Littfinski **D**aten**T**echnik (**LDT**)
Bühler electronic GmbH • Ulmenstraße 43 • 15370 Fredersdorf / Germany • Tel.: +49 (0) 33439 / 867-0

Assigning addresses of the feedback module RS-16-O with Lenz-Manual Control LH101

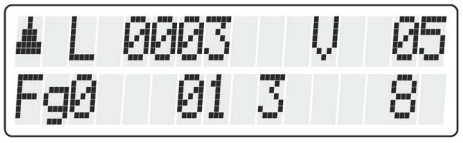
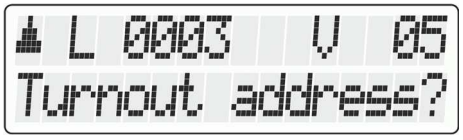
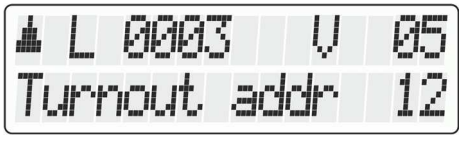
For information transfer all feedback modules of the installation are connected to each other respectively to the central unit via the **RS-feedback bus** (cables to the clamps R and S). Therefore each feedback module gets it's own **individual address** which is unique and **cannot be allocated a second time** by another module. **Addresses** for feedback tasks at the *Digital plus by Lenz ®* -System are located in the **area** from **1** to **128**. For a definite feedback each address can only be assigned once. **Each address** can report **8 contacts.**

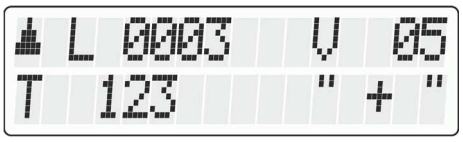
As the **RS-16-O has 16 inputs** each unit occupies **2 addresses** of the feedback system. The **first address** covers the **inputs 1 to 8** and the second the **inputs 9 to 16**. The feedback address area at the *Digital plus by Lenz ®* -System is subdivided. Area **1** to **64** is reserved for **turnout decoders with feedback function**. If you will feedback turnout positions via the **RS-16-O** (for example a **combination** with our turnout decoder **S-DEC-4**) you should use the address area **1** to **64.** If you report **contacts** back with the **RS-16-O,** you should probably use the address area **65** to **128.** The **RS-16-O** feedback module is delivered with the default feedback address **65** and **66**.

For changing the address the RS-16-O is equipped with a **programming key S1** and a **red light diode**. By depressing the **programming key,** the light diode will **flash** which means that the **RS-16-O** is **ready for programming.**

The programming mode will only work, if the **J** and **K** marked clamps of the module are properly connected to the digital current circuit of the central unit. If there will be a **LZV100** used for the programming the connection has to be done according to the clamp identification. By using a **LZV200** the connection at the clamps **J** and **K** have to be exchanged.

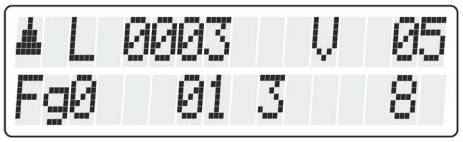
For the address programming will be a control command for magnetic article used. To indicate how the manual controller LH101 generates this command we quote below the operation manual[1] of the unit:

Action	Display	Explanation
		Initial position of the manual controller is the function "Controlling locomotive".
		Use the **'points/signals'** key to change to the menu for switching points and signals.
	The locomotive address currently used, including its direction and speed step, are displayed in the top line of the display.	
		Start to enter the address.
		If you enter a wrong address, use the  key to delete the entered digits.
		Continue until you have entered the last digit.



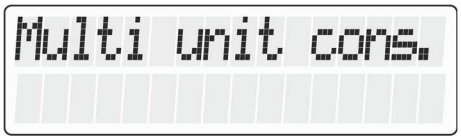
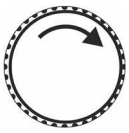
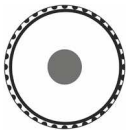
Press the **'points/signals'** key again to confirm your entry. A + or a – after the point address indicates its setting.

Press the '**M**' key to change the point/signal setting. *If the feedback module has stored the address the red LED will shortly flicker and go out. The module has been programmed!*



Press the **'Esc'** key to complete the **switching of points and signals**.

For checking the reports of a feedback module on the manual controller LH101 change to the operation mode **"Displaying feedback"**:

Action	Display	Explanation
		Initial position of the manual controller is as well the function "Controlling locomotive".
		Press the **'M'** key. You are offered the option last selected, e.g. multiple traction.
		Turn the rotary knob to display "Feedback showing".
		Press the rotary knob to select the option. You are asked to enter the feedback address.
		Let us assume that you want to display the 8 digits of feedback address 123.
		Enter the digits of the feedback address after another.
		Use the key  to delete or correct your entry.

Press **'M'**. The manual control checks the status of the feedback module with the command station and displays the result. The top line displays the address of the read- out feedback module. The bottom line displays the active feedback contacts.

Now can be the feedback module respectively the wiring be tested by applying a usual model railway AC-, DC- or digital voltage to the clamp **"Ref"** and the to be tested channel. At this sample is channel 3 occupied.

By activating the  key you will get back to the address input.

For requesting the second half of the detection lines from the **RS-16-O** enter here the follow address. At our sample is it the address 124.

Now can be the detection lines 9…16 of the **RS-16-O** tested as before described. Thereby will be the active lines indicated again with the digits 1…8. At this sample is channel 16 occupied.

Press the **'Esc'** key to return to "Controlling locomotive".

After successful address programming is the connection of the wires **J** and **K** at the module no longer required and can be removed.

[1]) Operating Manual LH101, Version 1.0, 2nd Edition 02 22
Lenz and *Digital plus* are registered brands of Lenz Elektronik GmbH at D-35398 Gießen.

Made in Europe by
Littfinski **D**aten**T**echnik (**LDT**)
Bühler electronic GmbH
Ulmenstraße 43
15370 Fredersdorf / Germany
Tel.: +49 (0) 33439 / 867-0
Internet: www.**ldt-infocenter**.com