ESU

General project information

Project-Name:

Roco X2800

Version-No.:

4

Project-No.:

11402

Item-No.:

Order-No.:

Customer:

Roco Modellspielwaren GmbH
Rifer Hauptstrasse 21
A-5400 Hallein

Contact person:

Detlef Bräuniger

Tel.-No.:

Email:

d.braeuniger@roco.cc

Project start:

06-04-28

Project status:

Active

Date of approval:

OEM-Manual required ☐

Sound recording documentation

Origin of the sound:

ESU X2800 Recording, Besancon

Recording date:

06-04-28

Comments:

ESU

Decoder information

Decodertype:

LokSound V3.5 8MBit

Firmware-Version:

0.0.5968

Loudspeaker:

40mm x 20mm

Configuration:

1 Speaker

Decoder Setup

Address:

3

max. speed:

32

Protocols:

DC	☒	Motorola	☒
AC	☒	mfx	☐
DCC	☒	Selectrix	☐

Break sections:

DCC	☒
Märklin	☒

Prime mover sound description:

idle + 6 drivesteps; dieselsound

Function keys:

F0	Light on/off
F1	Sound on/off
F2	Horn Signal 2
F3	Conductor's Signal
F4	Compressor
F5	Brake set
F6	Brake release
F7	Tachograph
F8	Shunting Mode
F9	Horn-Signal 1
F10	Airhorn 1 (high pitched)
F11	Airhorn 2 (low pitched)
F12	Airhorn 1 Short
F13	Airhorn 2 Short
F14	Diesel Notch Up
F15	Diesel Notch Down
F16	
F17	
F18	
F19	
F20	

Special features:

Doppler effect on F10 and F11

CV-Values

CV	DEC	BIN	HEX	CV	DEC	BIN	HEX	CV	DEC	BIN	HEX
CV 001 =	003	00000011	0x03	CV 116 =	015	00001111	0x0F	CV 182 =	011	00001011	0x0B
CV 002 =	003	00000011	0x03	CV 117 =	015	00001111	0x0F	CV 183 =	000	00000000	0x00
CV 003 =	010	00001010	0x0A	CV 118 =	015	00001111	0x0F	CV 184 =	000	00000000	0x00
CV 004 =	008	00001000	0x08	CV 121 =	064	01000000	0x40	CV 185 =	009	00001001	0x09
CV 005 =	024	00011000	0x18	CV 122 =	064	01000000	0x40	CV 186 =	000	00000000	0x00
CV 006 =	012	00001100	0x0C	CV 123 =	050	00110010	0x32	CV 187 =	000	00000000	0x00
CV 013 =	001	00000001	0x01	CV 124 =	006	00000110	0x06	CV 188 =	009	00001001	0x09
CV 014 =	003	00000011	0x03	CV 125 =	020	00010100	0x14	CV 189 =	000	00000000	0x00
CV 017 =	192	11000000	0xC0	CV 126 =	060	00111100	0x3C	CV 190 =	003	00000011	0x03
CV 018 =	128	10000000	0x80	CV 127 =	030	00011110	0x1E	CV 191 =	000	00000000	0x00
CV 019 =	000	00000000	0x00	CV 128 =	080	01010000	0x50	CV 192 =	000	00000000	0x00
CV 021 =	000	00000000	0x00	CV 129 =	000	00000000	0x00	CV 193 =	003	00000011	0x03
CV 022 =	000	00000000	0x00	CV 130 =	000	00000000	0x00	CV 194 =	000	00000000	0x00
CV 029 =	004	00000100	0x04	CV 131 =	000	00000000	0x00	CV 195 =	000	00000000	0x00
CV 049 =	019	00010011	0x13	CV 132 =	000	00000000	0x00	CV 196 =	000	00000000	0x00
CV 050 =	003	00000011	0x03	CV 133 =	000	00000000	0x00	CV 197 =	007	00000111	0x07
CV 051 =	003	00000011	0x03	CV 134 =	012	00001100	0x0C	CV 198 =	000	00000000	0x00
CV 052 =	000	00000000	0x00	CV 135 =	000	00000000	0x00	CV 199 =	000	00000000	0x00
CV 053 =	056	00111000	0x38	CV 136 =	000	00000000	0x00	CV 200 =	007	00000111	0x07
CV 054 =	032	00100000	0x20	CV 137 =	012	00001100	0x0C	CV 201 =	000	00000000	0x00
CV 055 =	024	00011000	0x18	CV 138 =	000	00000000	0x00	CV 202 =	032	00100000	0x20
CV 056 =	064	01000000	0x40	CV 139 =	000	00000000	0x00	CV 203 =	001	00000001	0x01
CV 057 =	001	00000001	0x01	CV 140 =	000	00000000	0x00	CV 204 =	000	00000000	0x00
CV 058 =	041	00101001	0x29	CV 141 =	001	00000001	0x01	CV 205 =	032	00100000	0x20
CV 059 =	032	00100000	0x20	CV 142 =	000	00000000	0x00	CV 206 =	001	00000001	0x01
CV 060 =	037	00100101	0x25	CV 143 =	000	00000000	0x00	CV 207 =	000	00000000	0x00
CV 061 =	020	00010100	0x14	CV 144 =	002	00000010	0x02	CV 208 =	032	00100000	0x20
CV 062 =	040	00101000	0x28	CV 145 =	000	00000000	0x00	CV 209 =	002	00000010	0x02
CV 063 =	032	00100000	0x20	CV 146 =	000	00000000	0x00	CV 210 =	000	00000000	0x00
CV 064 =	008	00001000	0x08	CV 147 =	000	00000000	0x00	CV 211 =	032	00100000	0x20
CV 066 =	000	00000000	0x00	CV 148 =	004	00000100	0x04	CV 212 =	002	00000010	0x02
CV 067 =	009	00001001	0x09	CV 149 =	000	00000000	0x00	CV 213 =	000	00000000	0x00
CV 068 =	018	00010010	0x12	CV 150 =	000	00000000	0x00	CV 214 =	000	00000000	0x00
CV 069 =	027	00011011	0x1B	CV 151 =	004	00000100	0x04	CV 215 =	003	00000011	0x03
CV 070 =	036	00100100	0x24	CV 152 =	000	00000000	0x00	CV 216 =	000	00000000	0x00
CV 071 =	045	00101101	0x2D	CV 153 =	000	00000000	0x00	CV 217 =	000	00000000	0x00
CV 072 =	054	00110110	0x36	CV 154 =	000	00000000	0x00	CV 218 =	003	00000011	0x03
CV 073 =	063	00111111	0x3F	CV 155 =	008	00001000	0x08	CV 219 =	000	00000000	0x00
CV 074 =	072	01001000	0x48	CV 156 =	000	00000000	0x00	CV 220 =	000	00000000	0x00
CV 075 =	081	01010001	0x51	CV 157 =	000	00000000	0x00	CV 221 =	004	00000100	0x04
CV 076 =	091	01011011	0x5B	CV 158 =	008	00001000	0x08	CV 222 =	000	00000000	0x00
CV 077 =	100	01100100	0x64	CV 159 =	000	00000000	0x00	CV 223 =	000	00000000	0x00
CV 078 =	109	01101101	0x6D	CV 160 =	000	00000000	0x00	CV 224 =	004	00000100	0x04
CV 079 =	118	01110110	0x76	CV 161 =	013	00001101	0x0D	CV 225 =	064	01000000	0x40
CV 080 =	127	01111111	0x7F	CV 162 =	000	00000000	0x00	CV 226 =	000	00000000	0x00
CV 081 =	136	10001000	0x88	CV 163 =	000	00000000	0x00	CV 227 =	000	00000000	0x00
CV 082 =	145	10010001	0x91	CV 164 =	013	00001101	0x0D	CV 228 =	064	01000000	0x40
CV 083 =	154	10011010	0x9A	CV 165 =	000	00000000	0x00	CV 229 =	000	00000000	0x00
CV 084 =	163	10100011	0xA3	CV 166 =	000	00000000	0x00	CV 230 =	000	00000000	0x00
CV 085 =	173	10101101	0xAD	CV 167 =	005	00000101	0x05	CV 231 =	128	10000000	0x80
CV 086 =	182	10110110	0xB6	CV 168 =	000	00000000	0x00	CV 232 =	000	00000000	0x00
CV 087 =	191	10111111	0xBF	CV 169 =	000	00000000	0x00	CV 233 =	000	00000000	0x00
CV 088 =	200	11001000	0xC8	CV 170 =	005	00000101	0x05	CV 234 =	128	10000000	0x80
CV 089 =	209	11010001	0xD1	CV 171 =	000	00000000	0x00	CV 235 =	000	00000000	0x00
CV 090 =	218	11011010	0xDA	CV 172 =	000	00000000	0x00	CV 236 =	000	00000000	0x00
CV 091 =	227	11100011	0xE3	CV 173 =	010	00001010	0x0A	CV 249 =	000	00000000	0x00
CV 092 =	236	11101100	0xEC	CV 174 =	000	00000000	0x00	CV 250 =	000	00000000	0x00
CV 093 =	245	11110101	0xF5	CV 175 =	000	00000000	0x00	CV 251 =	000	00000000	0x00
CV 094 =	255	11111111	0xFF	CV 176 =	010	00001010	0x0A	CV 252 =	000	00000000	0x00
CV 095 =	000	00000000	0x00	CV 177 =	000	00000000	0x00	CV 253 =	000	00000000	0x00
CV 112 =	033	00100001	0x21	CV 178 =	000	00000000	0x00	CV 254 =	000	00000000	0x00
CV 113 =	015	00001111	0x0F	CV 179 =	011	00001011	0x0B	CV 255 =	000	00000000	0x00
CV 114 =	015	00001111	0x0F	CV 180 =	000	00000000	0x00				
CV 115 =	015	00001111	0x0F	CV 181 =	000	00000000	0x00				

Revision

Date issued: **Sent by:**   **Customer's feedback date:**

06-08-22   email   06-08-21

Customer's feedback (change requests):

-emphasize gear steps

Changes in comparison to the former version:

according to the feedback

Approval note added ☐

Production file generated by: **Date of generating:**

Manual generated by: **Manual generated from:**