



ITEM No. LD101

ANE MODEL LD101 Dual Controller User Manual



**DMG Electech
UK Distributor**

LD101 User Manual (English version)

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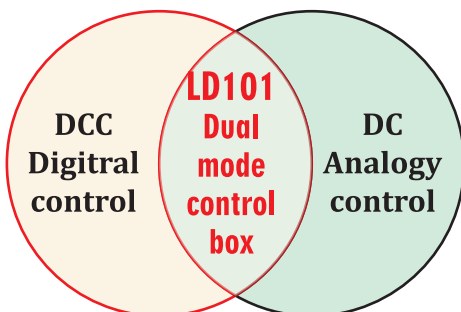
Appendix i

Other Products

1. Introduction

We are pleased that you have purchased the ANE MODEL Locodigit 101 DC / DCC dual mode command station set. This command station combines DC analogy and Digital command control in one box for the model railroader. The LD101 do not use DCC signal to control a DC loco. The unit has a separate DC control button. When you switch to DC control, it is a pure DC environment enabling you to control all DC loco on the track. The LD101 is your best choice for a

model railroad beginner or a modeller changing from DC to DCC. It allows you to use both DC and DCC as a control base for your operating requirements.



LD101 DC / DCC mode command station



2. LD101 Product Content (what is in the box)

1. LD101 handheld controller x1 (Pt no LD101/HC)
2. LD101 main control box x1 (Pt no LD101/MC)
3. 1.5 meter (4'11") handheld control cable x1
(Pt no LD101/1.5)
4. 110V ~240V AC to 15V DC power transformer x1
(Pt no LD101/240/15)
5. User manual x1

Before using your LD101.

Important:

The LD101 is not a toy and should only be used by ages 8 years and above.

A DC locomotive must never be connected to DCC power, always ensure your DC locomotive are isolated or removed from the track when switching to DCC mode.

ANE Model or DMG Electech will not be responsible for damage to locomotives or equipment operated on the incorrect supply system.

Diagrams to assist with wiring the layout are available on the DMG Electech website.

3. Quick Start Guide

Quickly start with LD101 DC / DCC command station

LD101 has two different Modes of model control. One is DC (Analogue) control and the other is DCC (Digital) control. You can choose either one of the modes to control your type of train.

Let us introduce how to control your layout with the ANE MODEL LD101 Dual Controller.

Note: The LD101 controller will always power on in the last mode selected DC or DCC

In DC Analogue control,

1. Take out the contents from the box. Ensure that all components listed in Section 2 are present and undamaged. (report any missing items to DMG Electech UK distributor immediately).
2. Connect one end of the 1.5 meters (4'11") handheld control cable (Pt no LD101/1.5) and the other end to the LD101 (Pt no LD101/MC) main control box.
3. Connect the track wires (not supplied) to main control box terminals marked track output.

4. Connect the DC plug from the power transformer (Pt no LD101/240/15) to Main control box (Pt no LD101/MC) power input socket.
5. Connect the mains transformer to the Mains power socket and turn on at the wall.
6. Press LD101 main control box (Pt no LD101/MC) power to turn on LD101.
7. Press LD101 handheld controller (Pt no LD101/HC) throttle power button on.
8. Set the control mode to DC by pressing the mode button (pressing the mode button alternates between DC and DCC). Orange DC LED light on. The DC LED on the main control box will illuminate.
9. In DC mode the throttle speed will display "0". It means the track has no power and loco will be stationery on the track.
10. Turning the rotary control clockwise will cause the speed to increase. The LED Display will show the speed number Max speed is 100.
11. Due to static friction loading of manufactured locomotive's you need to rotate to over 30 for most locomotives before the loco will start moving.

12. When you rotate the control to speed 1, Railcar or carriage internal lights will light. (Electech / ANE Model lighting units)
13. In DC mode the Speed knob has two different rotation scale modes. One is rotating 1 step speed will increase 1 or rotate 1 step and speed will increase 4. Pressing the speed knob will change between the two different modes.
14. Press the direction arrow buttons under the display screen to change locomotive direction.

WARNING: - DC control do not change locomotive direction while at speed or directly. Please make sure you reduce speed until the train has stopped before changing direction. Serious damage to locomotive gearbox and transmission MAY RESULT if this instruction is not followed.



Mode Button

Power ON/OFF

DCC Digital command control

1. Take out the contents from the box. Ensure that all components listed in Section 2 (above) are present and undamaged. (report any missing items to DMG Electech UK distributor immediately).
2. Connect one end of the 1.5 meters (4'11") handheld control cable (Pt no LD101/1.5) and the other end to the LD101 (Pt no LD101/MC) main control box.
3. Connect the track wires (not supplied) to main control box terminals marked track output.
4. Connect the DC plug from the power transformer (Pt no LD101/240/15) to Main control box power in socket.
5. Connect the mains transformer (Pt no LD101/240/15) to the Mains power socket and turn on at the wall.
6. Press LD101 main control box (Pt no LD101/MC) power to turn on LD101.
7. Press LD101 handheld controller (Pt no LD101/HC) throttle power on.
8. Change control mode to DCC (pressing the mode button alternates between DC and DCC). Blue DCC LED light on.

9. Both Handheld controller (Pt no LD101/HC) and main control box (Pt no LD101/MC) blue LED's will illuminate.
10. The handheld controller LED Display will show 3 the factory default setting. The green Loco LED will also illuminate.



LED display Loco Number mode

Enter Button

Rotary control Knob

11. Turn the Rotary control knob to select locomotive number that you require.
12. Once the display shows the locomotive number you selected Press the “Enter” button.
13. The Rotary control knob will now enter “speed Mode”.
14. Turn the rotary control knob clockwise to increase speed anticlockwise will decrease speed.
15. The speed control is selectable between two speed modes 28 or 128 steps to change speed mode press the rotary control knob. To change back press the rotary control knob again.

Note: in DCC mode the locomotive should start at step 1 however not all decoders provide this good a response The ANE Model / DMG Electech Decoders provide excellent response see back of this manual. Appendix i

16. Locomotive direction is selected using the buttons below the direction LED's



Direction LED's

Direction selection Buttons

17. To place the controller into "function mode"
Press the Enter Key again.

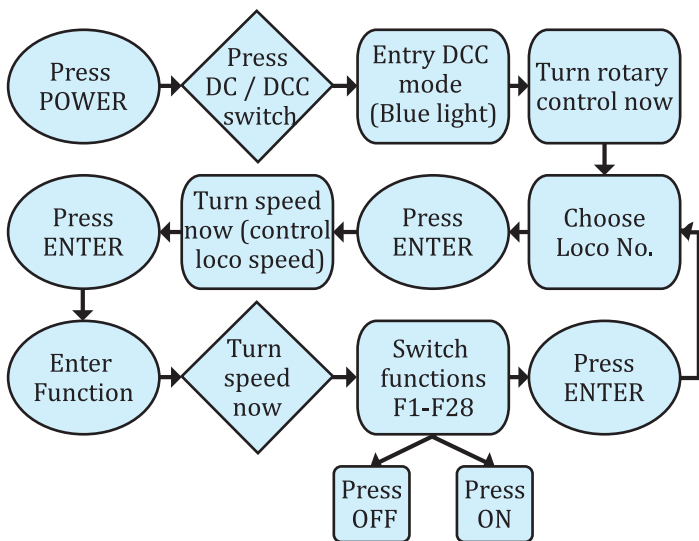
18. The LED Display will show F0 - F28 and the Function LED will illuminate (marked Func)



LED Display now shows Function.

Use these buttons to turn functions on or off.

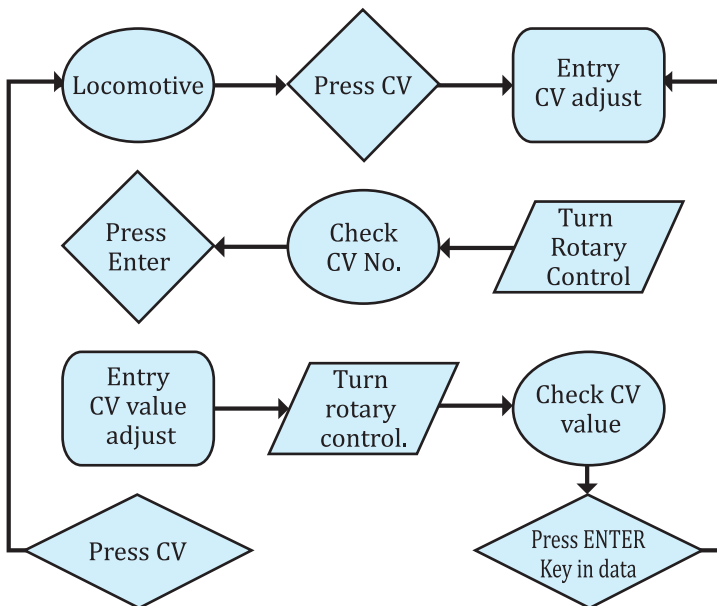
19. The Direction Buttons (Marked on and off) now turn the selected function on or off. (depending on function operation the function will remain latched in the selected state)
20. The LD101 command station has memory function for F0 front light and rear light. When you turn on F0, in all conditions no matter about dirty tracks or power off track section. It will light on again when the loco has the power to run. You do not need to turn on F0 again.
21. Pressing the enter button again will return the unit to locomotive choice mode.



4. Advanced Functions of the LD101

LD101 is not a simple or basic function DC / DCC command station. It has most of the important DCC functions.

Flow chart for CV programming



1. CV Adjustment

The LD101, uses main line program mode, the unit will focus on the loco that you want to adjust the CV to program. It will not influence another different address loco operate.

Note: Main line programing cannot read the CV value of a locomotive. You need to remember the CV value.

In the CV adjust function, we have two special design features in the LD101.

CV1025 for long address setting.

When you want to adjust long address, you should adjust CV29 at first. But in CV1025, we will adjust CV29 and long address at the same time. When you use CV1025, the data will start at 128 to 9999.



CV1026 back to factory default. When you forget your decoder address, you can put your loco on the track and use CV1026 to 8. It will reset this decoder to factory default.

Note: V1026 will reset all the locomotives that you put on the same track. If you do not want to reset all the locomotives on your layout, you need to remove the locomotives that you don't want to reset.



LED Display shows CV number.

CV Mode LED.

LED Display shows
New value.

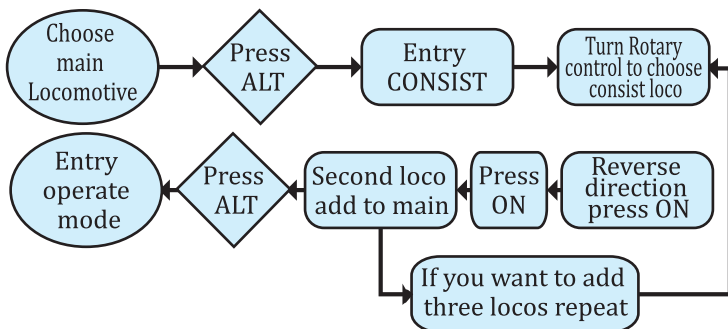
Data LED indicates
data input Mode



Consist Function operation.

LD101 has a consist function. This function use CV19 to control different locomotive consist.
Below is the consist add loco step.

Flowchart for Consist Operation



To program Consist

1. Select the main locomotive press the Alt button until consist is selected.
2. Consist LED will illuminate to show consist mode.
3. Turn the rotary control to select the consist loco (repeat this step for up to 3 locomotives).
4. Press the reverse direction button on.
5. Press the enter button
6. The second and subsequent locomotives are now added.
7. Press ALT to enter the operate mode.
8. Now in the operate mode.
9. Turn rotary control to control speed.

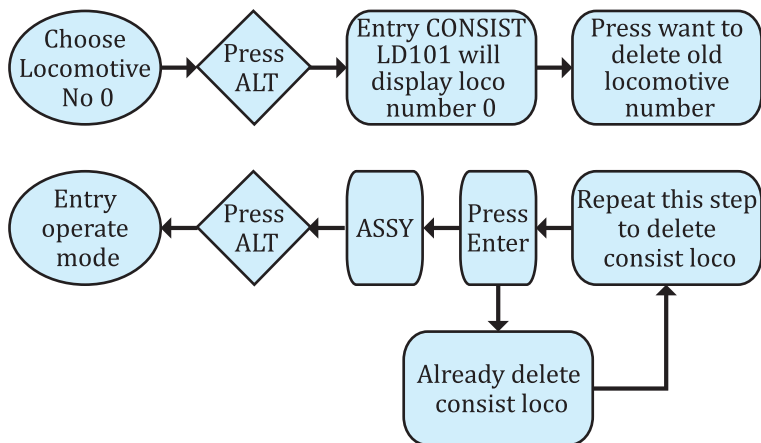


Consist mode selected LED

Alt Button

To delete Consist locomotives

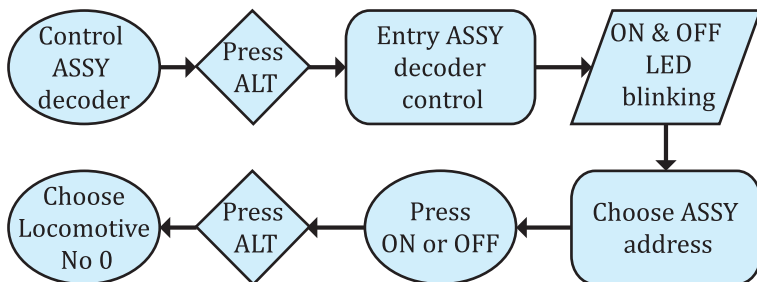
Flowchart for Delete Consist



1. Select loco Number.
2. Press ALT Button until Consist is selected.
3. Consist LED will illuminate.
4. LED display will show first Loco number.
5. Select the locomotive number you wish to delete.
6. LED display will show Loco Number to be deleted.
7. Press Enter
8. Press ALT until operate mode is selected.

Accessory Decoder Control Function (Stationary decoder control).

Flowchart for Accessory Decoder Control



The ASSY LED indicates control of stationary decoder (turnout, signal or another similar device).

1. To select accessory Press ALT button until ASSY LED is illuminated.
2. The on and off LED's will start blinking.
3. Use the rotary control to select the address of the accessory to be controlled.
4. Press the on or off button.
5. If required select another accessory to be controlled and repeat the above steps (3 & 4)
6. Press ALT to return to the operation mode.



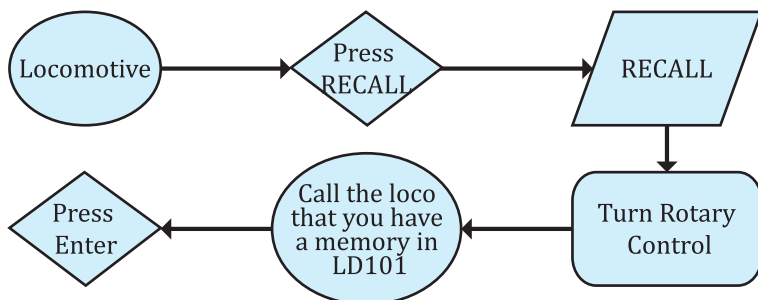
**Accessory
LED**

Recall function.

LD101 will remember the last 6 locomotive numbers that you operated.

Just use recall key to call back the loco and it also will remember the speed and function on or off.

Flowchart for Recall function



1. Press the recall Button.
2. Turn the rotary control dial to select the loco number you have in memory.
3. Press enter.



Display will show the loconumbers in memory

Enter Button

5. Trouble Shooting

The LD101 is built to the highest standards in the event of any problems, please check the items below before contacting Technical support. More information on trouble shooting will be added to the www.dmgelectech.co.uk website.

1. Controller does not operate.

Check DC or DCC in DCC LED is illuminated in DCC mode the Track LED is also illuminated on the main control Box (Pt no LD101/MC) if LED's are off check mains fuse and power supply.

If main control box (Pt no LD101/MC) DC or DCC LED is off check power switch is on.

2. Main control box DC or DCC light is illuminated, and the handheld controller (Pt no LD101/HC) power LED is off.

Check power switch on handheld controller is on. Check handheld controller cable (Pt no LD101/1.5) is not damaged and is fitted correctly.

3. All LED's function but Locomotive does not operate.

In DC or DC mode check track connections and power.

In DCC mode check correct decoder address.

4. In DCC mode poor locomotive response.
Check decoder is NMRA compatible try different decoder if problem persists contact UK distributor below.
5. IN DC mode locomotive does not move until 30 on LED display
This is normal and due to friction of DC locomotive.

Warranty & Repair Information

At ANE Model we value our customers. Customer satisfaction is our number one goal. This is why every control board has been tried and tested thoroughly. ANE Model will also replace any control board free within 90 days of purchase should there be any problems. See our website www.dmgelectech.co.uk or www.anemodel.com for more information about warranty and repair policies and procedures.

All items returned for warranty repair must be returned with proof of purchase and in the original packaging.

All warranties on the ANE Model products are limited to refund of purchase price or repair or replacement of the ANE model product at the sole discretion of ANE Model. In the event that ANE

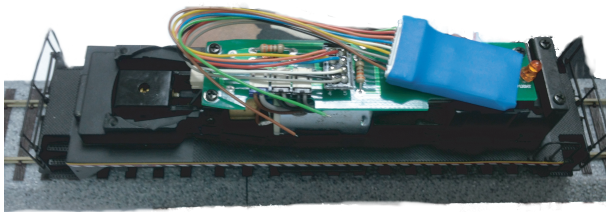
model product at the sole discretion of ANE Model. In the event that ANE Model products are not installed or used in accordance with the manufacturer's specifications, any and all warranties either expressed or implied are void. Except to the extent expressly stated in this section, there are no warranties, express or implied, including but not limited to any warranties of merchantability or fitness for a particular purpose.

ANE Model Co., Ltd. reserves the right to make changes in design and specifications, and/or to make additions or improvements in its products without imposing any obligations upon itself to install these changes, additions or improvements on any product previously manufactured.

Appendix i

Products to complement your LD101.

8 pin decoder.



Other Products: 21 pin decoders

LC203 LocoCruiser Standard decoder With NMRA 21 pin socket



Accept each DCC

command station control

Use separate track to program your locomotive number.

Dimensions :

Length: 1.1" (28 mm)

Width: 0.6" (15.5 mm)

Thickness: 0.2" (5 mm)

DCC standard decoder

suitable size for HO scale

locomotives.

Motor current 1.5 Amp continuous and 2 Amp peak,

Motor overload protect adjustable.

6x 100mA function outputs. Back-EMF with silent motor control

28 step adjustable speed table / Support long address

Advanced consist address setting, Supports running also in DC environment

Function remapping for each output, Braking function adjustable

