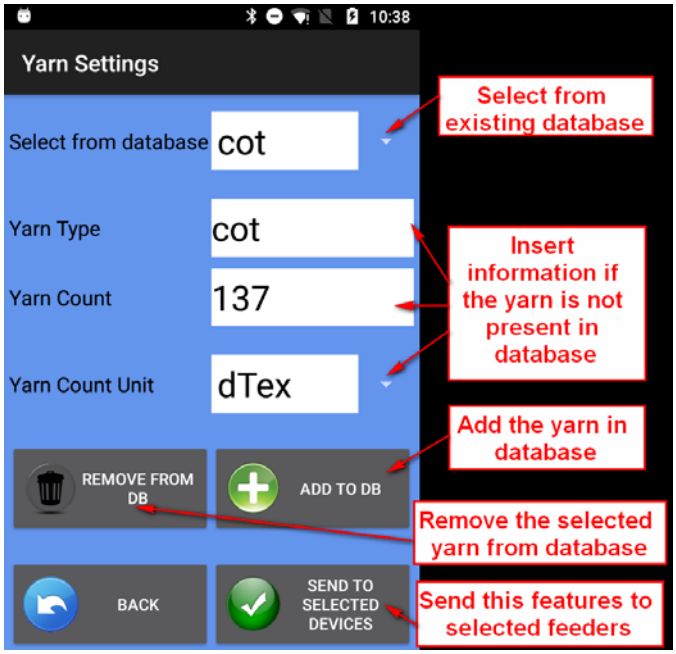
From Home screen click on  "YCM function".

Pic.20

Click on  to insert measurement unit, machine revolution and amount of machine needles (Pic.21)

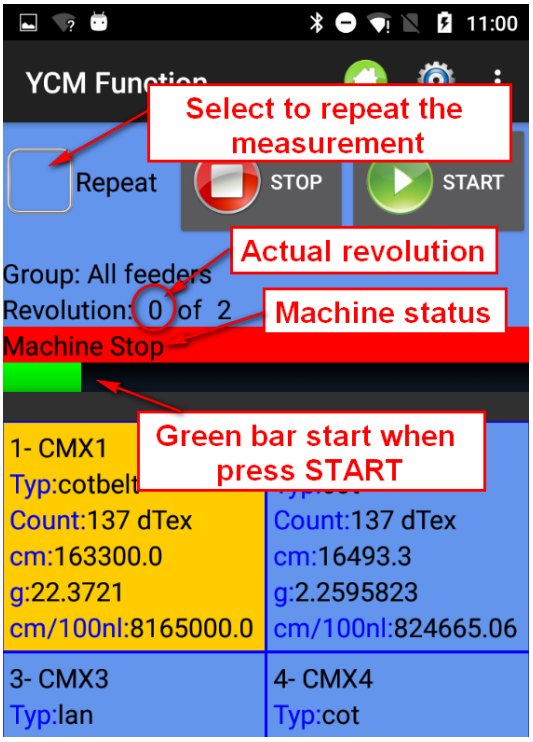
Pic.21

Click on  to type yarn features for all selected feeders (Pic.22)



Pic.22

Press  "Start" (Pic.23)

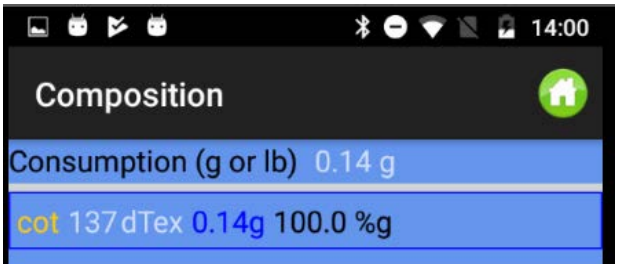


Pic.23

When YCM is over Pic.24 appears:

Pic.24

By pressing  button, the fabric composition will appear.



Pic 25

In case groups of feeders have been created, it is possible to assign different yarn types and counts to different groups.

Before Pressing on  to type yarn features, press “MORE” and “view group”.

Select the group to display and press  to type yarn features for the group.

After all yarns have been inserted, by choosing “all feeders” the display will show all feeders associated to the yarn type and count. By pressing  Start, the system will start counting. Of course the machine must run.

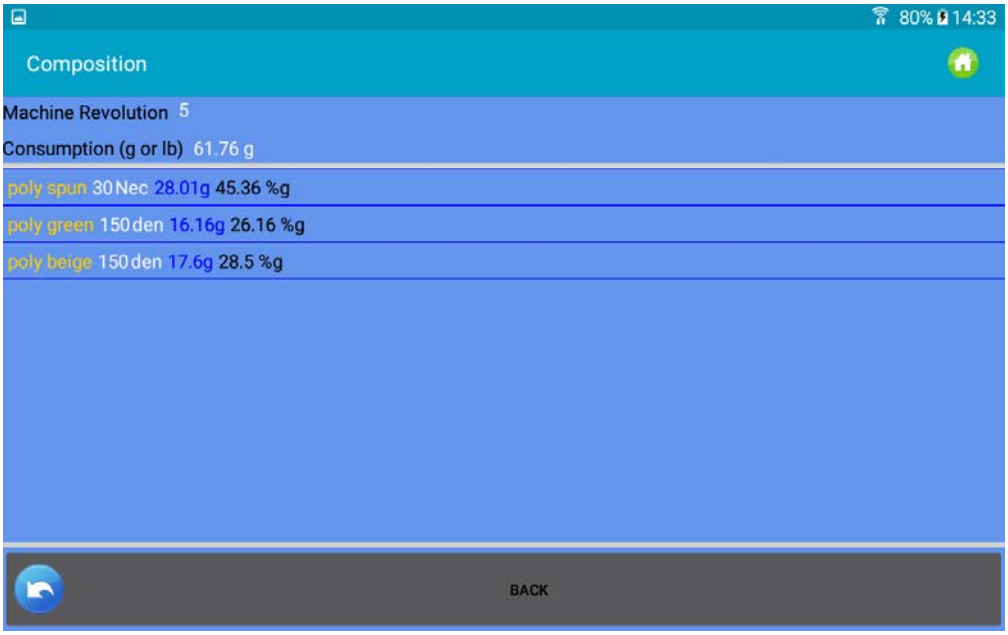
Below there is an example of the system working (green bar moving). 10 revolutions have been selected. Revolution 4 out of 10 has been reached.

When the system reaches the 10 programmed revolution, the following picture displays the results.

Pic28

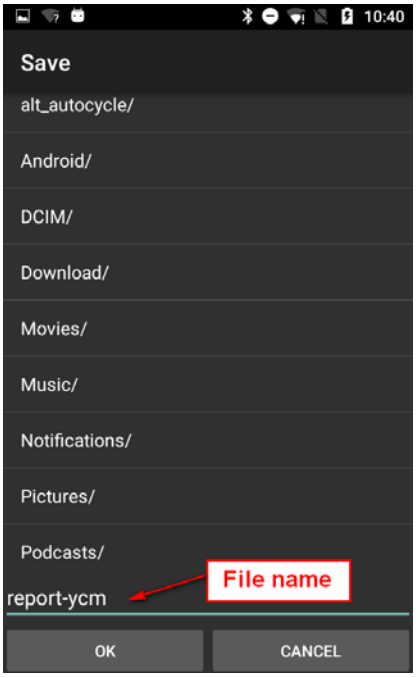
Press  button to get the composition.

Below an example of composition



Pic 28a

It is possible to save the report in a file. Press on  .



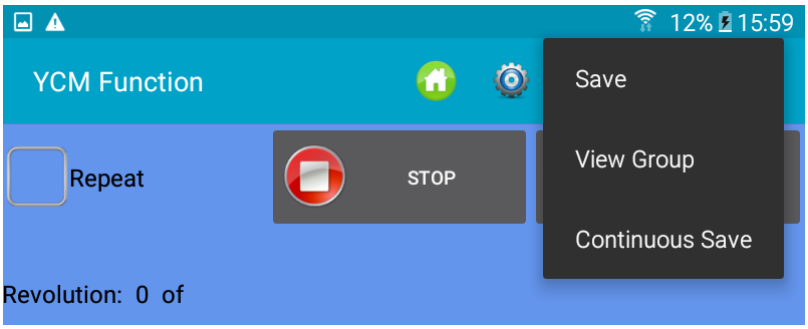
Pic 29

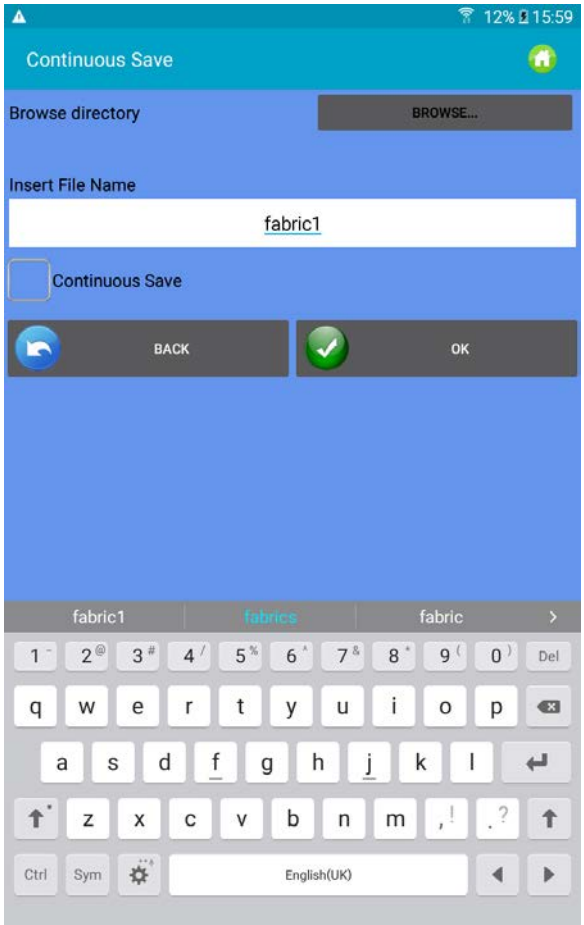
Insert file name and press  .

The saved yarn consumption information can be included in a database and opened with MICROSOFT EXCEL or similar. This information is very useful to calculate the cost of the pattern, as it contains the information in cm and in grams about the yarn consumed by each feeder, including the belt driven feeders. Moreover the file gives the information about the pattern composition (yarn and percentage in weight).

If in addition to the fabric cost, the interest is to keep the yarn stock under control, the next function can be important.

Before launching the yarn consumption count, select REPEAT, MORE and Continuous savings (see below):





Insert the file name and the directory and press OK.

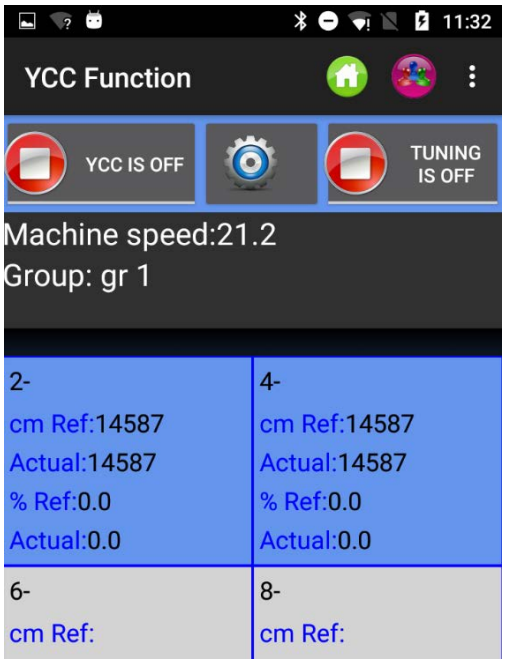
The system calculates the yarn consumption of the article, and when the programmed revolutions finish, it saves the yarn consumption in the file. Then the yarn consumption calculation re starts and at the end it saves another file in the same folder.
The new file will have the same name (“fabric1” in this case) but the date and the hour the moment it has been saved will be added to the file name.

Target of this function is to monitor the stock of yarn, measuring the yarn consumption of all the fabrics produced by the machine.

5. YCC function (large diameter machines) – password required

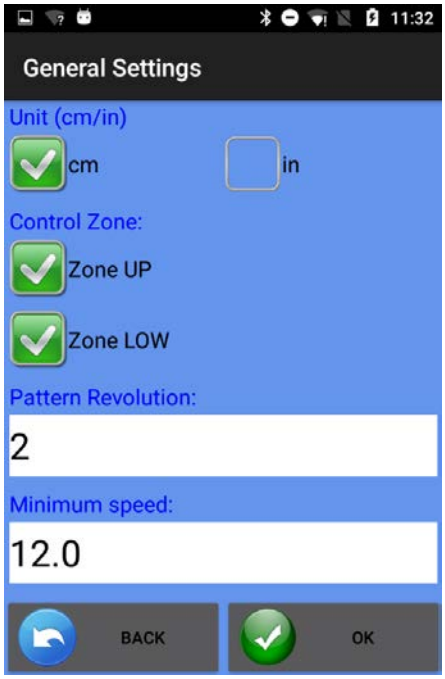
YCC SYSTEM checks yarn consumption of each feeder during one pattern, and stops the machine if the yarn consumption is out of tolerance with respect to a reference value stored in the memory of each feeder.

1. Select  From Home screen and insert password yccvisibile.
2. On Home screen press  "YCC function" button.



Pic.30

3. Select feeders groups by using  button
4. Press  to insert general settings for YCC function. Pic.31 appears



Pattern revolution: insert the number of pattern revolutions

Minimum speed: Insert a minimum speed below which YCC system is not working.

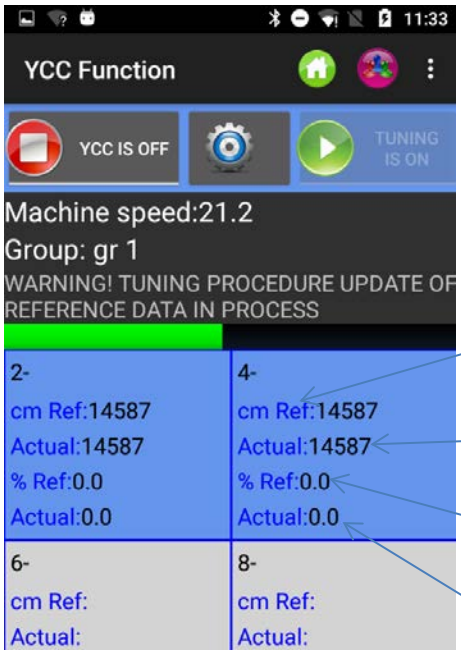
Zone UP/Zone LOW: Enable Alarm if the actual consumption value is higher/lower than the reference value +/- tolerance (%ref).

Pic.31

Insert all information and press  .

5. Press 

to start tuning. Pic.32 appears:



Reference yarn consumption: automatically set at the end of tuning

Present yarn consumption: refreshed after each revolution

Reference threshold: to be set by the operator

Actual threshold percentage: refreshed at each revolution. RED if out of tolerance,

Pic.32

Tuning will last for the number of revolutions set in “pattern revolution” tab of the above general settings screen (pic.31). During tuning, the warning message in pic32 appears and the system is not active.

NOTE: UP control and LW control can also be selected later, when tuning is over.

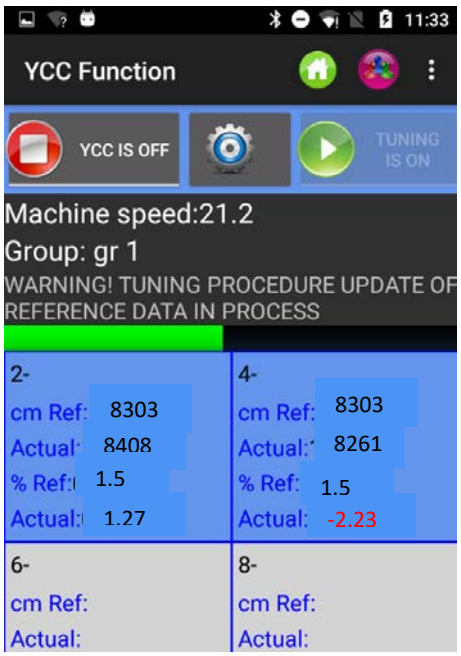
NOTE: If tuning has already been done, in order to start YCC press 

, the green bar starts moving and the YCC button turns to be 

.

6. At the end of tuning, the warning message automatically disappears, the tuning button turns to be 

. The YCC gets active and it starts monitoring the pattern.



Pic33

Reference percentage %Ref. : tolerance percentage. This value must be set by the operator.
By writing the number directly in the square of the feeder and pressing ENTER, the value is sent to each selected feeder.
If UP control tag is selected in the “YCC general settings” screen, the system will stop the machine if ACTUAL value is higher than cm Ref + %Ref. Similarly, if LW control tag is selected in the “YCC general settings” screen, the system will stop the machine if ACTUAL value is lower than cm Ref - %Ref.
In square number 2 the reference is 8303cm, the actual measurement is 8408cm. The tolerance percentage is 1.5%.
The difference between the actual and the reference value is 1.27% (the actual value is 1.27% higher than the reference). 1.27% is lower than 1.5%, so the machine does not stop.
In square number 4 the difference between actual and reference value is -2.23% (the actual value is 2.23% lower than the reference).
2.23% is higher than 1.5%, so the value is written in red and the machine stops (if the LW control tag has been selected).

To stop the YCC system, press 

.

Press  to save settings in KYC device

Press  to save file settings in a file (Insert file name and press OK).

Press  to recall file settings from files stored in the database.

6. YSC function (large diameter machines, storage feeders)

YSC is a function which allows the feeder equipped with ATTIVO to control the yarn consumption reference (yarn consumption mode) during plain knitting fabric, and the tension reference (tension mode) during Jacquard patterns. During yarn consumption mode each feeder keeps its yarn consumption reference constant by changing tension values. During Tension mode each feeder keeps its “T des dgr” parameter (desired yarn tension) constant.

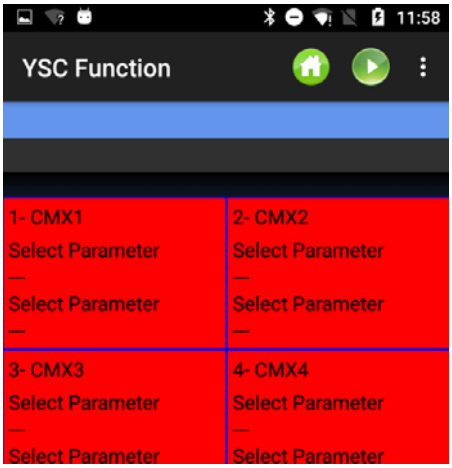
Feeders can automatically pass from one mode to the other when the pattern passes from plain to jacquard and viceversa.

Required software:
KYC: from KYC_V1.20 onwards
Storage feeders CAN BUS DC versions (Blue flat cable):
ECOMPACT from SW ECM2010 onwards
COMPACT: SW CMX23XX
ECOPOWER: From SW ECO2020 onwards
NOTE: this function is not available on AC feeders (grey flat cable)

Steps to be done to start the function

The pattern must be plain, all feeders of the same group must consume the same amount of yarn.

1. Select  from Home screen and insert password yscview.
2. On Home screen press  “YSC function” button.

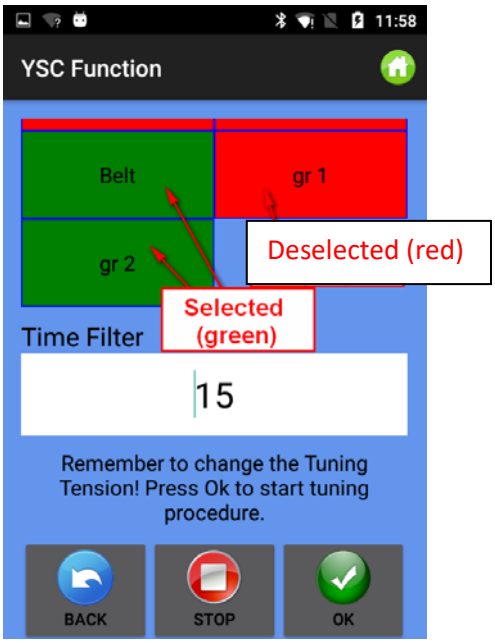


Pic.34

Menu item Pic.35

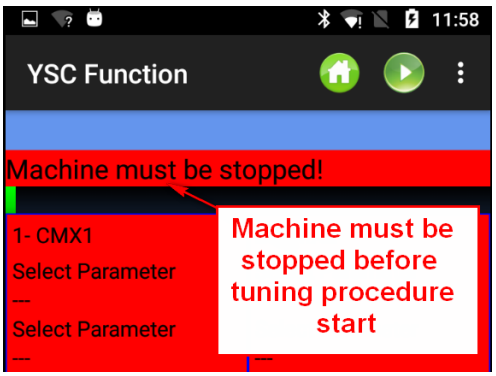
Pic.35

Press Tuning or  to start “tuning procedure”. Pic.36 appears.

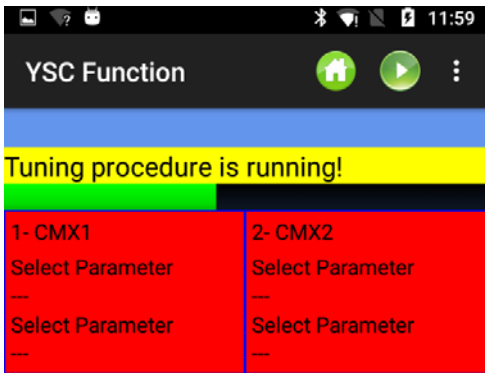


Pic.36

If there are some groups, the groups names appear in the window (above there are three groups, belt, gr1 and gr2), and the operator has to select the ones where he needs to enable the yarn consumption mode. Press and hold to select/deselect a group. This mode will be active only on the selected groups. The other groups will keep working in tension mode.
Insert time filter (leave 15seconds, which is related to the tuning time)and press OK to start tuning procedure. (Pic.37). If time filter is 15, the tuning procedure will last around 30seconds.
If the machine is running, the next message appears:

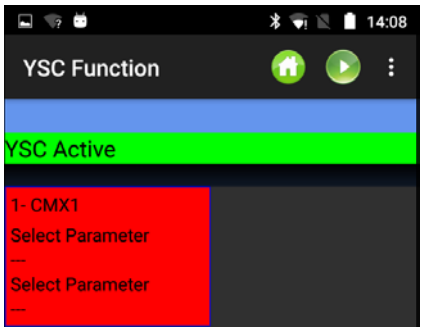


Stop the machine and enable tuning procedure when the machine is standing.



Pic.38

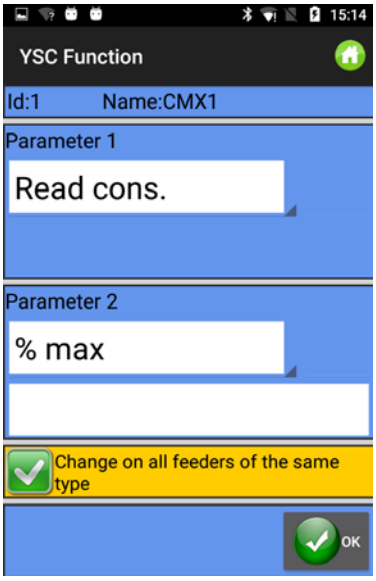
When tuning is terminated, YSC is active (Pic.39).



Pic. 39

The tuning procedure is required to allow each feeder to learn a speed reference which corresponds to a specific real time yarn consumption.

The yarn consumption reference is the same for all feeders belonging to the same group, as this value is an average value calculated by the KYC device on the base of the values received by each feeder of the group.
When the YSC function is working, the desired tension (T Des dgr parameter) will be modified by each feeder in order to keep this yarn consumption reference constant.
T Des dgr is available in the “parameters” screen (paragraph 3.3)
In order to see one specific parameter (and read or write its value) press on the feeder square (Pic.40):



Pic.40

YSC parameters and their meaning

Read Cons: this is the actual yarn consumption (read only, in cm/2s).

Desired Cons: this is the desired yarn consumption set during tuning procedure (read/write, in Cm/2s). Each feeder keeps this parameter constant by modifying the desired tension. Of course also Tdes parameter can be displayed (by going back to Group tag) in order to see how much this parameter is changing during time.

T.min: minimum tension permitted by YSC system (default 2g). If the yarn tension Tdes gets to Tmin during YSC working, YSC stays active, even if the tension won’t go below Tmin.

T.max: maximum tension permitted by YSC system (default 7g). If the yarn tension Tdes gets to Tmax during YSC working, YSC stays active, even if the tension won’t go above Tmax.

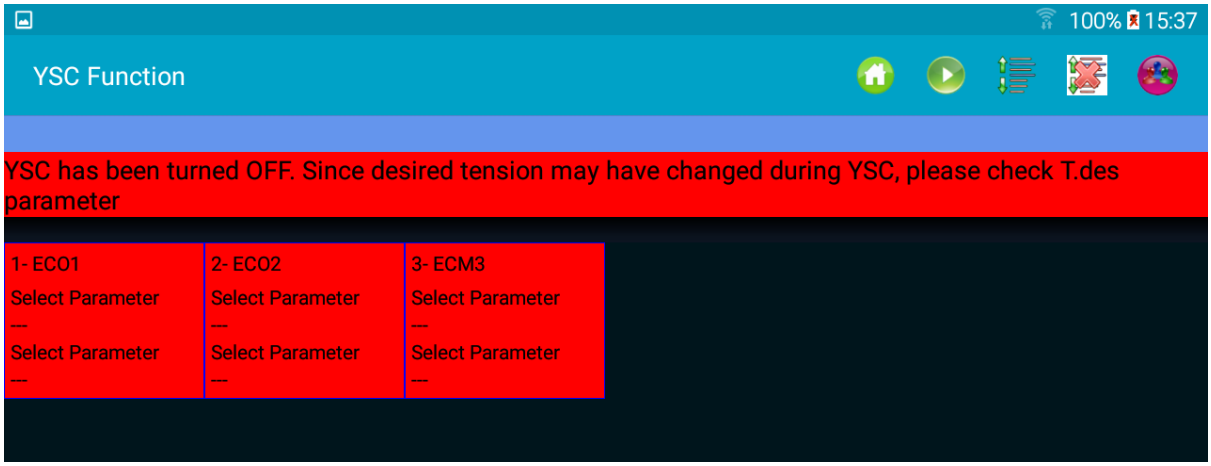
Both T.min and T.max can depend on the mechanics of the output brake. In fact the output brake could not be able to achieve a too high or a too low tension.

%max: maximum variation of real time yarn consumption above which YSC system is disabled. This parameter defines a limit between a plain area and a jacquard area of the same pattern. When the yarn consumption overcomes %max, it means that the pattern is no more plain and that feeder must

work in tension mode. The tension each feeder adjusts is the very last it was adjusting during consumption mode (default 10%).

Tuning des t.: tension of the ATTIVO system during tuning procedure. During tuning procedure ATTIVO is working in tension mode, and this is the tension at which the system record the yarn consumption parameters.

To stop YSC function , press  . The following picture appears:



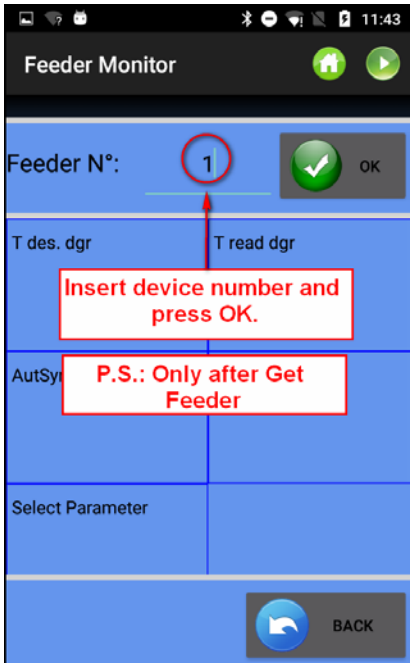
All feeders squares become red. Please read carefully what is written in the message above. In fact Tdes parameter can be very different from the set value when YSC started.

If not changed manually, when YSC system is turned off Tdes parameter keeps the very last value YSC system sets in each feeder.

7. Feeder monitor

This function allows to see the complete parameters table for one specific feeder. In the normal visualization only two parameters at a time are visible.

From HOME page press  “Feeder Monitor” . Pic. 42 appears:

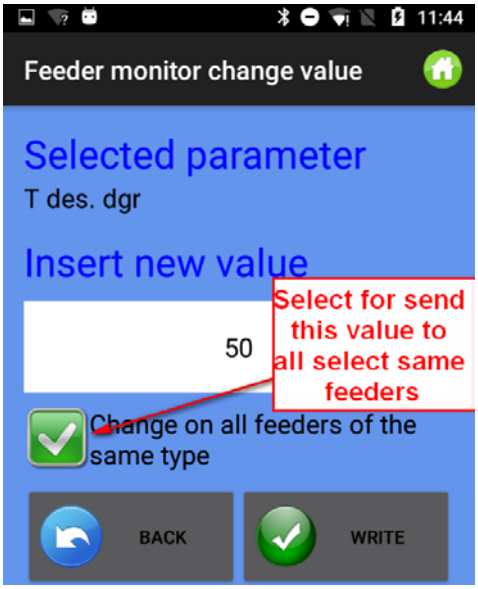


Pic.42

Insert device number and press OK. Press  to read parameters value.

Pic.43

To change parameters values, click on each square. The following picture appears:



Pic.44

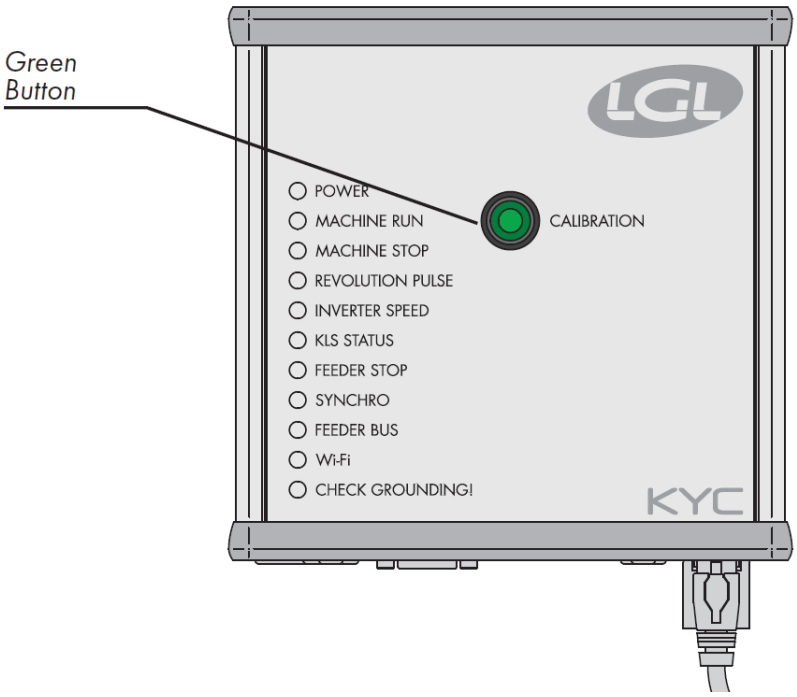
Insert new value and press  “Write”.

8. KLS function (Large diameter machines)

KLS system allows the feeder to stop the machine without using a sensor, in case of an output yarn break event. If the yarn gets broken between the feeder and the machine, the feeder will be able to detect the event and stop the machine.

This system requires some signals coming from the machine: RUN signal telling when the machine is running and INVERTER SIGNAL to give a machine speed reference.

Note: if the yarn gets broken before the feeder (between the bobbin and the feeder), this system is not involved. There is another sensor on the feeder itself detecting this case.



Pic.45

Once the installation is finished and the machine is ready to start, perform the following learning procedure:

1. Press the button for the learning procedure until all feeders lights turn on (approximately 1s). Feeders will keep their lights on while the machine stands.

2. Start up the machine with working speed. All lights turn off.

3. Run the machine until the end of the pattern.

4. At the end of the pattern stop the machine.

When the machine stops, the feeders store the timing in their memory. Now the feeders are ready to check yarn breaks between feeder and machine.

This procedure must be performed every time the pattern changes. This procedure does not have to be performed when the machine speed changes and the patterns does not change.

Note 1: The machine has to run for at least 8 seconds. If for any reason the machine stops earlier than 8 seconds, re start the machine. If the machine runs for more than 8 seconds, but it stops before the end of the pattern, feeders will be ready to check output yarn breaks. In any case if you get false stops, repeat the procedure being sure that the machine completes one full pattern.

Note 2: during the procedure, feeders are not able to detect output yarn breaks.

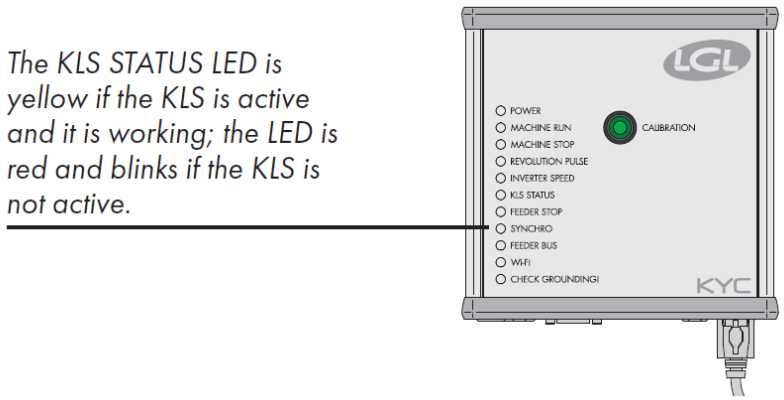
Note 3: by pressing the button for the learning procedure, all feeders lights turn on. If at this moment the button is pressed a second time, all feeders lights turn off and the system is no more active.

Feeders parameters involved in the KLS function

1. **OYB Sw Tmr**: This parameter can be intended as a test parameter for KLS system. During running, if the op-erator increases machine speed, the value of this parameter should decrease. If the operator decreases the machine speed, its value should increase.

   If OYB SW Tmr=0, then the output stop motion system is not active and feeders won't stop the machine if the yarn gets broken after the feeder.

In this case the KLS status LED on the KYC box will blink once per second. In order to enable the system, press GREEN button and perform the learning procedure described above.

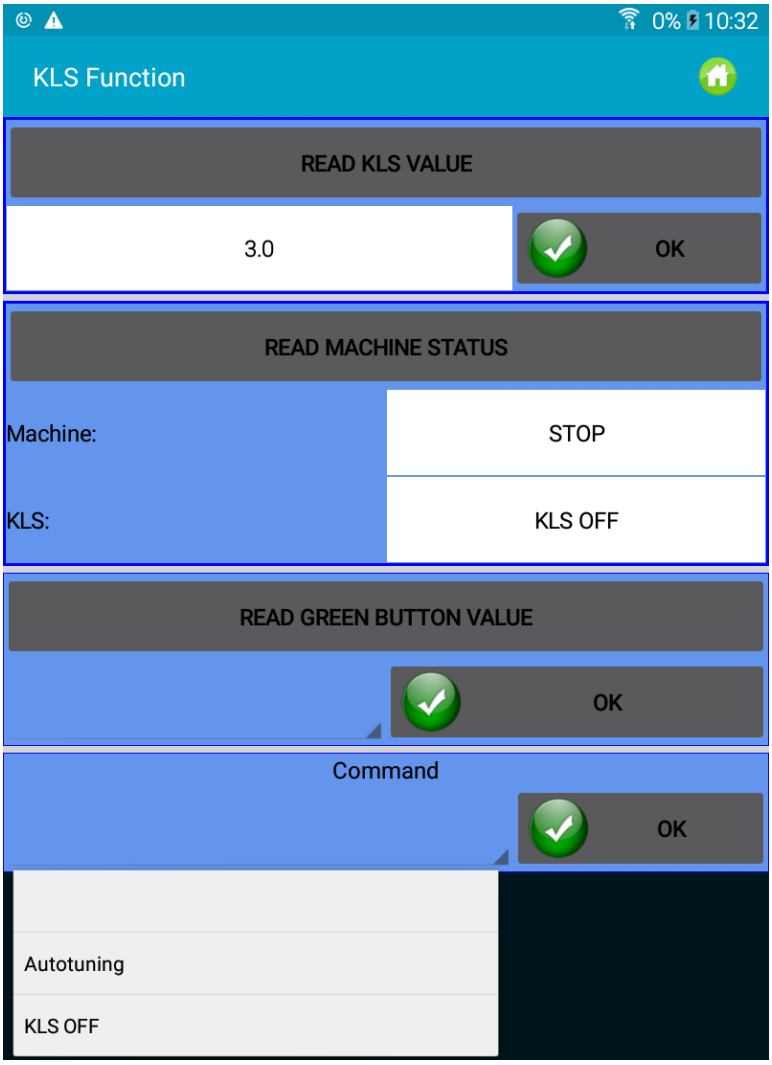


Pic.46

2. **KLS FAST** (Read Write) default value =0
   Compact from SW CMX0040 CMX2014
   If this parameter is set to 1, the KLS response time is 40% faster.
   Note: in case of false stops during production, KLS FAST must be set to 0.
3. **KLS Cm Delay** (Read Write) default value=86
   Compact from SW CMX0065 CMX2028
   Ecompact from SW ECM0001 ECM2001
   Ecopower from SW ECO0011 ECO2012
   This parameter modifies the KLS response time. If, in case of yarn break at the output side of the feeder, the machine stops late, it is possible to decrease this value to make the machine

stop earlier. If the value is set too low you may have false stops. We suggest to make some tests to find the correct value for each pattern.
Note: from software mentioned above, KLSFAST is no more active, it has been replaced by KLSCmDelay. KLSFAST can be still present in the parameters list but setting it to 0 r to 1 does not bring to any result.

From HOME page click on  "KLS Function".



Pic.47

Press " Read KLS value". This value in seconds (3 seconds in this example) corresponds to the delay by means of which the KLS system is activated every time the machine starts (speed ramp to reach production speed).
3 seconds =default value. We suggest to leave this value as it is. Increase it only in case there are false stops (OYB error) immediately after machine start.
Press "Read Machine Status" to read machine and KLS present status. In this example machine is standing and KLS is not working (KLS status can be seen also on KLS STATUS LED on the KYC).
Press "Read green button value" to read the green button status (ENABLED or DISABLED).
The button allows to enable or disable the green button on the kyc box.

Pic.48

In this example the green button is enabled.
Choose DISABLED to manage KLS system from the app (disabling the button the KYC box).
In case the green button on the KYC box has been disabled, the KLS function can be managed by the following COMMAND Menu:

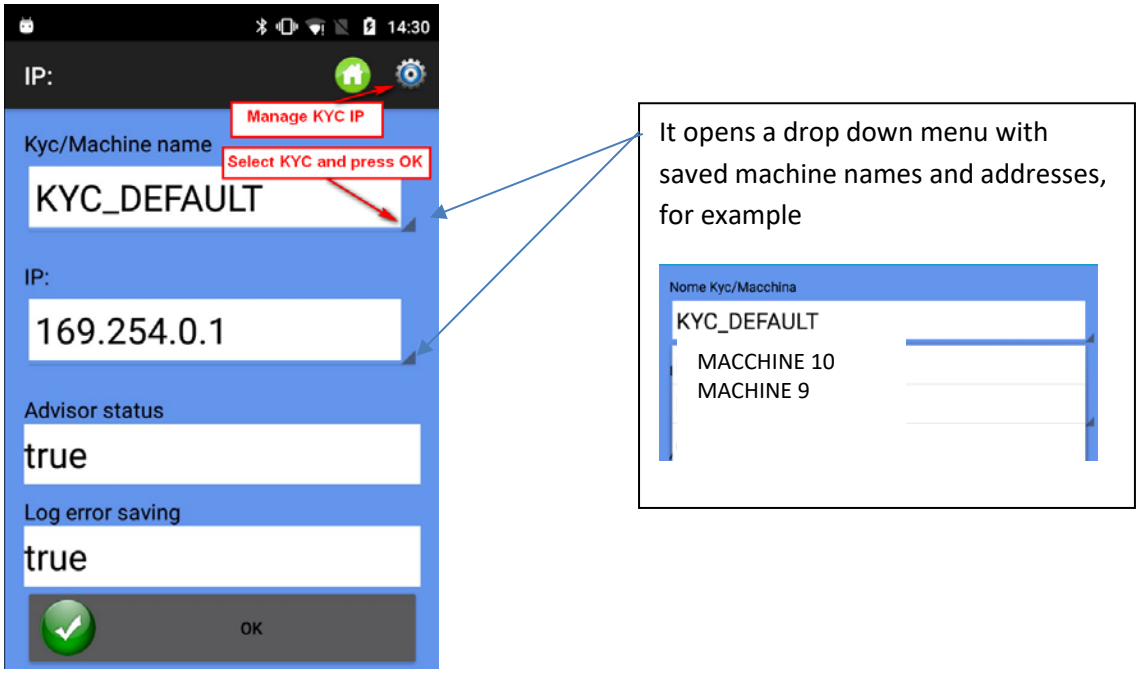
Pic.49

Autotuning: to start the learning procedure.
KLS OFF: to disable KLS (in case of striping)

9. IP Address Handling

If the App is used with a KYC or CONNECT device, i.e a device with Ethernet and /or wifi connection, it is possible to assign IP address to the device in order to include it in a network.

Press  icon.



Pic.50

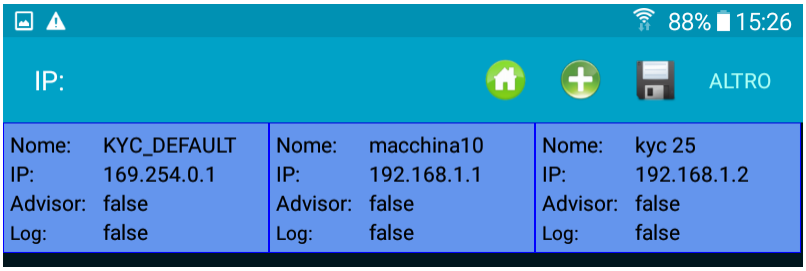
Kyc/Machine name: to choose the name by means of which the LGL device is seen by the network.

IP: IP Address by means of which the device is identified in the network.

Advisor status: enables Advisor function. See Chapter 13.

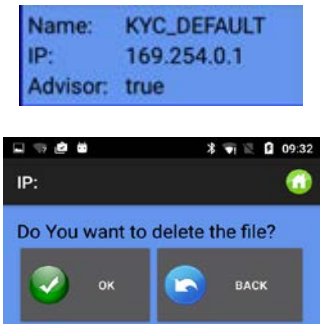
Log error saving: enables a function which saves a database with feeders errors. See chapter 14.

To manage IP addresses (add or modify), press  icon.



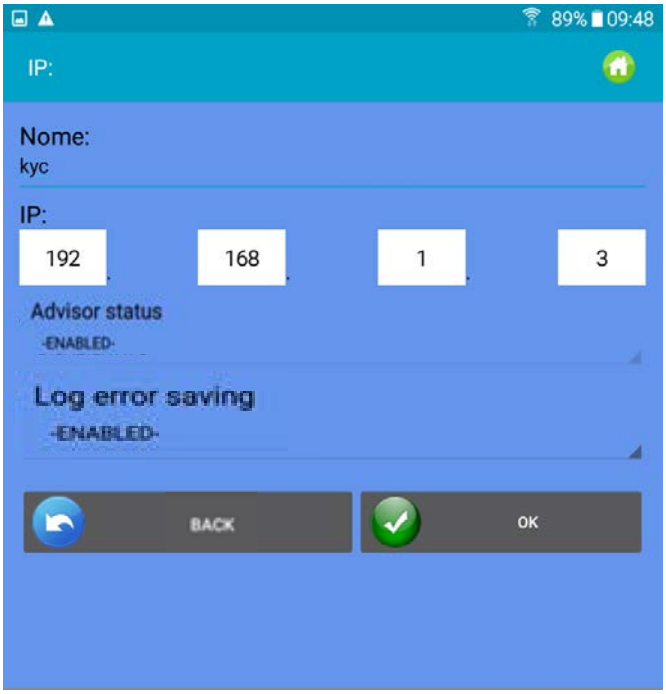
Pic.51

To delete an existing IP address, press and hold three seconds the rectangle



Pic.52

New IP addresses can be added from picture 51 by pressing  (pic 53)

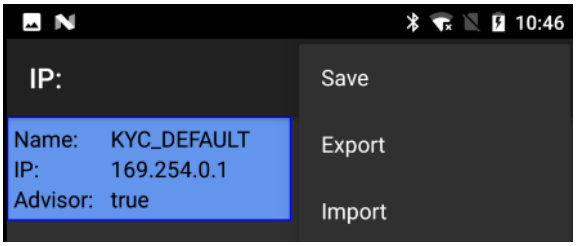


Pic.53

Press OK to go back to Picture 51 and press  icon to save changes.

To save the IP addresses list in a file that can be copied to another device or can be recalled later, click on “Export” (Pic.54).

To import the list of saved IP addresses, click on “Import” (Pic.54).

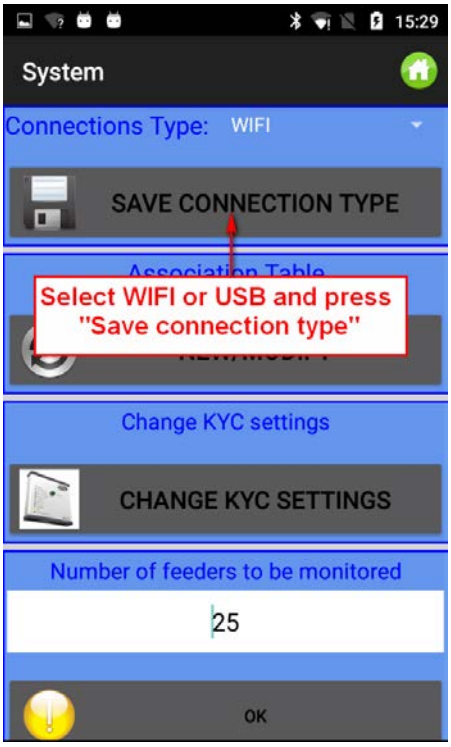

10:46
IP:
Name: KYC_DEFAULT
IP: 169.254.0.1
Advisor: true
Save
Export
Import

Pic.54

10.System

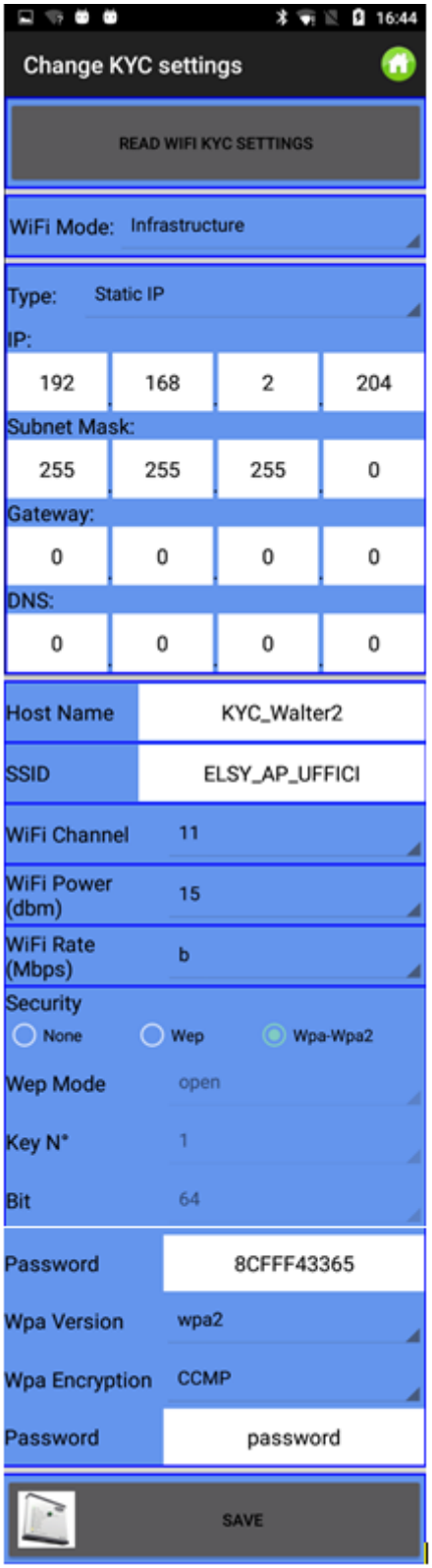
NOTE: function under password.

From start page click on  "System".



Pic.55

Connections Type: Select WIFI if the communication between the android device and the LGL KYC (CONNECT) is through wifi.
Select USB if this communication is through usb cable.
NOTE: the LGL devices KYC and CONNECT can have communication through WIFI or through usb cable. USBCONNECT device can have communication only through usb cable.
Press "save connection type" to save connection. The device will get communication through the saved connection.
Association table: service function for LGL technician
Change KYC Settings : Press on the button.

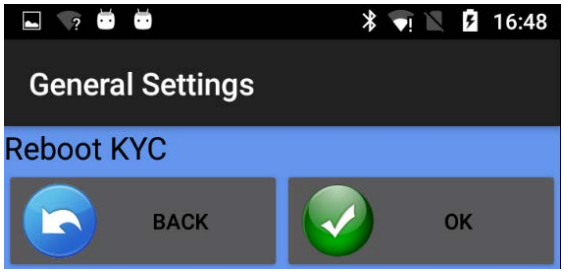


Pic.56

Press “Read WIFI KYC Setting” to read present values.

Insert/change the values and press “Save” to confirm.

At the end Pic.57 appears:



Pic.57

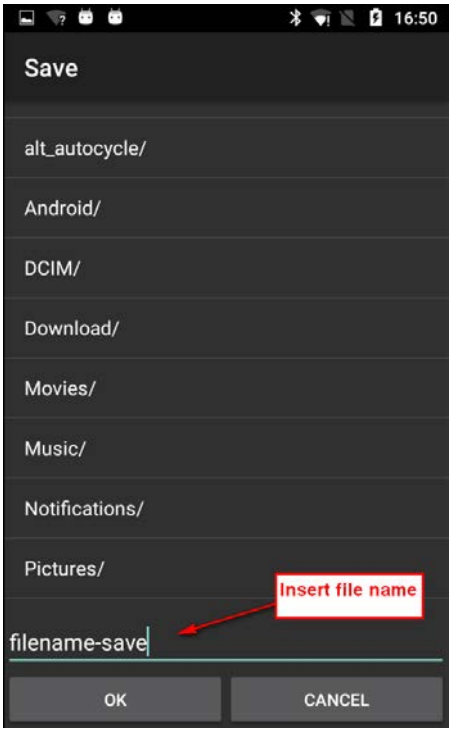
Press  to reboot the KYC.

The applet must be restarted.

11 Save & Open machine configuration

11.1 Save a machine configuration

In order to save a machine configuration, press  “Save Machine” in main screen. Pic.58 appears

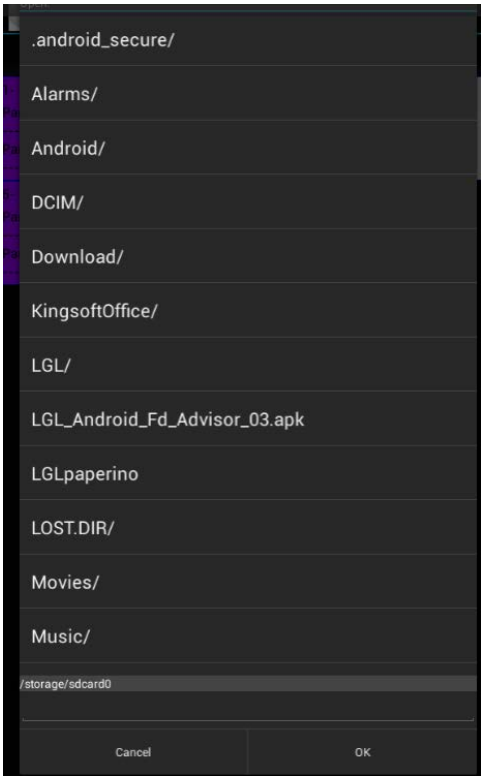


Pic.58

Insert configuration name and press OK. The machine configuration file is a .mac file that can be stored in the memory of the tablet or of the phone and recalled later. This file saves the groups created for a specific pattern, the yarn types and counts and the parameter list for each group.

11.2 Open a machine configuration

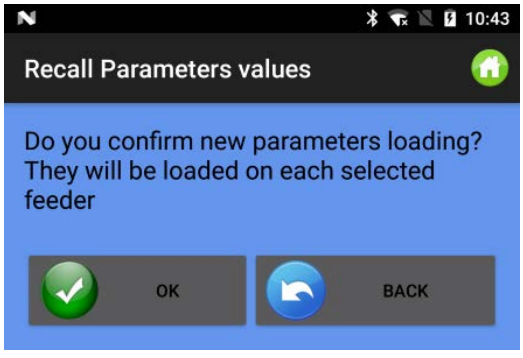
To open an existing machine configuration, press on  “Open Machine” in main screen.



Pic.59

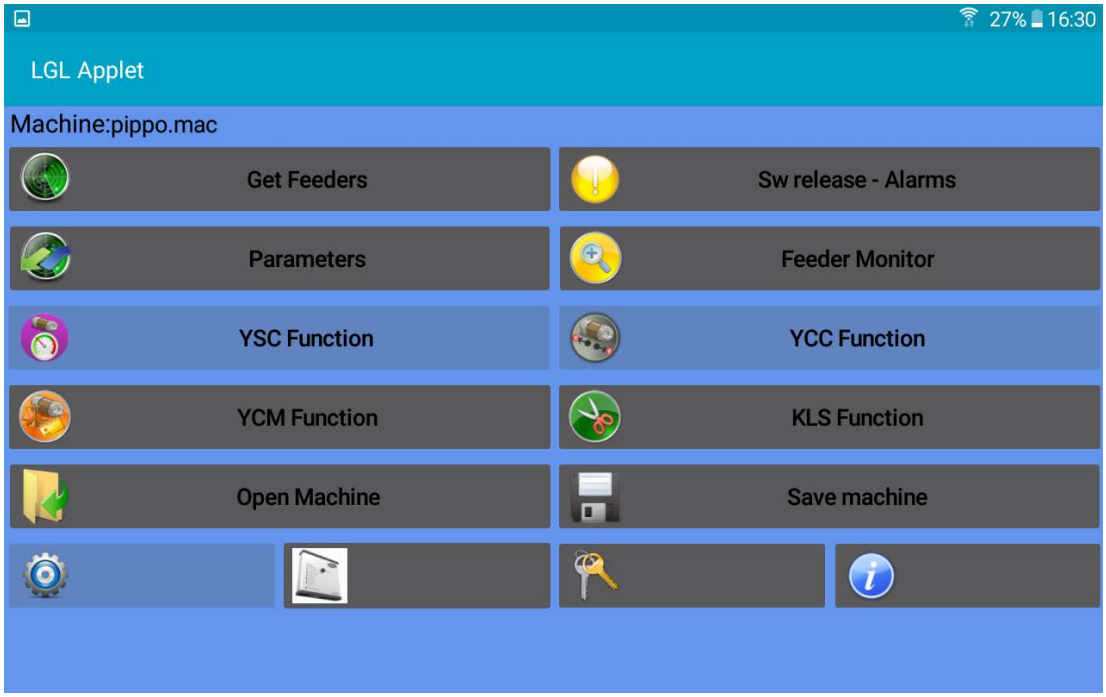
Search your file and press OK.

Picture 60 appears. Press BACK to load only feeders groups and yarns type and count. Press OK to load feeders groups, yarns type and count and in addition parameter values.



Pic.60

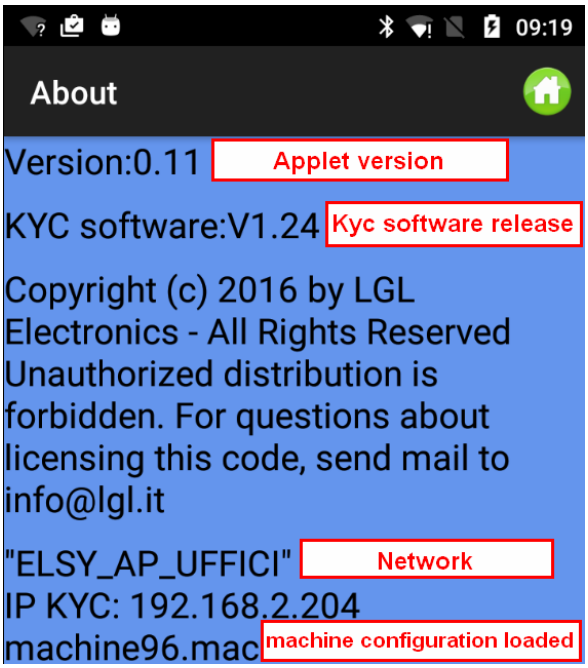
The name of the loaded configuration appears on top of the screen (see next picture where the loaded configuration is “pippo.mac”)



Pic61

12 About Page

Press  icon.



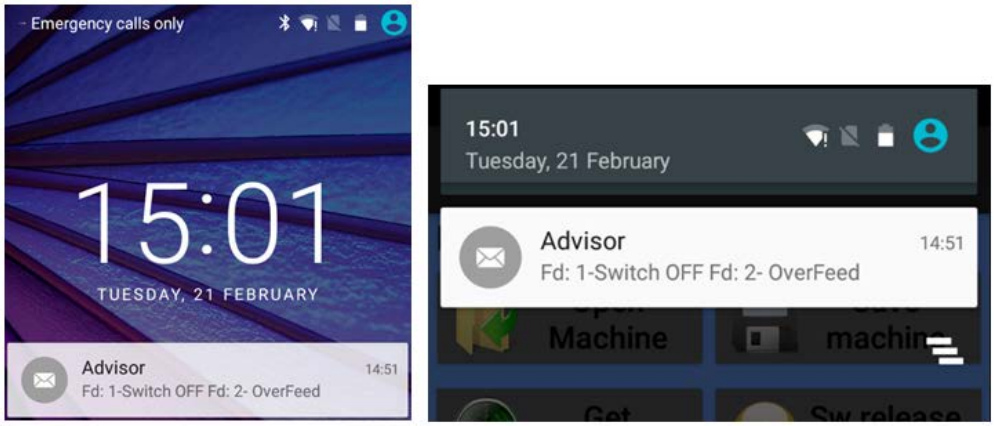
Pic.62

13. Advisor

The Advisor allows to have an alarm message on the ANDROID device when one feeder goes in alarm and stops the machine.
This function is possible only If the App is used with a KYC or CONNECT device, i.e a device with Ethernet and /or wifi connection
If advisor status is enabled (chapter 9, picture 50) and number of feeders to be monitored is different from 0 (chapter 10 picture 55), Advisor function is active.
When the machine stops due to feeder error, a picture like the one below appears:

Pic.63

The Android device vibrates and sounds. A message will appear in the background pic.64

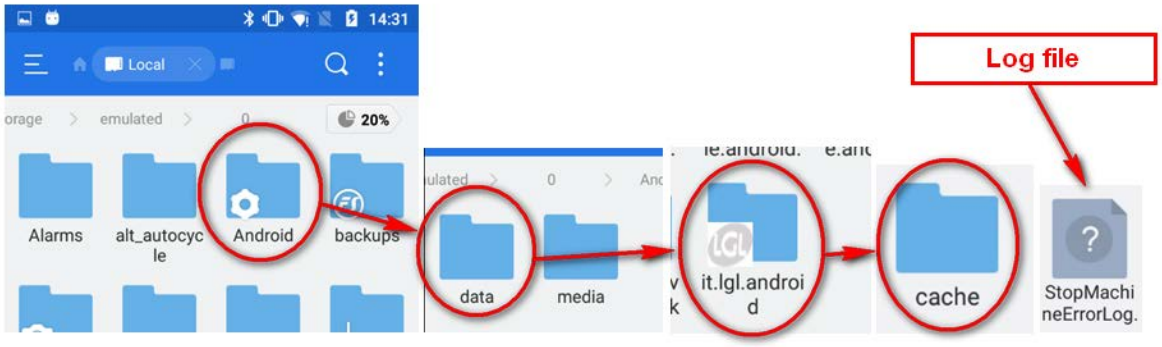


Pic.64

When machine runs again, this message will disappear automatically.

14. Log error saving

"Log error saving" is active if it is enabled in picture 50 (chapter 9) and the number of feeders to be monitored is different from 0 (chapter 10 picture 55).
The system, at each machine stop caused by one feeder, will update the log file in the dedicated folder (Pic.65). This file will contain all the stops caused by LGL feeders.


14:31
Local
orage
emulated
0
20%
Alarms
alt_autocycle
Android
backups
data
media
it.lgl.android
cache
Log file
StopMachineErrorLog.

Pic.65