

BELLA SERIES
SERIAL COMMUNICATION LOP
INSTALLATION MANUAL



TFT Displays

Document Version: v1.04

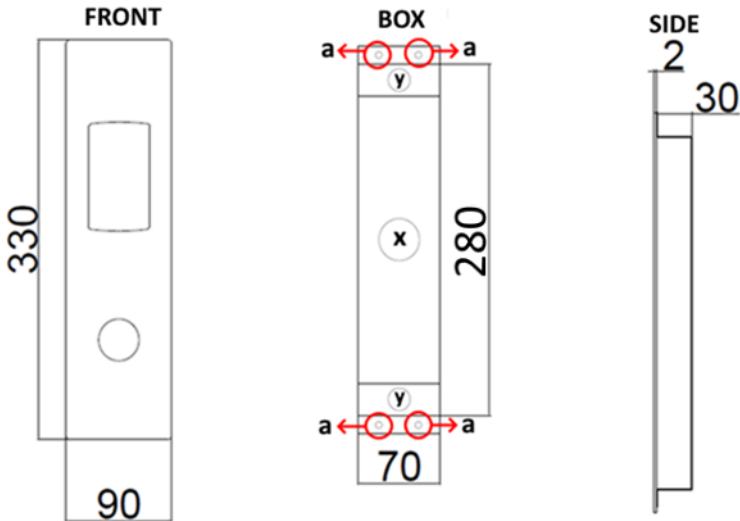


Figure 1

BELLA LOP Contents

- BELLA Serial Communication LOP
- Mounting Dowels and Screws
- User Manual and Installation Manual
- Terminating Resistor for systems without a shaft pit board with CAN interface.

1- Mechanical Installation

- 1.1 Pull the front cover of BELLA LOP out.
- 1.2 Drill a hole in the wall where you can insert the back box of LOP. Dimensions are available in Figure 1 and drawing sent to our customers.
- 1.3 Plug the cable coming from the controller or upper LOP to the rectangular socket on the backside of the front panel.
- 1.4 Place the back box of LOP to the pre-drilled hole in the wall and fix it by using dowels and screws at the points indicated by “a” in the figure.
- 1.5 Plug one cable coming from the controller or from upper landing panel through the hole indicated by “X” into one of the sockets on the backside of the LOP board.
- 1.6 Plug the cable leading to the lower LOP or pit board to the other socket.

- 1.7 If it is the lowest LOP and there is no serial pit board, then plug a resistor terminator to the other socket to close the network.
- 1.8 Then go to the next section to adjust id number and display settings.
- 1.9 When settings has been completed then insert the pins into the holes on the back box denoted by **y** and push the front panel onto the back box.

2- Electrical Connections

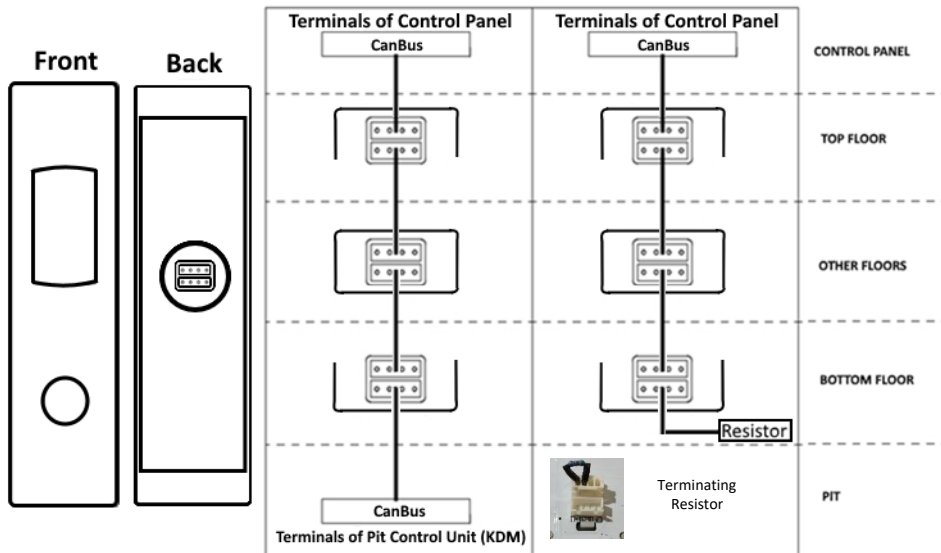


Figure 2

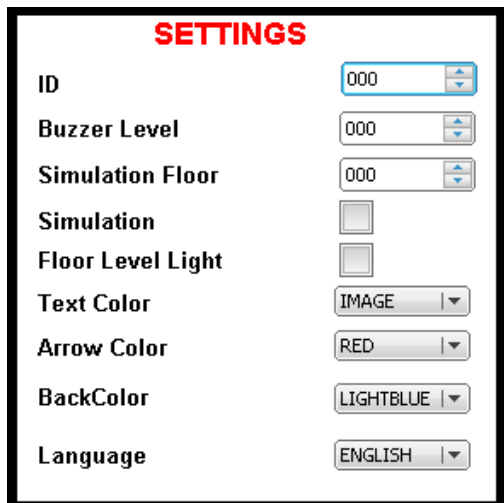
Figure 3

- 2.1 Connect the CANBUS cable terminals to the LOP interface in the control panel (100-1000-CL1-CH1).
- 2.2 If your system includes a **shaft pit control box with CAN interface** as shown in Figure 4, then connect all LOPs with CANBUS cables with two white rectangular sockets.
- 2.3 If no electronic shaft pit board with serial interface is present, then insert a terminating resistor into the lower socket of the LOP at the bottom floor as shown in Figure 5.

3- Operation and Adjustment Operations

There are 3 programming buttons on the board: UP, DOWN and ENT. You can increase the value of a parameter by pressing UP and decrease it by pressing DOWN button. After setting it to the desired value, press ENT button shortly to confirm.

In order to enter adjustment menu press 3 seconds ENT button.



ID: is the floor number of the LOP.

Buzzer Level: defines volume level of buzzer.

Simulation Floor: defines maximum floor number shown in simulation mode.

Simulation: If simulation is passive LOP function normally and communicates via CAN BUS. If simulation is active LOP Works in simulation mode without accepting calls and communicating with the controller.

Floor Level Light: is used in systems with semi-automatic doors. If this box is activated then AT FLOOR LEVEL indicator is lighted when the car is at floor level.

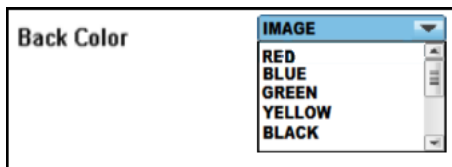
Text Color: defines the color of the numbers and characters.

Arrow Color: defines the color of the direction arrow.

Back Color: defines the background color of the display. An image can be shown also in background when IMAGE is selected in this box. The picture for the background should be saved into the SD card with the name "tft .bmb" and it should be an image file in bmp format.

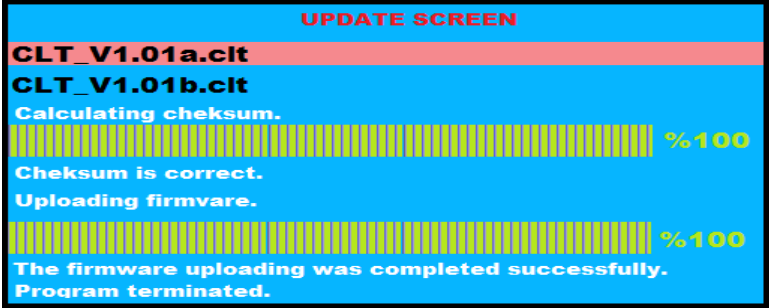
Language: defines the screen language.

After editing all parameters parameters press ENT button 3 for seconds to save them and exit.

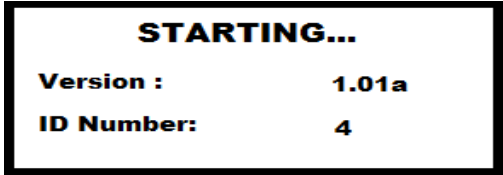


4- Firmware Update

- The software of TFT display can be updated by using SD card. The procedure for updating the software is as follows:
- Save the new file must into the SD card.
- Switch off the power of LOP.
- Press UP and DOWN buttons simultaneously and hold them pressed while switching on LOP
- When the update screen shown below appears release the buttons.
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- Select the file you want to upload (with “.clt” extension) on the update screen by using UP and DOWN buttons. Press ENT button to upload highlighted file for update.
- **Warning : During the update process, never turn off the power.**
- After update process has been completed, the LOP will be restarted.
- When the LOP is restarted, ID number and software version will appear on the screen.



5-Caution

- 4.1 Use only special stainless steel cleaners to clean the panels.
- 4.2 Do not use any detergent or acids to clean panels.
- 4.3 Avoid to contact any liquid to the LOP.
- 4.4 In case of an electrical failure, switched off the LOP and contact with Aybey Elektronik Technical Service.