



# ZC SERIES

Wall-Mounted Zone Controllers



ZC-1-4  
ZC-6-9  
ZC-Fire  
ZC-BOB

→ *User Guide*

# IMPORTANT SAFETY INSTRUCTIONS



The symbol shown to the left is an internationally accepted symbol that warns of potential hazards with electrical products. The exclamation point in an equilateral triangle indicates that it is necessary for the user to refer to the owner's manual.

Do not open the unit. Do not attempt to service the unit yourself. Refer all servicing to qualified personnel. Opening the chassis for any reason will void the manufacturer's warranty. Do not get the unit wet. If liquid is spilled on the unit, shut it off immediately and take it to a dealer for service.

The following is indicative of low altitude use; do not use this product above 2000m.



## WARNING FOR YOUR PROTECTION READ THE FOLLOWING:

READ THESE INSTRUCTIONS.

KEEP THESE INSTRUCTIONS.

HEED ALL WARNINGS.

FOLLOW ALL INSTRUCTIONS.

DO NOT USE THIS APPARATUS NEAR WATER.

CLEAN ONLY WITH A DRY CLOTH.

FOR INDOOR USE ONLY.

DO NOT BLOCK ANY OF THE VENTILATION OPENINGS. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES, OR OTHER APPARATUS (INCLUDING AMPLIFIERS) THAT PRODUCE HEAT.

ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.

UNPLUG THIS APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

Private households in the 25 member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For Countries not mentioned above, please contact your local authorities for a correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

## DECLARATION OF CONFORMITY

Manufacturer's Name: dbx Professional Products  
Manufacturer's Address: 10653 S. River Front Parkway, Suite 300  
South Jordan, Utah 84095, USA

declares that the product:

Product name: dbx Zone Controllers Models 1, 2, 3, 4, 6, 7, 8, 9; FIRE and BOB

Note: Product name may be suffixed by a combination of the letters EU, M, or V.

Product option: None

conforms to the following Product Specifications:

Safety: IEC 60065-01+Amd 1

EMC: EN 55022:2010 (N/A, analog product)  
EN 55013:1990  
EN 55020:1991  
FCC Part 15 (N/A, analog product)

Supplementary Information:

The product herewith complies with the requirements of the:

Low Voltage Directive 2014/35/EU  
EMC Directive 2014/30/EU  
RoHS Directive 2011/65/EU  
WEEE Directive 2012/19/EU

With regard to Directive 2005/32/EC and EC Regulation 1275/2008 of 17 December 2008, this product is designed, produced, and classified as Professional Audio Equipment and thus is exempt from this Directive.

C. Rex Reed  
Director, Engineering  
Signal Processing  
10653 S. River Front Parkway, Suite 300  
South Jordan, Utah 84095, USA  
Date: August 15, 2016

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or

Harman Professional Inc.  
10653 S. River Front Parkway, Suite 300  
South Jordan, Utah 84095, USA  
Ph: (801) 566-8800  
Fax: (801) 568-7583

# CONSIGNES DE SÉCURITÉ IMPORTANTES



Le symbole indiqué à gauche est un symbole internationalement acceptée qui avertit des dangers potentiels avec des produits électriques. Le point dans un triangle équilatéral d'exclamation indique qu'il est nécessaire pour l'utilisateur de consulter le manuel du propriétaire.

Ne pas ouvrir l'appareil. Ne pas essayer de réparer soi-même l'appareil. Confier toute réparation à du personnel qualifié. Ouvrir la structure de l'appareil pour quelque raison que ce soit annulera la garantie du fabricant. Ne pas mouiller l'appareil. Si du liquide est renversé sur l'appareil, fermer immédiatement l'appareil et l'apporter chez un réparateur.

Ce qui suit est représentatif d'une utilisation à basse altitude ; ne pas utiliser ce produit au-dessus de 2000 m.



## AVERTISSEMENT POUR VOTRE SÉCURITÉ LIRE ATTENTIVEMENT :

LIRE CES CONSIGNES.

CONSERVER CES CONSIGNES.

RESPECTER TOUS LES AVERTISSEMENTS.

SUIVRE TOUTES LES CONSIGNES.

NE PAS UTILISER CET APPAREIL PRÈS DE L'EAU.

NETTOYER UNIQUEMENT AVEC UN CHIFFON SEC.

POUR USAGE INTÉRIEUR UNIQUEMENT.

NE PAS OBSTRUER LES OUIES D'AÉRATION. EFFECTUER L'INSTALLATION CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

NE PAS INSTALLER À PROXIMITÉ DE SOURCES DE CHALEUR TELLES QUE DES RADIATEURS, BOUCHES D'AÉRATION, PLAQUES CHAUFFANTES OU TOUT AUTRE APPAREIL (Y COMPRIS DES AMPLIFICATEURS) DÉGAGEANT DE LA CHALEUR.

UTILISER UNIQUEMENT LES PIÈCES/ACCESSOIRES MENTIONNÉS PAR LE FABRICANT.

DÉBRANCHER L'APPAREIL AU COURS DES DRAGES OU EN CAS DE NON-UTILISATION PENDANT UNE DURÉE PROLONGÉE.

Les réparations doivent être confiées à un technicien S.A.V. qualifié. Une réparation est nécessaire en cas de dommage quelconque et en particulier en cas d'endommagement du cordon d'alimentation ou de la fiche électrique, d'infiltration liquide, d'introduction involontaire d'un objet dans l'appareil, d'exposition de l'appareil à la pluie ou à un milieu humide, de fonctionnement anormal ou de chute de l'appareil.



Ne pas jeter ce produit avec les ordures ménagères. Il existe un système de collecte sélective pour les produits électroniques usagés en conformité avec les lois en vigueur en matière de traitement, de récupération et de recyclage.

Dans les 25 États membres de l'UE, en Norvège et en Suisse, les ménages peuvent envoyer leurs produits électroniques usagés sans frais vers des centres de collecte sélective ou chez un distributeur (contre l'achat d'un nouveau produit).

Contactez les autorités locales pour connaître les procédures de traitement des déchets adoptées dans les pays non mentionnés ci-dessus.

Non seulement cette précaution vous permettra d'être sûr que votre produit est correctement traité, récupéré et recyclé, mais elle vous évitera également de nuire involontairement à l'environnement et à la santé humaine.

## DÉCLARATION DE CONFORMITÉ

Nom du fabricant : dbx Professional Products  
Adresse du fabricant : 10653 S. River Front Parkway, Suite 300  
South Jordan, Utah 84095, ÉTATS-UNIS

déclare que le produit :

Nom du produit : dbx Zone Controllers Modèles 1, 2, 3, 4, 6, 7, 8, 9; FIRE and BOB

Remarque : Nom du produit peut être suffixé par une combinaison des lettres de l'UE, M ou V.

Option du produit : Aucune

est conforme aux spécifications suivantes :

Sécurité : CEI/IEC 60065:2001 + Amd 1

CEM : EN 55022:2010 (S/O, produit analogique)  
EN 55013:1990  
EN 55020:1991  
Partie 15 des FCC (S/O, produit analogique)

Informations complémentaires :

Ce produit est conforme aux exigences suivantes :

Directive sur la basse tension 2014/35/UE

Directive 2014/30/UE

Directive RoHS 2011/65/UE

Directive DEEE 2012/19/UE

Ce produit appartient à la catégorie Matériel audio professionnel, il n'est pas concerné par la directive 2005/32/CE ou par le règlement européen 1275/2008 du 17 décembre 2008.

C. Rex Reed

Directeur, Ingénierie

Traitement des signaux

10653 S. River Front Parkway, Suite 300

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Date : 15 août 2016

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Fax : (801) 568-7583

## Zone Controller Wiring

The Zone Controllers, (ZC-1, ZC-2, ZC-3, ZC-4, ZC-6, ZC-7, ZC-8, ZC-9 and ZC-Fire) can be wired serially or in parallel. To wire in series, each Zone Controller must have an identification or zone number chosen using the DIP switches on the side of the controller (see diagram A). Each controller must have a unique number chosen — although there may be multiple Zone Controllers controlling a single zone, or a single Zone Controller that controls multiple outputs. The Zone Controllers can then be wired together and connected to the compatible device (e.g., DriveRack® 220i, 260, ZonePRO™, etc.) (see diagram B).

The Zone Controllers may also be wired in parallel with the use of the ZC-BOB. To wire in parallel (home run cabling), each controller must have a unique identification or number chosen using the DIP switches on the rear of the panel (see diagram A). To wire in parallel, each controller must be wired into a port of the ZC-BOB with a connecting wire going to the controlled device (see diagram C). Diagram D shows the typical wiring for ZC-4 Euroblock connections in which the installer needs to use SPDT (single-pole, double-throw) switches with one side being connected to 5 volts (+VREF) and the other side to ground (GND). Diagram E shows the proper way to interface the ZC-Fire to the fire alarm system. Use only the relay/switch closure or the 5-24V DC inputs. Do not use both inputs at the same time. For information regarding ZC setup, please see the respective manual for the device that you are setting up.

Diagram A

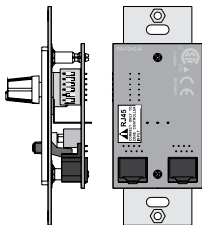


Diagram B

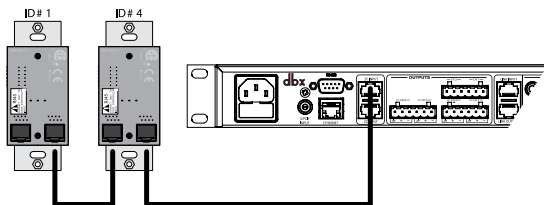


Diagram C

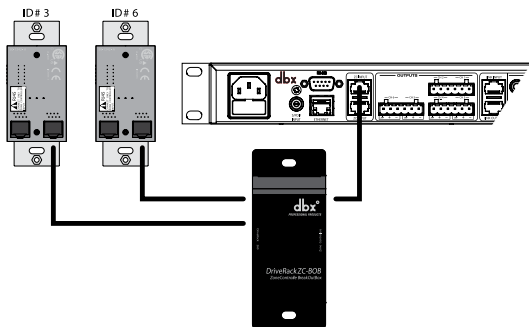
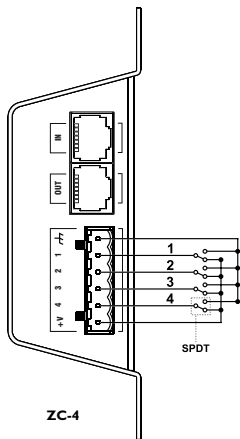


Diagram D



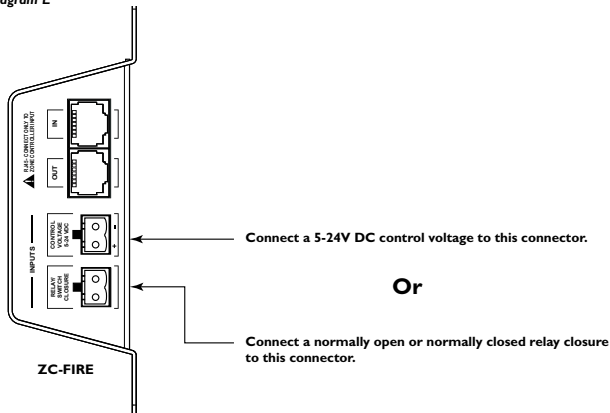
ZC-4 Binary Appnotes

SW4	SW3	SW2	SW1	Hex	Setting
0	0	0	0	0	0
0	0	0	1	1	1
0	0	1	0	2	2
0	0	1	1	3	3
0	1	0	0	4	4
0	1	0	1	5	5
0	1	1	0	6	6
0	1	1	1	7	7
1	0	0	0	8	8
1	0	0	1	9	9
1	0	1	0	A	10
1	0	1	1	B	11
1	1	0	0	C	12
1	1	0	1	D	13
1	1	1	0	E	14
1	1	1	1	F	15

Switches SW1-SW4 correspond to switch inputs 1-4 on the ZC-4's EuroBlock connector. Each switch connected to the ZC-4 must be a Single-Pole Double-Throw (SPDT). One pole of each switch should be connected to the ground reference on the ZC-4's EuroBlock connector while the other pole should be connected to the +V reference. Because there are four switch inputs, there are 16 possible switch combinations. In the chart above, a "0"

corresponds to a switch connected to the ground reference; a "1" corresponds to the switch being connected to the +V reference. None of the poles should be left hanging but should either be connected to +V or ground.

Diagram E



### Zone Controller Maximum Cable Length

Note - The following cable lengths were achieved using Cat5 Enhanced cable exhibiting a maximum D.C. resistance of 29 Ohms per 1,000 feet. When connecting Zone Controllers in series, the following cable length restrictions apply:

- As shown in Diagram F, any (3) Zone Controllers may be wired in series as long as the total cable length does not exceed 600 feet.
- Any (6) Zone Controllers may be wired in series as long as the total cable length does not exceed 300 feet. Refer to Diagram G.
- Cable runs of up to 1,000 feet may be achieved using “Home Run” wiring. An example of this is shown in Diagram H. A dbx Zone Controller Break Out Box (dbx ZC-BOB) is used to parallel several cable runs. It should be noted that a 1,000 foot cable with a single Zone Controller may be connected directly to the controlled device.

Note - Daisy chaining Zone Controllers to a ZC-BOB (connecting them serially) is not supported or recommended.

Diagram F

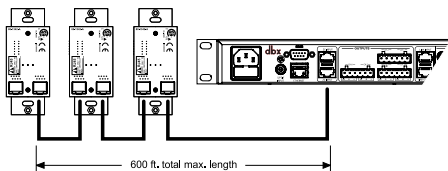


Diagram G

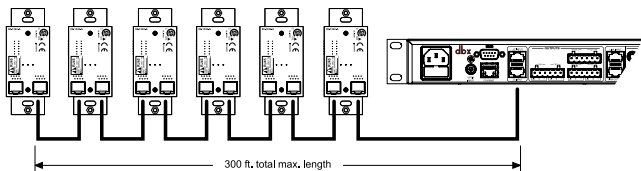
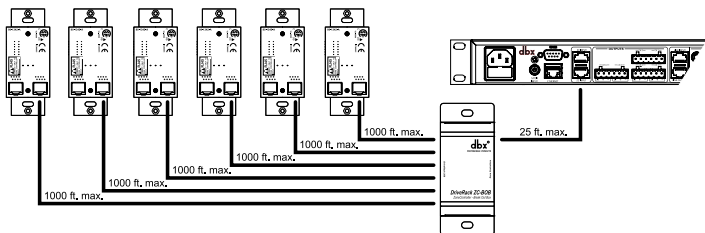
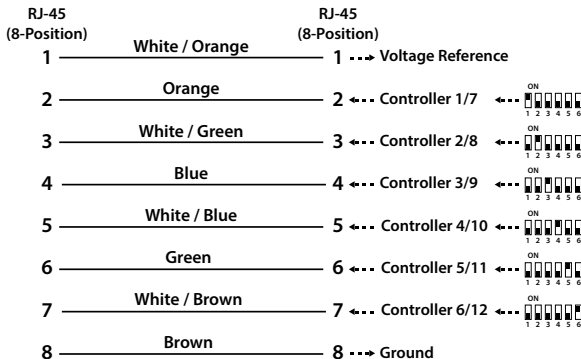


Diagram H



### Cable Spec: Cat5 Cable - 4-Twisted Pairs of 24AWG wire



### Zone Controller Compatibility Chart

	DriveRack 220i	DriveRack 260	DriveRack 4800/4820	ZonePRO 640(M) / 641(M)	ZonePRO 1260(M) / 1261(M)	SC 32 / 64
<b>ZC-1</b>	X	X	X	X	X	X
<b>ZC-2</b>	X	X	X	X	X	X
<b>ZC-3</b>	X	X	X	X	X	X
<b>ZC-4</b>	X	X	X	X	X	X
<b>ZC-6</b>			X	X	X	X
<b>ZC-7</b>			X	X	X	X
<b>ZC-8</b>			X	X	X	X
<b>ZC-9</b>			X		X	X
<b>ZC-Fire</b>			X	X	X	X
<b>ZC-BOB</b>	X	X	X	X	X	X



## Safety Warning

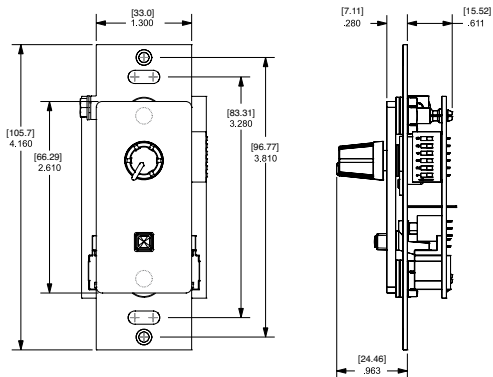
The installation of the Zone Controllers MUST be accomplished with the use of cable which is rated VW-1 or higher. Common NEC designations which meet this rating include: CMP, CMR, CMG, CM and CMX.

## Specifications

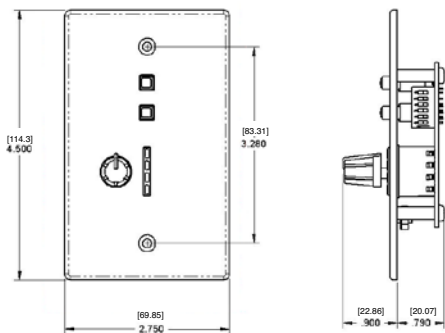
<b>Connections:</b>	ZC-1, ZC-2, ZC-3, ZC-6, ZC-7, ZC-8 and ZC-9 Connectors: (2) RJ-45 ZC-4 Connectors: (2) RJ-45, (1) 6-Pin Phoenix ZC-BOB Connectors: (7) RJ-45 ZC-Fire Connectors: (2) RJ-45, (2) 2-Pin Phoenix
<b>Wiring:</b>	Maximum cable length depends on number of Zone Controllers and wiring schematic.
<b>Series Wiring:</b>	Maximum cable length varies with number of Zone Controllers. For example, three Zone Controllers: 600 ft., six Zone Controllers: 300 ft.
<b>Parallel Wiring:</b>	Using a ZC-BOB: Up to six Zone Controllers: 1000 ft.
<b>Cable:</b>	CAT5 or CAT5E with <math><28.6\text{ Ohm/M}</math> (Ohm/1000 ft.) nominal DCR and rated VW-1 or higher.
<b>Safety Agency Approvals:</b>	UL 60065-07, IEC 60065, EN 55013
<b>Shipping Weight:</b>	.7 lb.

### Dimensions

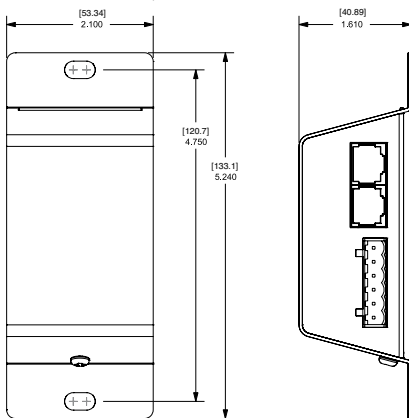
#### ZC-1, ZC-2, ZC-3, ZC-6, ZC-7



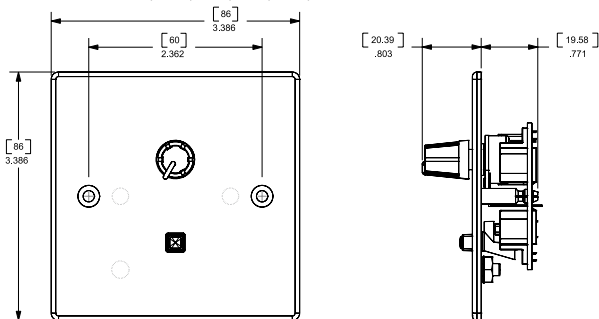
#### ZC-8 and ZC-9



ZC-4, ZC-BOB and ZC-Fire



ZC-1, ZC-2, ZC-3, ZC-6, ZC-7, ZC-8 and ZC-9 EU Models





**Phone:** (801) 566-8800

**Website:** [dbxpro.com](http://dbxpro.com)

**Support:** [dbxpro.com/en-US/support](http://dbxpro.com/en-US/support)

ZC Series User Guide

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