DMX REFERENCE

impression X5 Dot Wash

GLP impression X5 Dot Wash

GLP



Manufacturer	GLP
GDTF file	GLP_impression_X5_Dot_Wash_150338.gdtf
GDTF revision	20260710_X5DotWash_byGLP_prelim01 · 2026-07-10
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Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Installation 5
5 Connections 5
6 Operation 6
7 Functions at a glance 6
8 DMX channels 8
Mode M1 Compressed 8
Mode M1 Compressed virtual DIM 9
Mode M2 Simple 9
Mode M3 Normal 10
Mode M4 Direct Emitter Control 12
9 Technical specifications 13
10 Maintenance and cleaning 13
11 Troubleshooting 14
12 Disposal 14

1 About this manual

This document describes the GLP impression X5 Dot Wash by GLP. It was compiled from the GDTF file GLP_impression_X5_Dot_Wash_150338.gdtf from the GDTF-Share library.

File revision: “20260710_X5DotWash_byGLP_prelim01”.

The DMX modes, the channel functions and the technical data are given as the GDTF file states them. Installation, operation from the device's control panel, service and safety instructions are described in the manufacturer's original user manual, which takes precedence over this document.

This document was not issued or endorsed by GLP; product names and trademarks belong to their owners.

Safety notices are marked with signal words according to the severity of the hazard: DANGER – an imminent hazard that will result in death or serious injury; WARNING – a potential hazard that could result in death or serious injury; CAUTION – a potential hazard that could result in minor injury or property damage; NOTE – additional information for correct and safe use.

> **NOTE** This product is designed for stage and effect lighting. It is not suitable for household room illumination.

2 Quick reference

Parameter	Value
Weight	0.6 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
M1 Compressed	6	85	1, 7, 13, 19, ...
M1 Compressed virtual DIM	6	85	1, 7, 13, 19, ...
M2 Simple	9	56	1, 10, 19, 28, ...
M3 Normal	12	42	1, 13, 25, 37, ...
M4 Direct Emitter Control	11	46	1, 12, 23, 34, ...

No light? Check these channels

- M2 Simple: CH 1 Dimmer above 0; CH 3 Shutter at 251–255 “Open”
- M3 Normal: CH 1 Dimmer above 0; CH 3 Shutter at 251–255 “Open”
- M4 Direct Emitter Control: CH 1 Dimmer above 0; CH 3 Shutter at 251–255 “Open”


Read the manual before use


Do not stare into the light


Indoor use only

3 Safety instructions



Read the manual before use



Do not stare into the light



Indoor use only

⚠ WARNING

- This device is intended for professional use. Installation, connection, setup and maintenance must be carried out only by suitably qualified persons who have read this manual.
- Use the device only for its intended purpose and as described in this manual.
- Do not open the housing and do not modify or tamper with the device. Refer all repairs to an authorized service center.
- Do not use the device if its housing, power or data cable, or a connector is damaged, if the device has been dropped, or if liquid or a foreign object has entered it. In such a case, have it checked by a service center.
- Disconnect the device from the power supply before cleaning, maintenance or any work on the connections.
- After moving the device from a cold to a warm environment, let it reach room temperature before switching it on to prevent condensation inside.
- The device is not a toy; keep it out of the reach of children.

⚠ WARNING

- This device is designed for indoor use only. Protect it from rain, splashing water, moisture and dust, and do not place containers with liquids on it.
- Do not operate the device in high humidity, near water, or where condensation can form on it.

⚠ CAUTION

- This device emits intense light. Do not look directly into the light source or the beam at close range; doing so may damage your eyes.
- Do not aim the beam at the eyes of people or animals at close range, and do not view the light source through optical instruments (binoculars, camera lenses).
- Do not aim the beam at flammable or heat-sensitive materials at close range.

⚠ CAUTION

- Strobe and fast flashing light effects can trigger epileptic seizures in susceptible people (photosensitive epilepsy) and can cause nausea or disorientation.
- Inform the audience and performers in advance that strobe effects will be used, for example with a notice at the entrance, and do not use them longer than necessary.

4 Installation

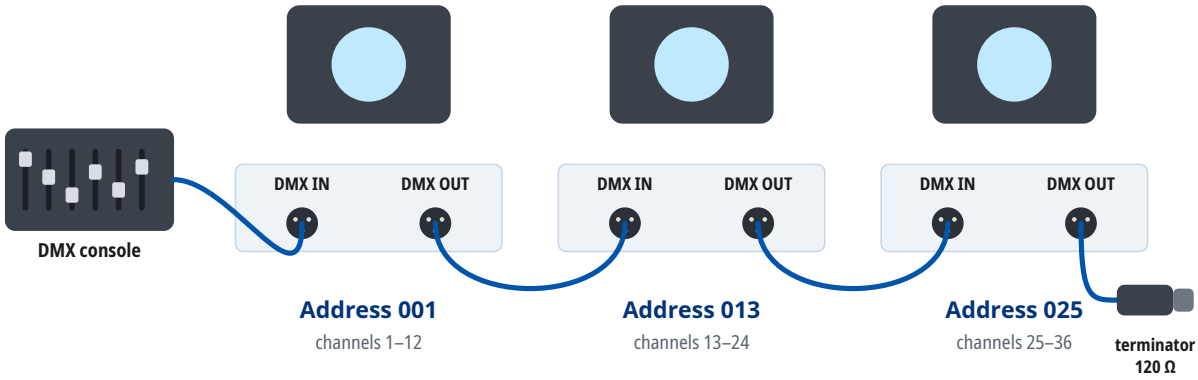
⚠ WARNING

- Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
- The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
- Weight of the device: 0.58 kg.
- Use suitable mounting hardware (for example truss clamps) and tighten all screw connections properly.
- Always secure the suspended device against falling with a safety cable of adequate load capacity, routed through a fixed point of the device and around the supporting structure.
- During installation and removal, keep people out of the area below the work position.
- Regularly inspect the fixings and the safety cable for damage, corrosion and loosening.

5 Connections

- Use shielded cable designed for DMX512 with an impedance of 110 Ω. Ordinary microphone cable is not suitable for DMX, especially over longer distances.
- Connect the devices in a daisy chain: connect the DMX OUT of one device to the DMX IN of the next. Do not split the line with Y-cables or wire it in a star; the line may be split only with a DMX splitter.
- Connect the shield to pin 1 only. Do not connect the shield (ground) to the metal shell of the connector; this can cause short circuits or erratic behavior.
- XLR pin assignment: pin 1 – shield (ground), pin 2 – Data- (Data Complement), pin 3 – Data+ (Data True). On 5-pin connectors, pins 4 and 5 are not connected; a 5-pin connector can be connected to a 3-pin one with a cable adapter.
- Terminate the end of the line (for impedance matching): plug an XLR connector with a 120 Ω, ¼ W resistor between pins 2 and 3 into the DMX OUT of the last device. This reduces the risk of erratic behavior.
- Connect no more than 32 devices to one DMX line. For more devices or longer runs, use a DMX splitter or booster.

DMX line



Mode M3 Normal: every unit occupies 12 channels from its address. At most 32 units on one line; for more units or longer runs use a DMX splitter. A 120 Ω terminator closes the last DMX OUT.

6 Operation

Setting the DMX address

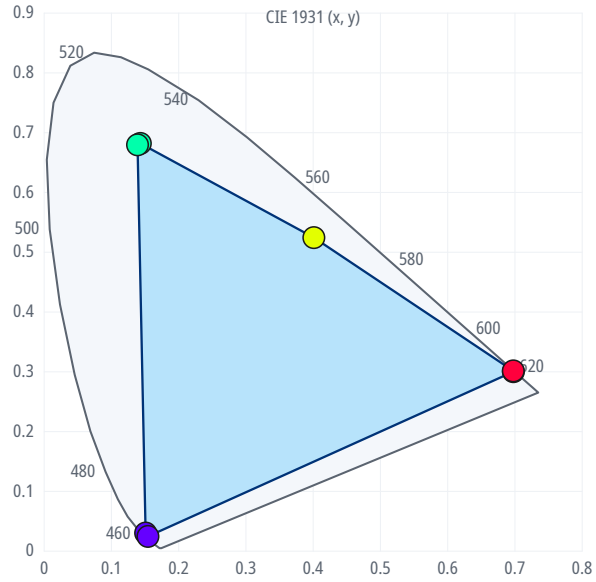
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “M3 Normal”: 12.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied channel does not exceed 512. Devices with the same start address and mode respond identically.
- For several devices in a row in the DMX mode “M3 Normal”, you can use, for example, the start addresses 1, 13, 25, 37.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.
- The device supports RDM (Remote Device Management), two-way communication with the controller over the DMX line.

7 Functions at a glance

Functions in each DMX mode

	M1 Compressed 6 channels	M1 Compressed virtual DIM 6 channels	M2 Simple 9 channels	M3 Normal 12 channels	M4 Direct Emitter Control 11 channels
Dimmer		✓	1	1	1
Shutter / strobe			3	3	3
Color mixing	1, 3, 5	1, 3, 5	4, 6, 8	4 channels (4–12)	4× (4–10)
Color temperature				10	

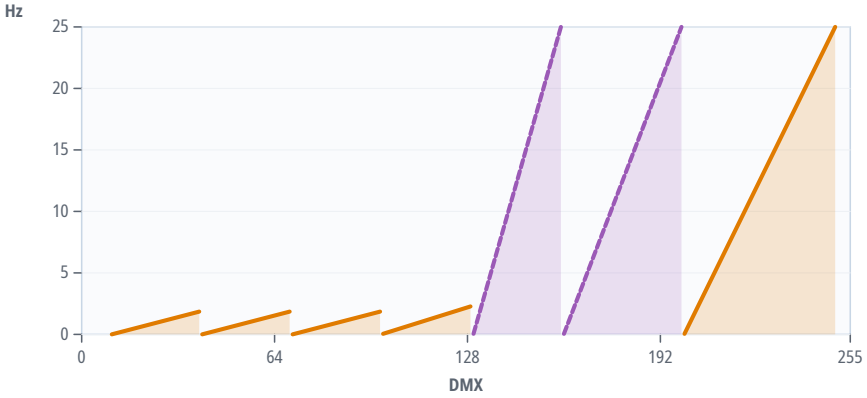
LED colors and the colors they mix



LED	x	y
Red	0.698	0.300
Green	0.143	0.682
Blue	0.151	0.030
RGBL Red	0.698	0.302
RGBL Green	0.139	0.680
RGBL Blue	0.154	0.025
RGBL Lime (GY)	0.401	0.524

The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

Strobe rate

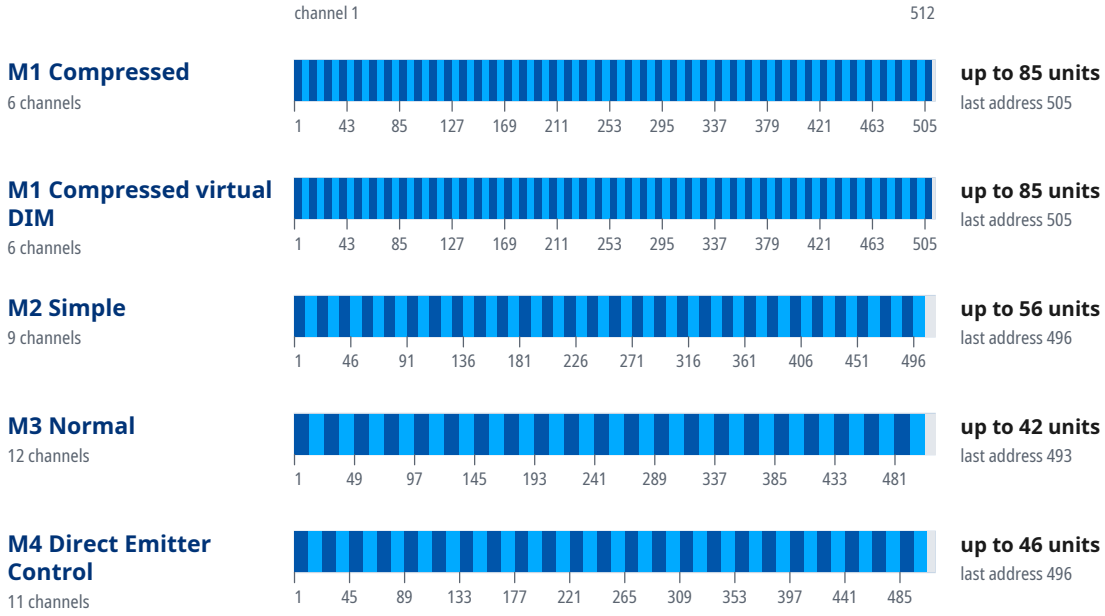


CH 3 · M3 Normal

- 10–39: 0.005–1.85 Hz
  Shutter1StrobePulse
- 40–69: 0.005–1.85 Hz
  Shutter1StrobePulseOpen
- 70–99: 0.005–1.85 Hz
  Shutter1StrobePulseClose
- 100–129: 0.049–2.27 Hz
  Shutter1StrobeDouble-Flash
- 130–159: 0.05–25 Hz
  Shutter1StrobeRndPixel
- 160–199: 0.047–25 Hz
  Shutter1StrobeRandom
- 200–250: 0.047–25 Hz

8 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “M3 Normal”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	61	11	121	16	181
2	13	7	73	12	133	17	193
3	25	8	85	13	145	18	205
4	37	9	97	14	157	19	217
5	49	10	109	15	169	20	229

Mode M1 Compressed

16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 3 Green 255, CH 5 Blue 255.

CH	Function	DMX	Description
1	Red	0–255	Min … Max
		255	Max
2	Red Fine	0–255	Fine adjustment of CH 1
3	Green	0–255	Min … Max
		255	Max
4	Green Fine	0–255	Fine adjustment of CH 3
5	Blue	0–255	Min … Max
		255	Max
6	Blue Fine	0–255	Fine adjustment of CH 5

Mode M1 Compressed virtual DIM

16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 3 Green 255, CH 5 Blue 255.

CH	Function	DMX	Description
1	Red		Same as CH 1 in the mode “M1 Compressed” (p. 8)
2	Red Fine	0–255	Fine adjustment of CH 1
3	Green		Same as CH 3 in the mode “M1 Compressed” (p. 8)
4	Green Fine	0–255	Fine adjustment of CH 3
5	Blue		Same as CH 5 in the mode “M1 Compressed” (p. 8)
6	Blue Fine	0–255	Fine adjustment of CH 5

Mode M2 Simple

16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0; CH 3 Shutter at 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Shutter 255, CH 4 Red 255, CH 6 Green 255, CH 8 Blue 255.

CH	Function	DMX	Description
1	Dimmer	0–63	Closed ... 25%
		63–127	25% ... 50%
		127–191	50% ... 75%
		191–255	75% ... Open
		255	Open
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Shutter	0–4	Closed
		5	Single Flash
		6–8	Single Flash ... Flash Single
		9	Flash Single
		10	Pulse Slow
		11–23	Pulse Slow ... Pulse Medium
		24	Pulse Medium
		25–38	Pulse Medium ... Pulse Fast
		39	Pulse Fast
		40	Pulse Open Slow
		41–53	Pulse Open Slow ... Pulse Open Med
		54	Pulse Open Med
		55–68	Pulse Open Med ... Pulse Open Fast
		69	Pulse Open Fast
		70	Pulse Close Slow
		71–83	Pulse Close Slow ... Pulse Close Med
		84	Pulse Close Med
		85–98	Pulse Close Med ... Pulse Close Fast

CH	Function	DMX	Description
3	Shutter (continued)	99	Pulse Close Fast
		100	Double Flash Slow
		101–113	Double Flash Slow ... Double Flash Med
		114	Double Flash Med
		115–128	Double Flash Med ... Double Flash Fast
		129	Double Flash Fast
		130	Random Pixel Slow
		131–143	Random Pixel Slow ... Random Pixel Med
		144	Random Pixel Med
		145–158	Random Pixel Med ... Random Pixel Fast
		159	Random Pixel Fast
		160	Random All Slow
		161–178	Random All Slow ... Random All Med
		179	Random All Med
		180–198	Random All Med ... Random All Fast
		199	Random All Fast
		200	Strobe Slow
		201–224	Strobe Slow ... Strobe Med
		225	Strobe Med
		226–249	Strobe Med ... Strobe Fast
		250	Strobe Fast
		251–255	Open
4	Red		Same as CH 1 in the mode “M1 Compressed” (p. 8)
5	Red Fine	0–255	Fine adjustment of CH 4
6	Green		Same as CH 3 in the mode “M1 Compressed” (p. 8)
7	Green Fine	0–255	Fine adjustment of CH 6
8	Blue		Same as CH 5 in the mode “M1 Compressed” (p. 8)
9	Blue Fine	0–255	Fine adjustment of CH 8

Mode M3 Normal

16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0; CH 3 Shutter at 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Shutter 255, CH 4 Red 255, CH 6 Green 255, CH 8 Blue 255, CH 10 Color Temperature 0.

CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “M2 Simple” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Shutter		Same as CH 3 in the mode “M2 Simple” (p. 9)
4	Red		Same as CH 1 in the mode “M1 Compressed” (p. 8)
5	Red Fine	0–255	Fine adjustment of CH 4
6	Green		Same as CH 3 in the mode “M1 Compressed” (p. 8)

CH	Function	DMX	Description
7	Green Fine	0–255	Fine adjustment of CH 6
8	Blue		Same as CH 5 in the mode “M1 Compressed” (p. 8)
9	Blue Fine	0–255	Fine adjustment of CH 8
10	Color Temperature	0–9	Open White Point
		10–11	10000K
		12–69	10000K ... 8000K
		70	8000K
		71–114	8000K ... 6500K
		115	6500K
		116–140	6500K ... 5600K
		141	5600K
		142–188	5600K ... 4000K
		189	4000K
		190–203	4000K ... 3500K
		204	3500K
		205–212	3500K ... 3200K
		213	3200K
		214–217	3200K ... 3000K
		218	3000K
		219–226	3000K ... 2700K
		227	2700K
		228–238	2700K ... 2300K
		239	2300K
		240–254	2300K ... 1800K
		255	1800K
11	Tint	0–9	Open
		10	Full Minus Green
		11–132	Full Minus Green ... Neutral
		133	Neutral
		134–254	Neutral ... Full Plus Green
		255	Full Plus Green
12	Color Quality	0	High Brightness
		1–254	High Brightness ... High Quality
		255	High Quality

Mode M4 Direct Emitter Control

16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0; CH 3 Shutter at 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Shutter 255, CH 4 Red 255, CH 6 Green 255, CH 8 Blue 255, CH 10 Lime 255.

CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “M2 Simple” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Shutter		Same as CH 3 in the mode “M2 Simple” (p. 9)
4	Red		Same as CH 1 in the mode “M1 Compressed” (p. 8)
5	Red Fine	0–255	Fine adjustment of CH 4
6	Green		Same as CH 3 in the mode “M1 Compressed” (p. 8)
7	Green Fine	0–255	Fine adjustment of CH 6
8	Blue		Same as CH 5 in the mode “M1 Compressed” (p. 8)
9	Blue Fine	0–255	Fine adjustment of CH 8
10	Lime	0–255	Min … Max
		255	Max
11	Lime Fine	0–255	Fine adjustment of CH 10

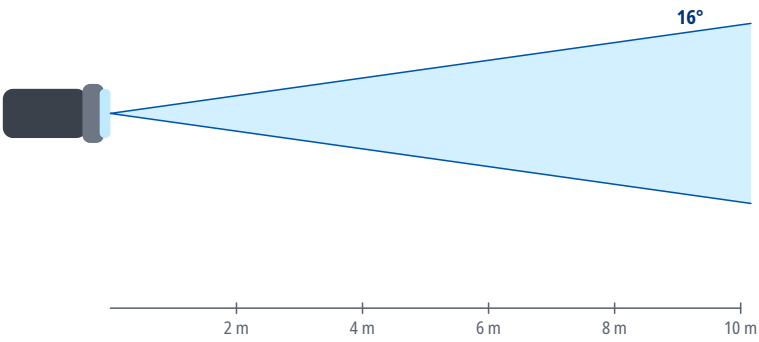
9 Technical specifications

Parameter	Value
Light source	LED
RDM	yes (manufacturer ID 0x676C, device model ID 0x1020)
Weight	0.6 kg
Operating temperature	-10 to 45 °C

Speeds and ranges

Parameter	Value
Strobe frequency	0.047–25 Hz

Spot diameter



Distance	Ø 16°
2 m	0.56 m
4 m	1.1 m
6 m	1.7 m
8 m	2.2 m
10 m	2.8 m
15 m	4.2 m

Spot diameter square to the beam axis, calculated from the beam angle.

10 Maintenance and cleaning

- Before cleaning and maintenance, switch the device off, disconnect it from the power supply and let it cool down.
- Clean the housing with a soft, dry or slightly damp cloth. Do not use solvents, abrasive cleaners or pressure washers, and make sure no liquid gets into the device.
- Clean optical parts (lenses, front glass), if the device has any, with a soft lint-free cloth and a cleaner intended for optics or glass.
- Regularly inspect the housing, cables, connectors and fixings. Have damaged parts replaced by a service center.
- How often to clean depends on the environment; dust, smoke and fog make the device dirty much faster.

11 Troubleshooting

Problem	Remedy
The device does not switch on	Check the supply voltage, the cables and the fuse, if the device has one.
The device does not respond to DMX	Check the start address, the selected DMX mode and whether it matches the profile in the controller, the cable connection to DMX IN, and the controller output (universe).
The device behaves erratically or flickers	Check the terminator at the end of the line, the condition and wiring of the cables (shield on pin 1 only), the number of devices on the line (32 at most), and that the line is not split without a splitter.
Only some devices on the line respond	Check the cable and connectors between the last working and the first non-working device, and make sure all devices on the line are switched on.
Devices respond to the wrong channels or affect each other	Check that the addresses do not overlap and that the DMX mode on the devices matches the patch in the controller.
The device or the connected load does not light up although it receives DMX	Check the values of the dimmer, shutter and strobe channels against the DMX channel table. For the DMX modes for which the sources state it, the chapter DMX channels gives under the mode's heading which channels must be open.

12 Disposal

The crossed-out wheeled bin symbol on the product, in the manual or on the packaging means that the product must not be disposed of with unsorted household waste at the end of its life.

Take the end-of-life equipment to a collection point, for example a municipal collection site or a retailer. Proper disposal enables materials to be recycled and helps prevent possible negative effects on the environment and human health.

Follow the regulations applicable in your country; in the Czech Republic, take-back is governed by Act No. 542/2020 Coll., on End-of-Life Products.

Recycle the packaging materials according to their type.