

USER'S MANUAL

L-160C LOADER

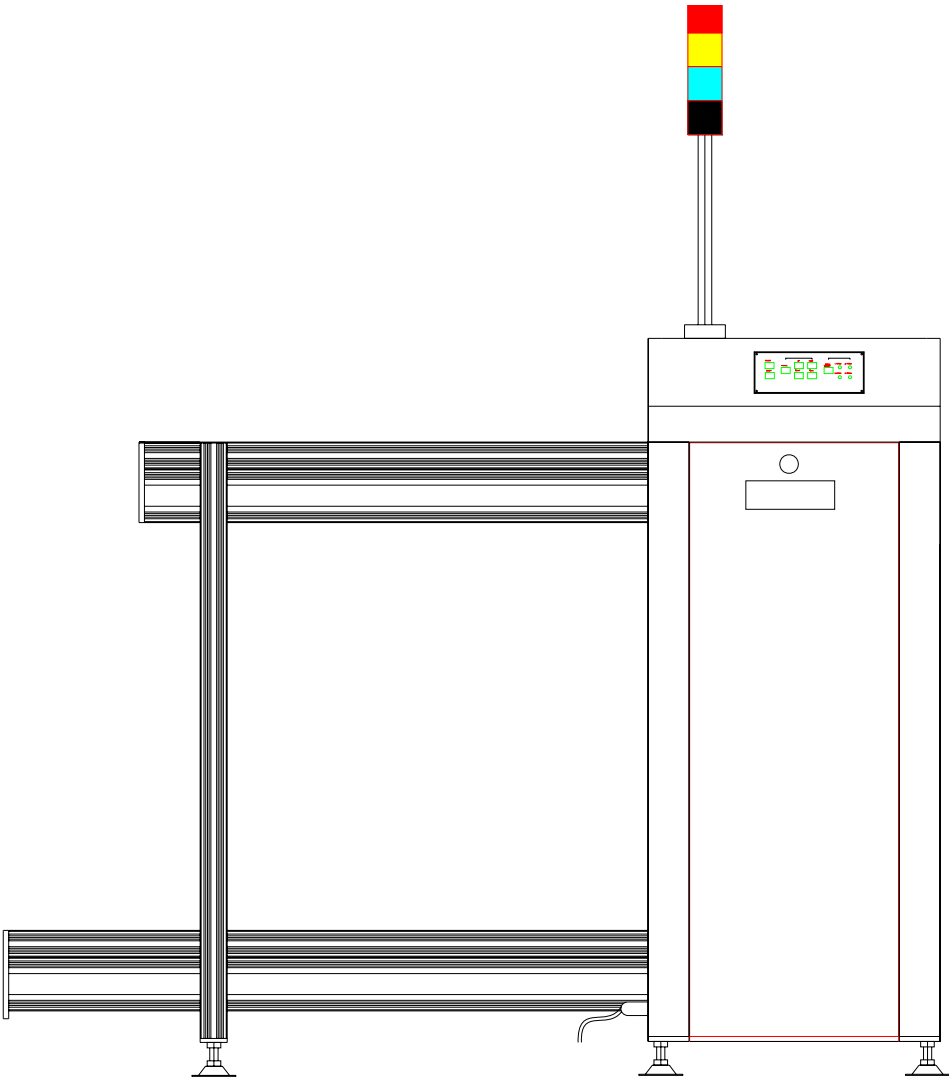


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Use the following safety guidelines to help ensure your own personal safety and to help protect your loader and working environment from potential damage.

1. APPEARANCE



2. SAFETY PRECAUTIONS

Please operate machine according user's manual instruction.

Cautions:

- 1) maintenance and repair, please refer to your distributor or a professional service person.
- 2) use the following safety guidelines to help ensure your personal safety and help your loader and working environment from potential damage.
- 3) during the operation should not be any part of the body (head, hands, etc.) under campaign components range of motion, you may be moving parts and injury hit.
- 4) debugging equipment, do not switch near the operator panel or some emergency stop to the abnormality occurred when the closure of equipment, reduce the loss and injury.

NOTICE:

! WARNING not follow the instructions of the warning signs may be accidents and operations to bring harm.

! CAUTIONS not follow the instructions carefully to the signs that might damage the equipment and operators to bring harm.

3. PRODUCT DESCRIPTION

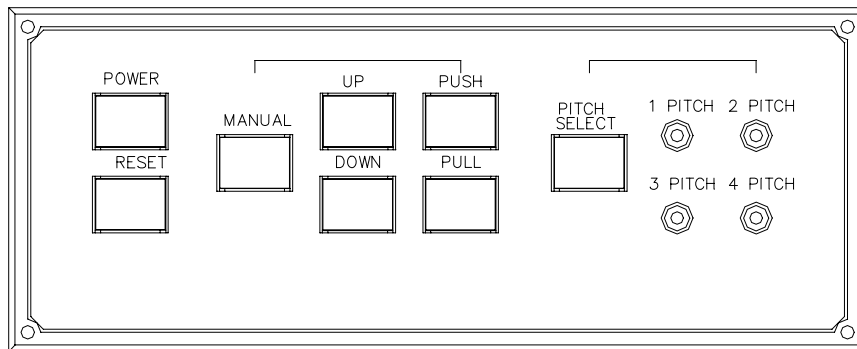
Available with connection with smt and ai productions line, hands-free pcb exposure, better protection for the PCB, a single automated control movements framing. high precision, automated counting (customizable, touch control panel have this function), fault alarm function, required for a full range of automation equipment.

CHARACTER:

- 1) PLC control system, high-performance photoelectric sensor, motor.

- 2) humanity control panel (customizable touch screen panel) operation .
- 3) two magazines distance adjustable. (10,20,30,40mm)
- 4) from left to right direction (customizable from right to left direction)
- 5) standard outlet, easy connect with other equipment.

4. PERFORMANCE



CONTROL PANEL



URGENT

BUTTON

DESCRIPTION:

- EMERGENCY BUTTON: STOP ANY OPERATION ANYTIME.
- POWER: POWER SWITCH.
- Auto/Manual: Push this button (led indicator flash), machine working under manual mode, can control--- up/down/push/recovery button by hand. Recovery this button, machine working under auto mode.
- Pitch Select: pitch select -10mm/20mm/30mm/40mm
- Up: under manual control mode, control "up"
- Down: under manual control mode, "down"
- Push: under manual control mode, control pusher push"pcb" out.
- Pull: under manual control mode, take pusher back.
- Reset: under manual mode, push "reset"5 seconds, r esumption of initial state machine. if machine work wrong under atuo mode, after

troubleshooting, push "reset" , can make machine recovery.

TECHNICAL PARAMETER:

machine size:	L1600 x W820 x H1150mm (height adjustable)
machine net weight.:	150kg
air consumption:	100 liters / hour
compressed air:	5~6kg/cm ²
power supply:	ac220v,50/60hz
power:	200w
speed:	45s (lifts recovery –mg into lift –first board)
control mode:	plc control
pcb position:	high precision motor and photoelectric sensor
pcb magazines:	standard size.

NOTICE BEFORE TURN ON POWER

MAKE SURE:

emergency button recovery

air supply keep at 6kg/cm² as rated.

no pcb stayed between magazine and machine behind.

Change new (PCB) model operating flow

1. put one magazine filled with pcb on former transport belt.
2. push "auto" button, magazine flow into lift, push "manual", and push "up" button again.
3. magazine will automatically up to first loading position.
4. use waving hand stick, adjust pusher to the middle line position of pcb.
5. push pusher to test if can push pcb out..
6. push "auto", machine into auto working mode, machine are reay.

5. INSTALLATION

MAKE SURE:

check control box avoid abnormal.

check six feet balance, avoid machinery vibration.

air supply keep at 6kg/cm², adjust machine inside pressure regulator to 5kg/cm².

cylinder clear, no water and drying.

INSTALLATION ENVIRONMENT:

Do not allow install machine in: more dust, oil mist, conductive dust, corrosive gases, flammable gases, humidity, easy shock, high temperature and outdoor environment.

INSTALLATION AND TESTING ONLY MADE BY PROFESSIONAL SERVICE

PERSON:

- 1) Check and test fixed speed motor and air supply through switch and sensor.
- 2) Check and ensure air supply speed smooth and stable.
- 3) check and ensure all sensors in right place.
- 4) check PLC input indicators and ensure all sensors in right place.
- 5) check PLC output indicators and ensure all output in good situation.

6. PREPARATION AND NOTICE BEFORE USE

MOVING: Handling this machine, the machine should not be so excessive shock or vibration.

Cylinder: air supply keep at 6kg/cm², adjust machine inside pressure regulator to 5kg/cm² Cylinder clear, no water and drying.

Power Supply: 230V 50Hz ~60Hz

7. MAINTENANCE

Once a week

Check with the transport chain whether it is too lax, and maintain a clean chain maintaining lifts the optical axis linear bearings and clean

Using non-fiber cloth or paper wipe dirty oil, and then lubricating ball screw
Test all automatic and manual operation functions

PCB testing whether the smooth transmission

Put lifts transferred to the maximum-after closing the power to check whether the lifts down

Cylinder check whether the smooth moves

Check whether the track chain wear

Inspection photoelectric sensors, magnetic sensors normal work

8. ELIMINATION OF COMMON FAULTS

Yellow light flash:

Wait MAGAZINE into lifts, Add MAGAZINE in CONVEYOR, After entering the lifts, automatic yellow light extinguished

After MAGAZINE out lifts, the yellow light from the extinguished

Red light flash:

All CONVEYOR transportation MAGAZINE not running smoothly, it will have a flashing red light, Check whether the deformation MAGAZIN, Availability lockplate phenomenon. After troubleshooting, push "reset", machine recovery.

Pusher not pushed back or not , it will have a flashing red light. Check MAGAZINE or adjust rusher position, push" RESET", redlight extinguish, machine recovery and work.

Three color signal lights Note:

Green light : mean machine in auto mode working.

Yellow light : mean machine in manual mode working.

Yellow light flash : waiting MAGAZINE IN OR OUT.

Red light flash : Abnormal functioning, or push emergency button, while buzzer ring

9. HOSTING, TRANSPORT, STOCKPILING

The removal of this equipment, please do not make the engines subjected to excessive shock or vibration.

Machinery parts of the heavy lifting, is an important part of the machinery, should be particularly careful handling.

Installation, transportation, and environmental requirements, air temperature of 5-50°C, humidity 20% -85%, under an altitude of 1000 m height, transport and storage temperature of -25 to +55 °C.