An Example of a Zero 88 Chilli Dimmer System used in a Multiple Ballroom scenario

A client requires a lighting system to be set-up in three Ballrooms. Each Ballroom has eight Lighting Fixtures (Chandeliers)

These individual Ballrooms 1, 2 & 3 are designed and built such that they can be converted into one large Ballroom when the two partitions are opened (ie : Partition A and B) see Ballroom Layout Diagram A attached.

The 2 operational requirements / scenarios that are to implemented.

1. Lighting in each of the Ballrooms 1, 2 & 3 can be controlled using individual *Chilli 10 button control Panels* assigned to their respective Ballrooms (see Ballroom Layout Diagram A)

2. Lighting in all three Ballrooms can be controlled by way of a Master control Panel (which is actually a *Chilli 10 button control Panel***)** if the partitions A and B are opened.

Dimming

Client would like four levels of dimming

When Client presses the following Buttons below on the Control Panels in their respective Ballrooms 1, 2 & 3

Button 1 pressed: All lights in the respective Ballroom will be 100%
Button 2 pressed: All lights in the respective Ballroom will be 75%
Button 3 pressed: All lights in the respective Ballroom will be 50%
Button 4 pressed: All lights in the respective Ballroom will be 25%

When Client presses the following Buttons below on the Master Control Panel

Button 1 pressed: All lights in all Ballroom will be 100%
Button 2 pressed: All lights in all Ballroom will be 75%
Button 3 pressed: All lights in all Ballroom will be 50%
Button 4 pressed: All lights in all Ballroom will be 25%

A brief description of the "Ballroom Layout Diagram A"

The 3 respective Ballrooms are shown , Ballroom 1 , Ballroom 2 and Ballroom 3

The ballroom is divided into four Areas which are :

Area 1 : Ballroom 1
Area 2 : Ballroom 2
Area 3 : Ballroom 3
Area 0 : Ballroom 1,2 & 3

Each Ballroom has eight lighting fixtures denoted by the Letter and a number (ie: **L9**)

There are two Chilli 1210i dimmers installed for the Lighting system, giving a total of 24 channels of Dimming control. (Dimmers are labelled D1 and D2). Dimmer D1 channels are connected to Lighting Fixtures L01 to L12 and Dimmer D2 channels are connected to Lighting Fixtures L13 to L24 respectively.

Each Area has an individual *Chilli 10 button Control Panel* which is daisy chained to the dimmers using a CAT5E cable .(Note: It is important to terminate with a 120 ohm resistor supplied to the last Chilli Control Panel in Area 1 and to the Chilli 1210i Dimmer D1).

The Termination resistor of 120 ohms , 0.25 Watt is connected between the CAN-H and CAN-L terminals. See Chilli Operational Manual page 2-11

Programming the Dimmer and Panels

Dimmers are set with the following parameters, it is best to reset the dimmer before setting all the parameters:

<u>Dimmer D1</u>
Chillinet is on Enabled mode : CHILLINET ENABLED
Dimmer No: 1
Dimmer Law set : NORMAL
Topset: 100%
Set Preheat: 0%
3-way DIP switch located above DMX terminations switch 2 to ON switch to left
DMX start Address : 1
DMX Fail Mode: Fade to Memory :01
DMX input mode: DMX Disabled
Security: Lock Dimmer : CODE: 1234

Channel 1 : Area 1
Channel 2 : Area 1
Channel 3 : Area 1
Channel 4 : Area 1
Channel 5 : Area 2
Channel 6 : Area 2
Channel 7 : Area 2
Channel 8 : Area 2
Channel 9 : Area 3

Channel 10 : Area 3
Channel 11 : Area 3
Channel 12 : Area 3

Dimmer D2
Chillinet is on Enabled mode : CHILLINET ENABLED
Dimmer No: 2
Dimmer Law set : NORMAL
Topset: 100%
Set Preheat: 0%
3-way DIP switch located above DMX terminations switch 2 to ON switch to left
DMX start Address : 13
DMX Fail Mode: Fade to Memory :01
DMX input mode: DMX DISABLED
Security: Lock Dimmer : CODE: 1234

Channel 1 : Area 1
Channel 2 : Area 1
Channel 3 : Area 1
Channel 4 : Area 1
Channel 5 : Area 2
Channel 6 : Area 2
Channel 7 : Area 2
Channel 8 : Area 2
Channel 9 : Area 3
Channel 10 : Area 3
Channel 11 : Area 3
Channel 12 : Area 3

Memories to program

Memory	Dim No	Channel No	Area No	Light Fixture	Level	Remarks
1	1	1	A1	L1	100.00%	
	1	2	A1	L2	100.00%	
	1	3	A1	L3	100.00%	
	1	4	A1	L4	100.00%	
	1	5	A2	L5	100.00%	
	1	6	A2	L6	100.00%	
	1	7	A2	L7	100.00%	

	1	8	A2	L8	100.00%	
	1	9	A3	L9	100.00%	
	1	10	A3	L10	100.00%	
	1	11	A3	L11	100.00%	
	1	12	A3	L12	100.00%	
2	1	1	A1	L1	75.00%	
	1	2	A1	L2	75.00%	
	1	3	A1	L3	75.00%	
	1	4	A1	L4	75.00%	
	1	5	A2	L5	75.00%	
	1	6	A2	L6	75.00%	
	1	7	A2	L7	75.00%	
	1	8	A2	L8	75.00%	
	1	9	A3	L9	75.00%	
	1	10	A3	L10	75.00%	
	1	11	A3	L11	75.00%	
	1	12	A3	L12	75.00%	
3	1	1	A1	L1	50.00%	
	1	2	A1	L2	50.00%	
	1	3	A1	L3	50.00%	
	1	4	A1	L4	50.00%	
	1	5	A2	L5	50.00%	
	1	6	A2	L6	50.00%	
	1	7	A2	L7	50.00%	
	1	8	A2	L8	50.00%	
	1	9	A3	L9	50.00%	
	1	10	A3	L10	50.00%	
	1	11	A3	L11	50.00%	
	1	12	A3	L12	50.00%	
4	1	1	A1	L1	25.00%	
	1	2	A1	L2	25.00%	
	1	3	A1	L3	25.00%	

	1	4	A1	L4	25.00%	
	1	5	A2	L5	25.00%	
	1	6	A2	L6	25.00%	
	1	7	A2	L7	25.00%	
	1	8	A2	L8	25.00%	
	1	9	A3	L9	25.00%	
	1	10	A3	L10	25.00%	
	1	11	A3	L11	25.00%	
	1	12	A3	L12	25.00%	

Memory	**Dim No**	**Channel No**	**Area No**	**Light Fixture**	**Level**	**Remarks**
1	2	1	A1	L13	100.00%	
	2	2	A1	L14	100.00%	
	2	3	A1	L15	100.00%	
	2	4	A1	L16	100.00%	
	2	5	A2	L17	100.00%	
	2	6	A2	L18	100.00%	
	2	7	A2	L19	100.00%	
	2	8	A2	L20	100.00%	
	2	9	A3	L21	100.00%	
	2	10	A3	L22	100.00%	
	2	11	A3	L23	100.00%	
	2	12	A3	L24	100.00%	
2	2	1	A1	L1	75.00%	
	2	2	A1	L2	75.00%	
	2	3	A1	L3	75.00%	
	2	4	A1	L4	75.00%	
	2	5	A2	L5	75.00%	
	2	6	A2	L6	75.00%	
	2	7	A2	L7	75.00%	
	2	8	A2	L8	75.00%	

	2	9	A3	L9	75.00%	
	2	10	A3	L10	75.00%	
	2	11	A3	L11	75.00%	
	2	12	A3	L12	75.00%	
3	2	1	A1	L13	50.00%	
	2	2	A1	L14	50.00%	
	2	3	A1	L15	50.00%	
	2	4	A1	L16	50.00%	
	2	5	A2	L17	50.00%	
	2	6	A2	L18	50.00%	
	2	7	A2	L19	50.00%	
	2	8	A2	L20	50.00%	
	2	9	A3	L21	50.00%	
	2	10	A3	L22	50.00%	
	2	11	A3	L23	50.00%	
	2	12	A3	L24	50.00%	
4	2	1	A1	L1	25.00%	
	2	2	A1	L2	25.00%	
	2	3	A1	L3	25.00%	
	2	4	A1	L4	25.00%	
	2	5	A2	L5	25.00%	
	2	6	A2	L6	25.00%	
	2	7	A2	L7	25.00%	
	2	8	A2	L8	25.00%	
	2	9	A3	L9	25.00%	
	2	10	A3	L10	25.00%	
	2	11	A3	L11	25.00%	
	2	12	A3	L12	25.00%	

How to Program the Chilli Dimmer , more info in Chilli Operational Manual

To reset the Dimmer

SELECT <RESET DIMMER>, > PRESS ENTER
<CONFIRM RESET> > PRESS ENTER,
> PRESS ESC

1.

To set to Chilli Net & Dimmer No.

SELECT < CHILLI NET>, > PRESS ENTER
THE STATE : CHANGED TO 'ENABLED > PRESS ENTER,
> PRESS ESC

DIMMER NO : CHANGED TO NO 1 & 2 TO RESPECTIVE DIMMERS

To set to Dimmer Law

1. SELECT <DIMMER LAWS>, >PRESS ENTER
2. SET LAWS TO THE RESPECTIVE CHANNEL ON WHAT TYPE OF LIGHTING FIXTURES USED...

EXAMPLE : CHANNEL : 1 (individually)
or ALL CHANNELS > PRESS ENTER
LAW : NORMAL > PRESS ENTER
> PRESS ESC

To set Area Control

GO TO AREA CONTROL, SELECT RESPECTIVE CHANNEL AND SET THE RESPECTIVE AREA .

EXAMPLE :

	DIMMER 1	DIMMER 2
CHANNEL (1)	AREA (1)	AREA (1)
CHANNEL (2)	AREA (1)	AREA (1)
CHANNEL (3)	AREA (1)	AREA (1)
CHANNEL (4)	AREA (1)	AREA (1)
CHANNEL (5)	AREA (2)	AREA (2)
CHANNEL (6)	AREA (2)	AREA (2)
CHANNEL (7)	AREA (2)	AREA (2)
CHANNEL (8)	AREA (2)	AREA (2)
CHANNEL (9)	AREA (3)	AREA (3)
CHANNEL (10)	AREA (3)	AREA (3)
CHANNEL (11)	AREA (3)	AREA (3)
CHANNEL (12)	AREA (3)	AREA (3)

To Program a Channel Level

> SELECT <MANUAL CONTROL> > PRESS ENTER,
> SELECT <SET CHANNEL LEVEL> > PRESS ENTER

PUT THE LEVEL OF THE CHANNEL YOU WANT IT TO BE 0 to 100

EXAMPLE : (A) (2) [CHANNEL] : 5 > PRESS ENTER
AREA NO. [LEVEL] : 100 > PRESS ENTER

> PRESS ESC

To save into Memory

> SELECT <MEMORIES> > PRESS ENTER,
> SELECT <RECORD MEMORY> > PRESS ENTER

EXAMPLE : AREA : 1 > PRESS ENTER
MEMORIES : 1

AREA 1 MEM 1 > PRESS ENTER
FADE TIME (3) SEC > PRESS ENTER

> PRESS ESC

AND IT IS SAVED.

To transfer the Memory to a Chilli Control Panel

GO TO THE CHILLI PANEL WHICH YOU WANT TO SET TO AREA 1.

PRESS THE **OFF** AND NUMBER (**1**) BUTTON ON THE CHILLI PANEL AT THE SAME TIME AND HOLD IT FOR 5 SECONDS UNTIL THE BLUE LEDS ON THE CHILLI PANEL BLINK.

GO TO DIMMER TO WHICH THE PARTICULAR AREA AND CHANNEL YOU WANT THE MEMORIES TO BE PLAYED TO THE APPROPRIATE PANEL

SELECT <MEMORIES>, > PRESS ENTER,
SELECT <PLAY MEMORIES>, > PRESS ENTER

EXAMPLE : AREA : 1 > PRESS ENTER
MEMORIES : 1

PLAY ALL THE SUBSEQUENT MEMORIES THAT YOU HAD SAVED FOR THAT PARTICULAR PANEL.

UPON COMPLETION
>PRESS THE **OFF** BUTTON ON THE CONTROL PANEL TO END THE TRANSFER
>PRESS THE **OFF** BUTTON ON THE CONTROL PANEL AGAIN TO OFF THE LIGHTING FIXTURES.

DO THE SAME SEQUENCE FOR AREA (2) & AREA (3) ON THE SECOND & THIRD CONTROL CHILLI PANEL.

To Program AREA (0)

This Area 0 cannot be assigned by channel. The master area 0 sends network wide messages and therefore affects all areas. This is useful if you wish to have control of all areas from one control panel. A master panel is assigned in the same way as any other area panel. Pressing the 'Memory 1' button on a master area panel will send a message to all areas telling them to play 'Memory 1' in all the Area Panels (ie: to play the memory 1 in Control Panel in Area 1, Control Panel Area 2 & Control Panel Area 3).

GO TO THE CHILLI PANEL WHICH YOU WANT TO SET TO AREA 0.
(THE MASTER CONTROL PANEL)

PRESS THE **OFF** AND NUMBER (**1**) BUTTON ON THE CHILLI PANEL AT THE SAME TIME AND HOLD IT FOR 5 SECONDS UNTIL THE BLUE LEDS ON THE CHILLI PANEL BLINK.

GO TO DIMMER NO. (1)

> SELECT <MEMORIES> > PRESS ENTER
> SELECT <PLAY MEMORIES> > PRESS ENTER

EXAMPLE : AREA : 0 > PRESS ENTER
MEMORY : 1

*REPEAT THE SAME SEQUENCE FOR AREA : 0 UNTIL ALL MEMORIES ARE PLAYED TILL MEMORY : 12
> PRESS ESC

UPON COMPLETION
>PRESS THE **OFF** BUTTON ON THE CONTROL PANEL TO END THE TRANSFER
>PRESS THE **OFF** BUTTON ON THE CONTROL PANEL AGAIN TO OFF THE LIGHTING FIXTURES.

* NOW THE CHILLI PANEL (AREA 0) IS SET AND ACTS AS A MASTER CONTROL PANEL WHICH ACTIVATES MEMORIES IN AREA 1, AREA 2 & AREA3 CHILLI PANELS.

Notes:

The Panel in Area 1,Area 2 and Area 3 will be activated once during programming (blinking Blue LED) as the 4 memories are played from Dimmer 1.

The Panel in Area 1,Area 2 and Area 3 will be activated again during programming (blinking Blue LED) as the 4 memories are played from Dimmer 2.

I have connected the channels of dimmer D1 and D2 such that 4 channels of each dimmer is to their respective Ballrooms. This arrangement is done so that if either Dimmer D1 or D2 were to fail some lights will be there in each Ballroom.