

# INSTRUCTION MANUAL

## WATER LEAK DETECTION SYSTEM

ERTL TESTED AS PER IS:2189



### NATIONAL SECURITY DEVICES

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# INTRODUCTION

It is our pleasure to welcome you in family of NATIONAL SECURITY DEVICES, is well known brand name in the field of Fire/Security Alarm manufacturer and security related products. We came to the picture in the last decade and with in a short span. We succeed to achieve a very good response & report in the industries. We are very professional using advanced equipment and technology, computerized R& D, in House tools Room/Assembly plant and of course our skilled workmanship with the strict quality control.

It is our proud feeling that valuable customer are giving us time to time good opportunity to serve him. And therefore we are glad continuous on the various stage of up gradation of process and our product. Some of our parsonages are CPWD, PWD, Bank, Railway Ansal, Hotels, Unitech, DDA, NBCC. And many more Govt and pvt. Security consultant.

We are strongly commitment to our client to provide best quality, prices, superior customer care & priority prompt supply.

A part from our existing product range, So We have necessary infrastructure that provide all type of security product and their accessories as per as requirement and specification of the customer.

## SYSTEM FEATURE

Your WDAMX Water Alarm panel comes with its internally power unit, main mother board card control unit with the space of 2no. 7AH battery, 4 different zones line with the visual Hooter lines and common Hooter point which gives continuous output voltage. Also has provision of extra relay contact.

### **Feature of the system are describe as follows:-**

- (1) Micro controller based & fault monitoring system.
- (2) Zones wise/common Hooter facility.
- (3) Zones wise 1 sets of common potential free Relay contact in fault condition.
- (4) Control key tactile type switch for prompt action
- (5) In built battery charger & AC to DC change over & vice versa.
- (6) Additional gadget facility option available through relay.
- (7) Visual indication of common leakage, common Fault mains, charging, low battery etc.
- (8) In built auto charging.
- (9) Audio visual indication for leakage/fault.
- (10) Common silence switch for accept of(leakage/Fault zone /power) and respective common relay.
- (11) In silence condition sounder again restart in the event of leakage or Fault in other zone for silence again, press silence switch.

**(13)** System is fully detachable part by such as power unit, mother Board, front display board etc. Thus servicing is so simple cost effective and time saving also. This process dose not need very experienced person, thus you easily change.

Few tips for good maintenance of your system

Precautions ensuring system in Healthy condition :-

Daily Attention : The panel should be normal, if not is required urgent attention.

weekly Attention :

(1) One time in weekly minimum a detector/Trigger Device(MCB) etc operated to test the ability of the control panel, sounder Alarm and operation of other devices.

(2) A visual examine of the battery & charge condition. Battery should be in good condition.

Yearly Attention :

(1) Trigger Device/Detector should be check the Alarm function of control system. The operation of Alarm sounder should be test when practicable.

Visual inspection should be made to confirm that all cable /wire fitting and equipments are secure undamaged & adequate protected.

Although NATIONAL SECURITY DEVICES full till all the criteria of a Fire/Security Alarm system, but it recommended that this system is not perfect life & property saving devices, thus up grading of product is always an ahead policy of us. This is our unchallenged right in all circumstances.

This operating Manual Guide to understand you about the system and be followed the instruction.

# INSTALLATION

Before the installation of product/ device this is must to chosen the right place. In the case for security Alarm system it is necessary to see the following points.

(1) Do't install system in High radioactivity magnetic field and moisture area.

(2) Where the heavy Electrical cables junction and shock Hazard area.

(3) In restricted area enclosed area.

## **For the installation of a panel following the prescribed steps :-**

Level the panel correctly, making sure the back box assemble is held accurately against the wall, and mark the position of the four fixing holes.

(a) Open front door.

(b) Drill and plug the wall.

(c) Prepare the apertures required for cable access.

(d) Screw the panel back box to the wall using Four fixing holes with screw of appropriate size.

## **SYSTEM COMMISSIONING**

Before connection field wire it is must to check them by a low voltage millimeters. It is must be satisfied Hooter or other control circuits are giving right symptom. If found do ought please check them again.

Before the system commissioning all the detection zone line circuit must be check the resistance between each line & negative must be check and certified to be 2.2K ohm + - 10%.

After the line have been found satisfactory with then the detection & sounder circuit is connected as per wiring diagram.

Now connected battery with supply first, power fault & system on lamps are glow LCD display its massage for first few minutes.

Now connection of mains supply 230Volt. Mains lamps & system on glow system will silent.

After initial pattern of system it shows “**System Normal**” massage. If any massage display rather than “**System Normal**” please check respective fault. Now your system is ready for your purpose.

## TEST PROCEDURE

1) Turn on power control switch, all indication lamps glow including LCD message. Press lamp test, all lamps glow with the sounder. F lamps not glow under zonal card change zonal card change zone card switch position.

2) To test silence/reset, trigger the detection sensor become alarm condition. Respective zone & monitor lamp remain flash. By reset, sensor become normal condition LCD message also become normal condition.

3) To test silence simulate open short of detection line fault alarm glow. Monitor fault lamp glow & common fault relay energize with warning tone. LED respective event for the same. It still same till the removing of fault Push silence, the system will be silence, Monitor fault lamps & fault relay.

### CONTROL

**EVACUATE :-** If the operator/concerning officer understand the leakage is very in Handing position, then he can evacuate the area by pressing this button.

**LAMP TEST :-** To check the LED in the healthy position this switch, All LED will be glow with the buzzer sounder.

**SILENCE :-** Whenever any signal comes from sensing or switch devices, the internal buzzer beeping with the information display ON led with respective fault & zone. To mute that audio alarm press silence button or in case of leakage the Hooter sounder can be mute by pressing this button.

**RESET :-** This switch has specially provided for starting the systems after any event or function.



## TECHNICAL DATA

- 1) OPERATING VOLTAGE : 24 DC+ 10%
- 2) MAINS SUPPLY : 230V AC 190V AC
- 3) STAND BY SUPPLY : 24V/250Ma
- 4) AUXILIARY OUTPUT : 12V/250Ma
- 5) AUXILIARY OUTPUT : 24V/1Amp
- 6) VOLTAGE CHARGER : 26.6V
- 7) STAND BY CURRENT : 15.6Ma/ZONE
- 8) ALARM CURRENT : 35Ma ZONE
- 9) AC FUSE RATING : 500Ma
- 10) DC FUSE RATING : 1.5Amp
- 11) BATTERY FUSE RATING : 3Amp
- 12) DIMENSIONS : (12X12X4)Inch
- 13) WEIGHT : 6 KG

## TROUBLE SHOOTING

<b>SYMPTOM</b>	<b>SOLUTION</b>
1) Only mains lamp glow	Check DC/Bat Fuse
2) Only Power fault lamp glow	Check all Fuse
3) Battery backup fail	Replace Battery
4) Control switches are not functioning	Check cable Belt from Back board to front board.
5) Display(LED +LCD) are not glowing	Check cable Belt from Back board to front board.
6) None stop fault	Check the causes of same fault

If problems persist remain please call our engineer or E-mail us.

# VISUAL TEST

<b>S. No.</b>	<b>Test Feature</b>	<b>Feature Standard</b>	<b>Observation</b>
<b>1</b>	Aesthetical	Checked Generally	Found Satisfactory
<b>2</b>	Cabinet/Dimension	Material: CRCA Sheet, Size	Found Satisfactory
<b>3</b>	Painting	Standard P. O. Red both External & Internal	Found Satisfactory
<b>4</b>	Cable Entry	Entry: Top	Found Satisfactory
<b>5</b>	Annunciation	Checked as per approved Schematic	Found Satisfactory
<b>6</b>	Components	Checked Generally	Found Satisfactory

## **Functional Test**

Test for operation & Logic as per approved drawing and all the required operations were carried out.

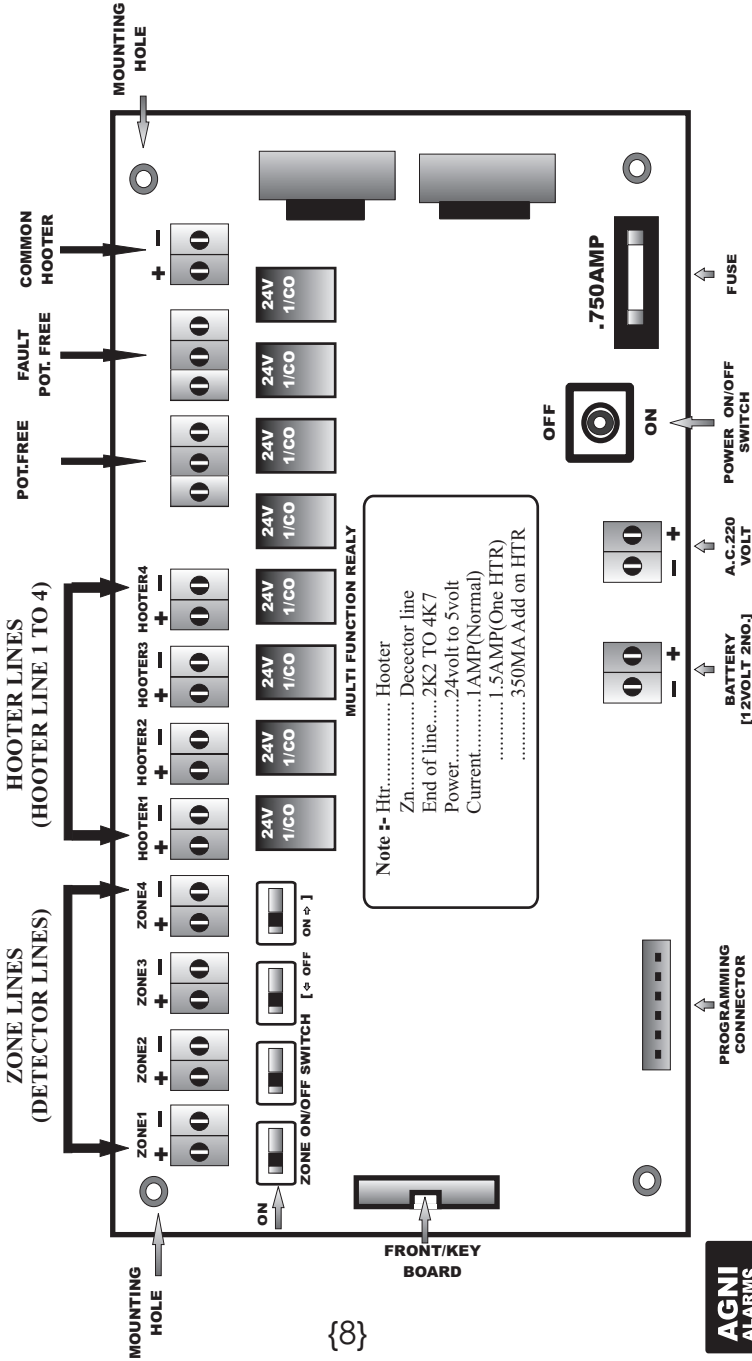
**Found satisfactory**

## **High Voltage**

Test at 2KV for 60sec. between phase and neutral, between phase & earth neutral and earth(By disconnecting Electronics circuit) for operation as per approved drawing and all the required operations were carried out.

**Found satisfactory**

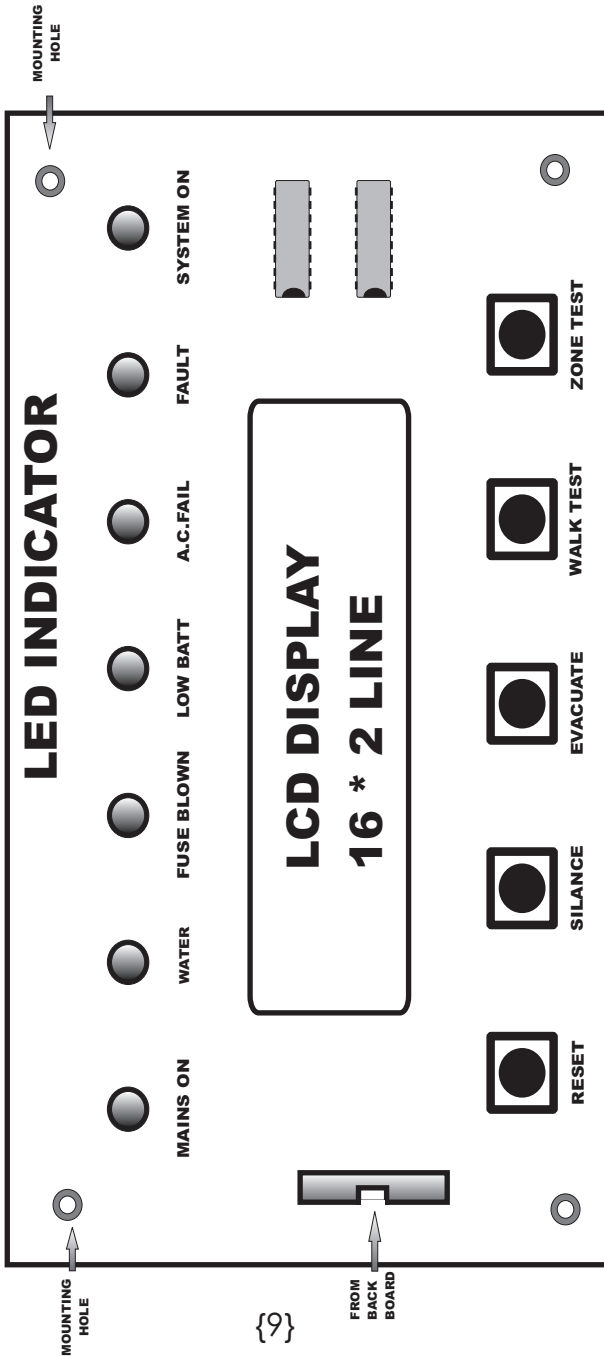
# MAIN BOARD DEMO (MODAL: DIGITAL) WIRING/CONNECTOR DIAGRAM



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# FRONT BOARD MODAL : DIGITAL



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# TEST REPORT

.....ZONE MAIN SECURITY CONTROL PANEL/LOCAL  
PANEL/REPEATER PANEL WORKING ZONE .....  
SPARE ZONES.....

CONTRACTOR NAME:

CLIENT / SITE:\

BILL NO/ CHALLAN NO:

SERIAL NO:

This is to certify that the water alarm control panel supplied as per detail has been manufactured by NATIONAL SECURITY DEVICES at delhi-92, and have been tested as per the provisional laid down in is :2189-1999 manufactures as per the condition in Electronics regional test laboratory (N)

Test Report No . ERTL (N)/90 (4)-2K 7/Q0094

It is future certified that all the featured laid down in the panel as per customer specification have been provided and checked.

Date of testing

**Date of Issued : QUALITY CONTROL MANAGER**

**Client Copy**

# WARRANTY CERTIFICATE

Dear customer,

Our NATIONAL SECURITY DEVICES product is guaranteed against manufacturing defects of parts and components for a period of 12 months from the date of purchase. During this period any items found defective will be repaired at our works or through service center.

Terms & condition :

1) serial No. sticker should not be Broken/Tempered/  
Mismatch.

2) serial No. Sticker should not be Tempered / loss or  
miss match our company record.

**Serial No :**

**Stamp :**

**NATIONAL SECURITY DEVICES**

DEALER'S NAME & ADDRESS

Signature with stamp

**MODEL NO : DIGITAL**

**SRL.NO :**

**SALE DATE :**





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