



ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

No: TL 10 / 74 (2)/AMED/2009 – MED

Office of the VC&MD,
Bus Bhavan, Musheerabad,
Hyderabad – 500624.

Circular no. 25 /2009-MED dt. 12-10-2009

SUBJECT : VEHICLES – JnNURM Buses- Provision of '**LED Destination Boards**' in **Semi-Low Floor / Low Floor** Buses – issue of guidelines on loading/updating of route details – Reg.

I. INTRODUCTION:

The corporation has placed orders for procurement of 1540 Low floor / Semi-Low floor buses under JnNURM scheme for deploying in Hyderabad/Secunderabad twin cities, Vijayawada, Visakhapatnam and Tiurupati cities. Orders are placed as per the specifications of Ministry of Urban Development (MOUD), Govt. of India which include provision of LED Destination boards at front, on side and at rear of the bus and other ITS related equipment.

These day light viewable 'LED' destination boards are passenger friendly and provide display of route details in fixed / scrolling mode in bright amber color with light sensitivity. The commuters feel more comfortable as the display is visible from long distance in clear and legible manner; hence it is of more of significance to maintain these LED boards. As the provision of LED destination boards is relatively new to the corporation, the following guidelines are issued on installation of software in to systems of depot, programming of routes, uploading the route details in to LED destination boards on the vehicles and updating of routes.

II. SOURCES:

At present the following approved makes of 'LED' destination boards are provided in the vehicles and are covered by a warranty of 7 years.

- 1 M/s. Castmaster Mobitec P Ltd.,
Plot no.46, Sector -6, Industrial Area, Faridabad
Phone: 0129- 4097400 / 4097401.
**Contact person: Mr. Lalit Setia, Asst.Manager, Service,
Mobile: 09818151947**

- 2 M/s. Hanover Displays Ltd.,
Authorised dealer:
M/s. Power Electronics,
C – 25/7, MIDC, Commercial Building,
Chinchwad, Pune-411019
Ph: 020-6510 1305 Fax: 020- 2747 6933
**Contact person: Mr. Arun Kumar, Area Service Engineer
Mobile: 09481777077**

The LED display system consists of one front LED destination board, one side LED destination board, one rear LED destination board and one Control unit. The above components shall be protected from dust and spillage of water/ oil etc.

III. THE REQUISITES:

In order to install the software of 'LED' display boards, the following system requirements are needed at the depots.

1. Window XP OS
2. Software of the LED Display unit
3. Microsoft Telugu fonts
4. One Loader unit

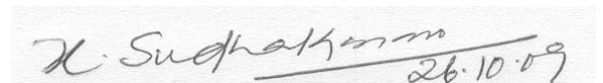
Core Group Supervisors and some of the System Supervisors of HCR, SCR and VSP were already trained on this subject by the respective unit manufacturers. The above supervisors were also provided with software and loader units of the 'LED' destination boards. If the software is required at any of the depots, may have the same from Dy.CME (C&B) .

A detailed installation and programming procedure of 'LED' destination Boards is explained in the hand out attached herewith at Annexure.

Therefore, all the Depot Managers of GH Zone, VJA, VSP and TPT regions are advised to install the required software at their depots and ensure that the buses deployed under JnNURM are run with proper display of route and destination.

All the Dy.CME's/ RM's of GH Zone, VJA, VSP and TPT regions are also advised review the functioning of 'LED' destination display boards regularly to ensure proper functioning of the same and to avoid complaints from commuters.

Please acknowledge.



EXECUTIVE DIRECTOR (ENGG. & IT)

Encl: Installation procedure

To

All the Depot Managers of Greater HYD Zone, VJA, VSP and TPT regions

Copy to: Director (V&S) for information,

Copy to: ED (A&P), ED (AM& HZ), ED(O&MIS), ED(GHZ), ED(V&V), ED(K&N) for Information

Copy to: FA, CAO, CFM for information,

Copy to: CME(C&B), CME(O), CTM, CE(IE&IT) for information and necessary action,

Copy to: The Regional Managers, HCR, SCR, VJA, VSP and TPT for information and necessary action,

Copy to: Dy.CME(C&B), DY.CME (O), for information and necessary action,

Copy to: All the Dy.CMEs of HCR, SCR, VJA, VSP and TPT for information and necessary action,

Copy to: All the Maintenance In-charges of HCR, SCR, VJA, VSP and TPT for information and necessary action,

Copy to: Manual section

Installation Procedure and Programming of 'LED' destination Display Boards:

CASTMASTER MOBITEC:

The Windows XP OS only supports the software developed by M/s. Castmaster Moditec P Ltd., for programming the route display details of 'LED' destination boards. Hence, in order to install the software one of the PC at depot shall have Windows XP OS installed.

I. INSTALLATION:

1. Insert CD/Pen Drive in which the software is available, into the drive and install it.
2. Restart the system.
3. Extract the license name and key from the Cast master Mobitec registry zip file from the dump and paste them in license and key check boxes of the registration window when it asks for them.
4. Restart the system.

II. CREATING ROUTES:

1. Double click on 'MIE icon" created on the desktop to open the application.
2. Main window of the application will be opened.
3. Create new database by clicking on Files/Database handling/Add or New buttons in menu bar.
4. Save the data base duly giving it a filename and it will be saved in ".gdb" format.
5. Highlight the newly created database file and activate it by clicking on "ACTIVATE" button. The application will be closed.
6. Re-open the application.
7. Pop up "Scroll data upgrade" window will appear, click on UPGRADE button.
8. Open Bus Configuration window by clicking on Bus Configuration icon or from Options/Bus configuration in menu bar.
9. Assign bus name and bus type by clicking on ADD/EDIT buttons. Bus type is optional.
10. Close the window.
11. Click on Sign Configuration icon or from Options/ sign configuration in menu bar to open Sign Configuration window.
12. Click on "ADD" button to assign sign types. "Add sign" window will appear. Select MobilLED with pitch 13.4X10(y*x) in the sign type check box.
13. Give 16 for height and 140 for width in the check boxes. Click on "Enable scroll support" check box. Click on OK button.
14. Repeat step no: 11 duly giving 16 for height and 96 for width.
15. Click on Edit Signs button. "Signs on Bus" window will appear. Click on ADD button. ADD SIGN window will come. Highlight to select sign type from the previously assigned two types i.e., 16 x96 for rear and left side and 16X140 for front sign.
16. Click on template button to open template configuration window and select template type.
17. Click OK button to return back and select location of sign in placement check box from the drop down menu.
18. Address (i.e., 6 for front, 7 for left and 11 for rear sign) will be automatically appear in the address check box.
19. Repeat the Step no: 13, 14 and 15 for each sign i.e., for front, rear and left.
20. Close the windows and return to main window.
21. In the left side of the window, Bus name and front, left and rear sign icons will appear.
22. Open 'New programme' window by clicking on "NEW" button or from File/New programme in menu bar.

23. In the "New programme" window, select the bus. Give the route Number in line number check box. Give route name in "Alternative destination text" check box. The line number and the alternative destination text will appear on control unit screen to identify the route. Click on OK button.
24. Preview of front sign with route number as fed in line number check box will appear in the main window.
25. Click in the destination area or line number area to type/edit. Different types of font can be selected from the font check box. Use alignment icons to align the text typed. All Microsoft Office editing operations like cut, copy and paste and navigation keys will work here also.
26. Select the text you want to scroll and click on the scroll keys. If you select Scroll option for the text, scroll bar will appear at the bottom of the sign.
27. Save the sign and select another sign.
28. Repeat StepNo:23 and 24.
29. Scrolling can be verified by run simulation option available in tools in the menu bar.
30. After creating all signs for a route, another route can be created in the same manner in the same ".gdb" file by clicking either new button or new programme option available in File option of menu bar.
31. After creating all required routes, an out file shall be created by clicking "Create Out File" option in Tools button of menu bar.
32. By clicking this, create out file wizard will appear. In the first step, select ICU 600 for control unit. Click next button to open second step of the wizard.
33. In this window all the available programmes (routes) in the right side box and empty box of "Included programmes" on the left side will appear. Use navigation buttons appear in the center of the window to include required routes from the available routes. Click Next.
34. Click Next buttons in the subsequent steps to accept default settings and lastly finish button. Save the out file in the required location.
35. For creating Telugu signs, insert Windows XP service pack 2 CD in the drive. Click on Start/Settings/Regional and language options. Select Telugu language from the drop down list at language check box, duly opting CD when it prompts. Select Telugu language.
36. In Internet open "Google Indic Transliteration" site and select Telugu.
37. Type the required destination name, give a blank with space bar and then click Enter.
38. The text typed in English will be translated into Telugu. If it is not correct in Telugu, right click on it. Different options will appear, select the right one.
39. Copy and paste these Telugu words on a word document and again copy and paste on the sign for making Telugu sign.
40. To rotate text in signs alternatively, select the first sign. In the "Sign Texts" check box add other sign by clicking on ADD button and selecting the corresponding sign number.

III. LOADING ROUTES IN TO CONTROL UNIT:

1. Copy the out file created as explained above in a Kingston make pen drive of 1 GB capacity only.
2. Insert the pen drive in USB port of the control unit. The out file in the pen drive will automatically get down loaded into the control unit.
3. Follow the display instructions on the control unit screen and remove the pen drive when it prompts on the screen of the control unit.
4. Wait until the new data base is installed and then the control unit restarts.
5. List of out files will be displayed on the screen of the control unit.
6. Select the required (route) out file by using navigation keys and selection key($\sqrt{\quad}$)
7. All the routes in the selected out file will be displayed.
8. Select the desired route from the list of routes available in the file and press selection key($\sqrt{\quad}$).

9. The desired route will be displayed on the front, side and rear destination boards.
10. In order to change the route display, press **F1** key to redisplay the list of routes. Repeat action at sl.no.8.
11. Press Home button to return to out file list. Repeat Sl.No.6 to 8 to change from one out file to another.

IV. GUIDE LINES TO DRIVER:

1. Control unit will display the route selected previously when the ignition is in '**ON**' position.
2. Switch on the LED board. The boards will display the route as shown on control unit LCD screen.
3. In order to select a destination, press **F1** Key to get the list of routes on control unit LCD Screen.
4. Select the desired route from the list by pressing **UP/DOWN** arrow buttons and then press ($\sqrt{\quad}$) button for selection. The selected route will be displayed on control unit LCD screen as well as LED destination boards.
5. Other than the above do not press any of the buttons.
6. Handle the control unit carefully and don't use any object to press the buttons of control unit from driver seat.

HANOVER:

I. INSTALLATION:

Insert CD/Pen Drive in which the software is available, into the drive and install it.

II. CREATING ROUTES:

1. Double click on Helen Icon.
2. Click on File option in menu bar.
3. Click on New option in drop down menu.
4. 'Create New Destination' window will appear.
5. Create a new folder.
6. Give a file name and save to create a new file.
7. 'Sign Parameter Editor' window will appear.
8. Select sign numbers by using UP/DOWN buttons in Sign address and size area of window. Select 0 for front destination board. For TYPE, select "External Fitted". For "width & Height" select 128 x 15. By selecting these, fields in Fields and justification area will be activated. The default values, 32 for width, 7 for height and Left for justification will be appeared.
9. Click on 'Select general fonts' and then click on 'Select standard fonts'.
10. Click on 'Select RN fonts' and then click on 'Select standard RN fonts'.
11. Select 1 for side and rear destination boards. For TYPE, select "External Fitted". For "width & Height" select 96 x 15.
12. Repeat steps 9 & 11
13. Click 'OK'.
14. This will return to Main window. Click on Destination and select 'New'.
15. 'Enter Route Code and Name' window will appear.
16. Type destination Sl.No. in destination box and type route no. destination and via details in front destination box i.e., boxes shown against 128 x 15 size.
17. Click on Drop. Details typed in front sign will be copied in side/rear sign area and driver's message boxes.
18. Click on 'OK'.
19. Preview of destination boards will appear.
20. Click on the destination you want edit.
21. Sign Designer window will appear.

22. In text input option area, template of the destination board will displayed. The desired layout can be selected by using UP/DOWN buttons.
23. The Number of Fix boxes in Super x area will change as per the selection of template.
24. Click drop and then check the fix boxes and again click drop
25. Check on extend box and then click drop
26. The text in the preview will be justified.
27. Check on Super x box.
28. Super X features will be displayed.
29. Check the scroll box of same colour of the area you want to scroll in template.
30. Check the 'Proportinate Second Line' box and then click drop
31. The text opted for scroll will scroll in the preview.
32. If the destination is required in single language, click on save & exit.
33. For creating destination board in second language, viz, in telugu, after step 29, check on the manual mode box, which will display a command line at the bottom. In this, before via details there is a " fit2". Type '\rep1 and click drop.
34. Select page 2.
35. Select required template.
36. Select Telugu language in bottom task pane.
37. Check on the font selection. Font button will appear. Click it to open font window and select desired telugu font from the list.
38. Type directly on the template and drop.
39. Repeat the steps 23 to 31.
40. Save and exit to main window.
41. Click on Options in menu bar. Select console config. Edit Profile window will appear. Click on Modify button. Configure Console Parameter window will appear.
42. Click on 'Advanced' button and adjust scroll page time to 0.0 and then click on 'Destination' button to adjust 1st Page time. Adjust this as required basing on the length of test to scroll.
43. Click OK to return main window.

III. LOADING THE ROUTES IN TO DESTINATION BOARDS:

1. Connect Base station and Keylo to System.
2. Click on File option on menu bar.
3. Click on 'Save output file' and then OK in 'Save output file' window. Click ok when it prompts.
4. Click on 'Send out put file'. Light on Keylo will blick and stop. OK button will get highlighted and the file will be copied. Close the window and remove the Keylo.
5. Connect the Keylo to Control unit. Switch on the control unit. The out file in the Keylo will be copied to control unit. When the LCD screen prompts Idle, remove the Keylo. Press D key and then serial number of route to be displayed. Press enter key.