



RELEASE NOTES					
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FDS101 CCTV Flame Detector Test Torch		
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HELP US TO HELP YOU

Every effort has been made to ensure the accuracy in the contents of our documents, however, Micropack (Engineering) Ltd can assume no responsibility for any errors or omissions in our documents or their consequences.

Micropack (Engineering) Ltd would greatly appreciate being informed of any errors or omissions that may be found in our documents. To this end we include a form, given in Section 7, for you to photocopy, complete and return to us so that we take the appropriate action. Thank you.



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1 Safety Instructions

For the correct and effective use of this equipment, to maintain safety and avoid hazards it is essential that you read and understand these instructions and act accordingly **BEFORE** operating this equipment.



Pay particular attention to all Safety Warnings,



Cautions and Important Notices.

1.1 Warnings

- This equipment is Atex certified for, and intended for, use in potentially hazardous areas.
- For installations in North America the National Electrical Code (NEC) should be strictly observed.
- Where appropriate local or national regulations should be used.
- Do not drill holes in the enclosure, as this will invalidate the hazardous area approval.
- The enclosure lid and base should always be fully tightened and locked into position before energising the equipment.
- Do not open the enclosure in the presence of a flammable atmosphere.
- All permits and proper site procedures and practises must be followed.
- Repair of equipment should never be performed by non-trained personnel.

1.2 Cautions

- Use only approved parts and accessories with this equipment.
- To maintain safety standards, regular maintenance should be performed by qualified personnel.

1.3 Important Notices

- Pay attention to the guidelines given throughout this document.
- If in any doubt ask your local sales representative or contact Micropack (Engineering) Ltd.
- Micropack (Engineering) Ltd take no responsibility for use of its equipment if this is not in accordance with the appropriate issue and/or amendment of the manual.
- Micropack (Engineering) Ltd reserve the right to change or revise the information contain herein without notice and without obligation to notify any person or organisation of such action.

2 Introduction

The **Micropack CCTV Flame Detector Test Torch** is used to test the correct operation of Micropack FDS101 CCTV Flame Detectors.

The torch has been designed specifically to enable long range testing of FDS101 CCTV Flame Detectors. The device has been designed for hand held use by a single operator. The device is a completely self contained, portable unit. A single charge is sufficient to test up to fifty FDS101 CCTV Flame Detectors.

The torch has been designed specifically for use in the extreme marine environments experienced offshore.

2.1 FEATURES

- **Long Range** – The torch can reliably operate FDS101 CCTV Flame Detectors at distance between 3m & 8m.
- **Portable** – The test torch is a portable hand held unit designed for single operator operation.
- **Robust and Reliable** – The test torch has been designed for the extreme offshore environmental conditions.
- **Reduced Maintenance Costs** – Reduces the need for scaffold or ladder access to the detector.

2.2 Detector Enclosure

The test torch electronics are housed in an enclosure which is Atex certified for use in zone 1 hazardous areas. The enclosure comprises of the enclosure cover (and faceplate window), the enclosure base (and certification label) and fixing collar to connect the enclosure base and cover together.

The enclosure carries the certification label and serial number as shown on the device.

3 Operating Instructions

The test torch operation is extremely simple to use. Once aligned, simply press the button, maintaining alignment, and wait for the detector to go into alarm. The test torch LED's will flash when energised, and the detector response time should typically be less than 10 seconds. The switch is spring loaded and releasing the pressure from the switch will disconnect the power.

Charging Socket



The picture above, shows the FDS101CCTV Flame Detector Test Torch fitted with the shoulder strap. The on/off button is shown to the underside of the test torch. The charging socket is opposite.

4 Maintenance and Testing

4.1 Routine

There is no set maintenance routine for the test torch due the simplicity of the device. All internal maintenance or repair must be conducted by Micropack.

Therefore, routine maintenance is simply limited to ensuring the faceplate is kept clean and that no damage to the integrity of the enclosure or flame paths is caused.

4.2 Battery Charging

A charging unit is supplied with the torch. Simply remove the brass blanking plug (opposite the pushbutton) to reveal the charging socket, and conduct the following:

- Connect plug to Test Torch.
- Connect Charger unit to mains socket (adaptors supplied for various world locations).
- Switch on mains supply.
- Wait until red LED (on charger unit) stops flashing.
- Press yellow button on charger unit.
- Wait until charger LED is green.



The yellow button causes the charger unit to completely discharge the battery pack prior to re-charging. Unless this is done the battery pack will retain memory charge and charging capability will be limited. Full re-charge will take between 8 and 12 hours.

A “fast” charge may be applied by simply not pressing the yellow button – however, as indicated above, battery memory effects will result in the battery pack not maintaining a full charge and limit the battery life. Charging in this way will take approximately 4 hours. Eventually, battery life will be so limited that a full discharge / recharge cycle will be required.

Note : Battery charging should never take place within a hazardous area.

5 Fault Finding

5.1 Diagnostics

Fault finding by personnel other than Micropack employees is prohibited and non-compliance of this will invalidate the warranty. If the torch fails to operate there are two simple causes :

- (a) the torch batteries need recharged, or
- (b) the unit is faulty and needs to be returned to Micropack.

5.2 Replacement and Repair

The test torch contains no user serviceable parts.



6 Technical Specification

6.1 Engineering Specification

6.2 Electrical Specification

Battery Pack		Charger
9 cells	1.2 V each	100-240V
Peak Current	4.5 A	100mA Max
Capacity	2.1 Ahr	50/60Hz
Fast charge	4 hours	
Full discharge / charge	8 – 12 hours	

6.3 Mechanical Specification

Parameter	Units	Value	Comment
Enclosure			
Overall Dimensions	mm	150Dia x 150L	
Shipping Weight	Kg	4kg	
Material		LM25 Alloy	
Coating	Colour	Red Epoxy Coated Finish	
Pushbutton	mm	1 x M20	
Charging Socket	mm	1 x M20	
Ingress Protection	IP	66	
Transit Case			
Overall Dimensions	mm	230H x 270D x 420W	
Shipping Weight	kg	6kg	

6.4 Environmental Specification

Parameter	Units	Min	Max	Comment
Operating Ambient Temperature	°C	-20	+70	
Storage Ambient Temperature	°C	-20	+80	
Relative Humidity	% RH	5	95	Non Condensing



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I suggest the following corrections/changes be made to Section	
Marked up copies attached (as appropriate): Yes/No	
Please inform me of the outcome of this change: Yes/No	
For Micropack (Engineering) Limited :	
Actioned By: _____	Date: _____
Response: _____	Date: _____