




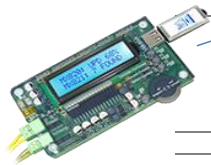




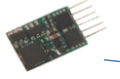
		EAN	RRP
<b>STARTSETS (Digital Command Station, Power supply, Controller)</b>			
<b>START</b>	Command Station MX10 + Controller MX32 + USB stick + CAN cable + 8POLA1M + Power supply NG200 + Manuals (MX10, MX32/FU)	9009606100214	1640,00
<b>STARTFU</b>	Command Station MX10 + Controller wireless MX32FU + USB stick + CAN cable + 8POLA1M + Power supply NG200 + Manuals (MX10, MX32/FU)	9009606100221	1730,00
<b>STARTG</b>	Command Station MX10 + Controller MX32 + USB stick + CAN cable + 8POLA1M + Power supply NG600 + Manuals (MX10, MX32/FU)	9009606100313	1830,00
<b>STARTGFU</b>	Command Station MX10 + Controller wireless MX32FU + USB stick + CAN cable + 8POLA1M + Power supply NG600 + Manuals (MX10, MX32/FU)	9009606101310	1920,00
<b>COMMAND STATION, CONTROLLERS, POWER SUPPLY</b>			
<b>MX10</b>	<b>ZIMO Digital Command Station, 500 Watt, DCC / Motorola</b> - 2 individual track outputs, adjustable track voltage 10 - 24V, - 12A or 8A track current, adjustable thresholds for overcurrent and turn-off times, - Programming track, decoder software update und sound loading on the second track output, - Ports for ZIMO CAN (2x), LAN (to PC or WIFI router), USB stick (for MX10's own update, decoder software update,...), USB mini (to PC), CAN cable, - XNet bus, booster control ports, - 14 digital I/Os (for emergency stop button, AOS inputs,...), - 2,4 GHz MiWi radio modul with 5dBi antenna, - Rotary knob, 3 keys and display for configuration of voltage, current, basecab, ... - Note: no power supply included + Scope of delivery: USB stick, set of connectors, CAN cable, 8POLA1M, manuals;	9009606100108	1190,00
			
<b>MX10EC</b> available 2nd qu. 2019	<b>ZIMO Digital Command Station "Economy", 300 Watt, DCC / Motorola</b> - adjustable track voltage 10 - 24V, - 12A track current, adjustable thresholds for overcurrent and turn-off times, - Ports for ZIMO CAN (2x), LAN, USB stick, XNet bus, booster control ports, - 3 digital I/Os (for emergency stop button,...), 2,4 GHz MiWi radio modul /w 5dBi antenna, - Rotary knob, 3 keys and display for configuration of voltage, current, ... - Note: no power supply included + Scope of delivery: USB stick, set of connectors, CAN cable, 8POLA1M, manuals;	9009606100115	790,00
			
<b>NG200</b>	<b>Power supply 240W</b> (30V,8A) Meanwell HLG-240H-30A; 22x7x4cm; 1.2kg;	9009606101204	95,00
<b>NG600</b>	<b>Power supply 600W</b> (30V,20A) Meanwell HLG-600H-30A; 26x14,5x5cm; 3.4kg;	9009606101600	295,00
<b>MX10AVP</b>	<b>MX10 Distribution board</b> - 18 x 6 cm; incl. plugs and cables	9009606102102	64,00
<b>MX32</b>	<b>ZIMO Controller tethered use only</b> - 2.4 " (320 x 240 pixel) display, 16 dual-colour LEDs, - Control elements: 26 keys, speed slider, scrolling wheel, rocker switch, - Ports for ZIMO CAN bus (2x), CAN cable, USB stick (for MX32's own update, loading and saving of vehicle data, loco pictures, function symbols, languages, ...) + Scope of delivery: USB stick, CAN cable, manual MX32/FU	9009606100320	395,00
			
<b>MX32FU</b>	<b>ZIMO Controller radio + tethered use</b> Same as MX32; additional 2.4 GHz MiWi radio, antenna, Battery 1800 mAh, loading via CAN cable; + Scope of delivery: USB stick, CAN cable, manual MX32/FU	9009606100337	485,00
<b>MX10ANTRU</b>	External omni-directional MX10-antenna with 5m cable; 50 ohm; 82mm x Ø48mm;	9009606102508	45,00
<b>MX10ANTLA</b>	Spare MX10-antenna and stronger for MX32FU, 5dBi	9009606102607	2,80
<b>MX10STECK</b>	Spare set of connectors for MX10	9009606108005	22,00
<b>CAN BUS CABLES AND CAN BUS CABLE MATERIAL</b>			
<b>6POL015</b>	CAN bus cable (= Controller cable) 15cm	9009606200150	4,00
<b>6POL1M</b>	CAN bus cable (= Controller cable) 1m	9009606201003	5,00
<b>6POL3M</b>	CAN bus cable (= Controller cable) 3m	9009606203007	7,00
<b>6POL5M</b>	CAN bus cable (= Controller cable) 5m	9009606205001	9,00
<b>6POL10M</b>	CAN bus cable (= Controller cable) 10m	9009606210005	12,00
<b>6POL1KAB</b>	CAN bus cable material: CAN cable roll 100 m (without connector)	9009606220011	99,00
<b>6POL50ST</b>	CAN bus cable material: 50 CAN plugs	9009606220028	30,00
<b>6POLZANG</b>	CAN bus cable material: Installation tool for stripping and inserting CAN cables	9009606220035	50,00
<b>6POLTRIP</b>	Quadruple coupling for CAN bus wiring	9009606220042	10,00
<b>8POLA1M</b>	CAN2.0 bus adapter cable for handheld 1m for MX32/FU on MX10 (XNet), needed if MX9 in use at the same layout	9009606207005	14,00
<b>8POLA2M</b>	CAN2.0 bus adapter cable for handheld, same as 8POLA1M but 2m	9009606207012	16,00
<b>8POL1M</b>	CAN bus cable 8-pole (MX10 to StEin or booster), 1m	9009606208019	6,00
<b>8POL3M</b>	CAN bus cable 8-pole (MX10 to StEin or booster), 3m	9009606208033	8,00
<b>STEIN AND ACCESSORY FOR STEIN</b>			
<b>STEIN88V</b> available 2nd qu. 2019	<b>Stationary Equipment module "StEin" full version</b> 8 connectors for track sections (up to 8A, HLU, occupancy detection,...) 8 connectors for switches (twin coil, motor) or 16 single outputs, 16 inputs (light beam sensors, track contact,...) 1 connector for I <sup>2</sup> C bus (up to 16 PCBs for light signals) 2 speaker outputs, 2 connectors for ICA16-PCBs	9009606998804	585,00
			
<b>STEIN80G</b> available 2nd qu. 2019	<b>Stationary Equipment module "StEin" occupancy version</b> 8 connectors for track sections (up to 8A, HLU, occupancy detection,...) 16 inputs (photoelectric sensors, track connection,...)	9009606998002	385,00
<b>STEINE8W</b> available 2nd qu. 2019	<b>Accessory PCB for 8 switches</b> , connectable to STEIN88V or STEIN80G 8 connectors for switches (twin coil, motor) or 16 single outputs 16 inputs (track contact,... for forced switching)	9009606998118	85,00
<b>STEINE8S</b> available 2nd qu. 2019	<b>Accessory PCB for 8 servos</b> , connectable to STEIN88V 8 connectors for servos (switches,...) 8 connectors for frog polarisation and 16 inputs (track contact,...)	9009606998125	85,00
			
<b>ICA16LP</b>	<b>Connector board</b> for light signals with solderpads for STEIN88V usable via I <sup>2</sup> C bus, 16 open collector outputs for LEDs	9009606998132	22,00
<b>ICA16KL</b>	<b>Connector board</b> for light signals with screw terminal for STEIN88V usable via I <sup>2</sup> C bus, 16 open collector outputs for LEDs	9009606998149	29,00
<b>STEINSTECK</b>	Spare set of connectors for StEin-module 2x crimp plug, 1x 2-pole, 4x 3-pole, 1x big 3-pole, 1x 4-pole plugs	9009606998156	23,00

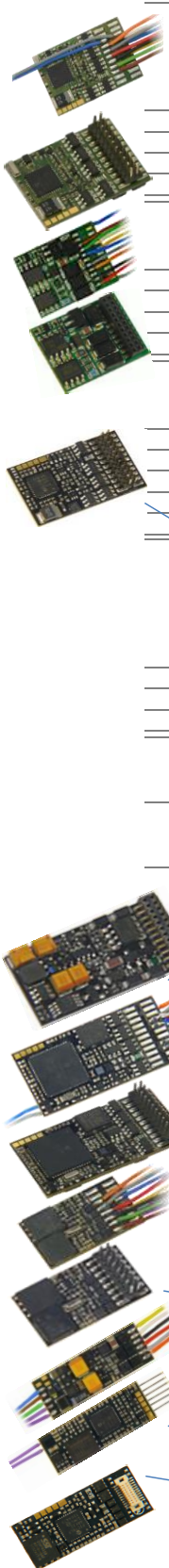

**DECODER SOFTWARE UPDATE DEVICE, DECODER TEST BOARD**

		EAN	RRP
<b>MXULFA</b>	<b>Decoder update and sound load device with display</b> (2x 16 characters) Decoder software update und sound load via USB stick Test mode (driving, switching functions, ...) + Scope of delivery: ZIMO USB stick with PC software and manual, SUSIKAB, plugs	9009606600028	193,00
<b>MXULFA-PF</b>	MXULFA with license for the PC Software P.F.u.Sch. from Mr. Ewald Sperrer	9009606600035	223,00
<b>MXULSTI</b>	ZIMO USB stick (as incl. with MXULFA) for use as spare/replacement	9009606600110	9,00
<b>SUSIKAB</b>	4-pin cable for connection between decoder and SUSI module	9009606771315	9,50
<b>MXULKAB</b>	USB cable (to PC; USB A and USB B (mini) connector)	4016032282907	6,60
<b>MXULFSTECK</b>	Spare set of plugs for MXULFA incl. SUSI cable	9009606600189	12,00
<b>NG40</b>	DC power supply 18V, 2.22A, 40 Watt, for MXULFA	9009606600202	32,00
<b>MXTAPV</b>	<b>Decoder test and connector board with motor and speaker for all decoders</b> with PluX, 21MTC, Next18, NEM651, NEM652 or free wires; in combination with MXULFA software update and sound loading possible; function test for motor, functions, sound, servo and smoke generator; Connectors for MX696, MX697 und MX699; + Scope of delivery: 2-pin plug (2POLSTECK-K) + SUSI cable (SUSIKAB)	9009606600158	77,00
<b>MXTAPS</b>	<b>Decoder test and connector board with motor and speaker for all small scale decoders</b> with PluX, 21MTC, Next18, NEM651, NEM652 or free wires; in combination with MXULFA software update and sound load possible; function test for motor, functions, sound, servo and smoke generator; + Scope of delivery: 2-pin plug (2POLSTECK-K) + SUSI cable (SUSIKAB)	9009606600165	57,00
<b>MXTAPSTECK</b>	Spare set of plugs for MXTAPS/V: 2POLSTECK-K + SUSIKAB + 3 jumpers	9009606600196	11,00

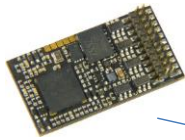

**DECODERS AND SOUND DECODERS FOR SMALL SCALE (N, TT, H0e, H0, 00, ...)**

<b>MX600</b>	<b>Economy flat decoder - 25 x 11 x 2 mm - 0.8A</b> 4 function outputs, 9 wires, Complete ZIMO features: DCC, RailCom, NMRA and ZIMO function mapping, HLU,... BUT no Motorola, AC analogue, SUSI nor servo control pads	9009606600905	21,00
<b>MX600R</b>	Similar to MX600 with 8-pin interface NEM652 on wires	9009606600981	23,00
<b>MX600P12</b>	Similar to MX600 with 11-pin PluX12 interface NEM658	9009606600219	20,00
<b>MX616</b>	<b>Miniature Decoder - 8 x 8 x 2.4 mm - 0.7A</b> 6 function outputs, 7 wires, Complete ZIMO features: DCC, Motorola, RailCom, NMRA and ZIMO function mapping, HLU,... BUT no SUSI nor servo control pads	9009606616906	35,00
<b>MX616R</b>	Similar to MX616 with 8-pin interface NEM652 on wires	9009606616982	37,00
<b>MX616F</b>	Similar to MX616 with 6-pin interface NEM651 on wires	9009606616968	39,00
<b>MX616N</b>	Similar to MX616 with 6-pin interface NEM651 directly mounted on PCB	9009606616067	33,00
<b>MX617</b>	<b>Miniature Decoder - 13 x 9 x 2.6 mm - 0.8A</b> 6 function outputs, 7 wires, Complete ZIMO features: DCC, Motorola, RailCom, NMRA and ZIMO function mapping, HLU,... BUT no SUSI nor servo control pads	9009606617903	31,00
<b>MX617R</b>	Similar to MX617 with 8-pin interface NEM652 on wires	9009606617989	33,00
<b>MX617F</b>	Similar to MX617 with 6-pin interface NEM651 on wires	9009606617965	35,00
<b>MX617N</b>	Similar to MX617 with 6-pin interface NEM651 directly mounted on PCB	9009606617064	30,00
<b>MX618N18</b>	<b>Miniature Decoder - 15 x 9.5 x 2.8 mm - 0.7A - Next18 (NEM662)</b> 4 function outputs, 4 logic level outputs (2 of them also for servo control or SUSI), Complete ZIMO features: DCC, Motorola, SUSI, RailCom, HLU...	9009606618009	27,00
<b>MX621</b>	<b>Subminiature Decoder - 12 x 8.5 x 2.2 mm - 0.7A</b> 4 function outputs (2 wired, 2 on solder pads), 7 wires, The MX621 has reduced features in comparison to other ZIMO decoders: DCC, RailCom,... BUT no Motorola, no servo control pad, no SUSI pads, no ZIMO special function mapping	9009606621900	37,00
<b>MX621R</b>	Similar to MX621 with 8-pin interface NEM652 on wires	9009606621986	39,00
<b>MX621F</b>	Similar to MX621 with 6-pin interface NEM651 on wires	9009606621962	41,00
<b>MX621N</b>	Similar to MX621 with 6-pin interface NEM651 directly mounted on PCB	9009606621061	36,00
<b>MX622</b>	<b>Miniature Decoder - 14 x 9 x 2.5 mm - 0.8A</b> 4 function outputs (2 wired, 2 on solder pads), 7 wires, Complete ZIMO features: DCC, Motorola, servo control pads, SUSI, RailCom, NMRA and ZIMO function mapping, HLU,...	9009606622907	33,00
<b>MX622R</b>	Similar to MX622 with 8-pin interface NEM652 on wires	9009606622983	35,00
<b>MX622F</b>	Similar to MX622 with 6-pin interface NEM651 on wires	9009606622969	37,00
<b>MX622N</b>	Similar to MX622 with 6-pin interface NEM651 directly mounted on PCB	9009606622068	32,00
<b>MX623</b>	<b>Small Decoder - 20 x 8.5 x 3.5 mm - 0.8A</b> 4 function outputs (2 wired, 2 on solder pads), 2 logic level output, 9 wires, Complete ZIMO features: DCC, Motorola, SUSI, servo control pads, RailCom, NMRA and ZIMO function mapping, HLU,...	9009606623904	28,00
<b>MX623R</b>	Similar to MX623, 8-pin interface NEM652 on wires	9009606623980	30,00
<b>MX623F</b>	Similar to MX623, 6-pin interface NEM651 on wires	9009606623966	32,00
<b>MX623P12</b>	Similar to MX623 with 11-pin PluX12 interface NEM658 directly mounted on PCB	9009606623126	27,00
<b>MX630</b>	<b>H0,00 Decoder - 20 x 11 x 3.5 mm - 1.0A</b> 6 function outputs (4 wired, 2 on solder pads), 9 wires, Complete ZIMO features: DCC, Motorola, SUSI, servo control pads, RailCom, NMRA and ZIMO function mapping, HLU,...	9009606630902	33,00
<b>MX630R</b>	Similar to MX630, 8-pin interface NEM652 on wires	9009606630988	35,00
<b>MX630F</b>	Similar to MX630 with 6-pin interface NEM651 on wires	9009606630964	37,00
<b>MX630P16</b>	Similar to MX630 with 15-pin PluX16 interface NEM658 directly mounted on PCB	9009606630162	32,00

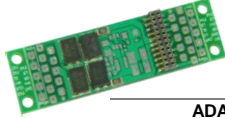




		EAN	RRP
<b>MX633</b>	<b>H0,00 Decoder with energy storage connection- 22 x 15 x 3.5 mm - 1.2A</b> (GoldCap modules with 7 GoldCaps can also be used), 10 function outputs (4 wired, 6 on solder pads), 11 wires, Complete ZIMO features: DCC, Motorola, SUSI, servo control pads, RailCom, NMRA and ZIMO function mapping, HLU,...	9009606633002	38,00
<b>MX633R</b>	Similar to MX633 with 8-pin interface NEM652 on wires	9009606633019	40,00
<b>MX633F</b>	Similar to MX633 with 6-pin interface NEM651 on wires	9009606633026	42,00
<b>MX633P16</b>	Similar to MX633, 15-pin PluX16 interface NEM658 directly mounted on PCB	9009606633033	36,00
<b>MX633P22</b>	Similar to MX633, 21-pin PluX22 interface NEM658 directly mounted on PCB	9009606633132	37,00
<b>MX634</b>	<b>H0,00 Decoder with energy storage connection- 20.5 x 15 x 4 mm - 1.2A</b> 6 function outputs (4 on wires, 2 on solder pads), 11 wires, Complete ZIMO features: see MX633 above	9009606634900	38,00
<b>MX634R</b>	Similar to MX634, 8-pin interface NEM652 on wires	9009606634986	40,00
<b>MX634F</b>	Similar to MX634, 6-pin interface NEM651 on wires	9009606634962	42,00
<b>MX634D</b>	Similar to MX634, 21MTC-interface (FO3, FO4: normal function outputs)	9009606634214	37,00
<b>MX634C</b>	Similar to MX634, 21MTC-interface NEM660 (FO3, FO4: logic level outputs)	9009606634238	37,00
<b>MX635</b>	<b>H0,00 Decoder /w energy storage connection (16V)-25x15x3.5mm-1.8A</b> 10 function outputs (4 wires, 6 on solder pads), 11 wires, Complete ZIMO features: see MX633 above	9009606635907	44,00
<b>MX635R</b>	Similar to MX635 with 8-pin interface NEM652 on wires	9009606635983	45,00
<b>MX635V</b>	Similar to MX635 with wires, adjustable low voltage	9009606635952	47,00
<b>MX635P16</b>	Similar to MX635, 15-pin PluX16 interface NEM658 directly mounted on PCB	9009606635167	43,00
<b>MX635P22</b>	Similar to MX635, 21-pin PluX22 interface NEM658 directly mounted on PCB	9009606635228	43,00
<b>MX635VP</b>	Similar to MX635P22 with additional 1,5V low voltage connection	9009606635716	47,00
<b>MX636D</b>	<b>H0,00 Decoder /w energy storage connection(16V)-26x15.5x3.5mm-1.8A</b> Note: MX636 is only available with 21MTC-interface; functional similar Decoder with wires -> MX635; 10 function outputs, FO3, FO4: amplified function outputs Complete ZIMO features: DCC and MM, 2 servo control wires, SUSI, RailCom, NMRA and ZIMO function mapping, etc.	9009606636218	43,00
<b>MX636C</b>	Similar to MX636D, 21MTC-interface NEM660 (FO3, FO4: logic level outputs)	9009606636232	43,00
<b>MX636VD</b>	Similar to MX636D with additional 1.5V low voltage connection	9009606636119	49,00
<b>MX636VC</b>	Similar to MX636C with additional 1.5V low voltage connection	9009606636317	49,00
<b>MX637P22</b>	<b>H0,00 Decoder with PluX22 - 22 x 15 x 3.5 mm - 1.2 A</b> 10 function outputs, 21-pin PluX22 plug Complete ZIMO features: see MX633 above	9009606637222	32,00
<b>MX638D</b>	<b>H0,00 Decoder with 21MTC - 20.5 x 15.5 x 3.5 mm - 1.2 A</b> 8 function outputs, 21MTC plug Complete ZIMO features: see MX633 above	9009606638212	32,00
<b>MX638C</b>	Similar to MX638D, but FO3, FO4 logic level outputs (changable via CV #8)	9009606638236	32,00
<b>MX644D</b>	<b>H0,00 Sound Decoder (3W) /w energy storage con.- 30x15x4mm - 1.2A</b> Note: MX644 is only available with 21MTC interface; functionally similar to a decoder with wires -> MX645; 8 function outputs; Complete ZIMO features: see MX633 above	9009606644213	89,00
<b>MX644C</b>	Similar to MX644D, 21MTC-interface NEM660 (FO3, FO4: logic level outputs)	9009606644237	89,00
<b>MX645</b>	<b>H0,00 Sound Decoder (3W) /w energy storage con.- 30x15x4mm - 1.2A</b> 12 function outputs (4 wired, 8 on solder pads), 13 wires Complete ZIMO features: see MX633 above	9009606645906	92,00
<b>MX645R</b>	Similar to MX645, 8-pin interface NEM652 on wires	9009606645982	94,00
<b>MX645F</b>	Similar to MX645, 6-pin interface NEM651 on wires	9009606645968	96,00
<b>MX645P16</b>	Similar to MX645, 15-pin PluX16 interface NEM658 directly mounted on PCB	9009606645166	88,00
<b>MX645P22</b>	Similar to MX645, 21-pin PluX22 interface NEM658 directly mounted on PCB	9009606645227	89,00
<b>MX648</b>	<b>Miniature Sound Decoder (1W audio) - 20 x 11 x 4mm - 0.8A</b> 6 function outputs (4 wired, 2 on solder pads), 11 wires Complete ZIMO features: see MX633 above	9009606648907	102,00
<b>MX648R</b>	Similar to MX648, 8-pin interface NEM652 on wires	9009606648983	104,00
<b>MX648F</b>	Similar to MX648, 6-pin interface NEM651 on wires	9009606648969	106,00
<b>MX648P16</b>	Similar to MX648, only 4 FOs, 15-pin PluX16 interface NEM658 dir. m. on PCB	9009606648167	99,00
<b>MX649</b>	<b>Miniature Sound Decoder (1W audio) - 23 x 9 x 4mm - 0.7A</b> 4 function outputs and 2 logic level outputs, 11 wires Complete ZIMO features: see MX633 above	9009606649904	102,00
<b>MX649R</b>	Similar to MX649, 8-pin interface NEM652 on wires	9009606649980	104,00
<b>MX649F</b>	Similar to MX649, 6-pin interface NEM651 on wires	9009606649966	106,00
<b>MX649N</b>	Similar to MX649, 6-pin interface NEM651 directly mouted on PCB	9009606649065	99,00
<b>MX649L</b>	Similar to MX649, 90° angulated 6-pin interface NEM651 directly mounted on PCB	9009606649072	99,00
<b>MX658N18</b>	<b>Miniature Sound Decoder - 25 x 10.5 x 3mm - 0.8A - 1W audio - Next18</b> 4 function outputs and 4 logic level outputs, no wires, Next18 (NEM662) Complete ZIMO Features: see MX633 above	9009606658005	89,00
<b>MX659N18</b>	<b>Miniature Sound Decoder - 19 x 9.5 x 3mm - 0.7A - 1W audio - Next18</b> same as MX658N18, but smaller	9009606659002	102,00
<b>MX660</b>	<b>Flat Sound Decoder - 42 x 9,5 x 2,5mm - 0,8A - 1W audio</b> 6 function outputs and 2 logic level outputs, no wires -> for self-soldering	9009606660954	88,00

**New Decoder Generation (MS Decoders)**


		EAN	RRP
<b>MS450</b>	<b>H0,00 Sound Decoder(3W) /w energy storage (16V) 30x15x4mm - 1.2A</b> 12 function outputs (4 wires, 8 on solder pads), 13 wires DCC, MM, mfx, DC and AC analog, 2 servo control wires, SUSI, RailCom, NMRA mapping, etc.	9009606450906	92,00
<b>MS450R</b>	Similar to MS450, 8-pole interface NEM652 on wires	9009606450982	94,00
<b>MS450P22</b>	Similar to MS450, 22-pole <b>PluX22</b> interface NEM658, no wires	9009606450227	89,00

**ADAPTER BOARDS (for small scale Decoders and Sound Decoders)**


<b>ADAPLU</b>	Adapter board for PluX22 Decoders - 45 x 15 x 4mm Connector to directly plug in ZIMO (Sound)-Decoders with - PluX22 interface (MX645P22, MX633P22), (NOT suitable for MX630P16, MX648P16) Additional rectifier diodes on the adapter board for more power	9009606522009	14,00
<b>ADAPLU15</b>	Similar to ADAPLU, additional 1.5V low voltage controller	9009606522016	24,00
<b>ADAPLU50</b>	Similar to ADAPLU, additional 5V low voltage controller for servos	9009606522054	24,00

NOTE: The combination

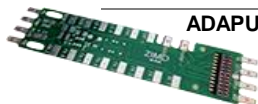
 Adapter board **ADAPLU** + Sound-Decoder **MX645P22**  
may be used in "smaller" large scale locos and offers  
**1,8A** continuous motor current.


<b>ADAMTC</b>	<b>Adapter Board for 21MTC-Decoder (solder pads) - 50 x 25 x 4.5mm</b> Connector to directly plug in the following (Sound)-Decoders - with 21MTC-interface (MX644C, MX634C, MX631C), - or compatible decoders from other manufacturers, with FO3 and FO4 as logic level outputs. Additional rectifier diodes on the adapter board for more power	9009606521002	16,00
<b>ADAMTC15</b>	Similar to ADAMTC, additional 1.5V low voltage controller	9009606521019	26,00
<b>ADAMTC50</b>	Similar to ADAMTC, additional 5V low voltage controller for servos	9009606521057	26,00



<b>ADAMKL</b>	<b>Adapter Board for 21MTC-Decoder (screw terminal) - 50 x 25 x 4.5mm</b> Connector to directly plug in the following (Sound)-Decoder - with 21MTC-interface (MX644C, MX634C, MX631C), - or compatible decoders from other manufacturers, with FO3 and FO4 as logic level outputs. Additional rectifier diodes on the adapter board for more power	9009606531001	36,00
<b>ADAMKL15</b>	Similar to ADAMKL, additional 1.5V low voltage controller	9009606531018	46,00
<b>ADAMKL50</b>	Similar to ADAMKL, additional 5V low voltage controller for servos	9009606531056	46,00

NOTE: The combination

 Adapter board **ADAMTC** + (Sound)-Decoder **MX644C, MX634C**  
may be used in "smaller" large scale locos and offers  
**1.8A** continuous motor current.


<b>ADAPUS</b>	US Adapter Board for US locos for PluX22 Decoder - 71 x 19 x 3.5 mm To replace the OEM decoder in KATO, Athearn, BLI, ... locos; Suitable to directly plug in MX645P16, MX645P22 (with sound) or MX633P22 (non-sound).	9009606520005	19,00
<b>ADAPUS15</b>	Similar to ADAPUS, additional 1.5V low voltage controller	9009606520012	29,00
<b>ADAPUS50</b>	Similar to ADAPUS, additional 5V low voltage controller for servos	9009606520050	29,00

<b>BRUCKSTECK</b>	16-pin blind/bridge connector (Decoder replacement for analogue mode) Note: FO1 and FO2 are constantly on	9009606523006	6,00
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**SOUND-PROJECTS in ZIMO Sound Decoders**

ZIMO Sound decoders are usually delivered with the "European Steam/Diesel Collection" already loaded at no cost (except MX697-Serie, which is delivered with the "US Steam/Diesel Collection") - or:

<b>PROJ-LAD</b>	Fee for loading an alternative free ZIMO sound project	9,00
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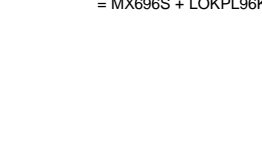
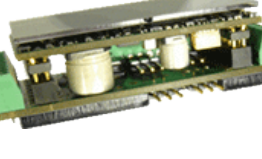
 Free ZIMO sound projects can be downloaded from [www.zimo.at](http://www.zimo.at) (ZIMO Sound Database) onto any ZIMO Sound Decoder (via MXDECUP/U, MX31ZL, MX10, MX32ZL oder MXULF/A).

A load code must be obtained in order to load a crypted (coded) sound project. This load code can be provided by a ZIMO retailer or an email to the sound provider. In each case, it is necessary to stipulate the Decoder ID, which can be read out in CVs #250 - #253. The load code provided is then entered into the CVs #260 - #263 prior to loading the sound project.







<b>LACOK-DAE</b>	Loadcode for crypted/coded sound projects from Mr. Heinz Däppen, small scale Sound Decoder	15,00
<b>LACOG-DAE</b>	Loadcode for crypted/coded sound projects from Mr. Heinz Däppen, large scale Sound Decoder	25,00
<b>LACOK-HEN</b>	Loadcode for crypted/coded sound projects from Mr. Matthias Henning, small scale Sound Decoder	15,00
<b>LACOG-HEN</b>	Loadcode for crypted/coded sound projects from Mr. Matthias Henning, large scale Sound Decoder	25,00
<b>LACOK-MES</b>	Loadcode for crypted/coded sound projects from Mr. Gabriel Mészáros, small scale Sound Decoder	15,00
<b>LACOG-MES</b>	Loadcode for crypted/coded sound projects from Mr. Gabriel Mészáros, large scale Sound Decoder	25,00
<b>LACOK-BRE</b>	Loadcode for crypted/coded sound projects from Mr. Georg Breuer, small scale Sound Decoder	15,00
<b>LACOG-BRE</b>	Loadcode for crypted/coded sound projects from Mr. Georg Breuer, large scale Sound Decoder	25,00
<b>LACOK-NUN</b>	Loadcode for crypted/coded sound projects from Mr. Carlos Núñez Deza, small scale Sound Decoder	15,00
<b>LACOG-NUN</b>	Loadcode for crypted/coded sound projects from Mr. Carlos Núñez Deza, large scale Sound Decoder	25,00
<b>LACOK-MAY</b>	Loadcode for crypted/coded sound projects from Mr. Alexander Mayer, small scale Sound Decoder	15,00
<b>LACOG-MAY</b>	Loadcode for crypted/coded sound projects from Mr. Alexander Mayer, large scale Sound Decoder	25,00
<b>LACOK-SKO</b>	Loadcode for crypted/coded sound projects from Mr. René Skov, small scale Sound Decoder	15,00
<b>LACOG-SKO</b>	Loadcode for crypted/coded sound projects from Mr. René Skov, large scale Sound Decoder	25,00
<b>LACOK-ZIM</b>	Loadcode for crypted/coded sound projects from ZIMO, small scale Sound Decoder	15,00
<b>LACOG-ZIM</b>	Loadcode for crypted/coded sound projects from ZIMO, large scale Sound Decoder	25,00

Each wired decoder with direct energy storage connections is delivered with a suitable capacitor for this decoder!




		EAN	RRP
<b>DECODER FOR LARGE SCALE (0, 1, G, 2) - MX695 Series</b>			
	<p><b>MX695KN Large scale decoder /w energy storage connector-51x40x13mm-6A</b>                      32 Connections on screw terminals                      = 1x 8-pin connector + 2x 12-pin connector                      + 12 Connector pins = 4x 3-pin connector (for servos)                      14 function outputs, NO sound, SUSI sound modules may be connected,                      3 individual low voltage outputs (5V; 10V; adjustable voltage: 1.5V to track),                      1 special connector for a pulsed smoke generator fan                      4 servo connections (4x 3-pin connector block: control, ground, 5V)                      ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO special function mapping, HLU,...</p>	9009606695000	98,00
<b>DECODER, SOUND DECODER FOR LARGE SCALE (0, 1, G, 2) - MX696 Series</b>			
	<p><b>MX696N Large scale Decoder /w energy storage connector-55x29x15mm-4A</b>                      20 Pins = 1 double rowed pin connector block (2x 10)                      for ribbon cable with insulation displacement contact                      8 function outputs, NO Sound, SUSI sound modules may be connected,                      1 low voltage controller (6V - may be used for servos),                      4 servo control signals (on solder pads),                      ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO special function mapping, HLU,....                      + Scope of delivery: 1x 20-pin flat cable, 1x 20-pin plug</p>	9009606696007	88,00
	<p><b>MX696S Large scale Sound Decoder /w energy storage conn.-55x29x15mm-4A</b>                      30 Pins = 2 double rowed pin connector block (2x 10 and 2x 5)                      for ribbon cable and with insulation displacement contact                      8 function outputs,                      1 low voltage controller (10V - for a small constant current consumer only, as the output is used internally to power the sound),                      1 special connector for a pulsed smoke generator fan,                      4 servo control signals (on solder pads, external 5V supply needed),                      Audio amplifier for 4 to 8 Ohm speakers, 10 Watt.                      ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO special function mapping, HLU,....                      + Scope of delivery: 1x 20-pin plug, 1x 20-pin ribbon cable, 1x 10-pin plug, 1x 10-pin ribbon cable</p>	9009606696113	158,00
	<p><b>MX696V Large scale Sound Decoder /w energy storage conn.-55x29x15mm-4A</b>                      40 Pins = 2 double rowed pin connector block (2x 10)                      for flat cable and with insulation displacement contact                      14 function outputs,                      2 low voltage controller (10V, adjustable voltage: 1,5V to track),                      1 special connector for a pulsed smoke generator fan,                      4 servo connections (4x signals on pins, 4x ground, 1x 5V together),                      Audio amplifier for 4 to 8 Ohm speakers, 10 Watt.                      ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO special function mapping, HLU,....                      + Scope of delivery: 2x 20-pin plugs, 2x 20-pin flat cable</p>	9009606696137	178,00
<b>COMBINATION LARGE SCALE SOUND DECODER AND LOCO BOARD</b>			
	<p><b>MX696KS Large Scale Sound Decoder /w energy storage conn.-68x29x20mm-4A</b>                      = MX696S + LOKPL96KS                      20 Connections on screw terminals                      = 2x 10-pin connector on screw terminal                      8 function outputs,                      1 special connector for a pulsed smoke generator fan,                      4 servo control signals (on solder pads, external 5V-supply needed),                      Audio amplifier for 4 to 8 Ohm speaker, 10 Watt.                      ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO special function mapping, HLU,....</p>	9009606696601	176,00
	<p><b>MX696KV Large Scale Sound Decoder /w energy storage conn.-68x29x20mm-4A</b>                      = MX696V + LOKPL96KV                      30 Connections on screw terminals                      = 3x 10-pin connector on screw terminals                      +12 Pins = 4x 3-pin connectors (for servos)                      14 function outputs,                      2 low voltage controller (5V; adjustable voltage: 1,5V to track),                      1 special connector for a pulsed smoke generator fan,                      4 servo connections (4x signals on pin, 4x ground, 4x 5V)                      Audio amplifier for 4 to 8 Ohm speakers, 10 Watt.                      ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO special function mapping, HLU,....</p>	9009606696656	206,00


### LOCO AND ADAPTER BOARDS FOR THE MX696-SOUND DECODERS

		EAN	RRP
	<b>LOKPL96BS</b> Loco board with solder pads for MX696S, MX696V - 68 x 26 x 8mm 42 Solder pads Connector to directly plug in MX696S or MX696V This loco board is made for an easy exchange of the decoder. The loco board itself doesn't have any features.	9009606696106	16,00
	<b>LOKPL96BV</b> Similar to LOKPL96BS, additionally with a 5V low voltage supply for function outputs and servos 4 servo connectors (on solder pads: control, ground, 5V)	9009606696151	26,00
	<b>LOKPL96LS</b> Loco board with pins for MX696S, MX696V - 68 x 26 x 10mm 20 Pins = 2x 10-pin connectors other specification as LOKPL96BS NOTE: 10-pin connector left = "10-pin DCC-interface" from LGB	9009606696205	20,00
	<b>LOKPL96LV</b> Similar to LOKPL96LS, additionally with 42 Pins = 3x 10-pin connectors + 4x 3-pin servo connectors a 5V low voltage controller for function outputs and servos, 4 servo connectors (4x 3-pin connector: signal, ground, 5V)	9009606696250	32,00
	<b>LOKPL96KS</b> Loco board with screw terminal for MX696S, MX696V - 68 x 26 x 10mm 20 Connections on screw terminals = 2x 10-pin connections on screw terminal other specification as LOKPL96LS NOTE: 10-pin connector left = "10-pin DCC-interface" from LGB	9009606696304	24,00
	<b>LOKPL96KV</b> Similar to LOKPL96KS, additionally with 30 Connections on screw terminals = 3x 10-pin screw terminal + 4x 3-pin connector a 5V low voltage controller for function outputs and servos, 4 servo connectors (4x 3-pin connector: signal, ground, 5V)	9009606696359	38,00



### LOCO AND ADAPTER BOARDS FOR THE MX699-SOUND DECODERS

	<b>LOKPL99</b> Loco board with connectors for MX699LS/MX699LV-62x46x10.5mm 3x 14-pin connector to directly plug in MX699LS,-LLS,-LV,-LLV 4x 3-pin servo connector (on solder pads and connector available) + Scope of delivery (if needed for self-soldering): 4x 3-pin angled plugs for servo, 2x 4-pin plugs for motor/track connection	9009606699619	24,00
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### SPECIAL-LOCO BOARD FOR CERTAIN MODELS






	<b>LOKPLSHMAL</b> Custom-made loco board for the TrainLine45 HSB-Mallet 99 5901/02 Part of the conversion set for the TrainLine45 HSB-Mallet (see also SETMALLET), Supports the TrainLine45 smoke generator and the ZIMO smoke generator TR92-101, no manual included (custom-made product)	9009606696908	35,00
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### SOUND DECODER FOR LARGE SCALE (0, 1, G, 2), AMERICAN INTERFACE - MX697

	<b>MX697S</b> Large Scale Sound Decoder with "American interface" (based on Bachmann) /w energy storage capacitor conn. - 60 x 32 x 21mm - 4A 24 Pins = 2x 12-pin connectors 10 function outputs, 1 low voltage controller (10V), 1 special connector for a pulsed smoke generator fan, 3 signal inputs (IN1, IN2, IN3) 4 servo control signals (external 5V supply needed), Audio amplifier for 4 to 8 Ohm speaker, 10 Watt. NB: No plugs and cables included, available as MX697STECK	9009606697110	168,00
	<b>MX697V</b> Large Scale Sound Decoder with "American interface" (based on Bachmann) /w energy storage capacitor conn.- 60 x 32 x 21mm - 4A 24 Pins = 2x 12-pin connectors 10 function outputs, 3 low voltage controllers (5V; 10V; adjustable voltage: 1,5V to track), 1 special connector for pulsed smoke generator fan, 3 signal inputs (IN1, IN2, IN3) 4 servo control signals on pins (signal, ground, 5V), Audio amplifier for 4 to 8 Ohm speaker, 10 Watt. + Scope of delivery: 3x 3-pin + 1x 2-pin plug and cable	9009606697134	188,00



**SOUND DECODER FOR LARGE SCALE (0, 1, G, 2) - MX699 Serie**

		EAN	RRP
	<p><b>MX699LS Large Scale Sound Decoder /w energy stor. on board-50x40x13mm-6A</b> 28 Pins = 2x 14-pin Märklin interface 8 function outputs, 2 low voltage controllers (5V; 10V each 1A), 1 special connector for a pulsed smoke generator fan, 4 servo connections (on solder pad: signal, ground, 5V), Audio amplifier for 4 to 8 Ohm speaker, 10 Watt. ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO function mapping, HLU,... + Scope of delivery: 2x 14-pin connector plugs (CRIBUCHS14)</p>	9009606699114	168,00
	<p><b>MX699LV Large Scale Sound Decoder /w energy stor. onboard-50x40x13mm-6A</b> 42 Pins = 3x 14-pin connector + 4x 3-pin connector 15 function outputs, 3 low voltage controller (5V, 10V, adjustable, each 1A), 2 special connectors for pulsed smoke generator fans, 4 servo connections (via pins: signal, ground, 5V), Audio amplifier for 4 to 8 Ohm speakers, 10 Watt. ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO function mapping, HLU,... + Scope of delivery: 3x 14-pin connector plugs (CRIBUCHS14)</p>	9009606699138	188,00
	<p><b>MX699LM Large Scale Sound Decoder /w energy stor. onboard-50x40x13mm-6A</b> 28 Pins = 2x 14-pin connector (contains 2x 14-pin Märklin interface) + 1x 14-pin screw terminal 15 function outputs, 3 low voltage controller (5V, 10V, adjustable, each 1A), 2 special connectors for pulsed smoke generator fans, 4 servo connections (on solder pads: signal, ground, 5V), Audio amplifier for 4 to 8 Ohm speakers, 10 Watt. ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO function mapping, HLU,... + Scope of delivery: 2x 14-pin connector plugs (CRIBUCHS14)</p>	9009606699121	188,00
	<p><b>MX699KS Large Scale Sound Decoder /w energy stor. onboard-50x40x13mm-6A</b> 30 Connections on screw terminal = 2x 12-pin + 1x 6-pin screw terminal +12 Pins = 4x 3-pin connector 8 function outputs, 2 low voltage controllers (5V, 10V, each 1A), 1 special connector for a pulsed smoke generator fan, 4 servo connections (via pins: signal, ground, 5V), Audio amplifier for 4 to 8 Ohm speakers, 10 Watt. ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO function mapping, HLU,...</p>	9009606699213	198,00
	<p><b>MX699KV Large Scale Sound Decoder /w energy stor. onboard-50x40x13mm-6A</b> 38 Connections on screw terminal = 2x 12-pin + 1x 14-pin screw terminal +12 Pins = 4x 3-pin connector 15 function outputs, 3 low voltage controllers (5V, 10V, adjustable, each 1A), 1 special connector for a pulsed smoke generator fan, 4 servo connections (via pins: signal, ground, 5V), Audio amplifier for 4 to 8 Ohm speakers, 10 Watt. ZIMO Large Scale Decoder features: DCC and Motorola, low-loss synchronous rectifier (high power with low heating), SUSI, RailCom, NMRA and ZIMO function mapping, HLU,...</p>	9009606699237	208,00
	<p><b>MX699LLS</b> Same as Large Scale Sound Decoder MX699LS, but with longer pins (12mm instead of 6mm)</p>	9009606699145	168,00
	<p><b>MX699LLV</b> Same as Large Scale Sound Decoder MX699LV, but with longer pins (12mm instead of 6mm)</p>	9009606699152	188,00

DIGITAL CONVERSION SETS FOR CERTAIN GAUGE 0 AND G LOCO MODELS		EAN	RRP
<b>SETALLEGRA</b>	Conversion set for the LGB loco RhB Abe 8/12 Allegra - 2nd version contains: MX699LS with sound project from Mr. Heinz Däppen incl. load code, speaker LSFRRWS5 and installation guide		186,00
<b>SETALLEGRAM</b>	Conversion set for the LGB loco RhB Abe 8/12 Allegra contains: MX699LM (without plug CRIBUCHS14) with sound project from Mr. Heinz Däppen incl. load code, speaker LSFRRWS5 and installation guide		206,00
<b>SETBR64</b>	Conversion set for the PIKO loco BR 64 contains: MX696KS (= MX696S already plugged on LOKPL96KS), with sound project from Mr. Matthias Henning incl. load code, speaker LSFRRS5 and installation guide		176,00
<b>SETMALLET</b>	Conversion set for the TrainLine45 loco HSB Mallet 99 5901 - 4th version contains: MX696S with sound project from Mr. Heinz Däppen incl. load code, already plugged in LOKPLSHMAL, installation guide On request also with the sound projectversion for the TrainLine45 loco HSB Mallet 99 5902 available.		196,00
<b>SETLUDMILLA</b>	Conversion set for the PIKO loco BR 132 Ludmilla contains: MX699KS with sound project from Mr. Matthias Henning incl. load code, speaker LSFRRS7 and installation guide		209,00
<b>SETPFFIFI</b>	Conversion set for the TrainLine45 loco HSB 99 6101 contains: MX696S with sound project from Mr. Heinz Däppen incl. load code, speaker LSFRRWS5R, already plugged in LOKPLSHMAL, installation guide		214,00
<b>SETBR118</b>	Conversion set for the PIKO loco BR 118 (article 37570) prepared for the connection of 2 smoke generators (not included) contains: MX699KV with sound project from Mr. Matthias Henning incl. load code, speaker LSFRRS7, installation guide		219,00
<b>SETBR24</b>	Conversion set for the PIKO loco BR 24 DR (article 37220 and 37221) contains: MX696KS (=MX696S and LOKPL96KS) with sound project from Mr. Matthias Henning incl. load code, speaker LSFRRS5, energy storage device GOLMLANG, 2 screws 3x10mm, installation guide		224,00
<b>SETBR95</b>	Conversion set for the PIKO loco BR 95 DR (article 37230) contains: MX699KV with sound project from Mr. Matthias Henning incl. load code, speaker LSFRRS5, installation guide		232,00
<b>SETVT98</b>	Conversion set for the PIKO loco VT 98 (article 52720) contains: MX696S with ZIMO sound project, speaker LSFRRS5, 2 ZIMO light boards, SCHRAUB10, SCHRAUB20, 2 screws 3x10mm, energy storage device GOLMRUND, installation guide		237,00

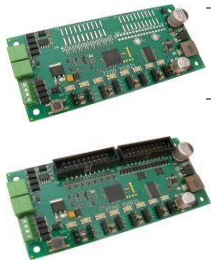
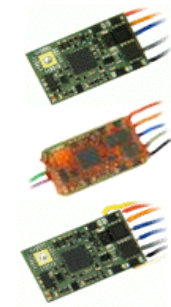
ZIMO recommends an additional energy storage capacitor GOLMRUND for all conversion sets with MX696-Sound Decoders. This capacitor is not included and may be ordered additionally.

### FUNCTION DECODERS

<b>MX681</b>	<b>Subminiature Function-Decoder - 12 x 8 x 2mm - 0.7A</b> 6 function outputs (4 wired, 2 on solder pads), 7 wires, Special ZIMO Function-Decoder features: programmable second address, effects and function mapping as loco decoders;	9009606681003	28,00
<b>MX681N</b>	Similar to MX681 with 6-pin interface NEM651 directly mounted on PCB	9009606681065	27,00
<b>MX681R</b>	Similar to MX681 with 8-pin interface NEM652 on wires	9009606681034	30,00
<b>MX685</b>	<b>Function Decoder - 20 x 11 x 3.5mm - 1.0A</b> 8 function outputs (4 wired, 4 on solder pads), 7 wires, Special ZIMO Function-Decoder features: 2 Servo connections, programmable second address, effects and function mapping as loco decoders;	9009606685001	26,00
<b>MX685R</b>	Similar to MX685 with 8-pin interface NEM652 on wires	9009606685032	28,00
<b>MX685P16</b>	Similar to MX685 with 15-pin PluX16 interface NEM658 directly mounted on PCB	9009606685162	25,00
<b>MX686</b>	<b>Function Decoder /w energy storage connection-20.5x15x4mm-1.2A</b> 8 function outputs (4 wired, 4 on solder pads), 9 wires, Special ZIMO Function-Decoder features: 2 Servo connections, programmable second address, effects and function mapping as loco decoders;	9009606686008	30,00
<b>MX686D</b>	Similar to MX686 with 21MTC-interface NEM660 directly mounted on PCB	9009606686213	29,00
<b>MX687V</b>	<b>Function-Decoder /w energy storage connection-28.5x15.5x4mm-1.6A</b> 8 function outputs (4 wired, 4 on solder pads), 10 wires, Special ZIMO Function-Decoder features: 2 Servo connections, programmable second address, effects and function mapping as loco decoders; with 1.5V <b>low voltage controller</b> for function outputs	9009606687012	38,00
<b>MX687W</b>	Similar to MX687 with 5V low voltage controller for function outputs and servos	9009606687029	38,00
<b>MX687WD</b>	Similar to MX687W with 21MTC interface NEM660 directly mounted on PCB	9009606687128	37,00
<b>MX688N18</b>	<b>Function Decoder - 15x9.5x2.8mm-0.7A-Next18 (NEM662)</b> 8 function outputs (4 of them logic level outputs for SUSI or servo), Special ZIMO Function Decoder features: 2 Servo connections, programmable second address, effects and function mapping as loco decoders;	9009606688002	25,00

Each wired decoder with direct energy storage connections has enclosed a suitable capacitor for this decoder!  
Each Function-Decoder has a blue marking dot, to distinguish them from the loco decoders!





**ACCESSORY DECODERS**

		EAN	RRP
<b>MX820E</b>	<b>Single Turnout Decoder - 19 x 11 x 3.5mm - 0.8A (Peak 2.5A)</b> for double coil-, motor- or EPL-control, or two aspect signal, 2 inputs for position message or forced switch, 5 wires, all ZIMO features like: DCC, RailCom,... usable to insert in LGB point machines.	9009606820006	25,00
<b>MX820D</b>	<b>Single Turnout Decoder - 23 x 12 x 3.5mm - 0.8A (Peak 2.5A)</b> Similar to MX820E with waterproof cover (sealed shrinking tube) for outdoors	9009606820013	29,00
<b>MX820V</b>	<b>Double Turnout Decoder - 19 x 11 x 3.5mm - 0.8A (Peak 2.5A)</b> for two double coil-, motor- or EPL-control, 4 inputs for position message or forced switch, 8 wires all ZIMO features like: DCC, RailCom,...	9009606820020	33,00
<b>MX820X</b>	Similar to MX820E with additional 8 outputs (open collector) on solder pads for bulbs (LEDs), e.g. four 2-aspect signals or two 4-aspect signals	9009606820136	38,00
<b>MX820Y</b>	Similar to MX820V with additional 16 outputs (open collector) on solder pads for bulbs (LEDs), f.e. eight 2-aspect signals or four 4-aspect signals	9009606820143	43,00
<b>MX820Z</b>	Accessory Decoder <b>WITHOUT</b> turnout outputs, but 16 outputs for bulbs (LEDs), e.g. eight 2-aspect signals or four 4-aspect signals	9009606820150	28,00
<b>MX821S</b>	<b>Servo Decoder - 105 x 50 x 15mm - 3.0A</b> for 8 servos (8x 3-pin plug incl. 5-6V supply) all ZIMO features like: DCC, RailCom,... + Scope of delivery: 2x 2-pin plugs (2POLSTECK-K)	9009606821119	66,00
<b>MX821V</b>	<b>Servo Decoder - 105 x 50 x 15mm - 3.0A + 1.6A</b> for 8 servos (8x 3-pin plug incl. 5-6V supply) for 16 inputs (position message, forced switch) and 16 outputs (signals, polarization relay) all ZIMO features like: DCC, RailCom, ... + Scope of delivery: 2x 2-pin plugs (2POLSTECK-K), 1m 20-pin ribbon cable, 2x 20-pin plug	9009606821133	96,00

**ACCESSORY FOR "SMALL" ZIMO DECODERS (small gauges from N to H0/00)**

<b>FLEXL10-WE</b>	10m highly flexible wire, <b>colour white</b>	9009606770400	6,00
<b>FLEXL10-YW</b>	10m highly flexible wire, <b>colour yellow</b>	9009606770417	6,00
<b>FLEXL10-OE</b>	10m highly flexible wire, <b>colour orange</b>	9009606770424	6,00
<b>FLEXL10-RD</b>	10m highly flexible wire, <b>colour red</b>	9009606770431	6,00
<b>FLEXL10-GN</b>	10m highly flexible wire, <b>colour green</b>	9009606770448	6,00
<b>FLEXL10-BE</b>	10m highly flexible wire, <b>colour blue</b>	9009606770455	6,00
<b>FLEXL10-VT</b>	10m highly flexible wire, <b>colour violet</b>	9009606770462	6,00
<b>FLEXL10-BN</b>	10m highly flexible wire, <b>colour brown</b>	9009606770479	6,00
<b>FLEXL10-GY</b>	10m highly flexible wire, <b>colour grey</b>	9009606770486	6,00
<b>FLEXL10-BK</b>	10m highly flexible wire, <b>colour black</b>	9009606770493	6,00
<b>FLEXL1000WE</b>	1000m highly flexible wire on reel, <b>colour white</b>	9009606770509	198,00
<b>FLEXL1000YW</b>	1000m highly flexible wire on reel, <b>colour yellow</b>	9009606770516	198,00
<b>FLEXL1000OE</b>	1000m highly flexible wire on reel, <b>colour orange</b>	9009606770523	198,00
<b>FLEXL1000RD</b>	1000m highly flexible wire on reel, <b>colour red</b>	9009606770530	198,00
<b>FLEXL1000GN</b>	1000m highly flexible wire on reel, <b>colour green</b>	9009606770547	198,00
<b>FLEXL1000BE</b>	1000m highly flexible wire on reel, <b>colour blue</b>	9009606770554	198,00
<b>FLEXL1000VT</b>	1000m highly flexible wire on reel, <b>colour violet</b>	9009606770561	198,00
<b>FLEXL1000BN</b>	1000m highly flexible wire on reel, <b>colour brown</b>	9009606770578	198,00
<b>FLEXL1000GY</b>	1000m highly flexible wire on reel, <b>colour grey</b>	9009606770585	198,00
<b>FLEXL1000BK</b>	1000m highly flexible wire on reel, <b>colour black</b>	9009606770592	198,00
<b>STIFT6</b>	6-pin NEM 651 connector (male) for converting wired decoders to F-types	9009606770110	2,00
<b>RSTECK</b>	8-pin NEM 652 connector (male) for converting wired decoders to R-types	9009606770127	3,00
<b>BUCHS6</b>	6-pin socket, for fitting in MX621N, MX622N, MX681N, MX646N, ...	9009606770134	2,00
<b>STIFT22</b>	22-pin connector (male), for fitting in 21MTC-Decoders (MX634D, MX644C,...)	9009606770141	3,00
<b>BUCHS22</b>	22-pin connector (female), for fitting in decoders with a PluX plug	9009606770158	2,00
<b>PLUX16</b>	15-pin SMD plug as used on all PluX16 decoders	9009606770165	1,80
<b>PLUX22</b>	21-pin SMD plug as used on all PluX22 decoders	9009606770172	2,00
<b>BUCHS8KAB</b>	8-pin connector (female) on wires, for plugging in all NEM 652 decoders	9009606770189	5,50
<b>M4000Z</b>	Amplifier for logic level outputs	9009606770219	13,00
<b>RC-1</b>	Subminiature servo (made by: TOKI Corporation)	9009606770318	45,00

**DIGITAL COUPLERS FOR SMALL AND LARGE SCALE DECODERS**

<b>DIGIKN/TTD1</b>	Krois digital switchable coupling for single traction, N and TT gauge	9009606775016	24,00
<b>DIGIKN/TTD2</b>	Krois digital switchable coupling for double traction, N and TT gauge	9009606775023	24,00
<b>DIGIKH0eD1</b>	Krois digital switchable coupling for single traction, H0e gauge	9009606775030	24,00
<b>DIGIKH0eD2</b>	Krois digital switchable coupling for double traction, H0e gauge	9009606775047	24,00
<b>DIGIKMK1</b>	Krois digital switchable coupling, for H0/00, NEM 362 without bracket	9009606775054	24,00
<b>DIGIKMK2</b>	Krois digital switchable coupling, for H0/00, NEM 362 with bracket	9009606775061	24,00
<b>DIGIKUPL</b>	Krois digital switchable coupling for LGB	9009606775115	29,00
<b>ENTKLGB</b>	Heyn/Fertig uncoupler 8025 for LGB (without motor)	9009606775122	27,00

ACCESSORY FOR LARGE SCALE DECODERS		EAN	RRP
<b>TR92-101</b>	Pulsed smoke generator with fan and heating element (large scale decoders only)	9009606771018	58,00
<b>BAKASTE2X5</b>	10-pin ribbon cable plug for MX696S	9009606771056	2,00
<b>BAKASTE2X10</b>	20-pin ribbon cable plug for MX696S and MX696V	9009606771063	2,00
<b>BAKAB20POL</b>	30m 20-pin ribbon cable on reel for MX696S and MX696V	9009606771070	70,00
<b>MX697STECK</b>	Spare set of connectors for MX697S or MX697V	9009606771162	9,00
<b>CRIBUCHS12</b>	12-pin socket/plug (female) soldered or crimped for MX695LS/LV	9009606771117	2,00
<b>CRIBUCHS14</b>	14pin socket/plug (female) soldered or crimped for MX699LS/LV/LM	9009606771148	2,50
<b>CRIMPTOOL</b>	Crimping tool for CRIBUCHS12, CRIBUCHS14	9009606771124	45,00
<b>CRIBUSET</b>	25 pcs. CRIBUCHS12 + Crimping tool CRIMPTOOL	9009606771131	78,00
<b>CRIBUSET14</b>	25 pcs. CRIBUCHS14 + Crimping tool CRIMPTOOL	9009606771155	94,00
<b>LITZAWG22WE</b>	7m wire on reel, 0.32mm <sup>2</sup> , colour white	9009606771407	10,00
<b>LITZAWG22YW</b>	7m wire on reel, 0.32mm <sup>2</sup> , colour yellow	9009606771414	10,00
<b>LITZAWG22OE</b>	7m wire on reel, 0.32mm <sup>2</sup> , colour orange	9009606771421	10,00
<b>LITZAWG22RD</b>	7m wire on reel, 0.32mm <sup>2</sup> , colour red	9009606771438	10,00
<b>LITZAWG22GN</b>	7m wire on reel, 0.32mm <sup>2</sup> , colour green	9009606771445	10,00
<b>LITZAWG22BE</b>	7m wire on reel, 0.32mm <sup>2</sup> , colour blue	9009606771452	10,00
<b>LITZAWG22VT</b>	7m wire on reel, 0.32mm <sup>2</sup> , colour violet	9009606771469	10,00
<b>LITZAWG22BN</b>	7m wire on reel, 0.32mm <sup>2</sup> , colour brown	9009606771476	10,00
<b>LITZAWG22GY</b>	7m wire on reel, 0.32mm <sup>2</sup> , colour grey	9009606771483	10,00
<b>LITZAWG22BK</b>	7m wire on reel, 0.32mm <sup>2</sup> , colour black	9009606771490	10,00
<b>SCHRAUB10</b>	Screw adapter 10-pin connector for MX696S	9009606771261	10,00
<b>SCHRAUB16</b>	Screw adapter 16-pin connector for MX69/MX690	9009606771247	11,00
<b>SCHRAUB20</b>	Screw adapter 20-pin connector for MX696-Serie	9009606771254	13,00
SPEAKER, SUITABLE FOR SMALL AND LARGE SCALE ZIMO SOUND DECODERS			
<b>LS8X12</b>	Rectangular speaker, 8 x 12 x 8mm, 8 Ohm, 0.5 W, with integrated sound box	9009606774019	5,20
<b>NEW! LS10x15H7</b>	Rectangular speaker, 11 x 15 x 9mm, 8 Ohm, 1 W, with integrated sound box	9009606774347	5,20
<b>LS10X15</b>	Rectangular speaker, 11 x 15 x 9mm, 8 Ohm, 1 W, with integrated sound box	9009606774026	5,20
<b>LS10X15H11</b>	Rectangular speaker, 11 x 15 x 12mm, 8 Ohm, 1 W, with integrated sound box	9009606774163	5,20
<b>LS13X18</b>	Rectangular speaker, 13 x 18 x 13mm, 8 Ohm, 1 W, with integrated sound box	9009606774170	5,20
<b>LS15X25</b>	Rectangular speaker, 14 x 25 x 5.3mm, 8 Ohm, 1 W, without sound box	9009606774309	6,00
<b>LS26X20X08</b>	Rectangular speaker, 26 x 20 x 8mm, 8 Ohm, 1 W, with integrated sound box	9009606774187	8,00
<b>LS40X20X09</b>	Rectangular speaker, 40 x 20 x 9mm, 8 Ohm, 1 W, with integrated sound box	9009606774194	9,00
<b>LS40X22X09</b>	Rectangular speaker, 40 x 22 x 9mm, 4 Ohm, 2 W, with integrated sound box	9009606774200	10,00
<b>LS50X15X14</b>	Rectangular speaker, 50 x 15 x 14mm, 4 Ohm, 2 W, with integrated sound box	9009606774217	14,00
<b>LS55X22X09</b>	Rectangular speaker, 55 x 22 x 9mm, 4 Ohm, 2 W, with integrated sound box	9009606774224	15,00
<b>LSG50X15X14</b>	Large scale speaker, 50 x 15 x 14mm, 16 Ohm, 2 W, with integrated sound box	9009606774231	14,00
<b>LS23R</b>	Round speaker, 23mm, 8 Ohm, 0.5 W, without sound box, with wires	9009606774095	6,00
<b>LS28R</b>	Round speaker, 28mm, 8 Ohm, 1 W, without sound box, no wires	9009606774101	6,00
<b>LSK50WP</b>	Speaker VISATON, shallow depth, 5 cm, 8 Ohm, 3 W	9009606774118	9,00
<b>LSK64WP</b>	Speaker VISATON, shallow depth, 6 cm, 8 Ohm, 3 W	9009606774125	10,00
<b>LSFR55</b>	Speaker VISATON, 5cm, 8 Ohm, 5 W	9009606774132	13,00
<b>LSFRWS5</b>	Speaker VISATON, 5cm, 8 Ohm, 4 W, shallow depth, with flange	9009606774248	13,00
<b>LSFRWS5R</b>	Speaker VISATON, 5cm, 8 Ohm, 4 W, shallow depth, without flange	9009606774255	13,50
<b>LSFRS7</b>	Speaker VISATON, 7cm, 8 Ohm, 8 W	9009606774149	14,00
<b>LSFRS8</b>	Speaker VISATON, 8cm, 4 Ohm, 30 W	9009606774156	18,00
<b>NEW! LSSC49</b>	Speaker VISATON SC4.9, 90 x 40 x 14mm, 8 Ohm, 4 W, wooden membrane	9009606774316	14,00
<b>NEW! LSSC59</b>	Speaker VISATON SC5.9, 90 x 50 x 35mm, 8 Ohm, 10 W	9009606774323	13,00
SPARE MATERIAL			
<b>2POLSTECK-K</b>	2-pin plug for track output (MX1, MXULFA, MX10 Track 2, MXTAP, MX9, ...)	9009606771506	1,20
<b>2POLSTECK-G</b>	2-pin plug for power supply (MX1, MXULFA, MX8,...)	9009606771513	1,20
<b>MXULDIS</b>	Display and top cover to upgrade a MXULF to a MXULFA	9009606600134	44,00
<b>TR92-101-HZ</b>	Spare heating element for TR92-101 (Please mention version/resistor value of TR92-101 when ordering)	9009606771025	15,00
<b>TR92-101-MO</b>	Spare fan motor for TR92-101	9009606771032	9,00
<b>MX1DIS</b>	Additional display in case for MX1EC	9009606772008	50,00

Further repair and spare parts for old products (battery, displays, batteries, Flash-EPROMs, EPROMs...) on request available.



ENERGY STORAGE SOLUTIONS FOR ZIMO DECODERS		EAN	RRP
	<b>SPEIKOMP</b> for Decoders WITHOUT direct energy storage connection (MX621, MX622, MX623, MX630, .. MX646, MX648, ..): Choke 100µH, diode 1N4007, resistors 100R and 3K3, capacitor 470µF/35V (10x12mm) and capacitor 680µF/35V (10x20mm)	9009606772015	6,00
	<b>ELKSODR</b> = 10x SPEIKOMP for 10 Decoders WITHOUT direct energy storage connection (MX621, MX622, MX623, MX630, .. MX646, MX648, ..): 10 Chokes 100µH, 10 diodes 1N4007, 10 resistors 100R and 10 resistors 3K3, 10 capacitors 470µF/35V (10x12mm) and 10 680µF/35V (10x20mm)	9009606772022	60,00
	<b>ELKSOMT</b> for about 10 - 20 Decoders WITH 35V energy storage connection (MX631, MX632, ... MX644, ... and older types like MX640, MX642): 20 capacitors 470µF/35V (10x12mm), 20 680µF/35V (10x20mm)	9009606772114	30,00
	<b>ELKSOPL</b> for about 20 - 30 Decoders WITH 16V energy storage connection (MX633, ... MX645, ...): 20 capacitors 680µF/16V (10x20mm), 20 2200µF/16V (10x20mm)	9009606772121	25,00
	<b>ELKSOGR</b> for about 5 - 10 Large Scale Decoders WITH 16V energy storage connection (MX695, MX696, ...): 5 capacitors 10000µF/16V (18x35mm), 5 capacitors 22000µF/16V (22x40mm)	9009606772145	25,00
	<b>TANTSOPL</b> for two or more Decoders WITH 16V energy storage connection (only for MX633- and MX645-Serie): 30 Tantal-SMD capacitors 220µF/16V (7 x 4 x 2mm)	9009606773043	30,00
	<b>SUPERCAP68</b> for one Decoder WITH 16V energy storage connection (only for MX633-, MX645-, MX695- and MX696-Serie) 6800µF/15V (20x15x5,8mm)	9009606773067	25,00
	<b>GOLDSORG</b> for 2 Large Scale Decoders with 16V energy storage connection (for MX695- and MX696-serie): 15 GoldCaps 1F/2,5V (8x12mm), 7 pcs are used in series and connected to the decoder via capacitors+ and capacitors- pad	9009606773012	25,00
	<b>GOLMRUND</b> for 1 Large Scale Decoder with 16V energy storage capacitor (MX695, MX696, MX633): GoldCap-module with 7 GoldCaps 1F/2,5V (equal to 140000µF) in round shape 25 x 14mm (diameter x height).	9009606773029	25,00
	<b>GOLMLANG</b> for 1 Large Scale Decoder with 16V energy storage capacitor (MX695, MX696, MX633): GoldCap-module with 7 GoldCaps 1F/2,5V (equal to 140000µF) in elongated shape 60 x 8 x 14mm (L x W x H).	9009606773036	25,00
NOTE: More than one capacitor could be used in parallel (parallel circuit) for each decoder.			
	<b>MXFURC</b> Compatibility module for new radio controllers MX32FU on "old" Command Station MX1, including a RailCom detector for the "old" system <small>not yet available</small>	9009606100412	
REVERSING LOOP MODULES, ACCESSORY MODULES AND TRACK SECTION MODULES			
	<b>MX7</b> Single reverse loop module, plugs included	9009606700018	140,00
	<b>MX7/3</b> Triple reverse loop module, plugs included	9009606700025	220,00
	<b>MX8S</b> Accessory module, 16 switches (only twin-coil) or 32 LEDs, bulbs; plugs incl.	9009606800015	315,00
	<b>MX8M</b> Accessory module, 16 switches (motor and EPL machines) or 32 LEDs; plugs incl.	9009606800022	395,00
	<b>TRAFO15</b> Transformer 15V, 150VA; for MX8	9009606880017	100,00
	<b>MX8STECK</b> Spare set of plugs for MX8	9009606880024	22,00
	<b>MX9B</b> Track section module, 16 track sections, only track vacancy detection, plugs incl.	9009606900012	360,00
	<b>MX9V</b> Track section module, 16 track sections, full version with HLU, plugs incl.	9009606900029	420,00
	<b>MX9ALA</b> Plug-in board for MX9, 8 bulbs or LEDs outputs	9009606900111	31,00
	<b>MX9AZN</b> Plug-in board for MX9, loco number identification (TT, H0, 00)	9009606900128	34,00
	<b>MX9AZNG</b> Plug-in board for MX9, loco number identification (large scales)	9009606900135	34,00
	<b>MX9ZIAP</b> External loco number display, plugged directly in MX9	9009606900210	114,00
	<b>MX9ZIAW</b> External loco number display (angled), plugged directly in MX9	9009606900227	122,00
	<b>TRAFO25</b> Transformer 25V, 200VA; for MX1	9009606980014	100,00
	<b>MX9STECK</b> Spare set of plugs for MX9	9009606980021	15,00
ADVERTISING MATERIAL			
	<b>CATSYSDE</b> ZIMO System catalogue German - current edition - about 75g / pcs.		0,00
	<b>CATSYSENG</b> ZIMO System catalogue English - current edition - about 75g / pcs.		0,00
	<b>CATDECDE</b> ZIMO Decoder catalogue German - current edition - about 210g / pcs.		0,00
	<b>CATDECENG</b> ZIMO Decoder catalogue English - current edition - about 210g / pcs.		0,00
	<b>BOOKLETDE</b> ZIMO short introduction for small-scale decoders German		0,00
	<b>BOOKLETEN</b> ZIMO short introduction for small-scale decoders English		0,00
	<b>BOOKLETFR</b> ZIMO short introduction for small-scale decoders French		0,00
	<b>BOOKLETES</b> ZIMO short introduction for small-scale decoders Spanish		0,00
	<b>POSTERSYS</b> ZIMO poster System - size A3		0,00
	<b>POSTERDEC</b> ZIMO poster Decoder - size A3		0,00
	<b>TUERAUFKL</b> ZIMO Indoor sticker "ZIMO Digitalsystem und Decoder - hier erhältlich"		0,00
	<b>ZIMOSTICKER</b> ZIMO small round sticker "ZIMO on board"		0,00

Keep in mind, that catalogues have a certain weight, by all means it could lead to higher shipping costs due to more parcel weight.

**DISCOUNTS**

**Scaled discount on decoder (for retailers/PP-prices only)**

The following discounts are available for decoder orders:

For small scale decoders over 25 pcs. (mixing of different decoder types allowed) = -5%, for over 50 pcs. = -10%

For large scale decoders over 10 pcs. (mixing of different decoder types allowed) = -3%, for over 20 pcs. = -6%

**Individual retailer discount for all products (except spare parts)**

An individual retailer discount on the PP (between 3% and 6%) is granted, if there is a constant order frequency over a long term period or the retailer supports ZIMO directly in our merchandising mission (helping at ZIMO exhibitions, giving seminars for ZIMO products,...).

**Bank account Austria:**

Raiffeisen Bank NÖ-Wien

Account: 29900400200

BLZ: 32000

IBAN: AT83 3200 0299 0040 0200

BIC: RLNWATWWXXX

Prices valid from 1. February 2019

Prices in Euro