



User Manual

For the **DCMaster** Analog Control Module



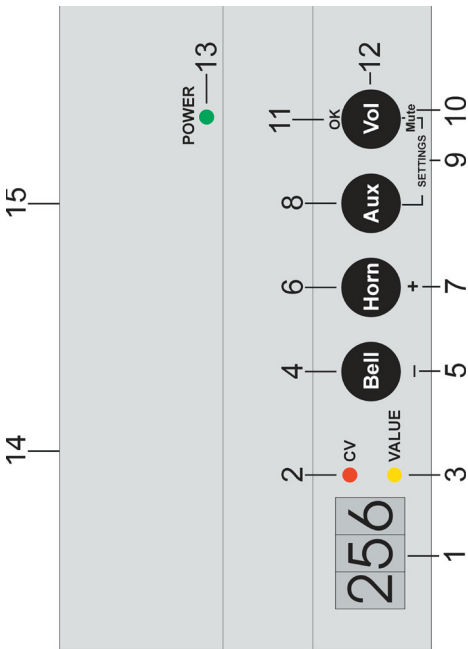
DCMaster Installation and Operation

The DCMaster is designed to work with any DC Analog power pack to make operating and programming your sound-equipped *BLI Blue Line* and *PCM* locomotives more convenient. With the help of the DCMaster, you can activate the bell, trigger the horn/whistle, adjust the master volume of your locomotive and mute the sound. Further, you can activate a locomotive specific sound by way of an additional function button.

Installation

- First connect the red wires from the DC Master marked “DC Power” to the “Variable DC” terminals on your DC power pack.
- Then connect the black wires from the DC Master marked “To Track” to the track terminals.
- Set up is now complete.

Diagram 1: DCMaster Details



The unit will be in Run mode as soon as power is applied. The Power LED (13) will shine steadily. Your DCMaster is now ready to operate.

In Run mode the Bell, Horn, Aux and Volume buttons will operate normally. The LED-Display (1) will be off in Run mode.

Operation

Bell Button (4)

Press the Bell button to toggle the bell on or off. It does not make any difference how long you hold the Bell button down; it will only toggle the bell once.

Horn Button (6)

Press the Horn button for any length of time to produce long or short horn/whistle blasts. Tapping once briefly will produce a short hoot.

With a PCM model, you can use the Horn Button to enable the Doppler: Pressing the Horn button for at least 2 seconds, releasing the Horn button

and then pressing again quickly will enable the Doppler. The locomotive must be moving faster than a certain speed level for Doppler to work.

Aux Button (8)

The Aux button enables Function 4. In most engines, this is a certain sound which is typical for the particular prototype. You can change the function of the Aux button by making CV changes to change the response of Function 4. You can make these CV changes in the DCMaster Programming Mode.

Vol Button (11)

Pressing the Vol button once for any length of time will mute the sound. Even when muted, the Horn, Bell and Aux button are still active.

The Volume button can be used to increase or decrease volume level of engines. For engines with the Loksound system, tapping the Volume button quickly two times will increase the master volume by one step. The

sound volume can be increased in four steps. When the volume has reached the highest volume and you tap the Volume button quickly two times again, the volume will return to the lowest volume level again.

For *BLI Blue Line* engines, tapping the Volume button quickly two times will increase the master volume by one step. The sound volume can be increased in eight steps. When the maximum volume level is achieved, you will hear a horn. If you continue double-pressing the Volume button, the volume level will decrease step-by-step.

LED Functions

Whenever you press one of the four buttons, the LEDs (2) and (3) will flash together to indicate that you pressed the button.

The Power Pack Direction Switch

Use the direction switch to change the direction of your engine as you would with a traditional locomotive.

Programming with your DCMaster

Before you start, please remove all locomotives from your layout except the locomotive you want to program. Failing to do so will result in all locomotives being programmed to the same values.

To enter Programming Mode:

- Press and hold the Aux (8) and Vol (11) buttons down while you turn on track power to send the DCMaster into Programming Mode
- The LED-Display (1) will show "E01" to indicate that you are in Programming Mode. At this time, no power is applied to your locomotive.
- In Programming mode, each button has a different meaning, indicated by the labeling below or above the button. Please note details (5) (7) and (11).

Quick setting	DCC CV	Description
E01	63	System master volume
E02	3	“Load” (Acc Momentum) Helper mode: 000: Normal Engine has all sounds and lights enabled 001: Lead Engine: All sounds enabled, and reverse light disabled. 002: Mid Helper: Has Horn, Bell and all lights disabled. 003: End Helper: Has Horn, Bell, and all lights disabled except Reverse Light. 004: Pusher: Has Reverse Light always as train warning light. Horn, Bell and all other lights are disabled.
E04	Cv29.0	Reverse Mode
E08	CV125	Analog Vstart:
E09	CV126	Analog Vmax
E11	CV8	Programming Reset – Sets CVs back to default values
E13	CV121	Horn volume
E14	CV122	Bell volume
E15	CV123	Auxiliary sound volume

Selecting the Program option:

The DCMaster offers two programming options: In the **quick settings** mode (usable only for LokSound engines at the time of this printing), indicated by the “E” in the LED-Display, you can reach the following settings:

The Horn button (6) is used to select the next option, the Bell button (4) is used to go backwards in the list. The indicators (5) and (7) show you the direction of the selection.

After selection of the desired setting, press the Volume button once. The DCMaster is in Value input mode now, indicated by LED (3).

Now you can enter the desired value by using the + or – buttons. The LED Display shows the actual value. After setting the appropriate value, press the OK button (12) again. The DCMaster now applies power to the track and reprograms the locomotive. While the DCMaster is programming, the LED Display is shut off.

After programming, the DCMaster will again jump to the settings menu. You may now select another option to program.

To leave the programming mode, simply switch off the power on your DC power pack.

DCC Programming:

The DCMaster can also program any DCC CV using the DCC Direct Programming Mode. In this mode, you can adjust any CV setting for your sound-equipped *BLI Blue Line* model or PCM locomotive. Please refer to the User Manual included with your locomotive for a full list of supported CVs.

Entering DCC programming mode:

- Press and hold the Aux (8) and Vol (11) buttons down while you turn on track power

- to trigger the DCMaster to enter Programming Mode
- The LED-Display (1) will show “E01” to indicate that you are in Programming Mode. At this time, no power is applied to your locomotive.
 - In Programming mode, each of the four buttons has a different meaning, indicated by the labeling below or above the button. Please note details (5) (7) and (11)
 - **Press the Bell Button (4) once**
 - The LED-Display shows “001” now, the LED (2) is steadily on also.

Now you can select the CV you want to program. Just use the + and – buttons to go to the desired CV number. After reaching the wanted CV, press the OK button once.

The LED (3) will shine to inform you that now you can enter the new value

of the selected CV. Select the value using the + and – keys again. Finally, press the OK button (12).

The DCMaster now will apply power to the programming track and program the CV to the desired value. While programming, the LED display is off . After the programming, the DCMaster enters the CV selection mode again. You can now select another CV to program.

To leave the programming mode, simply switch off the power of your DC power pack.

Please note:

- The DCMaster can program CVs, but can't read the actual value. It is a "write-only" programming device.
- The DCMaster uses the DCC direct mode programming mode.

Service-Support and Assistance

Should you encounter difficulty in operating your PCM or BLI BlueLine locomotive, please be sure that you have thoroughly perused all documentation that came packaged with your locomotive.

BLI / PCM can be contacted directly for technical assistance as well.

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