

**BALDWIN BOX▲LL**

# BVRDTSM Touchscreen Microphone

Installation Instructions



Manual name: BVRDTSM Touchscreen Microphone

Issue: 5

ECR: 3235

Date of issue: Sept 2019

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This equipment has been designed and manufactured to conform to the following EC Standards:

EMC: EN55103-1 Environment Classification: E1,

EMC: EN55103-2 Environment Classification: E5,

Safety: EN60065

Failure to use the equipment in the manner described in the product literature will invalidate the conformity.

A “Declaration of Conformity” statement to the above standards and a list of auxiliary equipment used for compliance verification is available on request.

Amendment Record _____	v
Proprietary Notice _____	v
Safety Information _____	vi
Comments _____	vi

## Introduction

Microphone Options & Features _____	2
Technical Specification _____	3

## Installation

Hardware Configuration Options _____	5
Audio Outputs _____	7
Configuration Option - Live Page & AUX _____	8
Description - - - - -	8
Hardware Required - - - - -	8
Hardware Configuration - - - - -	9
Cabling and Connection details - - - - -	9
Configuration Option - Dual Outputs _____	10
Description - - - - -	10
Hardware Required - - - - -	10
Hardware Configuration - - - - -	11
Cabling and Connection details - - - - -	12
Configuration Option - Live Page & Hardwired Bypass _____	13
Description - - - - -	13
Hardware Required - - - - -	13
Hardware Configuration - - - - -	14
Cabling and Connection details - - - - -	14
Configuration Option - Live Paging, AUX and Hardwired Bypass _____	15
Description - - - - -	15
Hardware Required - - - - -	15
Hardware Configuration - - - - -	16
Cabling and Connection details - - - - -	17
Configuration Option - Dual Outputs & Hardwired Bypass _____	18
Description - - - - -	18
Hardware Required - - - - -	18
Hardware Configuration - - - - -	19

Cabling and Connection details - - - - -	20
BMS8/16 Termination Box _____	20
Recommended Cable Types _____	21

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## Operating Instructions

Controls & Indicators _____	23
Operation _____	24
General Tips - - - - -	24
User Accounts- - - - -	25
Zone Selection - - - - -	26
Groups - - - - -	26
Recording of User Messages - - - - -	26

---



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## Firmware Configuration

Introduction _____	29
Entering Configuration Mode _____	29
Import / Export Configuration Settings _____	30
Configuration Options _____	31
User Accounts- - - - -	31
Installation - - - - -	32
Communication - - - - -	32
Audio Channels - - - - -	32
User Interface - - - - -	33
Zones - - - - -	33
Groups - - - - -	33
Messages - - - - -	34
Music- - - - -	34
Vols - - - - -	34
DVA - - - - -	34
Paging - - - - -	34
Logs - - - - -	35
Monitoring - - - - -	35
General- - - - -	35
Line/Amp Inputs- - - - -	35
Display - - - - -	35
Default Names- - - - -	35
VA Active - - - - -	36
Time/Date - - - - -	36
Import/Export - - - - -	36
Firmware - - - - -	36

## AMENDMENT RECORD

Change Note Number	Nature of Amendment	Date of Amendment
N/A	Issue 1: First Release	Jan 2017
ECR3230	Issue 2 : Updates	June 2017
ECR3330	Issue 3: Updates	Oct 2017
ECR3376	Issue 4: Updates	Jan 2018

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## SAFETY INFORMATION

Personnel who install, maintain or repair this equipment must read the safety information below before starting work.

Voltages in excess of 30 Volts RMS or 50 Volts DC are considered Hazardous and in certain circumstances can be lethal.

If Functional Testing, Maintenance, or Repair is to be completed with the Mains Power (and/or battery backup) connected then this should only be undertaken by personnel who are fully aware of the danger involved and who have taken adequate precautions and training.

This Manual contains Warnings, Cautions and Notes.

**Warnings** describe potential threats to health or life, e.g.



**WARNING**

Before attempting to remove this component, ensure the Mains Power Supply and Battery Backup have been disconnected.

**Cautions** describe potential threats to the equipment, e.g.



**CAUTION**

Notice must be taken of all cautions.  
If a Caution is ignored the equipment may be damaged.



**CAUTION: ELECTRO-STATIC SENSITIVE DEVICES**

Observe the relevant precautions for the protection of Electro-static Sensitive Devices when handling this equipment.

**Notes** are statements that are useful to the user in the context of a particular section of the manual, e.g.



*NOTE: Do not speak into the microphone until the "Speak Now" LED is illuminated.*

## COMMENTS

Comments regarding the content of this manual are welcome and should be addressed to [mail@baldwinboxall.co.uk](mailto:mail@baldwinboxall.co.uk).

# I Introduction

The BVRDTSM Touchscreen Microphone has been designed to provide a wide variety of features suitable for any installation.

*Figure 1.1 — BVRDTSM Microphone*



The Microphone is configured during commissioning using the built touchscreen. Standard RJ45 Network cable connections (carrying both Audio and Serial Data) are employed, in order to make installation simple and flexible.

## I.1 MICROPHONE OPTIONS & FEATURES

The BVRDTSM microphone includes the following features as standard:

- Fully monitored microphone, speech and data paths
- Ergonomic design with all buttons and displays mounted behind a stylish overlay
- Performs as a Paging microphone (with emergency options disabled) and as a Fire microphone only when the key switch is turned
- 7" high brightness, capacitive touchscreen
- NFC Smart card access control with configurable permissions per user
- Record, Preview and Broadcast non-emergency messages
- Scheduler to enable timed broadcast of non-emergency messages
- Route background music sources to all zones
- Zone programmable volume adjustment
- Connect a background music source directly to the microphone
- USB import and export of non-emergency messages, configuration files and logs (fault and activity)
- All configuration performed via touchscreen, no other tools required
- “Speak Now” indicator to show the user when a pre-announcement chime has finished
- Ability to select router stored emergency messages
- Voice alarm system Active indicator
- Option to add emergency “All Call” bypass facility
- Option for dual output facility (audio, data and power) for connection to dual systems

## I.2 TECHNICAL SPECIFICATION

<b>Audio</b>	
Nominal Output Level	0dBm
Max Output (limiter operating)	+6dBm
Output Impedance	180R
Frequency Response (-3dB)	200Hz - 12KHz
<b>Power Requirement (24V DC)</b>	
Standby	0.175A
In Use	0.36A
<b>Serial Data Link (See note below)</b>	
RS485	Type 2 Protocol, 9600, 38400, 115200 Baud, 8 bit, Even Parity, 1 Stop Bit
<b>Dimensions</b>	
	(W x H x D)
BVRDTSM	275mm x 48mm x 177mm



*NOTE: The RS485 Protocol is configured during the commissioning process, the default values are shown above.*



## 2 Installation

### 2.1 HARDWARE CONFIGURATION OPTIONS

There are 4 hardware configuration options accessible by removing the left and right side panels of the BVRDTSM. These and their functions are shown in the images and tables below;

Figure 2.1 — BVRDTSM RH Hardware Options

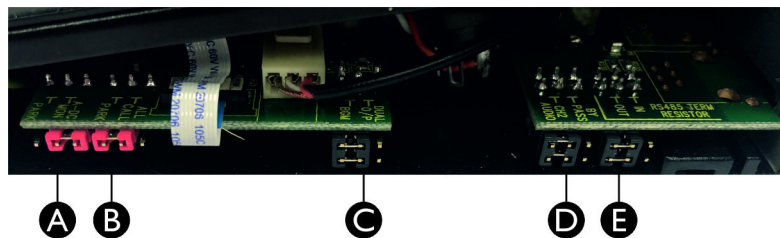


Table 2.1 — BVRDTSM RH Hardware Options

Figure	Marked as	Function
A	A-DC Mon / Park	Default: A-DC Mon A-DC Mon: Applies a DC Voltage for monitoring purposes to the audio transmission path Park*: No DC present, set to Park if Audio input is not transformer isolated

Figure	Marked as	Function
B	All Call / Park	Factory Fit Option All Call: Set on microphones with All Call Bypass button Park: Set on microphones without All Call Bypass button
C	Dual OP / BGM	Default: BGM Dual OP: Microphone audio routed out of OP1 and OP2 BGM: AUX Audio routed out of OP2 See section 2.2 for more details
D	Bypass / CH2 Audio	Default: CH2 Audio Bypass: Connect bypass access signals via OP1 CH2 Audio: Connect Aux audio channel via OP1
E	RS485 Term Resistor	Default: Out In: RS485 termination Out: No RS485 Termination



*NOTE: \* If park is selected "Protocol Faults (BVRD2M MB F/W 2.00 and above)" must be also be disabled in the configuration. This enables compatability with legacy systems*

Figure 2.2 — BVRDTSM LH Hardware Options

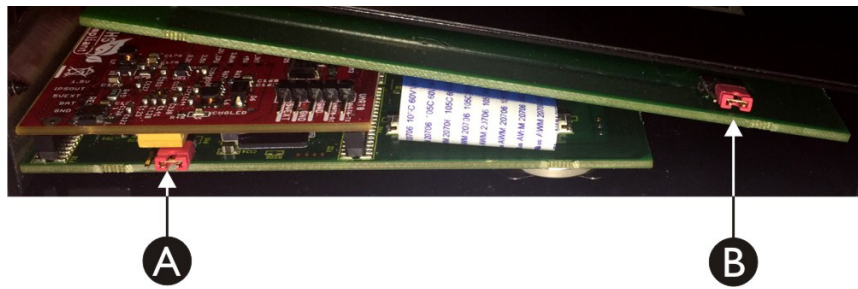


Table 2.2 — BVRDTSM LH Hardware Options

Figure	Marked as	Function
A	Test / Park	Default: Park Factory use only
B	3V3 / Park*	Default: Park Park: Hardware Bypass Access Level = 10V 3V3: Hardwired Bypass Access Level = 3V3



*NOTE: \* Option label on underside of PCB. Hardwired Bypass Access Level must match connected BVRD2M or BVRD2M4 configured level. See manuals for these products for more details.*

## 2.2 AUDIO OUTPUTS

The BVRDTSM is equipped with 2 Audio Outputs OP1 and OP2. OP1 is used for Live paging broadcasts. OP2 can be configured for either;

- AUX Output (broadcast of microphone stored none emergency messages or routing of local background music connection)
- Dual Output (OP1 and OP2 carry live paging broadcasts for dual redundant systems)

See Hardware Configuration section for more details on how to change the Audio Output Configuration.

In order to simplify cabling requirements by default the BVRDTSM also carries the AUX Output on OP1. This means that the microphone can be installed using a single CAT6A cable.

If a Hard Wired Bypass is fitted to the microphone (factory fit option) then the AUX Output is not available on OP1 so therefore OP2 must also be connected.

Please see the following sections for details of site connections and hardware configuration for all Audio Output options.

## 2.3 CONFIGURATION OPTION - LIVE PAGE & AUX

### 2.3.1 Description

This is the default configuration of a BVRDTSM and enables;

- Live Paging and Emergency Paging Broadcasts
- Broadcasting of microphone stored none emergency messages
- Routing of a locally connected background music source (microphone messages take priority and if triggered will stop local background music routing)

### 2.3.2 Hardware Required

In order to support this BVRDTSM configuration the following additional equipment is required;

- BMS8 - required to terminate the BVRDTSM microphone CAT6A lead to site wiring
- BVRDIF7 - required to terminate the site wiring to a Voice Alarm rack (If a bypass input on a BVRD2M or BVRD2M4 is to be used by the BVRDTSM and the microphone is not configured for Bypass ensure the corresponding ZENER/PARK jumper on the BVRDIF7 is set to ZENER)
- 1 x CAT6A cable

Optional Equipment;

- Background Music Source (if required) connected to AUX IN jack socket on rear of the BVRDTSM
- Headphones connected to H/SET OUT jack socket on the rear of the BVRDTSM (allows previewing of recorded messages before broadcast)

### 2.3.3 Hardware Configuration

The following hardware options must be set to support this configuration;

Option	Jumper Position
A-DC Mon / Park	Don't Care*
All Call / Park	Park
Dual OP / BGM	BGM
Bypass / CH2 Audio	CH2 Audio
RS485 Term Resistor	Don't Care*
+3V3 / Park	Don't Care*



NOTE: \* see section section 2.1 above for more information

### 2.3.4 Cabling and Connection details

Please see Table below for details of Site Wiring connections;

Mic OP (CAT6A)	BMS8 (CAT6A)	BMS8 (Site Wiring)	Cable	BVRDIF7 (Site Wiring)
1	1	+V	4 Core 1	+V
		0V		0V
		RS485-A		RS485-A
		RS485-B		RS485-B
		Audio CH1 (Paging)	4 Core 2	Audio CH1 (Paging)
		Audio CH1 (Paging)		Audio CH1 (Paging)
		Audio CH2 (AUX)		Audio CH2 (AUX)
		Audio CH2 (AUX)		Audio CH2 (AUX)
		EMC	Shield of cable 1&2	EMC
2		Not Used		

## 2.4 CONFIGURATION OPTION - DUAL OUTPUTS

### 2.4.1 Description

This is an optional configuration that can be set by the end user it allows;

- Live Paging and Emergency Paging Broadcasts to 2 independent Voice Alarm systems (dual redundant)



*NOTE: Broadcasting of microphone stored messages or local background music source is not possible in this configuration*

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### 2.4.2 Hardware Required

In order to support this BVRDTSM configuration the following additional equipment is required;

- BMS16 - required to terminate the BVRDTSM microphone OP1 and OP2 to site wiring
- 2 x BVRDIF3 - one required per voice alarm system
- 2 x CAT6A cable

Optional Equipment;

- None

## 2.4.3 Hardware Configuration

The following hardware options must be set to support this configuration;

Option	Jumper Position
A-DC Mon / Park	Don't Care*
All Call / Park	Park
Dual OP / BGM	Dual OP
Bypass / CH2 Audio	Don't Care*
RS485 Term Resistor	Don't Care*
+3V3 / Park	Don't Care*



*NOTE: \* see section section 2.1 above for more information*

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## 2.4.4 Cabling and Connection details

Please see Table below for details of Site Wiring connections;

<b>Mic OP (CAT6A)</b>	<b>BMSI6 (CAT6A)</b>	<b>BMSI6 Channel 1 (Site Wiring)</b>	<b>Cable</b>	<b>BVRDIF3 Rack 1 (Site Wiring)</b>
1	Channel 1	+V	4 Core 1	+V
		0V		0V
		RS485-A		RS485-A
		RS485-B		RS485-B
		Audio CH1 (Paging)	4 Core 2(or 2 Core)	Audio CH1 (Paging)
		Audio CH1 (Paging)		Audio CH1 (Paging)
		Not Used		Not Used
		Not Used		Not Used
		EMC	Shield of cable 1&2	EMC
		<b>BMSI6 Channel 2 (Site Wiring)</b>		<b>BVRDIF3 Rack 2 (Site Wiring)</b>
2	Channel 2	+V	4 Core 3	+V
		0V		0V
		RS485-A		RS485-A
		RS485-B		RS485-B
		Audio CH2 (Paging)	4 Core 4 (or 2 Core)	Line (Paging)
		Audio CH2 (Paging)		Line (Paging)
		Not Used		Not Used
		Not Used		Not Used
		EMC	Shield of cable 3&4	EMC

## 2.5 CONFIGURATION OPTION - LIVE PAGE & HARDWIRED BYPASS

### 2.5.1 Description

The addition of Hardwired Bypass is a factory fit option. If this option is fitted then it is possible to configure the microphone for Live paging and Hardwired bypass enabling;

- Live Paging and Emergency Paging
- Performing an All Call utilising the Hardwired Bypass inputs of a Baldwin Boxall router.



*NOTE: Broadcasting of microphone stored messages or local background music source is not possible in this configuration*

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### 2.5.2 Hardware Required

In order to support this BVRDTSM configuration the following additional equipment is required;

- BMS8 - required to terminate the BVRDTSM microphone CAT6A lead to site wiring
- BVRDIF3 - required to terminate the site wiring to a Voice Alarm rack
- 1 x CAT6A cable

Optional Equipment;

- None

## 2.5.3 Hardware Configuration

The following hardware options must be set to support this configuration;

Option	Jumper Position
A-DC Mon / Park	Don't Care*
All Call / Park	All Call
Dual OP / BGM	Don't Care*
Bypass / CH2 Audio	Bypass
RS485 Term Resistor	Don't Care*
+3V3 / Park	Must match the hardwired bypass access level of the connected Baldwin Boxall router (3V3 = 3V3, Park = 10V)



*NOTE: \* see section section 2.1 above for more information*

## 2.5.4 Cabling and Connection details

Please see Table below for details of Site Wiring connections;

Mic OP (CAT6A)	BMS8 (CAT6A)	BMS8 (Site Wiring)	Cable	BVRDIF7 (Site Wiring)
1	1	+V	4 Core 1	+V
		0V		0V
		RS485-A		RS485-A
		RS485-B		RS485-B
		Audio CHI (Paging)	4 Core 2	Audio CHI (Paging)
		Audio CHI (Paging)		Audio CHI (Paging)
		Access		Access
		0V		0V
		EMC	Shield of cable 1&2	EMC
2	Not Used			

## 2.6 CONFIGURATION OPTION - LIVE PAGING, AUX AND HARDWIRED BYPASS

### 2.6.1 Description

The addition of Hardwired Bypass is a factory fit option. If this option is fitted then it is possible to configure the microphone for Live paging, AUX output and hardwired bypass enabling;

- Live Paging and Emergency Paging Broadcasts
- Broadcasting of microphone stored none emergency messages
- Routing of a locally connected background music source (microphone messages take priority and if triggered will stop local background music routing)
- Performing an All Call utilising the Hardwired Bypass inputs of a Baldwin Boxall router.

### 2.6.2 Hardware Required

In order to support this BVRDTSM configuration the following additional equipment is required;

- BMS16 - required to terminate the BVRDTSM microphone OP1 and OP2 to site wiring
- 2 x BVRDIF3 - 2 required in order to interface all the required signals to a voice alarm rack.
- 2 x CAT6A cable

Optional Equipment;

- Background Music Source (if required) connected to AUX IN jack socket on rear of the BVRDTSM
- Headphones connected to H/SET OUT jack socket on the rear of the BVRDTSM (allows previewing of recorded messages before broadcast)

## 2.6.3 Hardware Configuration

The following hardware options must be set to support this configuration;

<b>Option</b>	<b>Jumper Position</b>
A-DC Mon / Park	Don't Care*
All Call / Park	All Call
Dual OP / BGM	BGM
Bypass / CH2 Audio	Bypass
RS485 Term Resistor	Don't Care*
+3V3 / Park	Must match the hardwired bypass access level of the connected Baldwin Boxall router (3V3 = 3V3, Park = 10V)



*NOTE: \* see section section 2.1 above for more information*

## 2.6.4 Cabling and Connection details

Please see Table below for details of Site Wiring connections;

Mic OP (CAT6A)	BMS16 (CAT6A)	BMS16 Channel 1 (Site Wiring)	Cable	BVRDIF31 (Site Wiring)
1	Channel 1	+V	4 Core 1	+V
		0V		0V
		RS485-A		RS485-A
		RS485-B		RS485-B
		Audio CHI (Paging)	4 Core 2	Audio CHI (Paging)
		Audio CHI (Paging)		Audio CHI (Paging)
		ACCESS		ACCESS
		0V		0V
		EMC	Shield of cable 1&2	EMC
		<b>BMS16 Channel 2 (Site Wiring)</b>		<b>BVRDIF3 2 (Site Wiring)</b>
2	Channel 2	Not used	Not required	Not used
		Not used		Not used
		Not used		Not used
		Not used		Not used
		Audio CH2 (AUX)	4 Core 3 (or 2 Core)	Line (AUX)
		Audio CH2 (AUX)		Line (AUX)
		Not Used		Not Used
		Not Used		Not Used
		EMC	Shield of cable 3	EMC

## 2.7 CONFIGURATION OPTION - DUAL OUTPUTS & HARDWIRED BYPASS

### 2.7.1 Description

This is an optional configurational that can be configured by the end user it allows;

- Live Paging and Emergency Paging Broadcasts to 2 independent Voice Alarm systems (dual redundant)
- Performing an All Call to both Voice Alarm systems utilising the Hardwired Bypass inputs of Baldwin Boxall routers.



*NOTE: Broadcasting of microphone stored messages or local background music source is not possible in this configuration*

---

### 2.7.2 Hardware Required

In order to support this BVRDTSM configuration the following additional equipment is required;

- BMS16 - required to terminate the BVRDTSM microphone OP1 and OP2 to site wiring
- 2 x BVRDIF3 - one required per voice alarm system
- 2 x CAT6A cable

Optional Equipment;

- None

## 2.7.3 Hardware Configuration

The following hardware options must be set to support this configuration;

Option	Jumper Position
A-DC Mon / Park	Don't Care*
All Call / Park	All Call
Dual OP / BGM	Dual OP
Bypass / CH2 Audio	Bypass
RS485 Term Resistor	Don't Care*
+3V3 / Park	Must match the hardwired bypass access level of the connected Baldwin Boxall router (3V3 = 3V3, Park = 10V)



*NOTE: \* see section section 2.1 above for more information*

## 2.7.4 Cabling and Connection details

Please see Table below for details of Site Wiring connections;

Mic OP (CAT6A)	BMS16 (CAT6A)	BMS16 Channel 1 (Site Wiring)	Cable	BVRDIF3 Rack 1 (Site Wiring)
1	Channel 1	+V	4 Core 1	+V
		0V		0V
		RS485-A		RS485-A
		RS485-B		RS485-B
		Audio CH1 (Paging)	4 Core 2	Audio CH1 (Paging)
		Audio CH1 (Paging)		Audio CH1 (Paging)
		ACCESS		ACCESS
		0V		0V
		EMC	Shield of cable 1&2	EMC
		<b>BMS16 Channel 2 (Site Wiring)</b>		<b>BVRDIF3 Rack 2 (Site Wiring)</b>
2	Channel 2	+V	4 Core 3	+V
		0V		0V
		RS485-A		RS485-A
		RS485-B		RS485-B
		Audio CH2 (Paging)	4 Core 4	Line (Paging)
		Audio CH2 (Paging)		Line (Paging)
		ACCESS		ACCESS
		0V		0V
		EMC	Shield of cable 3&4	EMC

## 2.8 BMS8/16 TERMINATION BOX

As shown above all BVRDTSM microphone CAT6A connections should be terminated to a BMS8 or BMS16 termination box.



### CAUTION

The BMS8/16 Termination Boxes have a standard RJ45 socket to allow use of standard CAT6A network cables to connect to the microphone.

Care must be taken to ensure this socket is not used for any other equipment since it may be damaged if connected.

## 2.9 RECOMMENDED CABLE TYPES

The BVRDTSM Touchscreen Microphone BMS8 should be terminated to Fire Rated cable (MICC/ FP200 or similar). It is strongly recommended that Audio is not routed down the same cable as RS485 data as shown in the Configuration Options above.



# 3 Operating Instructions

## 3.1 CONTROLS & INDICATORS

Figure 3.1 — BVRDTSM Controls and Indicators

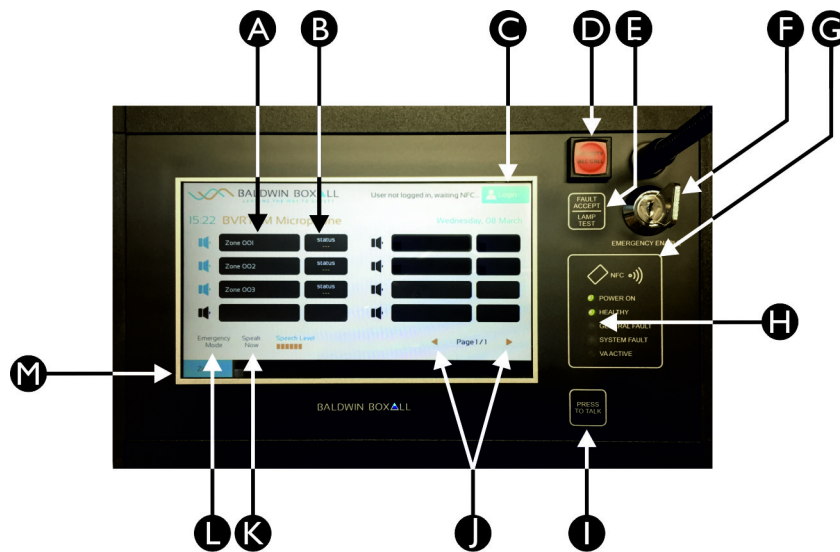


Table 3.1 — BVRDTSM Controls and Indicators

ID	Function	Description
A	Zone Select	Press to select / de-select zones
B	Zone Status	Indicates routing status and fault status of a zone
C	Logon Button	Press to log on using Pin Number
D	Bypass Button	Turn key F and Press Bypass Button to activate hard wired bypass function if present

<b>ID</b>	<b>Function</b>	<b>Description</b>
E	Fault Accept / Lamp Test	Used to silence the Fault Buzzer and to test the LED indicators
F	Emergency Key Switch	Turn to enable high priority emergency broadcast and enable broadcast of BVRD2M/4 stored VA messages
G	NFC Antenna Aerial	Present NFC card to this area to log on
H	Status LED's	Power On: Power supplied to BVRDTSM Healthy: Indicates healthy status General Fault: Indicates general fault with BVRDTSM microphone or connected BVRD2M/M4 router System Fault: Indicates CPU Fault, Reboot or Configuration Data Corruption VA Active: Indicates and emergency broadcast is being made on the system.
I	PTT Button	Press and hold to broadcast to selected zones*
J	Scroll Buttons	Used to scroll between zone pages if more than 8 zones configured
K	Speak Now Indicator	Indicates when a pre-announcement chime has finished playing
L	Emergency Mode Indicator	Indicates that the BVRDTSM is currently in Emergency Mode
M	Menu Bar	Used to select different configured functions including: Zones: Zone Status Display Groups: Group Selection VA Messages: Router stored emergency message playback Music: Background Music routing Volume: Volume Controls PA Messages: BVRDTSM stored non-emergency message playback Logs: Fault Log Display

## 3.2 OPERATION

### 3.2.1 General Tips

The following are some general tips for using the microphone;

- When the BVRDTSM first boots it will indicate a General Fault, a System Fault and the fault buzzer will sound. The fault buzzer can be silenced by pressing the Fault Accept button. In order to clear the System Fault the key must be turned and the Fault Accept button pressed again.

- In order to do anything you must be logged in either via an NFC card or via pressing the “Login” button and entering a Pin Number. If you are not logged in it is possible to select zones but the PTT button will not work.
- Zones must be selected in order to route any audio to them either Live Broadcasts, Background Music Sources, BVRDTSM stored PA messages or BVRD2M/M4 stored emergency messages.
- Zones must be selected in order to cancel setup audio routes either Background Music Sources, BVRDTSM stored PA messages or BVRD2M/M4 store emergency messages. For Live Broadcasts the route is cleared and the zones de-selected automatically once the PTT button has been released.
- By default pressing the PTT button with no zones selected will perform an All Call Live Broadcast, this functionality can be changed, please see the firmware configuration section for more information.

## 3.2.2 User Accounts

The BVRDTSM can be configured with multiple user accounts with different functions allowed in different accounts.

In order to use a BVRDTSM microphone a user must be logged in. This is achieved either by presenting a configured NFC card to the NFC antenna (Item H in Figure 3.1 above) or by pressing the “Login” button (Item C in Figure 3.1 above) and entering a Pin Number.

A user will be logged out after a configured period of time for security. It is possible to disable this log out timer in Configuration Mode to make the microphone never log out.

## 3.2.3 Zone Selection

Before any other functions can be performed the user must select the zones that are to be used.



*NOTE: If no zones are selected and the PTT button is pressed by default an "All Call" broadcast will be made. It is possible to disable this function in configuration mode.*

---

The user selects the zone by pressing the corresponding Zone Select button (item A in Figure 3.1 above). The selection status is displayed in the Zone Status display (Item B in Figure 3.1 above).

Once zones are selected pressing the PTT button will initiate a broadcast to the selected zones and the Zone Status display will change to “Live” to show that the BVRDTSM is currently broadcasting to that zone. If the Zone status display does not change it indicates that a higher priority broadcast is currently being made to that Zone.

Once zones are selected it is possible to perform other functions such as VA Message, PA Message playback, Back Ground Music routing, Volume Controls etc. by pressing the corresponding Menu Bar button (item N in Figure 3.1 above).



*NOTE: VA Message playback is only enabled in Emergency Mode.*

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## 3.2.4 Groups

Instead of selecting multiple zones manually it is possible to configure buttons to select groups of zones which are accessible via the “Groups” button on the menu bar (item N in Figure 3.1 above). Once a “Group” button is pressed the display automatically returns to the “Zones” display to show the status of selected groups.

## 3.2.5 Recording of User Messages

It is possible to record user messages for future broadcast by using the PA Messages screen.

Messages can be recorded, previewed via the H/SET OUT socket on the rear of the BVRDTSM, broadcast or scheduled for later broadcast.



*NOTE: PA Messages are not monitored and so should not be used for Emergency announcements.*

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## 4 Firmware Configuration

### 4.1 INTRODUCTION

It is necessary to configure the BVRDTSM microphone prior to use. All configuration is performed using the touchscreen.



#### **CAUTION**

It is possible to render the BVRDTSM inoperable if incorrect configuration settings are made. It is advised that the current configuration is backed up to a USB stick before any changes are made.

### 4.2 ENTERING CONFIGURATION MODE

In order to enter configuration mode;

1. Turn the Key to Emergency Mode (clockwise).
2. Press and hold lamp test for 7s until menu appears.
3. Press Restart. Once rebooted it will show a Pin Entry screen enter the configuration Pin Code (Default: 5555).

4. Once in Configuration Mode turn the key back to the normal position (anti-clockwise)



*NOTE: When in configuration mode Audio Surveillance and RS485 polling is disabled causing any connected BVRD2M/4 routers to indicate Audio and Transmission faults for the microphone*

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*NOTE: If the BVRDTSM configuration is changed it is important to press Save and Reboot, if the microphone is simply rebooted no changes will be saved.*

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In order to exit configuration mode;

1. Ensure the key is in normal mode (anti-clockwise).
2. Press "Save and Reboot" in order to save any changes and reboot or "Exit" to reboot the BVRDTSM without saving changes.

## 4.3 IMPORT / EXPORT CONFIGURATION SETTINGS

It is possible to both import and export configuration data by attaching a formatted USB stick into the USB ports on the rear of the microphone.

In order to Backup the current configuration file;

1. Enter Configuration Mode.
2. Connect USB stick to BVRDTSM USB Port.
3. Change the name of the backup file if required.
4. Press Backup.

In order to Import a configuration file;

1. Enter Configuration Mode.
2. Connect USB stick to BVRDTSM USB Port.
3. Press "Import File".

4. Press "Scan Removable Media". This will scan the attached USB stick and display all the configuration files contained therein.
5. Select the required configuration backup file.
6. Press "Import" and then "Yes" on the Warning that appears.
7. The configuration can then be edited if required or "Save/ Reboot" pressed to reboot the microphone to begin using the imported configuration.

## 4.4 CONFIGURATION OPTIONS

### 4.4.1 User Accounts

In this section User Accounts can be setup and NFC cards enrolled to the users.

Each user (except Administrator who has full access) can be allocated an Access Level from 1-5. The functions available to the various access levels are as follows;

- L5 - Full access to all functions (as L4 but with access to Logs).
- L4 - Paging to Zones, Groups, Background Music, Volume Controls and PA Messages.
- L3 - Paging to Zones, Groups, Background Music and Volume Controls
- L2 - Paging to Zones, Groups and Background Music routing.
- L1 - Paging to Zones and Groups only.



*NOTE: Functions must be enabled in the User Interface section in order for them to appear regardless of the access level set.*

---

User accounts can be added, removed given a new name, allocated an access level, have a pin number set (for use without NFC access cards), have an NFC card (one per user) and the auto logout feature be enabled or disabled.

After each change to a user the save button must be pressed before moving on to the next user.



*NOTE: The administrator user can only have an NFC card enrolled, no other changes are possible.*

---



*NOTE: The administrator account is the user account used to access the configuration section so any changes to the default 5555 pin number must be recorded for future use.*

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## 4.4.2 Installation

This section includes free text areas for project specific information.

## 4.4.3 Communication

This sections allows changes to the RS485 communication settings, these must match the connected BVRD2M/M4 routers.

## 4.4.4 Audio Channels

This section is where the audio inputs of the BVRD2M/M4 routers are configured. These settings must match the physical installation.



*NOTE: Early versions of the BVRDTSM have 2 inputs allocated to the AUX audio channel, these must be different in order to ensure correct operation. For BVRD2M/M4 inputs 1-8 they can be set as "a" or "b" for the same physical input. If a higher input number is required the audio must be connected to 2 different audio inputs on the BVRD2M/M4 routers.*

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## 4.4.5 User Interface

In this section functions can be enabled, disabled and configured. Please see sections below for the options available.



*NOTE: If a function is not enabled it will not appear in the bottom menu bar regardless of the access level of a given user.*

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### 4.4.5.1 Zones

In the Zones section the number of Zone buttons and their names can be configured.



*NOTE: Zone button number 1 refers to button 1 in the BVRD2M/M4 button allocation table, 2-2, 3-3 etc.*

---

Zones names can be changed by selecting the Zone button of interest by using the Zone Button + and - buttons and then touching the Zone Button Text text entry field.

It is possible to restrict access to individual zone buttons depending on access level. If a logged in user has an access level less than the configured “Button Access Level” then the zone button will be displayed but cannot be selected. For example if the “Button Access Level” is set to 3 then only users with an access level of 3,4 or 5 will be able to select the zone for paging, playback of messages or routing of background music sources.

### 4.4.5.2 Groups

In this section group buttons can be configured, for each group button it is possible to change the name and change the zones allocated to that group. If a zone has a Yes against the Grouped Zones entry then that zone will be selected by the Group button of interest.

### 4.4.5.3 Messages

This section is used to configure access to BVRD2M/2M4 router stored emergency messages.



*NOTE: Access to trigger router stored messages is only allowed when the key is turned. Turning the key also logs the user in as Administrator.*

---

The quantity of message buttons to be displayed can be configured by using the Quantity + and - buttons.

For each button the Message Button Test (e.g. the name) and which message the button triggers can be configured.

### 4.4.5.4 Music

Background Music routing buttons can be configured here. The quantity of buttons, the Music Button Text (e.g. the name) and the routed BVRD2M/M4 audio input can be adjusted.

In order to use the BVRDTSM AUX IN jack socket to connect a background music source the Audio Input Triggered must match the configured physical input in the Audio Channels section.

### 4.4.5.5 Vols

BVRD2M/M4 volume controls can be configured here. The quantity of controls, name and associated CI input can be selected.

### 4.4.5.6 DVA

This section controls if the recording of messages and message scheduling is enabled.

### 4.4.5.7 Paging

The Speak Now indicated delay and All Call broadcast when no zones selected option can be configured here.

#### 4.4.5.8 Logs

Enabling and disabling the Logs viewer for Level 5 users is configured under the Logs section.

### 4.4.6 Monitoring

#### 4.4.6.1 General

The Audio Surveillance output level (default -15dB), can be set here options are -10dB, -15dB, -25dB, -30dB.

The fault buzzer can be muted with the Buzzer Mute option.

Additional protocol fault bits can be disabled here enabling compatibility with BVRD2M/M4 routers with firmware prior to V2.0.

#### 4.4.6.2 Line/Amp Inputs

Speaker line, amplifier faults or CI Fault inputs can be associated with Zone buttons in this section.

### 4.4.7 Display

In this section the screen brightness and the display dim time out can be adjusted.

### 4.4.8 Default Names

The names of BVRD2M/M4 audio inputs and faults can be changed here.

## 4.4.9 VA Active

Live inputs that trigger the VA Active LED indication can be configured here. Use the + and - buttons to select the BVRD2M/M4 inputs and change the No to a Yes to trigger the VA Active indication when these inputs are Live.



*NOTE: BVRD2M/M4 stored emergency messages are accessed at the end of the audio inputs.*

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## 4.4.10 Time/Date

The time and data can be set here. Set the time and date using the + and - buttons then click update to set the time.

The BVRDTSM can synchronise the clocks of all connected BVRD2M/M4 routers, change this option to Yes to enable this function.

## 4.4.11 Import/Export

Configurations files can be imported and exported to a USB stick, see above for more information

## 4.4.12 Firmware

Factory use only