WARRANTY CARD

1. KH Trading machines and tools are covered by 6/24 months warranty, starting on the date of purchase, as described in the Civil Code (proof of purchase or invoice receipt must be enclosed with the warranty card when making a claim).
2. This warranty does not cover defects caused by unprofessional handling, machine overloads, not complying with instructions contained in this manual, using accessories that are not approved, unauthorized repair, regular wear and tear and damages occurred during transport. Further, this warranty does not cover parts and accessories such as the motor, carbon brushes, seals and hot-air operated parts and parts that need to be changed regularly.
3. If the repair is to be found as not covered by the warranty policy, all costs including the repair and shipping to and from the repair centre will be paid by the customer, according to valid price list. See www.
4. When making a claim, you must present the warranty card, showing the date of the purchase, the serial number of the machine, vendor stamp and signature of sales clerk, as well as the proof of purchase receipt.
5. Warranty claim shall be made at the vendor shop where you bought your machine or you may mail it to a service centre. The vendor is obligated to fill out the warranty card (date of sale, serial number, vendor stamp and signature). All these information must be filled in at the time of sale.
6. The warranty period will be extended for the period of time for which the machine has been in the service centre possession. If the repair or defect is not covered by the warranty policy, all costs including the repair and shipping will be paid by the owner of the machine / tool. We recommend sending the machine in its original packaging. Please, also enclose brief description of the defect with the packaging.
7. Before sending the machine for repair, clean it thoroughly. If the received machine is dirty, it may be rejected by the service shop or you may be charged a cleaning fee.

SERVICE
Logistic centre Klecany
Topolová 483
250 67 Klecany
Czech Republic

Claim department phone number: 266 190 156
266 190 111
Fax: 260 190 100
http://www.KHnet.cz
Email: servis@KHnet.cz

T-mobile: 603 414 975
O2: 601 218 255
Vodafone: 608 227 255

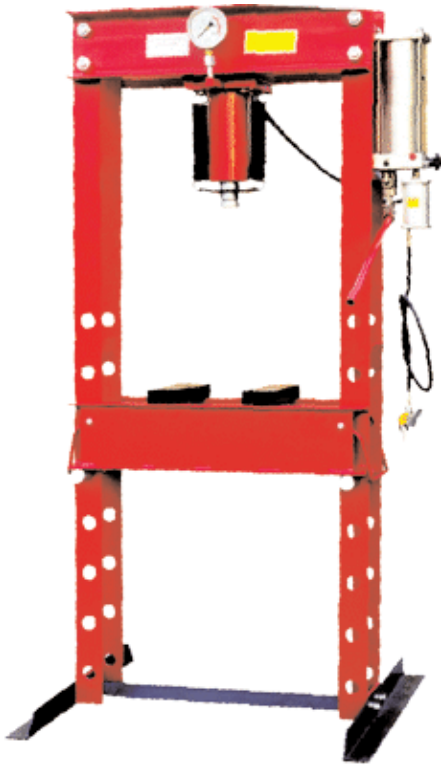
Product: **PNEUMATIC-HYDRAULIC PRESS MACHINE SD40T**	
Type: **SD0806**	Serial number (product series):
Date of manufacture:	Repair centre notes:
Date of sale, stamp, signature:	

Without the correctly filled warranty card or without proof of purchase receipt, including the product type (invoice, purchase receipt) no warranty claim will be processed.

unimax

USER'S MANUAL

PNEUMATIC-HYDRAULIC PRESS MACHINE SD40T



SD0806

Dear customer. Thank you for purchasing equipment from KH Trading, s.r.o.
Our company is ready to offer you our services - before, during and after you buy our product.
If you have any question, comment or idea, please contact our business centre. We will do our best to address your comment or question in timely matter.

Before first use, please read this manual carefully. It is your responsibility to study all instructions, necessary for safe use and operation and to understand all risks that may be involved during the use of power machines.
WARNING! Do not try to use this machine before reading this entire manual and before you know how to handle it. Keep this manual for future reference.
Pay special attention to safety instructions. Not complying with safety rules may cause injury to the operating person or to people standing by or it may cause damage to the machine or to the work piece.
Pay special attention to safety notes and safety labels on the machine.
Never remove or damage them.

Please, write information such as the invoice number and the number of the sale receipt here in this box.

DESCRIPTION

Machine description

A new engine concept with a hydraulic multiplication device powered by compressed air eliminates physical efforts and increases work efficiency (the alternate option of manual pumping is also available).

Number of operating persons required: 1

TECHNICAL SPECIFICATION

Press force	40 t
Maximum piston lift	180 mm
Maximum height of the work piece	1,050 mm
Distance between columns	655 mm
Compressed air operational pressure	8.2 - 13.7 bar
Connecting the compressed air supply	1/4" NPT
Packaging dimensions	1,990 × 510 × 285 mm
Gross weight	210 kg

The accuracy of instructions, graphs and information contained herein, depends on the printing date. Due to continuous product improvement, the manufacturer reserves the right to change technical parameters of the product, without prior customer notification.

REPAIR AND MAINTENANCE REPORT

Report and maintenance report:

DATE	REPAIR AND MAINTENANCE REPORT	SERVICE SHOP

SAFETY PRECAUTIONS

- **This device may be used by a qualified person, 18 years or older who has been trained in work and environmental safety procedures.**
- **Any person using this equipment must possess a medical certificate demonstrating his eligibility to operate this equipment.**

We recommend placing work safety regulations notices at your workshop:

- **"Prevent most common injuries" - PRESS MACHINES**

Self-adhesive safety symbols labels used with your machine:

Place the self-adhesive safety labels on conspicuous place on your machine.

Symbols used in this manual

Warning!
This symbol informs you about the risk of personal injury or damage to the machine or materials.

Warning!
Danger of damage.

Note:
Additional information.

Use personal safety gear.

General instructions

- Plastic bags and packaging materials pose danger for small children and animals.
- Make sure you know how to control your tool or machine and that you are familiar with its operating procedure. Know the hazards that may occur, if not used correctly.
- If other person is using this machine make sure that he knows how to safely operate this equipment and that he is familiar with hazards and risk that may occur, if not used correctly.
- Pay special attention to safety notes and safety labels on the machine. Do not remove or damage them. If the warning label becomes unreadable, please contact your vendor.
- Keep your working place clean. Dirty and disorganized workplace may cause accidents.
- Never work in poorly lit, narrow or too crowded rooms. Make sure the floor is solid and stable and that you can move around easily. Always keep stable posture.
- Keep focusing and use common sense. Do not continue working if you cannot pay attention.
- Maintain your tools clean and in safe working conditions.

- Handles must be kept free of grease and dirt.
- Make sure no children, unauthorized persons or animals have access to your workshop.
- Do not put legs or hands inside the working space.
- Never leave your machine unattended during operation.
- Use only for purposes for which it has been designed.
- Use personal protective gear such as safety goggles, ear protection, respirator, safe working shoes etc.
- Do not overreach, use both hands.
- Never work under the influence of alcohol or other drugs.
- Do not use the machine/tool if you feel dizzy or week.
- Any modifications or improvements to the machine are strictly prohibited. DO NOT USE if you discover bent part, crack or other damage.
- Never perform any maintenance during operation.
- If you see any unusual sign or hear any strange sound, switch off the machine immediately.
- Do not forget to remove all wrenches and/or screwdrivers from the machine.
- Before use, make sure all screws are tightened securely.
- Perform maintenance regularly. Before use make sure the machine is in good working conditions and without any damage.
- Use only original spare parts during repairs.
- Using extension pieces or accessories not approved by the manufacturer may cause injuries to the operating personnel.
- Use this machine only for work that could be handled by it. Do not overload tools, accessories or the machine. For large work volume use more powerful machine.
- Do not overload your device. Measure the work load in such way, so it could be done with comfortable speed. Damages due to machine overload are not covered by the warranty policy.
- Do not expose to extremely high temperature or direct sunlight.
- This machine is not designed for use in humid environments or under water.
- If you are not using your machine, store it in a dry place and locked place, out of reach of children.
- Before use make sure that all safety elements work correctly and efficiently. Make sure all moving parts are in good working conditions.
- Before use make sure that no part is cracked or stuck, Make sure all parts are attached and assembled as designed. Also take into consideration other conditions that may have a negative effect on the proper function of your machine.
- If not stated otherwise in this manual, all damaged parts and safety elements must be repaired or changed.

⚠ Assembly

- Do not use the machine unless completely assembled.

⚠ Compressed air

- The supplied air must be dry and compressed according to the required specifications. The air flow supply must be sufficient. Higher supply pressure decreases the life expectancy of the machine and increases the possibility of injuries.
- The coupling that connects the machine with the supply apparatus must have the prescribed dimensions.
- Take extra caution if using the machine near water. Water may seriously damage your tools or machine. Do not forget to drain the condensed water from the pressure container. Also completely dry out the air supply hose.

Position	Name	Number of pieces
39	Air valve	1
40	Washer	1
41	Pneumatic drive	1
42	Stud	3
43	Connecting rod	1
44	Air hose	1
45	Stud 8 × 28	3
46	Handle	1
47	Washer	2
48	Lower frame stud	2
49	Lower frame	1
50	Washer12	4
51	Safety washer 12	4
52	Nut M12	4
53	Lower partition	1
54	Safety nut M10	4
55	Air inlet threading	1
56	Pressure gauge threading	1
57	Nut	1
58	Screw	1
59	Sealing ring	1
60	Refill cap	1
61	Silon ring	1

- Make sure no dirt can enter the inside of the machine. Keep inletand outlet openings clean.
- Before uncoupling compressed air piping or hose, turn off the air pressure supply. Wait until the pressure equalizes.
- Before starting your work, inspect all couplings and piping for leakage. If leak is found repair it immediately. Leakage puts an extra strength on the compressor and increases the operational cost.
- Inspect the pressure hoses and piping system regularly. If you discover a leakage during work, stop working immediately. Have the defective part repaired or changed for a new one. Pressure hoses may not be twisted. Observe the line on the hose surface. Hoses marked like that must be kept as straight as possible.
- Do not run the pressure hoses over sharp edges or through places where they may be damaged or cut.
- Before installing a new hose blow compressed air through it first.
- When you have to run the hose through a various structures, use protective bushing and inspect them regularly.
- Use protective plugs and covers to prevent dirt form entering the machine.

⚠ Hydraulic equipment

- Small escape trace of hydraulic fluid form the hydraulic pump and from other hydraulic equipment is usual phenomenon and it is not considered as defect. If there is a shortage of hydraulic fluid it must be refilled regularly.
- Before uncoupling compressed air piping or hose, turn off the air pressure supply. Wait until the pressure equalizes.
- Before starting your work, inspect all couplings and piping for leakage. If leak is found repair it immediately.
- Inspect the pressure hoses and piping system regularly. If you discover damage or leak, stop working immediately and have the damaged part changed or repaired immediately.
- Pressure hoses must not be twisted. Observe the line on the surface of the hose that must not be twisted.
- Do not run the pressure hoses over sharp edges or through places where they may be damaged or cut.
- Never put more stress/weight on the hydraulic cylinder than the maximum allowed weight. Do not try to extend the piston bar using excessive force. It may come out of the cylinder completely.
- If the quick couplings are disconnected, place safety plugs in the opened inlets to prevent dirt from entering the system.
- If the stress on the hydraulic cylinder is not spread evenly, pump carefully. If you have to use abnormal force to during pumping, stop working and set the cylinder so the load/stress would be more centred. This action should lower the force necessary for pumping.
- Do not place heavy objects on the hydraulic hoses and make sure the hoses are not tangled together. Leave the hoses loose to prevent damages to the hoses and to the couplings.
- Keep your tools far away from heat sources and fire to prevent damages to your tools.
- New hoses must be cleaned with compressed air or flushed with clean hydraulic fluid.
- When you have to run the hose through a various structures, use protective bushing and inspect them regularly.
- Hydraulic fluid spill on floor creates danger of slipping and risk of personal injuries. If you discover spill have it cleaned immediately. In accordance with the rules of waste law management, absorbing substances or wool must be properly stored in enclosed metal container and delivered to authorized waste collection centre.
- Do not mix different hydraulic fluids together (e.g. from different manufactures).
- Follow the hydraulic fluids change periods.

- Make sure that you are using clean hydraulic fluids. Dirt in the fluid significantly lowers the lifespan of the fluid and may cause irreversible damages to your machine.
- Use protective plugs and covers to prevent dirt form entering the machine.

⚠ Metal turning operations

- Always securely fasten the work piece on the work table using appropriate clamping equipment or vise. Do not hold the work piece in your hands during work. Use both hands to hold the handles of the machine/tool.
- Do not overreach. Keep sacure posture on both legs. That will help you to keep balance in case of a reverse impact.
- Maintain your tools clean.
- When changing tools or during maintenance, follow safety instructions.
- To feed or move the work piece use appropriate extension tool.
- Make sure the work piece complies with required technical parameters and that is securely fastened.
- Use extra caution when releasing the work piece from the fastening device.

⚠ Press machines

- Do not the exceed the maximum pressing force or machine capacity.
- Never use an extension pole for the pump handle to increase the pressure.
- Observe the current operational pressure on the pressure gauge and do not exceed the maximum allowed value.
- Use the press machine on stable, levelled and non-slip floor surface.
- Make sure your workshop is illuminated sufficiently.
- Keep the working surfaces and the surrounding area around your machine clean.
- Do not allow waste products to gather on the floor and around your machine.
- Before each use, inspect the press machine thoroughly.
- If you discover any damage, stop working or do not start working. Have the damage part repaired or exchanged for a new and original part immediately.
- If the sliding press head does not move continuously, bleed the hydraulic system. Using machine with hydraulic system that contains air, increases risk of injuries and damages to your machine.
- Before starting your work, inspect if all bolts, screws and nuts are properly fastened.
- Before pressing, make sure that the work piece is centred on the vertical press head axis.
- Do not use the press machine to depress springs or do not work with potentially hazardous materials.
- Do not place your legs or hands inside the press frames.
- During work do not stand in front of the working area. Make sure no unauthorized persons may enter the working space around the machine.
- Do not let unauthorized and improperly trained persons using this machine.
- Do not attempt to perform any improvements or modification to your machine.
- Use only high quality hydraulic fluids for refills.
- Do not use brake fluids to refill the hydraulic fluid reservoir.
- Do not mix different hydraulic fluids together (e.g. from different manufactures).
- Do not store or install the machine in a place where rain, or bad weather may cause damages.

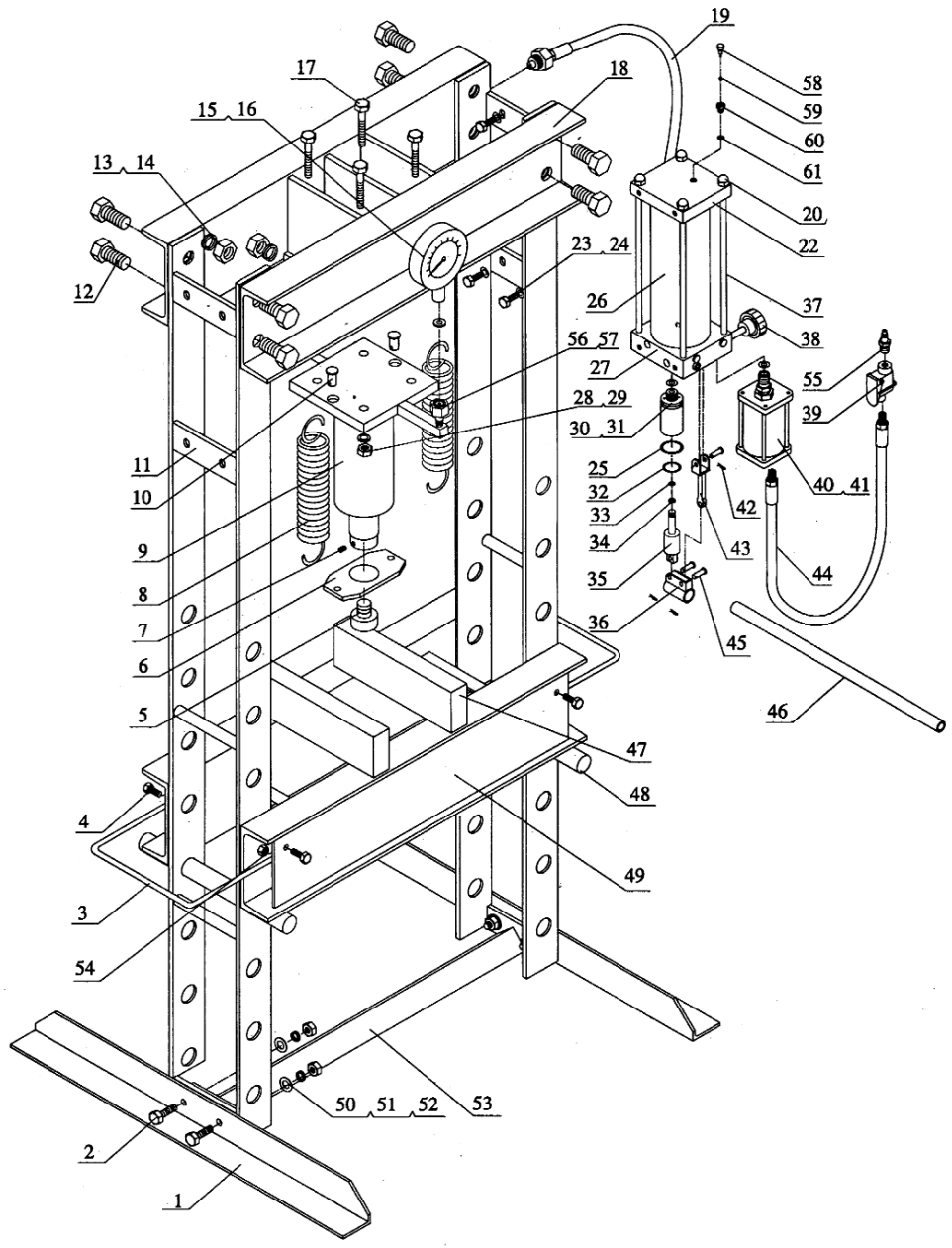
⚠ Power equipment

- If your machine is equipped with depressed springs, use suitable device to release them slowly and safely.

PART LISTING

Position	Name	Number of pieces
1	Bottom support flange	2
2	Screw M12 x 35	4
3	Handle	2
4	Screw M10	4
5	Support	1
6	Spring mount	1
7	Screw M8 × 12	1
8	Pull spring	2
9	Pressing head	1
10	Stud	2
11	Column	2
12	Screw M24 x 50	8
13	Nut M24	8
14	Safety washer 24	8
15	Pressure gauge	1
16	Silon seal	1
17	Screw M14	4
18	Upper crossbeam	1
19	Pressure hose	1
20	Nut M10	4
22	Reservoir lid	1
23	Šroub M10	4
24	Washer10	4
25	O-ring	1
26	Reservoir	1
27	Pump body	1
28	Safety washer 14	4
29	Nut M14	4
30	Washer	1
31	Small piston	1
32	O-ring	1
33	O-ring	1
34	Silon safety ring	1
35	Small piston	1
36	Hand lever socket	1
37	Terminal	1
38	Drain valve	1

DETAILED PART DRAWING



ASSEMBLY

- Before throwing the packaging material out, make sure no part is left inside. If so, take it out and install it. Use the part listing for check-up and the installation drawing for guidance.
- Using screws 12, washers 14 and nuts 13, connect the two upper cross beams 18.
- Connect one header (1) on the left side with the lower crossbeam. Use screws 2, washers 50, elastic washers 51 and nuts 52 to do so.
- Connect the right footing 1 with the lower crossbeam.
- Lift the frame up to vertical position.
- Place the lower frame stud 48 into holes in columns 11.
- Place the lower frame 49 inside the lower press frame on studs 48 and connect the handle 3.
- Mount the pneumatic drive with hydraulic pump in place, using screws 23 and washers 24.
- Fasten the slide press head 9 to the upper crossbeam, using screws 17 and washers 28.
- Connect the hydraulic pressure hose 19 and the pressure gauge 15 to the slide press head 9.

OPERATION

- Before starting work, inspect the entire press machine for loose screws, nuts and damages.
- If you discover any damage, do not continue or start working. You may damage the machine or injure yourself.

Before first use

- Open the air valve 39 and pour one teaspoon of oil inside the air inlet 55 to lubricate the pneumatic mechanism.
- Close the valve 39.
- Connect the compressed air supply and start the press machine for about 3 seconds to lubricate the air pump.
- Inspect the hydraulic system and couplings for leakage regularly.
- If you discover leak tighten the coupling.
- If tightening is not enough, have it repaired.
- When you finish the repair, test the hydraulic system for leakage again.

Bleeding the hydraulic system.

Manual pumping

- Open the valve 38 by turning it counter clockwise.
- Perform few full lift of the pump handle to push the air out ofthe system.

Using compressed air

- Open the valve 38 by turning it counter clockwise.
- Connect compressed air supply hose to the inlet threading 55.
- Open the air valve 39 and let the air flow in for a while to push the air out of the hydraulic system.

Operation

- Place the supports 47 on the lower frame and place the work piece on them.
- Close the release valve 38 by turning it clockwise and tighten it securely.
- Connect the compressed air supply hose to the air inlet threading 55.
- Make sure that condensed water is removed, air filtration and continuous air lubrication is available and working. Continuous compressed air lubrication significantly increases the operational life of hydraulic system.

- Place the support 5 on the sliding press head. The supplied support is designed for flat and levelled surface pressing operations, where the stability of the work piece is ensured.It is prohibited to use the machine without the support.
- Open the air supply valve 39 and lower the sliding press head with the mounted support 5 towards the pressed work piece.
- Close the air supply valve 39.
- The centre of the pressed work piece must be placed in the centre of the press head/cylinder. Also make sure that the work piece is levelled. When pressing out bearings, studs etc. use suitable auxiliary devices of appropriate size (place such device under the work piece and on the piston extension) to prevent ejection o the work piece.
- Open the valve 39 or use the hand pump if compressed air is not available.
- Observe the pressure gauge to make sure that the pressure will not reach the maximum allowed value.
- When you finish your work, close the air supply valve 39 or stop pumping and slowly release the pressure by turning the valve 38. Turn the valve in small steps only.
- When the pressure is released completely, remove the work piece from the frame.
- Due to safety regulations, after you finish your work, disconnect, the air supply hose from the threading of the air inlet valve 39.
- Remove all tools, work pieces and waste from the working space.

NOTE

- Occasional hydraulic fluid drop from the pressing head or from the hydraulic unit is normal and cannot be completely eliminated.
- It is not malfunctioning.

MAINTENANCE

NOTE

Never lubricate supports 47 or the lower frame 49.

- Keep your tools clean. Dirt may enter the inner mechanism of your machine and cause damage.
- Do not use aggressive cleaning solution or paint thinners to clean the machine.
- Clean plastic parts with cloth dipped in soup water.
- Clean and lubricate metal surfaces with a cloth dipped in paraffin oil.
- If you are not using your machine, lubricate it with suitable grease and store it in a dry place to prevent corrosion.
- Lubricate moveable parts with oil.
- If the press machine is loosing power, bleed the hydraulic system as described earlier.

Hydraulic fluid refill, check up and change.

- Clean the fluid cap 60 and its surrounding area to prevent dirt from entering the system.
- Unscrew the refill cap 60.
- Check the level of the fluid and refill if needed.
- Use only high quality hydraulic fluids for refills.
- Screw the cap back in and tighten securely.
- Bleed the hydraulic system according to the procedure described earlier.
- If you are not using your press machine, open the valve 38 to prevent spring fatigue. If the springs get worn out or fatigued, the piston may not return to its original position.
- Hydraulic fluid should be changed after long time of use to ensure long operational life of your machine.

DISPOSAL

- Used hydraulic fluids must be disposed off in accordance with the Law of waste disposal management.

When the operational life of your device is over, dispose off it in accordance with valid rules and regulations. Your product is made of metal and plastic parts that may be recycled when separated.

1. Disassemble all parts.
2. Separate all parts according to the material they are made of (e.g. metals, rubber, plastics, etc.).

Take the separated parts to the recycling facility near you for further processing.
Information about the locations of recycling centres may be found at your local City office or throughout an Internet search.

CAUTION

If the machine breaks down, send it back to the vendor for quick repair.
Please, enclose brief description of the defect. That makes repair easier. If the machine is still covered by warranty, enclose the warranty card and proof of purchase receipt. After the warranty period expires, we repair your machine for a special price.

To prevent possible damages during shipping, packed the machine carefully or use the original packaging material. We are not liable for shipping damages due to incorrect packaging of your machine. If making a claim at the shipping company the level and method of packaging plays a major role during claim evaluation process.

Note: Pictures and contents in this manual may slightly differ from the actual product or accessories.
It is due to continuous improvement of our products. Such small differences have no effect on the product functionality.