02.040.00/02.045.00/02.080.00/02.120.00/02.160.00

Service Manual



NOTE

This manual is related to the following Equipment:

02.040.00

02.045.00

02.080.00

02.120.00

02.160.00



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All device equipment and accessories should be in good working order prior to use.

It is the responsibility of each facility's engineering department to test equipments and "routine basis" to determine if the devices are functioning within specifications.

No device or accessory should be used if a malfunction is suspected.

The installation, operation, search for breakdowns and the repair of equipment must only be performed by trained personnel⁽¹⁾ who have sufficient knowledge about the equipment, spare parts, and the information supplied.



- 1. BEFORE STARTING TO INSPECT THE DEVICE, MAKE SURE IT IS NOT CONNECTED TO THE ELECTRIC POWER SUPPLY NETWORK.
- 2. DO NOT USE THE APPLIANCE IN THE PRESENCE OF INFLAMMABLE AND/OR EXPLOSIVE LIQUIDS, GASES OR MIXTURES.
- 3. DO NOT LEAVE THE APPLIANCE EXPOSED TO ATMOSPHERIC AGENTS OR HEAT SOURCES.
- 4. USING THE APPLIANCE UNDER DIFFERENT CONDITIONS THAN THOSE SPECIFIED IN THIS HANDBOOK MAY PREJUDICE ITS SAFETY AND ITS TECHNICAL PARAMETERS

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^{1.} An educated (qualified) person has sufficient knowledge or experience to allow him to avoid the dangers presented by electricity, whereas an informed (trained) person is sufficiently informed or works supervised by qualified persons, so as to allow him to avoid the dangers presented by electricity (e.g. operators or maintenance staff).

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Service Manual

WARNING

READ THE INSTRUCTION MANUAL BEFORE USING THE DEVICE

WARNING

THE DEVICE IS INTENDED FOR SKILLED PERSONNEL ONLY

WARNING

DO NOT DISASSEMBLE THE DEVICE. WHEN REPAIR IS NEEDED. PLEASE CONTACT CUSTOMER SERVICE

CAUTION

PLEASE COMPLY CAREFULLY WITH THE FOLLOWING GUIDELINES WHEN USING THE DEVICE:

DO NOT USE THE DEVICE WITH WET OR DAMP HANDS

DO NOT SPILL WATER OR LIQUIDS ON THE DEVICE

DO NOT USE THE DEVICE NEAR LIQUIDS, GASSES, INFLAMMABLE AND/OR EXPLOSIVE MATERIALS

THE DEVICE IS INTENDED FOR INDOOR USE ONLY

KEEP THE DEVICE AWAY FROM ATMOSPHERIC AGENTS OR HEAT SOURCES

BEFORE CLEANING OR MAINTENANCE, PLEASE MAKE SURE THAT THE DEVICE IS UNPLUGGED FROM THE POWER SUPPLY

DO NOT USE THE DEVICE FOR USES OTHER THAN THOSE SPECIFIED BY THE MANUFACTURER. A DIFFERENT USE OF THE DEVICE THAN WHAT SPECIFICALLY INDICATED IN THIS MANUAL MAY CAUSE SAFETY PROBLEMS

AND DERANGE THE DEVICE'S TECHNICAL PARAMETERS

INSTALLATION

WHEN UNPACKING THE DEVICE, CHECK NO DAMAGES WERE INCURRED DURING TRANSPORTATION

WHEN USING THE PRODUCT FOR THE FIRST TIME AND THROUGHOUT ITS LIFE, CHECK THAT THE POWER SUPPLY CABLE HAS NO DAMAGE, SUCH AS TEARS OR FRAYS. IN CASE THE CABLE IS DAMAGED, DO NOT CONNECT THE PLUG TO THE POWER OUTLET.

STEP 1- IDENTIFY THE INSTALLATION LOCATION. THE VIEWBOX MUST BE MOUNTED ON A STABLE WALL, AWAY FROM WATER SUPPLIES OR SOURCES OF HEAT

STEP 2- FASTEN TWO HOOKS IN LINE WITH THE CORRESPONDING MOUNTING EYELETS (DISTANCE SPECIFIED IN TABLE 1)

STEP 3- HANG THE VIEWBOX WITHOUT EVER BENDING THE POWER SUPPLY CABLE

TECHNICAL FEATURES

THE DEVICE IS INTENDED FOR THE DISPLAY OF X-RAYS AND PHOTOGRAPHIC NEGATIVES

TABLE 1	SIZE MODEL	02.040.00	02.080.00	02.120.00	02.160.00	02.045.00
	WIDTH	43 cm	83 cm	123 cm	163 cm	41,5 cm
DIMENSIONS: FRAME	HEIGHT	46 cm	46 cm	46 cm	46 cm	13 cm
	DEPTH	12 cm	12 cm	12 cm	12 cm	27,5 cm
INSTALLATION AREA	INNER DISTANCE BETWEEN MOUNTING EYELETS	ISTANCE ETWEEN 28 cm 69 cm OUNTING		109 cm	149 cm	NA
VIEWING AREA	WIDTH	40 cm	80 cm	120 cm	160 cm	40 cm
VIEWING AREA	HEIGHT	43 cm	43 cm	43 cm	43 cm	22 cm
AMELOUT.	NET WEIGHT	6 kg	10 kg	14 kg	19 kg	2,95 kg
WEIGHT	GROSS WEIGHT	7 kg	12 kg	16 kg	22 kg	3,65 kg
	NOMINAL POTENTIAL	230 V	230 V	230 V	230 V	230 V
POWER	NOMINAL POWER	45 W	85 W	130 W	170 W	28 W
CHARACTERISTICS	NOMINAL FREQUENCY	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
	CIRCUIT FUSES (MM 5X20)	F2A-250 V	F2A-250 V	F2A-250 V	F2A-250 V	F2A-250 V

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OPERATING INSTRUCTIONS

THE DEVICE IS A FILM-VIEWER USED TO VIEW X-RAYS AND/OR PHOTOGRAPHIC NEGATIVES

OPERATING TEMPERATURE: BETWEEN 5° AND 40° OPERATING HUMIDITY: BETWEEN 50 AND 80% OF RH

ALTITUDE MAX 2000 m

MAX VOLTAGE VARIATION ALLOWED MAX +/- 10%

STEP 1 – PLUG THE CONNECTING TERMINAL OF THE POWER SUPPLY CABLE (SUPPLIED) IN THE PLUG ON THE SIDE OF THE DEVICE

STEP 2 – SWITCH ON THE VIEWBOX BY FLIPPING THE MAIN SWITCH ON THE 'ON' POSITION

STEP 3 - LAY THE X-RAY ON THE DEVICE'S BACK-LIGHTED PANEL

STEP4- WHEN VIEWING IS FINISHED, REMOVE THE X-RAY

STEP 5- WHEN OPERATIONS ARE OVER, SWITCH OFF THE DEVICE BY FLIPPING THE SWITCH ON THE 'OFF' POSITION

STORAGE

PLEASE KEEP THE VIEWBOX IN DRY PLACES, AWAY FROM ATMOSPHERIC AGENTS

STORAGE TEMPERATURE: BETWEEN -10° AND + 40°

RELATIVE HUMIDITY: BETWEEN 20 AND 80%

CLEANING AND MAINTENANCE

BEFORE CLEANING OR MAINTENANCE, PLEASE MAKE SURE THE DEVICE IS NOT PLUGGED TO THE POWER SUPPLY

CLEANING MUST BE CARRIED OUT WITH A SOFT WET CLOTH, USING NON-ALCOHOLIC DETERGENTS. NEVER USE ABRASIVE COMPOUNDS OR THINNERS. CHECK THAT THE POWER CABLE HAS NO DAMAGE, SUCH AS TEARS, FRAYING OR BENDING.

IN CASE OF MALFUNCTIONING OR ANOMALIES, BEFORE ANY ACTION IS TAKEN PLEASE CONTACT THE CUSTOMER SERVICE OR SKILLED OPERATORS AUTHORIZED.

SHOULD ITS TECHNICAL STAFF FIND ANY SIGN OF TAMPERING, WE SHALL NOT COVER THE DEVICE WITH ANY KIND OF WARRANTY.

IF REPAIR IS NEEDED, PLEASE CONTACT US

TRANSPORTATION COSTS MUST ALWAYS BE AGREED UPON WITH US BEFORE SHIPMENT. SHOULD ANY LIQUID PENETRATE IN THE DEVICE, PLEASE CONTACT OUR CUSTOMER SERVICE FOR THE NECESSARY MAINTENANCE.

DO NOT REPAIR THE DEVICE DIRECTLY.

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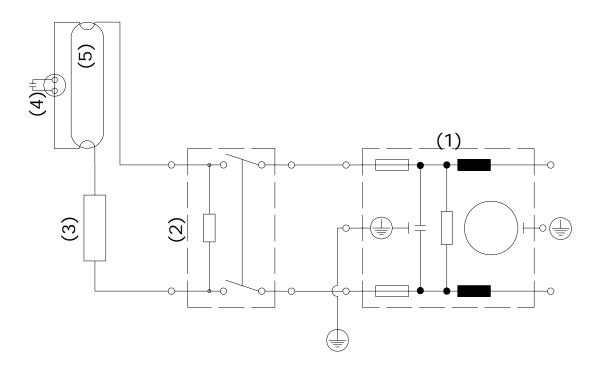
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Functional Layout 02.040.00/02.045.00

- (1) EMC filter with plug code N.07.000
- (2) Rocker switch code N.09.000
- (3) Ballast code N.04.000

- (4) Starter code N.03.000
- (5) Spare light code N.01.000



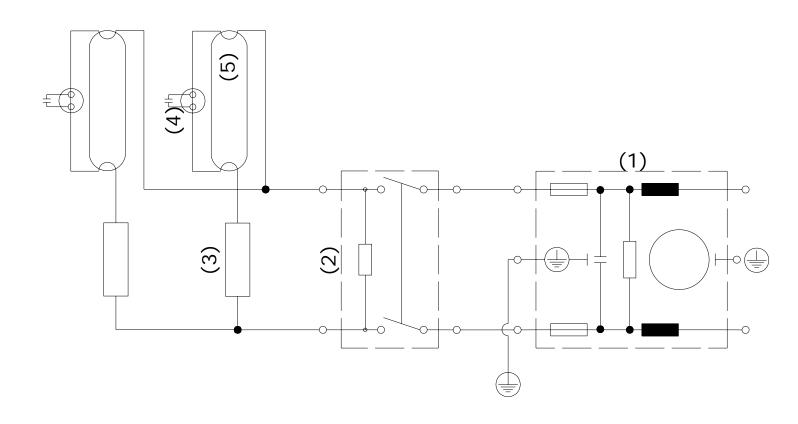
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Functional Layout 02.080.00

- (1) EMC filter with plug code N.07.000
- (2) Rocker switch code N.09.000
- (3) Ballast code N.04.000

- (4) Starter code N.03.000
- (5) Spare light code N.01.000



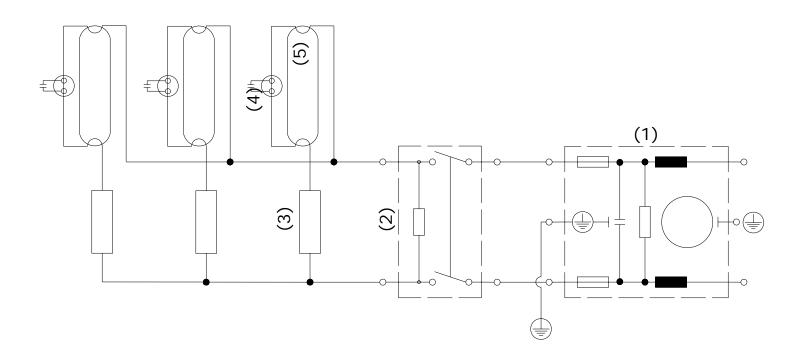
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Functional Layout 02.120.00

- (1) EMC filter with plug code N.07.000
- (2) Rocker switch code N.09.000
- (3) Ballast code N.04.000

- (4) Starter code N.03.000
- (5) Spare light code N.01.000



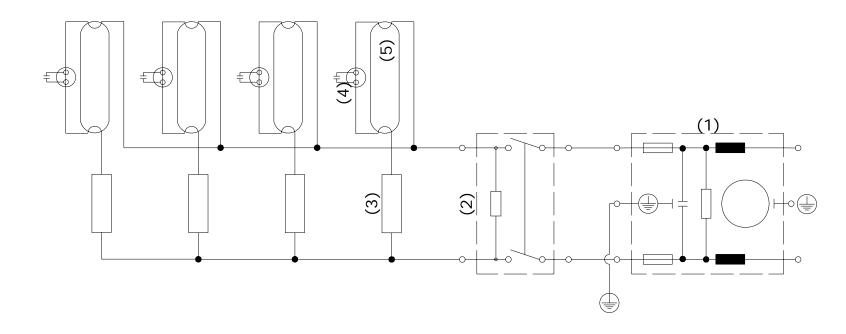
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Functional Layout 02.160.00

- (1) EMC filter with plug code N.07.000
- (2) Rocker switch code N.09.000
- (3) Ballast code N.04.000

- (4) Starter code N.03.000
- (5) Spare light code N.01.000



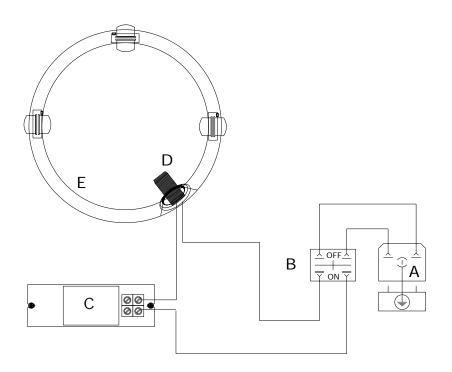
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Wiring 02.040.00/02.045.00

- (A) EMC filter with plug code N.07.000
- (B) Rocker switch code N.09.000
- (C) Ballast code N.04.000

- (D) Starter code N.03.000
- (E) Spare light code N.01.000



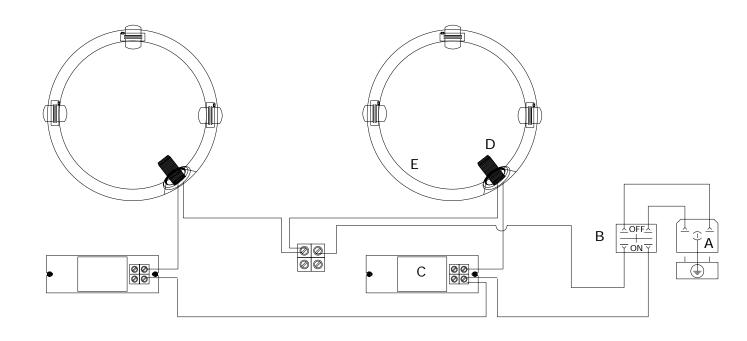
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Wiring 02.080.00

- (A) EMC filter with plug code N.07.000
- (B) Rocker switch code N.09.000
- (C) Ballast code N.04.000

- (D) Starter code N.03.000
- (E) Spare light code N.01.000



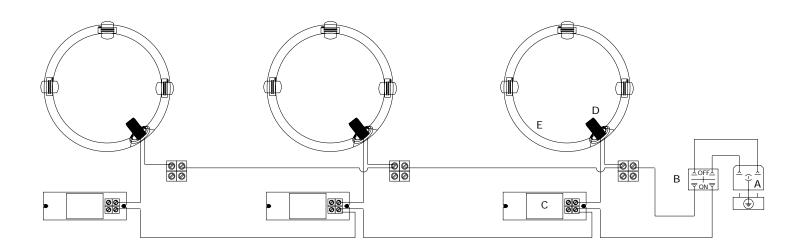
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Wiring 02.120.00

- (A) EMC filter with plug code N.07.000
- (B) Rocker switch code N.09.000
- (C) Ballast code N.04.000

- (D) Starter code N.03.000
- (E) Spare light code N.01.000



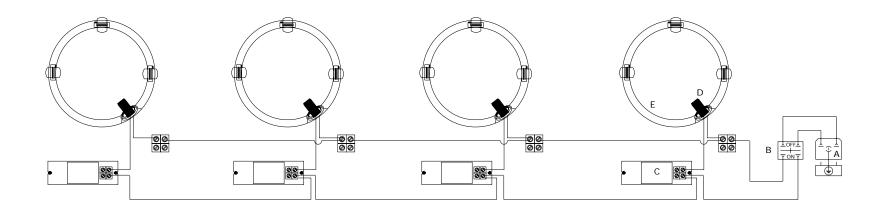
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Wiring 02.160.00

- (A) EMC filter with plug code N.07.000
- (B) Rocker switch code N.09.000
- (C) Ballast code N.04.000

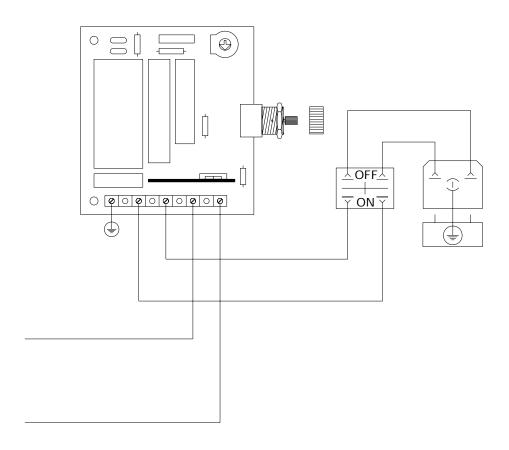
- (D) Starter code N.03.000
- (E) Spare light code N.01.000



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Wiring - Light regulator



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Correcting Malfunctions

	Situation		Possible Cause	Solution		
		а	Disconnected or loose cord	Check connections and reconnect unit		
	1 Equipment will not turn on	þ	Faulty wall outlet	Use another wall outlet		
1		С	Fuses are damaged	Check the fuses inside N.07.000 The stress of the stress		
		đ	Main rocker switch is damaged	In ON position, check the presence of the light; if no light is detected replace with a spare switch N.09.000		
		е	Wiring connection fault	Open the equipment and verify internal electrical wiring (see functional layout)		
	Situation		Possible Cause	Solution		
		а	The lamp is damaged	Open the equipment and check the integriry of the lamp		
	One leave not we	þ	Wiring connection fault	Open the equipment and verify internal electrical wiring (see functional layout)		
2 0	One lamp not run	С	Starter fault	Switch on the device and check for the blinking		
		d	Ballast fault	Check all screws on the blocks. If screws are properly holds, check the electrical feeding on the ballast		

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