

ARPEGE MASTERK

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ADJUSTMENT INSTRUCTIONS

IDLC-2 WEIGHING INDICATOR



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V2.0	IDLC_GB_Setting IDLC-2_rev00	00

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ADJUSTMENT INSTRUCTIONS WEIGHING INDICATOR IDLC-2

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11/04/2024	00	Original translation from de "IDLC_fr_Reglage IDLC-2_rev00"

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1. MATERIAL PRESENTATION

1.1. Technical characteristics

Maximum number of scale divisions in legal-for-trade mode : 5,000 (if the unit used is kg)
10,000 (if the unit used is lb)

Warning: If you use both units at the same time, you are limited to 4,536 in kg and 10,000 in lb.

Maximum number of digital load cells : 12
Maximum number of "CANDY_EX" transmitters : 4

Zero displayed at $\frac{1}{4}$ scale division.

Conversational digital adjustment from the front panel.

12V_{DC} voltage supply.

Consumption : 350mA to 500mA maximum under 12V_{DC}, for 8 load cells maximum or 2 transmitters maximum. For any higher configuration (12 load cells or 4 transmitters) a 12V_{DC} 1A power supply must be provided.

LCD screen 128 pixels by 64 pixels.

Keyboard: - 4 metrological keys also used for inputs,

- 4 application keys also used for inputs.

DSD (Alibi memory) : Storage of the last 1,000,000 weighings (FIFO)

1.2. Peripherals

The "IDLC-2" weighing indicator features:

❖ A slave USB interface :

USB : For communication with a host system. (Short distance connection: 3 meters max.)

❖ An Ethernet interface :

ETHERNET : For communication with a host system.

❖ A CAN bus interface :

MASTER CAN/RS485 : Communication with "CANDY_EX" transmitters (4 maximum) or digital load cells (12 maximum) and with compatible peripherals (Long distance connection: 300 meters max. and up to 1,000 meters with repeaters)

WARNING :



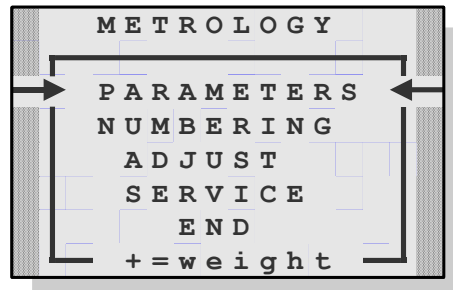
The MASTER CAN/RS485 connector is not compatible with the MASTER CAN connector of the previous IDLC generation, only this new generation of indicator IDLC-2 features the ETHERNET connection.



2. FRONT PANEL

2.1. Display

The "IDLC-2" indicator features a graphic LCD display offering user-friendly flexibility in using the system.



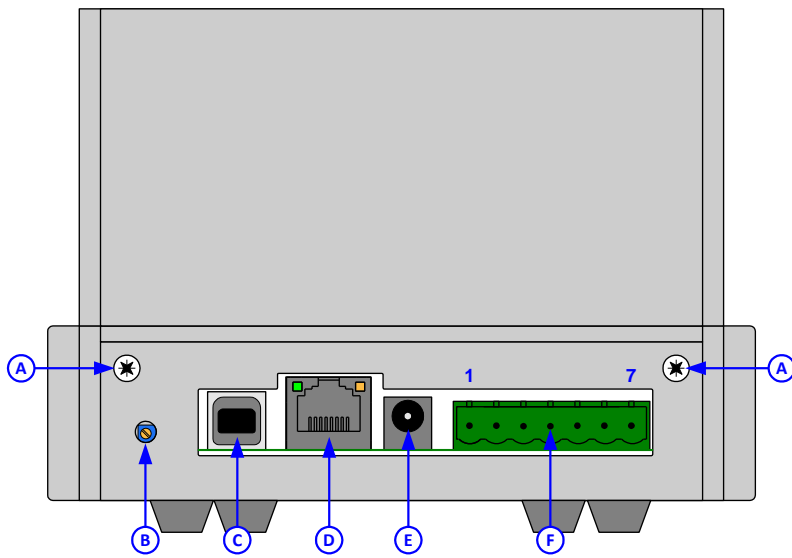
Display example: settings menu

2.2. Keyboard

The "IDLC-2" indicator is equipped with 8 keys (4 metrological keys, 4 application keys) used for inputs.

	General use	During seizures
	Implement a semi-automatic zeroing device. (The zeroing device cancels the tare device)	Shift of the data to be entered by one digit to the right.
	Temporarily recall the GROSS weight value, when a tare device has been set.	Shift of the data to be entered by one digit to the left.
	Use the calibration device with the mass present on the scale.	Resetting the value to be entered, in the case of a signed value, allows you to change the sign.
	Enter the function pointed by the arrows.	Validate the entry.
	Go to the previous menu function.	Return to the previous entry.
	Go to the next menu function.	Go to the next entry, validates the entry.
	Display weight.	Increases the flashing digit by one.
	Returns to the first menu function.	Decreases the flashing digit by one.

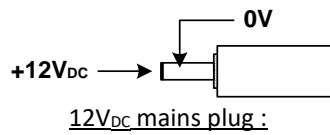
3. CONNECTION AND HOUSING



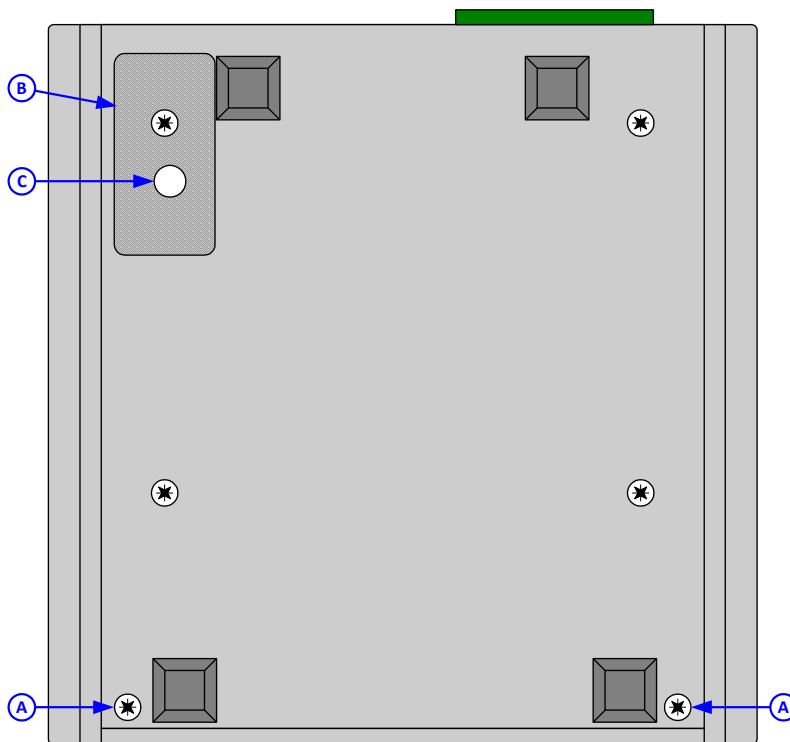
- A** : Closing screw.
- B** : Potentiometer for adjusting the contrast of the display.
- C** : **USB** port for connection to a PC (Type B)
- D** : **ETHERNET** port for connection to a PC.
- E** : 12V_{DC} power supply connection.
- F** : **MASTER CAN/RS485** link.

Rear side of the indicator

Pins	1	2	3	4	5	6	7
MASTER CAN / RS485	Ground	RxTx+	RxTx-	CAN_H	CAN_L	12V_CAN	0V



12V_{DC} mains plug :



- A** : Closing screw.
 - B** : Sealing area.
 - C** : Access to the adjustment push button (BP1)
- CAUTION** : Press the adjustment push button using a non-conductive tool.

Bottom view of the indicator

4. SETTING MODE

This handling must be carried out by an authorized agent

Switching from normal mode to adjustment mode:

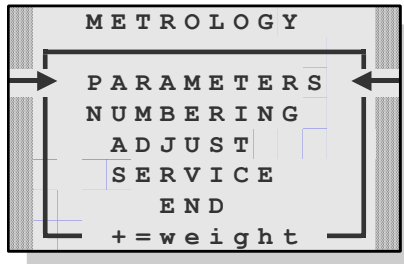
Switching from one mode to another is done using the adjustment push button (BP1) located under the indicator (See "[3. Connection and housing](#)")

To proceed :

- Power on the indicator.
- Keep the adjustment push button pressed for 5 seconds (Until the message "HELLO IDLC-2" is displayed),
- The start-up phases are displayed "999999", "888888", ... "111111", "000000" then the load cell (or transmitters) test screen.

	L C	S E R I A L N	S T A		
Test of load cell in station number "01" ⇒	0 1	0 7 0 1 0 0 1 1	OK	⇐	Load cell number "01", serial number "07010011", communication OK
Test of load cell in station number "02" ⇒	0 2	0 7 0 1 0 0 1 2	OK	⇐	Load cell number "02", serial number "07010011", communication OK
Test of load cell in station number "03" ⇒	0 3	0 7 0 1 0 0 1 3	OK	⇐	Load cell number "03", serial number "07010011", communication OK
Test of load cell in station number "04" ⇒	0 4	0 7 0 1 0 0 1 4	OK	⇐	Load cell number "04", serial number "07010011", communication OK
Test of load cell in station number "05" ⇒	0 5	0 7 0 1 0 0 1 5	NS	⇐	Load cell number "05", serial number "07010015", serial number fault
Test of load cell in station number "06" ⇒	0 6	0 7 0 1 0 0 1 6	COM	⇐	Load cell number "06", serial number "07010016", communication fault

- Once the load cells or transmitters have been tested, the adjustment menu is then displayed:

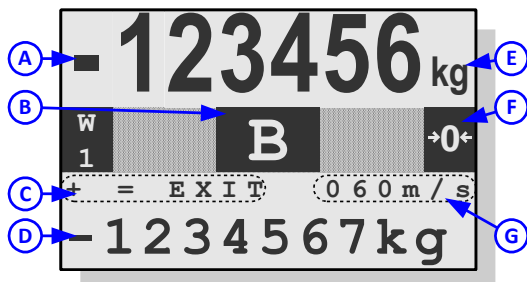


IMPORTANT : If a power failure occurs in adjustment mode before the backup is executed, all parameters or adjustment values will be lost.



Remarks :

- Use the key to move to next function and the key to return to the previous function.
- The selected function is indicated by the arrows (→ ←)
- To enter the selected function, tab the key.
- To access the weight display, tab the key, you will then see the screen below:



- A :** Weight on 6 digits of 12mm height.
- B :** Type of weight displayed: gross (B), net (N), tabulated tare (PT) or for data (DATA).
- C :** The key allows access to the [« Load cell \(transmitter\) display table »](#), see 5.5.
- D :** High precision weight on 7 digits.
- E :** Unit kg or lb.
- F :** Weight status, indicates that the weight is zero at 1/4 scale, indicates that the weight is unstable.
- G :** Number of measurements per second.

Tab the key to exit screen

4.1. Indicator settings : "PARAMETERS"

Enter the value of each parameter and validate with  or  keys (2 parameter pages). The  key allows to return to the previous entry or, when entering the first parameter, to exit the function.

- kg/lb** 0/1/2/3 : **X** Choice of weighing unit.
- 0 = the "kg" unit is used in adjustment mode and in normal mode (max. 5,000 scale divisions)
 - 1 = the unit "kg" is used in adjustment mode and in normal mode. In normal mode, it is possible to switch to calculated "lb" (max. 4,536 scale divisions in kg and max. 10,000 in lb)
 - 2 = the unit "lb" is used in adjustment mode and in normal mode (max. 10,000 scale divisions)
 - 3 = the unit "lb" is used in adjustment mode and in normal mode. In normal mode, it is possible to switch to calculated "kg" (max. 4,536 scale divisions in kg and max. 10,000 in lb)
- RANGE** : **XXXXXX** Six-digit measuring range, from 1kg to 250,000kg.
- DIVIS.** : **XXX.XXX** Measuring scale divisions (multiple of 1, 2, 5) in six digits, with three digits after the decimal point, from 0.001kg to 50kg.
- LEGAL** 0/1 : **X** If the indicator is intended for legal-for-trade use (Note : commercial transactions for instance, then the device needs a CE conformity marking) this parameter must be set to 1. Otherwise, the legal-for-trade limitations are disabled. Limitation of the maximum number of scale divisions to 5,000 and semi-automatic zeroing zone.
- 0 = No
 - 1 = yes
- L. CELL TYPE** : **X** Choice of the load cell type :
- 1 = **ARPEGE MASTER K** digital load cell(s) (example : **CPFN-A**)
 - 2 = "**CANDY_EX**" digital weight transmitter(s)
 - 7 = **SCAIME** digital load cell(s) CB50X-DL at 38,400 baud (Speed setting to use preferably)
 - 8 = **SCAIME** digital load cell(s) CB50X-DL at 19,200 baud.
 - 9 = **SCAIME** digital load cell(s) CB50X-DL at 9,600 baud.
- L. CELL NB** : **XX** Number of digital load cell(s) or transmitter(s) connected (From 1 to 12 digital load cells or from 1 to 4 transmitters)
- INPUT RANGE** : **X** Input Range, it is possible to modify the voltage range of the analog measuring chain (**Parameter for "CANDY_EX" transmitters only**)
- 0 = Default value (20 mV range)
 - 1 = Range 10 mV (Low draft or low tare)
 - 2 = Range 20 mV. (High draft or significant tare)
- NET** (0/1/2) : **X** Desired NET weighing mode.
- 0 = NET weighing is not authorized (Always in GROSS)
 - 1 = NET weighing is authorized (PT and TSA key activated)
 - 2 = NET weighing is authorized but the TSA key is disabled.
- Z. TRACKING** 0/7 : **X** Zero tracking mode.
- 0 = No zero tracking
 - 1 = Zero tracking enabled (0,5d per second)
 - 2 = Zero tracking enabled (0,5d every 2 seconds)
 - ...
 - 7 = Zero tracking enabled (0,5d every 7 seconds)

- Z . POWER UP 0/1 : X** Resets the zero on power-up within a range of +/- 10% of the maximum range.
- 0 = No
 - 1 = Yes
- IMMOBI . x . xe : X . X** Depending on the installation conditions of the scale, it will be necessary to adjust the immobility zone (From 0.5 to 3.0 divisions)
- NB IMMOB . MES : XX** Determines how quickly immobility is achieved. (5 to 99: number of measurements needed to obtain immobility.)
Minimum value = Number of measurements per second / 2
Example : for 70 meas./s, the minimum value of this parameter will be 35.
- FILTERING : XX** Filtering value for the analog measurement chain, from 00 to 99:
- 00 = Filtering disabled.
 - ...
 - 99 = Filtering at maximum.
- NB MEASURE/s : XXX** Number of measurements per second, from 10 to 160:
- from 010 to 014 = 10 measurements per second.
 - from 015 to 024 = 20 measurements per second.
 - from 025 to 034 = 30 measurements per second.
 - ...
 - from 155 to 160 = 160 measurements per second.
- CAUTION : Avoid harmonic frequencies of the power supply (50Hz or 60Hz)**

4.2. "NUMBERING" function

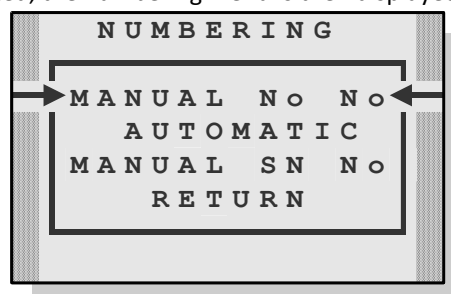
This function provides access to the load cells (transmitters) numbering menu. One has the choice between three numbering modes:

- Manual numbering with selection of the device to be numbered by the station number.
- Automatic numbering (*Not available for CB50X-DL digital load cells, see 4.1*)
- Manual numbering with selection of the device to be numbered by the serial number.






The main drawback of manual numbering is that it requires the load cells (transmitters) to be numbered one by one; on the other hand, one knows directly where the load cell is physically located.

Regarding automatic numbering, it is carried out while all the load cells (transmitters) are connected whatever their station number, on the other hand one doesn't know where they are physically located once the numbering has been carried out. (For troubleshooting it remains possible to identify the faulty load cell with a standard mass using the function "[4.4.1. Weight display: "WEIGHT DISP."](#)")

Once the function has been validated, the numbering menu is then displayed:



Remarks :

- Use the  key to move to next function and the  key to return to previous function.
- The selected function is indicated by the arrows ( )
- To enter the selected function, tab the  key.


4.2.1 Manual numbering by station number: "MANUAL No No"

Once the function has been validated, the screen below is displayed:

NUMBERING			
L . CELL	ADD :	XX	
NEW	ADD	:	YY

"XX" corresponds to the number of the load cell (transmitter) to be numbered and "YY" to the new number to be assigned to the load cell

This function allows you to change the station number of a sensor (transmitter):

- Choose the station number of the load cell (transmitter) to modify (see below example, here **53**) and validate with the  key.
- Enter the new number to assign (from 01 to 12) and validate.
- Back to the numbering menu.

Remarks :

- Number only one LC (transmitter) at a time.
- If the number of the LC (transmitter) to be numbered is unknown, use the universal address "00".
- BE CAREFUL not to leave two load cells or transmitters with the same number, this will cause operating problems.

4.2.2 Automatic numbering : "AUTOMATIC"



Not available for CB50X-DL digital sensors, see parameter "L . CELL TYPE" in 4.1.

This function automatically numbers, in a single operation, **ALL** digital load cells (transmitters) connected on the CAN bus network of the indicator, regardless of their station number.

The station number is assigned in ascending order of serial numbers. (01 to the lowest serial number, 02 to the next serial number, etc...)



PLEASE NOTE : when automatic numbering is executed it is without the possibility of cancellation!!



Example of numbering:



Automatic numbering of 4 new digital sensors (station number 53), with serial numbers 07010012, 07010013, 07010025 and 07010034.

Once the function is validated, the below screen is displayed:

S E R I A L	N	A D D
0 7 0 1 0 0 2 5		5 3
0 7 0 1 0 0 1 3		5 3
0 7 0 1 0 0 3 4		5 3
0 7 0 1 0 0 1 2		5 3

After a few seconds the indicator assigns the station numbers to the different load cells. with the following screen displayed:

S E R I A L N	A D D
0 7 0 1 0 0 1 2	0 1
0 7 0 1 0 0 1 3	0 2
0 7 0 1 0 0 2 5	0 3
0 7 0 1 0 0 3 4	0 4

The pointed line is indicated by the arrows (▶ ◀), use the  and  keys to move through the list of numbered load cells (transmitters). Maximum 6 lines can be displayed at a time.

To return to the numbering menu, tab the  key.


4.2.3 Manual numbering by serial number: "MANUAL SN No"

Once the function has been validated, the screen below is displayed:

S N	: X X X X X X X X
A D D	: Y Y

"XXXXXXXX" stands for the serial number of the LC (transmitter) to be numbered and "YY" for the new LC number to be assigned

This function allows you to change the station number of a LC (transmitter):

- Choose the serial number of the LC (transmitter) to modify (example 07010012) and validate with the  key.
- Enter the new station number to assign (from 01 to 12) and validate.
- To return to the numbering menu, validate a station number at 00.

Remark :

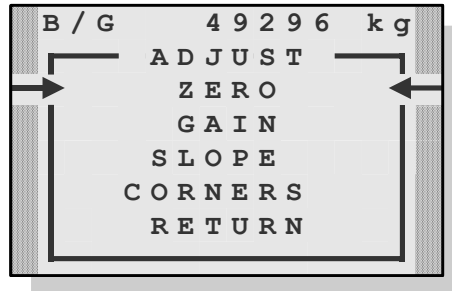
- It is possible to perform this function with all load cells (transmitters) connected to the indicator.
- BE CAREFUL not to assign two load cells or transmitters with the same number, this will cause operating problems.

4.2.4 End of numbering : "RETURN"

To return to the settings menu, validate this function.

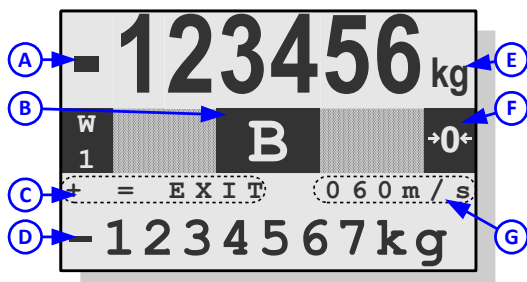
4.3. Metrological adjustment : "ADJUST"

This function gives access to the indicator calibration menu. Once the function has been validated, the adjustment menu is then displayed:



Remarks :

- The current weight is displayed in high precision on the first line.
- Use the key to move to next function and the key to return to the previous function.
- The selected function is indicated by the arrows (→ ←)
- To enter the selected function, tab the key.
- To access the weight display, tab the key, you will then see the screen below :



Tab the key to exit screen

A : Weight on 6 digits of 12mm height.

B : Type of weight displayed: gross (**B**), net (**N**), tabulated tare (**PT**) or for data (**DATA**).

C : The key allows access to the load cell (transmitter) display table, [see 5.5](#).

D : High precision weight on 7 digits.

E : Unit kg or lb.

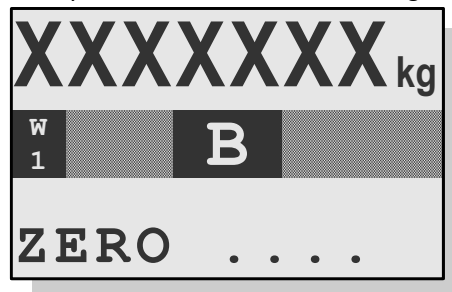
F : Weight status: indicates that the weight is zero at ¼ scale division, indicates that the displayed weight is unstable.

G : Number of measurements per second.

4.3.1 Zero setting : "ZERO"

Before validating this function, check the connection of the load cells and the status of the load receiver. (Scale, weighbridge, hopper, etc.)

The load receiver being empty and clean you can validate the zero setting, the message below is displayed:



"XXXXXXXX" stands for the weight measured on the scale.

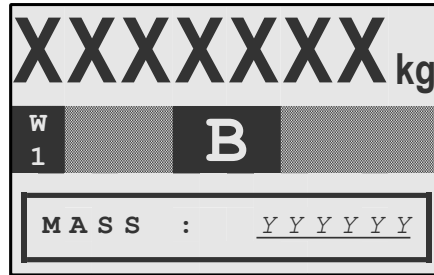
The message "**SAVING 1 WAIT. .**" is displayed while saving the setting then the weight which is displayed for 5 seconds allowing you to view the setting made.

The duration of this operation depends on the time necessary to obtain a stable measurement, requiring no vibration and calm weather for the scales located outside.

4.3.2 Gain adjustment : "GAIN"

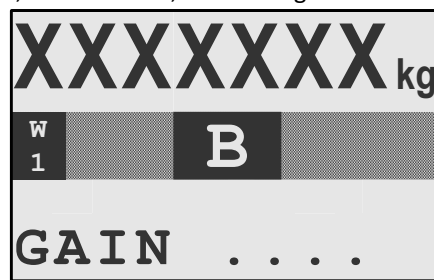
Before validating this function you must have carried out the zero adjustment.

Place the standard masses on the load receiver then validate the gain setting, the message below is displayed:



"XXXXXXXX" stands for the weight measured on the scale and "YYYYYY" for entering the sum of the masses.

Enter the total weight of the masses, then validate, the message below is displayed:



"XXXXXXXX" corresponds to the weight measured on the scale.

The "SAVING 1 WAIT . ." message is displayed while saving the setting then the weight is displayed for 5 seconds allowing you to check the setting made.

The duration of this operation depends on the time necessary to obtain a stable measurement, requiring no vibration and calm weather for the scales located outside.

Remarks :

- Good quality adjustment requires standard masses of value close to the maximum capacity of the scale.
- This operation can be repeated several times without unloading the masses.

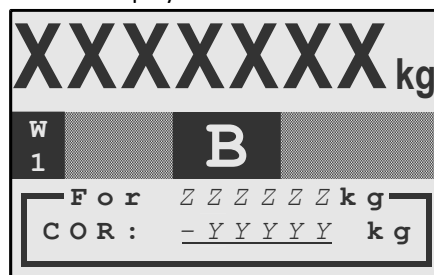
4.3.3 Slope correction: "SLOPE"

This function allows a slight correction to be made on the slope (System gain).

In particular, it makes it possible to compensate for the variation in the "g" gravity factor depending on the location of use of the complete instrument.

If when checking the scale you notice a slight shift at full load you can therefore correct the error using this function.


Validate the function, the message below is displayed:



"XXXXXXXX" corresponds to the weight measured on the scale and "YYYYY" corresponds to entering the desired correction which will be applied for the maximum range "ZZZZZ".

Enter the correction value and validate. The "**SAVING 1 WAIT . .**" message is displayed while saving the correction, then the weight is displayed for 5 seconds allowing to visualize the correction made.

Remarks :

- Change the sign using the  key.
- If the minus sign is displayed in front of the data the correction will be negative, if the plus sign is displayed in front of the data the correction will be positive.

4.3.4 Corner correction : "CORNER"

This function allows you to make a correction on an angle that is "too low" or "too high".

ATTENTION :

- This function is only to be used in the case of digital load cells, when using "**CANDY_EX**" transmitters the angle correction is carried out using the potentiometers located inside the transmitters.
- In principle this function is not necessary for weighing instruments (or weighbridge) with precision equal or less than 3,000 scale divisions : digital load cells are factory adjusted and therefore all identical.

Validate the function, the message below is displayed:


```

CORNERS
L . CELL  ADD :
      XX
CORNER MASS :
      YYY YY kg
CORRECTION :
      - ZZZ ZZ kg
  
```

"**xx**" corresponds to the station number of the LC on which you want to make the correction and "**zzzz**" corresponds to the desired correction which will be applied to the value of the standard control mass "**YYYYY**".

Enter the station number of the LC to correct, the value to which to apply the correction, the correction value in high precision format, then validate. The "**SAVING 1 WAIT . .**" message is displayed while the correction is being recorded and the weight is displayed for 5 seconds allowing to check the correction made.

Remarks :

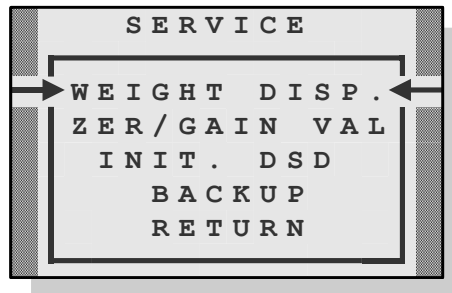
- Change the sign using the  key.
- If the minus sign is displayed in front of the data the correction will be negative, if the plus sign is displayed in front of the data the correction will be positive.
- **ARPEGE MASTER K** digital load cells **CPFN-A** provide 100,000 divisions on full range.

4.3.5 End of metrological adjustment : "RETURN"




To return to the settings menu, validate this function.

4.4. "SERVICE" menu

This function allows access to the indicator service menu. Once the function has been validated, the menu below is then displayed:



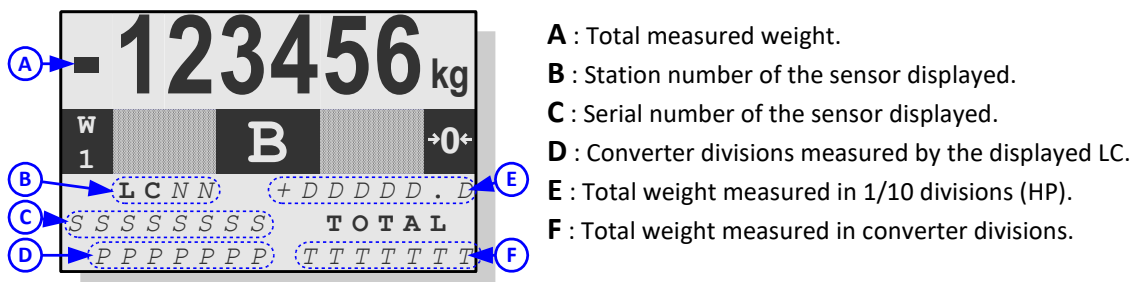
Remarks :

- Use the  key to switch to the next function and the  key to return to previous one.
- The selected function is indicated by the arrows (→ ←)
- To enter the selected function, tab the  key.




4.4.1. Weight display : "WEIGHT DISP."

This function displays the weight as well as the details of the converter points returned by each LC (Or transmitter)

Validate the function, the screen below is displayed:



Remark :

- Use the  key to switch to next load celle and the  key to return to previous one.
- To enter the selected function, tab the  key.

4.4.2. Zero and gain values of the indicator:: "ZER/GAIN VAL"

This function allows you to view and **modify** the "ZERO" and "GAIN" values of the indicator adjustment
Only for experienced users!

4.4.3. Initializing the DSD/Alibi memory : "INIT. DSD"

This function allows you to erase the DSD file, as well as set the initial DSD number of the new file.
Only for experienced users!

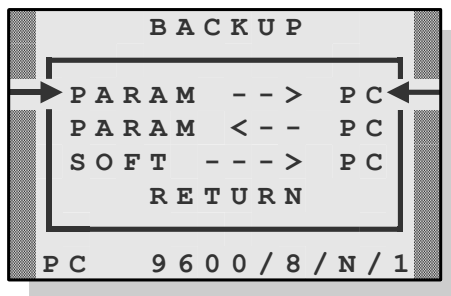


WARNING : Once the function has been launched and the deletion request confirmed, the initialization of the file is irreversible!!








4.4.4. Backup/restore menu: "BACKUP".

This function allows access to the backup/restore menu. Once the function has been validated, the menu below is then displayed:



Remarks :

- Communication with the PC for these different functions to be set at 9,600 Bauds, 8 data bits, no parity, one stop bit (Configuration recalled on the last line).
- Use the  key to move to the next function and the  key to return to the previous function.
- The selected function is indicated by the arrows ( )
- To enter the selected function, tab the  key.

4.4.1.1. Saving the indicator configuration : "PARAM --> PC"

This function allows you to perform a complete backup of the parameters and configuration of the indicator, to do this you must proceed as indicated below :

Connect the PC (on Com1) with the **IDLC-2** (on internal RS232) and launch « HyperTerminal » or any similar software.

Give a name to the connection and validate (TERMINAL.IDLC)

Then in the "Connect using" section, you must validate "Direct to Com1" then configure the connection with 9600 Bauds, 8 data bits, no parity, 1 bit stop, and no flow control.

Under HyperTerminal, go to "Transfer" then to "Capture text", define the name of the file to save the file and confirm "Start".

The PC is then ready to communicate with the indicator.

Validate the "**PARAM --> PC**" function, the message "**TRANSMIT WAIT.. Max 1mn30s**" is displayed during the backup.

Once the backup is completed, return to the "**BACKUP**" menu and close the Hyperterminal capture in the "Transfer" menu, "Capture text " then "Stop".

4.4.1.2. Restoration of the indicator configuration : "PARAM <-- PC"

This function allows you to perform a complete restoration of the parameters and configuration of the indicator previously carried out, to do this you must proceed as indicated below:

Connect the PC (on Com1) with the **IDLC-2** (on internal RS232) and launch HyperTerminal or any similar software.

Give a name to the connection and validate (TERMINAL.IDLC).

Then in the "Connect using" section you must validate "Direct to Com1" then configure the connection in 9600 Bauds, 8 data bits, no parity, 1 bit stop, and no flow control.

The PC is then ready to communicate with the indicator.

Validate the "**PARAM <-- PC**" function, the message "**RECEIVE WAIT..**" is displayed to indicate that the indicator is waiting for data recovery.

Under HyperTerminal, go to "Transfer" then "Send a text file", define the file to restore and confirm "Open".

Once the restoration is completed the indicator restarts, if the restoration did not proceed correctly one receives one of the error messages listed below and returns to the "**BACKUP**" menu.

List of error messages after restoring the indicator configuration:

Message :	Designation :	Actions / Solutions :
-- ERROR -- -- H --	The recovery file transfer was canceled by pressing the keyboard.	Restart the restore function.
-- ERROR -- -- P --	The file used is not in a compatible format.	Use a configuration restore file in a compatible format.
-- ERROR -- -- A --		
-- ERROR -- -- B --	An error occurred during the transfer (Communication error, CRC error, corrupted file, etc.)	Check the indicator configuration restoration file and restart the restoration function.
-- ERROR -- -- D --		

4.4.1.3. Saving the indicator software : "SOFT ---> PC"

This function allows you to make a backup of the indicator software, to do this you must proceed as indicated below:

Connect the PC (on Com1) with the **IDLC-2** (on internal RS232) and launch « HyperTerminal » or any similar software.

Give a name to the connection and validate (TERMINAL.IDLC)

Then in the "Connect using" section, you must validate "Direct to Com1" then configure the connection with 9600 Bauds, 8 data bits, no parity, 1 bit stop, and no flow control.

Under HyperTerminal, go to "Transfer" then to "Capture text", define the name of the file to save the file and confirm "Start".

The PC is then ready to communicate with the indicator.

Validate the "SOFT --> PC" function, the message "**TRANSMIT WAIT . . Max 5mn00s**" is displayed during the backup.

Once the backup is completed, we return to the "**BACKUP**" menu, close the Hyperterminal capture in the "Transfer" menu, "Capture text " then "Stop".

4.4.1.4. Return to the backup/restore menu: "RETURN"

This function allows you to return to the settings menu.

4.4.5. Return to the settings menu: "RETURN"

This function allows you to return to the settings menu.

4.5. End of settings : "END"

Once the end of adjustment function has been validated, the system asks whether or not to save the previously entered parameters:

```
Z E R O =   X X X X X X X p t s
G A I N =   Y Y Y Y Y Y Y p t s
          S A V E   ?
          Y E S =   +
          N O  =   -
```

```
Z E R O =   X X X X X X X p t s
G A I N =   Y Y Y Y Y Y Y p t s
          A D J U S T   ?
          Y E S =   +
          N O  =   -
```

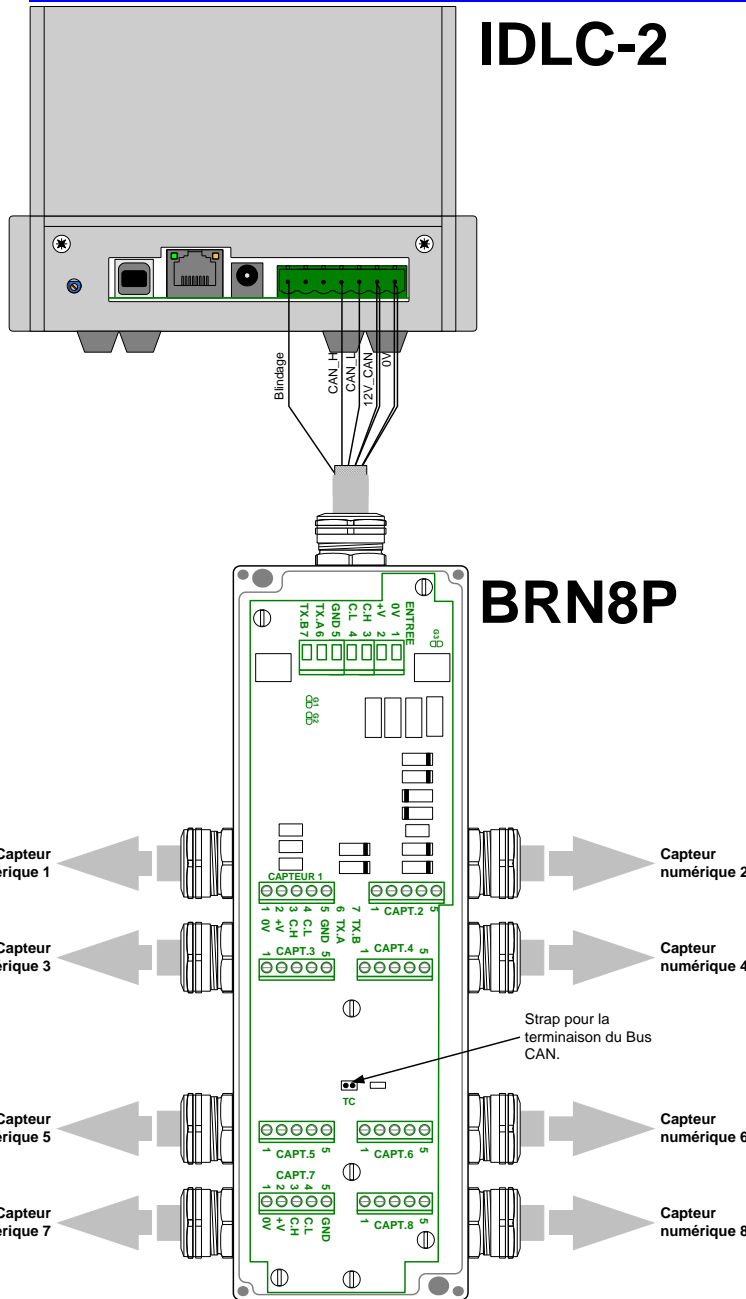
The above two displays are displayed alternately, "XXXXXXX" corresponds to the zero adjustment value and "YYYYYYY" to the gain adjustment value.

To confirm the save, tab the , if not tab the  key.

Messages "**SAVING 1 WAIT..**" then "**SAVING 2 WAIT..**" are displayed during the saving time (approximately 5 seconds) and the indicator restarts in application mode.

5. APPENDICES

5.1. IDLC-2 + junction box BRN8P bus connection to CPFN-A digital load cells



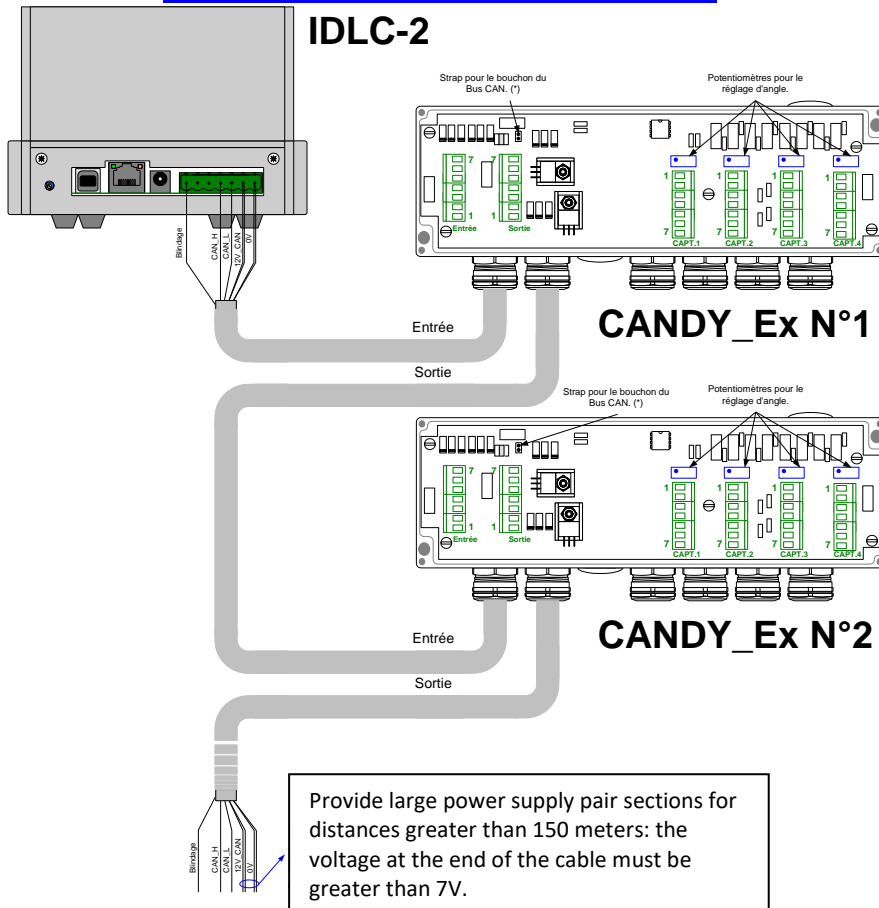
ATTENTION :
The MASTER CAN/RS485 connector of the IDLC-2 is not compatible with the MASTER CAN connector of the previous indicator generation (IDLC)

Jack marking	IDLC-2 connector MASTER CAN /RS485
1	
2	RxTx+
3	RxTx-
4	CAN_H
5	CAN_L
6	12V_CAN
7	0V

Jack marking	BRN8P connectors									
	Input	LC #1	LC #2	LC #3	LC #4	LC #5	LC #6	LC #7	LC #8	
1	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V
2	+V	+V	+V	+V	+V	+V	+V	+V	+V	+V
3	C.H	C.H	C.H	C.H	C.H	C.H	C.H	C.H	C.H	C.H
4	C.L	C.L	C.L	C.L	C.L	C.L	C.L	C.L	C.L	C.L
5										
6	TX.A	N.M.								
7	TX.B	N.M.								

N.M. : Not mounted.

5.2. IDLC-2 to CANDY-EX bus connection



ATTENTION :
 The MASTER CAN /RS485 connector of the IDLC-2 is not compatible with the MASTER CAN connector of the previous indicator generation (IDLC)

Provide large power supply pair sections for distances greater than 150 meters: the voltage at the end of the cable must be greater than 7V.

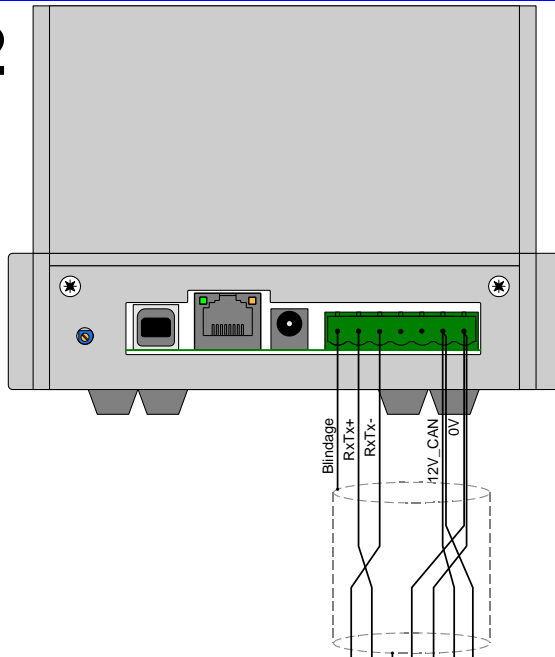
(*) : You must position a terminating resistor on the last "CANDY_EX" (ST1) to correctly polarize the CAN Bus.

Jack marking	IDLC-2 connector
1	MASTER CAN /RS485
2	RxTx+
3	RxTx-
4	CAN_H
5	CAN_L
6	12V_CAN
7	0V

Jack marking	IDLC-2 connector						
Pin #	Input	Output	LC #1	LC #2	LC #3	LC #4	
1	⏏	⏏	A+	A+	A+	A+	
2	12V_CAN	12V_CAN	R+	R+	R+	R+	
3	0V	0V	A-	A-	A-	A-	
4	CAN_H	CAN_H	R-	R-	R-	R-	
5	CAN_L	CAN_L	M+	M+	M+	M+	
6	12V_CAN	12V_CAN	M-	M-	M-	M-	
7	0V	0V	⏏	⏏	⏏	⏏	

5.3. IDLC-2 + junction box DLCJB-A bus connection to CB50X-DL digital LC

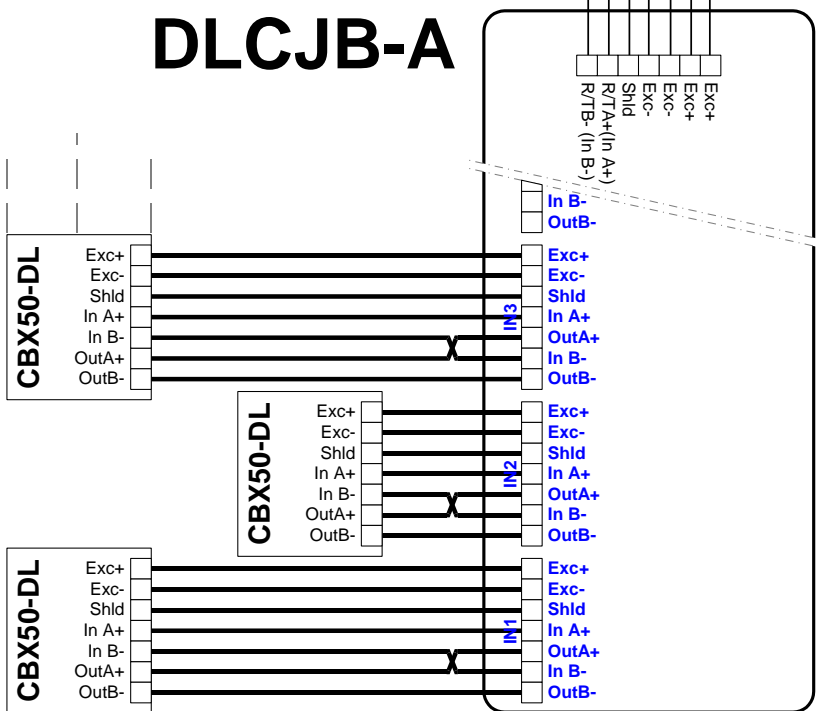
IDLC-2



Remark :

Using the RS485 link requires positioning the ST2 strap in mode 485 (rear side of the board), see “[5.4. Implementation and configuration of the IDLC-2 board](#)”.

DLCJB-A

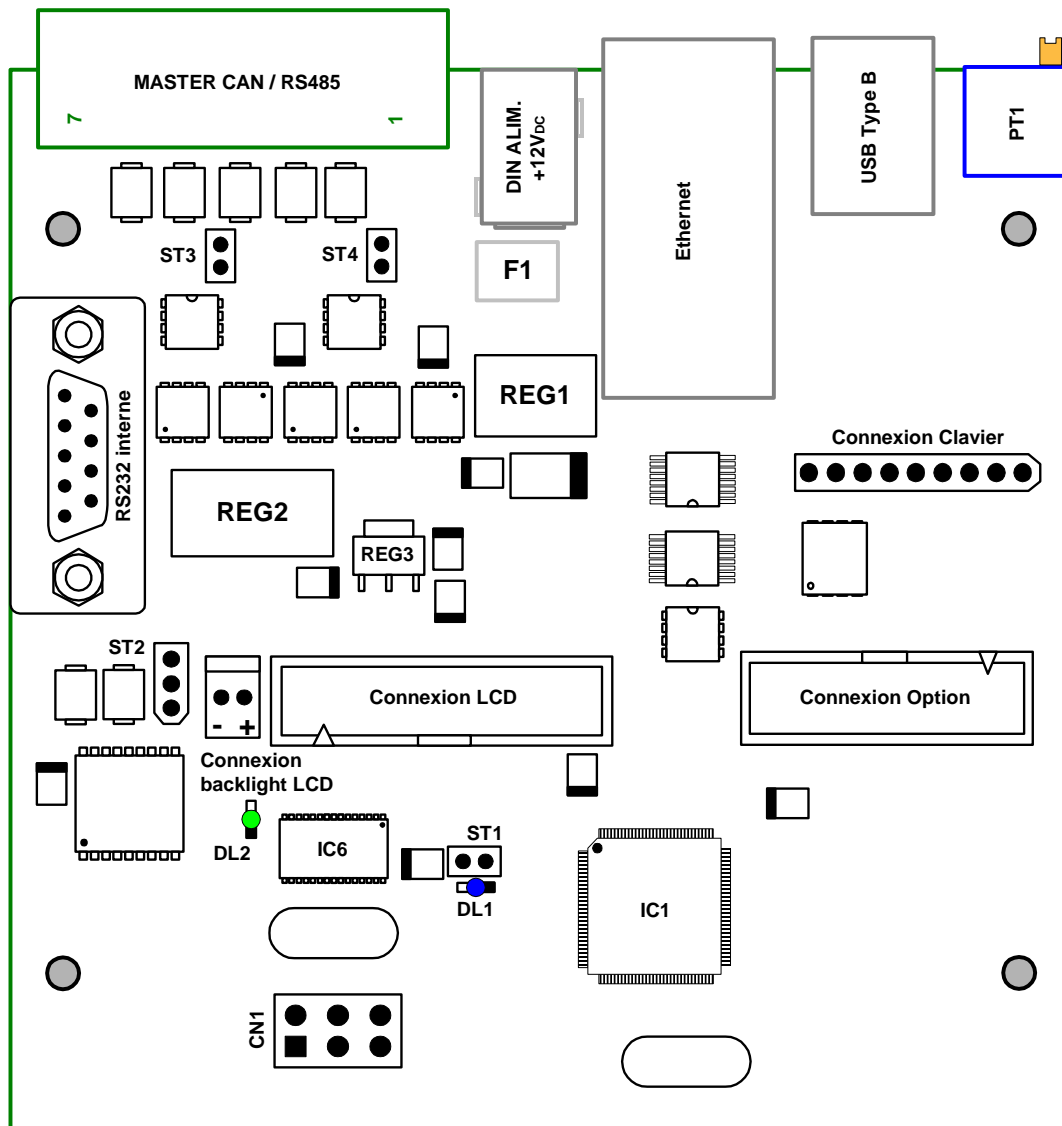


Jack marking	IDLC-2 connector
	MASTER CAN /RS485
Pin # 1	⏏
2	RxTx+
3	RxTx-
4	CAN_H
5	CAN_L
6	12V_CAN
7	0V

Junction box DLCJB-A				
Input	IN1	IN2	...	IN8
Exc+	Exc+	Exc+	...	Exc+
Exc-	Exc-	Exc-	...	Exc-
Exc-	Shield	Shield	...	Shield
Exc-	In A+	In A+	...	In A+
Shield	OutA+	OutA+	...	OutA+
R/TA+	In B-	In B-	...	In B-
R/TB-	OutB-	OutB-	...	OutB-

CBX50-DL
Exc+
Exc-
Shield
In A+
In B-
OutA+
OutB-

5.4. Installation and configuration of the IDLC-2 board



Detail :

ST1 : Factory reserved.

ST2 : Used to select RS485 or RS232.

 : RS485 mode
  : RS232 mode

ST3 : Used to put the terminating resistor on the CAN bus.

ST4 : Used to put the termination resistor on the RS485.


DL1 : Board life LED, flashes in normal operation and lights up steadily in factory reserved use.

DL2 : USB communication life LED, flashes during USB communication.

PT1 : LCD display contrast adjustment potentiometer.

5.5. Load cell (transmitter) display table

For easier maintenance, it is possible to view the status of the various load cells (or transmitters) connected to the indicator.




To access this function you must tab the  when the indicator displays the adjustment menu (see "**Erreur ! Source du renvoi introuvable.. SETTING MODE**") or the calibration menu (SEE "**Metrological adjustment : 'ADJUST'**"), to display the screen below:

L C	P t s	m / s
NN ▶	S X X X X X X X	V V V ◀
NN	S X X X X X X X	V V V
NN	S X X X X X X X	V V V
NN	S X X X X X X X	V V V
NN	S X X X X X X X	V V V
NN	S X X X X X X X	V V V

Detailed information:

NN = LC/transmitter station number.
 SXXXXXXXX = Number of points measured with the sign.
 VVV = Number of measurements per second of the LC.

Remarks :

- Use the  key to move to the next LC/transmitter and the  key to return to the previous LC/transmitter.
- The LC (or transmitter) currently selected is indicated by the arrows (▶ ◀)
- Tab the  key to access the LC/transmitter information screen.

Load cell/Transmitter Information Screen:

NN	
S N e e p =	E E E E E E E E
S N d l c =	C C C C C C C C
S o f t	R . R
P t s	S X X X X X X X
m / s	V V V S t S S S

Detailed load cell/transmitter information:

NN = Station number.
 EEEEEEEEE = Serial number stored in the indicator.
 CCCCCCCC = LC/transmitter serial number.
 R . R = Software version.
 SXXXXXXXX = Number of points measured with the sign.
 VVV = Number of measurements per second.
 SSS = Status.

List of available statuses :

- OK** = Load cell/transmitter operating normally..
COM = Communication fault.
SN = The serial number of the sensor/transmitter is different from that stored in the indicator.
REF = Measurement fault, defective or poorly wired cell.
HG- = Measurement fault, derated weight.
HG+ = Measurement fault, overload.
06V = Sensor/transmitter power supply is insufficient (<6V).
16V = The sensor/transmitter power supply is above its maximum admissible value (>16V).

5.6. Error messages

Message :	Designation :	Actions / Solutions :
SERI N	Problem with LC (transmitter) serial number.	It is necessary to redo a zero adjustment.
L CELL	Communication problem with load cells or transmitters.	It is necessary to check the wiring and connections.
OS	Out of scale error +	Exceeding the scale capacity.
OS-	Out of scale error -	Weight below zero.
OR	Converter error out of range +	A/D converter capacity exceeded.
OR-	Converter error out of range -	A/D converter capacity exceeded.

5.7. Error messages during setting

Message :	Designation :	Actions / Solutions :
ERROR ---1---	Incorrect scale division.	Enter a new value for the scale division (1, 2, 5, 10, 20, 50, 100...)
ERROR ---2---	Scale division different than 1/2/5.	
ERROR ---3---	Incorrect scale capacity.	Enter a value between 1 kg and 250,000 kg.
ERROR ---5---	Exceeding the maximum number of scale divisions.	The indicator operates in legal-for-trade mode, and the number of configured scale divisions exceeds 5,000. Enter new values for maximum capacity and scale divisions. (Number of scale divisions = Max. capacity / d scale division)
ERROR ---6---	Error on immobility range.	Enter a value between 0.5 and 3.0 scale divisions.
ERROR ---7---	Error on the number of immobility measurements.	Enter a value >= number of measurement per sec/2.
ERROR ---8---	Error on load cell type.	Parameter " L.CELL TYPE " must be 1 or 2.
ERROR ---9---	Error on number of load cells.	Parameter " L.CELL NB " must be between 1 and 12.

NOTES :

A large area containing approximately 35 horizontal dashed lines for writing, spaced evenly down the page.

