## CHROMABANK IP 100 / 200 / 300



### **SPECIFICATION**

CBankIP100	- ChromaBank IP 100W 6 Segment
CBankIP200	- ChromaBank IP 200W 12 Segment
CBanklP300	- ChromaBank IP 300W 12 Segment

The **ChromaBank IP** contains state of the art, high brightness, high efficiency Red, Green and Blue LEDs. These three primary colours can be mixed together to make an incredible palette of 16.7 million colours

They are IP65 rated fixtures and therefore suitable for outdoor or indoor use. They are powered directly from 100-240 Volts AC and have full remote DMX control of RGB levels or can function in Stand Alone Mode. Numerous chases and sequences are built in, enabling superb lighting effects without complicated programming.

These impressive fixtures are ideal for the architectural and entertainment markets to give an unlimited colour palette that can enhance building facades, water features and focal displays or to providing stunning dynamic colour in shows, conferences, concerts and themed environments.

Like the **ChromaBank**, the **ChromaBank IP** contains a **PULSAR ChromaZone** controller and can therefore also operate in 3, 6, 9, 10, 36, 42 or 46 Channel Modes.

The ChromaBank IP 100 may be configured as Fixture 1 of 2 or Fixture 2 of 2, displaying the LED segments 1-6 of 12 or 7-12 of 12. So, two ChromaBank IP 100s may emulate a ChromaBank IP 200. Please see the Channel Assignments Tables sheet for details of the different modes.

The **ChromaBank IP** has numerous chases and effects built in, making it possible to achieve fantastic effects without programming. These internal effects can be selected via the **User Interface Module** (UIM) on the rear of the units whilst in Stand Alone mode, or from a controller using a digital **PMX** (**P**ulsar **M**ultiple**X**) or **DMX** (**D**igital **M**ultiple**X**) signal.

Please see the **Menu Selection Overview** sheet for a pictorial representation of the menu functions.

The **ChromaBank IP** has a stand and mounting brackets making it ideal for floor, wall, ceiling or rig mounting.

The **ChromaBank IP** has a colour code letter. This signifies the finished colour of the fixture e.g. B = Black, S = Silver.

The **ChromaBank IP** has a thermal management system. This progressively reduces the power to the LEDs if the internal temperature exceeds limits set by the software.

Excess temperature will occur if the units are exposed to high ambient temperatures or inadvertently covered. It is therefore important for maximum performance that they have good ventilation on all sides.

NB - Patents applied for

### **CONNECTIONS**

**Mains Supply** - The **ChromaBank IP** works correctly on any mains voltage from 100-240 VAC, 50-60Hz, (self adjusting). Power consumption is 100, 200 or 300 Watts max.

A 5m, bare ended, mains cable is provided. The bare end of the cable should be fitted with a suitably approved and rated mains plug. Note: in some countries it is a requirement that such a plug be fitted by a qualified electrician.

#### **CABLE COLOURS**

Green/Yellow = \_\_ Earth / Ground

Brown = Live / Phase / Hot

Blue = Neutral

#### **WARNING - THIS APPLIANCE MUST BE EARTHED**

For safety we recommend the use of a Residual Current Circuit Breaker. An RCCB MUST be used when powering a ChromaBank IP in wet environments.

#### PMX/DMX In/Thru 5 Pin XLR Connectors

**Digital Control Signals:** Two 5 pin XLR connectors on 5m cables (in/thru) are provided. The pin connections of the sockets are:

PMX (RS232/423) SIGNAL
Pin 1 = Screen / Chassis Earth
Pin 2 = Signal
Pin 3 = Signal Earth
Pin 4 = no connection
Pin 5 = LVS (male only)

DMX SIGNAL
Pin 1 = Screen / Chassis Earth
Pin 2 = Signal Pin 3 = Signal +
Pin 4 = no connection
Pin 5 = LVS (male only)

Wet / Damp Environment Use – these products are IP65 rated. However, the cable connections *must* also be contained in a dry, low humidity, environment as water and vapour will travel inside the cables from the connection joints into the fixture. A waterproof connection box, or properly fitted IP68 rated connectors, are essential for cable connections in such environments. Suitable connectors are available from Pulsar.

Failure to take these precautions invalidates the guarantee.



#### **USER INTERFACE MODULE AND FUNCTIONS**

**LCD DISPLAY** A 2 line, 16 character per line, LCD display is used to set up, and indicate the status of, the **ChromaBank IP**. At switch on, the display shows:

DMX Address: n (where n=1 to 512)
Receiving: NO SIGNAL or DMX or PMX or ERROR

Press the  $\Upsilon$  (Up) or  $\P$  (Down) keys to cycle through the Menu Options (see *LCD Display Sheet*).

Press the X key on the UIM to change the settings.

**Note:** Program Mode self cancels after ~30 seconds if no keys have been pressed.

**Note:** if, at any time, the display shows **Receiving: ERROR**, then there is a problem with the DMX signal. It could be wiring, termination or poorly implemented DMX.

• **DMX Address** – depending on the operating mode, a block of 3, 6, 9, 10, 36, 42 or 46 channels is received from the DMX signal – see *Channel Assignments Tables*. The **DMX Address** is the number of the first channel in the block.

To set the required **DMX Address**, press the  $\Upsilon$  or  $\P$  keys on the **UIM** until the display shows **DMX Address**:

Press the **X** (change) key on the **UIM**, then set the start address using the  $\Upsilon$  or  $\P$  keys. These keys repeat if held down.

When the required **DMX Address** number shows in the display, press the ✓ (Yes) key to save changes or X (Back) key to restore the previous settings.

**Note:** the **Receiving:** text (NO SIGNAL / PMX / DMX / ERROR) in the display is for information only.

• **ChromaZone Mode** - the unit can be run in similar modes to the ChromaZone. The options are 3, 6, 9, 10, 36, 42 and 46 channel modes – see **Channel Assignments Tables**.

To set the required **Mode**, press the  $\Upsilon$  or  $\P$  keys on the **UIM** until the display shows **ChromaZone Mode**:

Press the **X** (change) key on the **UIM**, then select the required mode using the  $\hat{\mathbf{1}}$  or  $\hat{\mathbf{4}}$  keys.

When the required **ChromaZone Mode** shows in the display, press the  $\checkmark$  **(Yes)** key to save changes or **X (Back)** key to restore the previous settings.

• Channels per Fixture — the ChromaBank IP 100 is 18 channels per fixture, the ChromaBank IP 200 and 300 are 36 channels per fixture.

To view the number of **Channels per Fixture**, press the  $\Upsilon$  or  $\P$  keys on the **UIM** until the display shows **Channels per Fixture**:

Pressing the X (change) key on the UIM, followed by the  $\Upsilon$  or  ${\bf V}$  keys will have no effect.

Press the ✓ (Yes) key or X (Back) key to return to the main menu.

• **Fixture number:** the 36 RGB outputs from the built in ChromaZone are divided into fixture groups. 36 divided by the channels per fixture (see above) gives the number of fixtures available from the data block.

A ChromaBank IP 200 or 300 can only be Fixture 1.

Pressing the X (change) key on the UIM, followed by the  $\Upsilon$  or  ${\bf V}$  keys will have no effect.

Press the **✓** (Yes) key or X (Back) key to return to the main menu.

A **ChromaBank IP 100** may be either **Fixture 1** or **Fixture 2**, displaying the LED segments as 1-6 of 12 or 7-12 of 12. See the **Channel Assignments Table** for channel and fixture number colour details

To set the required **fixture number**, press the  $\Omega$  or  $\Psi$  keys on the **UIM** until the display shows **Fixture number**:

Press the **X** (change) key on the **UIM**, then select the required number using the  $\Upsilon$  or  $\Psi$  keys.

When the required **Fixture number** shows in the display, press the **'(Yes)** key to save changes or **X (Back)** key to restore the previous settings.

• Chase patterns: may be 6 or 12 way. E.g. two ChromaBank IP 100s, the first set as Fixture 1 of 2 and the second set as Fixture 2 of 2 will run a 12 way chase.

To set the required **chase patterns**, press the  $\Upsilon$  or  $\P$  keys on the **UIM** until the display shows **Chase patterns**:

Press the **X** (change) key on the **UIM**, then select **6** or **12** way using the **1** or **↓** keys.

When the required **chase pattern way number** shows in the display, press the **✓ (Yes)** key to save changes or **X (Back)** key to restore the previous settings.

• Channel 10: may be set as a Grand Master for the 36 RGB channels only, OR as a Global Grand Master for the 36 RGB channels, the ALL Red ,Green and Blue, and the Chase Levels

To set the required **Ch.10** mode of operation, press the  $\ 1$  or  $\ 4$  keys on the **UIM** until the display shows **Ch.10**...:

Press the **X** (change) key on the UIM, then select the required number using the  $\Upsilon$  or  $\Psi$  keys.

When the required **Ch.10** operation shows in the display, press the 
✓ **(Yes)** key to save changes or **X (Back)** key to restore the previous settings.

• Input Smoothing - ON or OFF. To disable the input smoothing, e.g. for fast response to video graphics signals, set to OFF

To turn the **Input Smoothing** ON/OFF, press the  $\Omega$  or  $\mathbb{Q}$  keys on the **UIM** until the display shows **Input Smoothing**:

Press the **X** (change) key on the **UIM**, then select the required state using the  $\hat{\mathbf{1}}$  or  $\hat{\mathbf{1}}$  keys.

When the required state shows in the display, press the  $\checkmark$  (Yes) key to save changes or X (Back) key to restore the previous settings.

• Low Voltage Supply - ON or OFF. To connect the LVS to pin 5 of the MALE XLR, set to ON.

The LVS is used to power some PULSAR controllers, e.g. Outstation OS1. 24V at up to 250mA d.c. is available.

To turn the **Low Voltage Supply** ON/OFF, press the  $\hat{\mathbf{1}}$  or  $\boldsymbol{\Psi}$  keys on the **UIM** until the display shows **Low Voltage Supply is:** 

Press the X (change) key on the UIM, then select the required state using the 1 or ↓ keys.

When the required state shows in the display, press the ✓ (Yes) key to save changes or X (Back) key to restore the previous settings.

• DMX Line Termination — ON or OFF, set the last unit in the DMX cable run to ON, all others to OFF. Errors can often occur if the DMX line is not terminated. DMX errors are shown in the display as:

DMX Address: n
Receiving: ERROR

To turn the **DMX Line Termination** ON/OFF, press the  $\Upsilon$  or  $\Psi$  keys on the **UIM** until the display shows **DMX Line Termination**:

Press the **X** (change) key on the **UIM**, then select the required state using the  $\Upsilon$  or  $\P$  keys.

When the required state shows in the display, press the ✓ (Yes) key to save changes or X (Back) key to restore the previous settings.

• If NoSignal use: In the event the ChromaBank IP is not receiving a DMX signal (e.g. controller no longer present), the unit may either use the user-programmable Stand Alone Settings (see Stand Alone Settings View/Change below) OR continue to use the Last DMX Packet received.

To select the **If NoSignal use:** requirement, press the  $\Upsilon$  or  $\Psi$  keys on the **UIM** until the display shows **If NoSignal use** 

Press the **X** (change) key on the **UIM**, then select the requirement using the  $\Upsilon$  or  $\Psi$  keys.

When your requirement is showing in the display, press the  $\checkmark$  (Yes) key to save changes or X (Back) key to restore the previous settings.

#### Stand Alone Settings View/Change

There are three possibilities depending on:

- a) whether there is an input signal and
- b) whether "If NoSignal use:" is set to "Stand Alone Mode" or set to "Last DMX Packet".
  - No Signal + Use Stand Alone Mode:

The current Stand Alone Settings may be viewed, changed and saved as the new Stand Alone Settings.

2. No Signal + Use Last DMX Packet:

The channel levels of the Last DMX Packet (if any) may be viewed, changed and saved as the new Stand Alone Settings.

Signal present:

The incoming signal overwrites any changes made but these incoming channel levels may be set at the controller, viewed and saved as the new Stand Alone Settings.

## CHROMABANK IP 100 / 200 / 300

#### **USER INTERFACE MODULE AND FUNCTIONS**

#### Stand Alone Settings View/Change (continued)

To View/Change the Stand Alone Settings, press the ↑ or ↓ keys on the UIM until the display shows Stand Alone Settings View/Change.

Press the X (change) key on the UIM, then select the channel to view/change using the 

or 

keys. These keys repeat if held down. When the channel to be viewed/changed is showing in the display, press the 1 or 1 keys to change the value. These keys repeat if held down. The display shows both the bit number (0-255) and percentage (0-100%).

Please see the Chase Select Table when modifying chases.

To modify further channels, select the channel to view/change using the ⇔ or ⇒ repeat keys, pressing the ûr or ♥ repeat keys to change the value.

When you have finished modifying channels, press the ✓ (Yes) key to save changes or X (Back) key to restore the previous settings.

#### VIEW(Sig)/SET(NoSig) Chan Levels

To View the Channel Levels/Change the Stand Alone Settings, press the  $\hat{\mathbf{1}}$  or  $\mathbf{J}$  keys on the **UIM** until the display shows VIEW(Sig)/SET(NoSig) Chan Levels

Press the X (change) key on the UIM, then select the channel to change/view using the 

or 

keys. These keys repeat if held

When the channel to be changed/viewed is showing in the display, press the 1 or 4 keys to change the value. These keys repeat if held down. The display shows both percentage (0-100%) and bit number (0-255), and for channels 4 (Chase 1 Select) and 7 (Chase 2 Select) the chases selected.

Please see the **Chase Select Table** when modifying chases. Notes:

- this menu item is for this session use only, data is never saved.
- the values can only be changed if the unit is not receiving data.
- $\bullet$  pressing the  ${\bf X}$  or  ${\bf \checkmark}$  keys returns to the main menu.

#### Restore Factory Default Settings

UIM until the display shows Restore Factory Default Settings.

Press the X (change) key on the UIM, then press the ✓ (Yes) key to restore defaults or X (Back) key to exit.

The factory default settings are

**DMX Address ChromaZone Mode** 46 Channel

18 (CBankIP100) / 36 (CBankIP200/300) Channels per Fixture Fixture number 1of2 (CBankIP100)/1of1 CBankIP200/300) Chase patterns 12 (CBankIP100) / 12 (CBankIP200/300) Grand Master for the 36 RGBs only Channel 10

Input Smoothing ON Low Voltage Supply ON **DMX Line Termination** OFF

Stand Alone Mode If NoSignal use:

**Stand Alone Settings** 

= 0 bits / 0% Ch.4 = Chase 1 Select = Auto Chase Ch.5 = Chase 1 Speed = 128 bits / 50% Ch.6 = Chase 1 Level = 255 bits / 100% Ch.7 - 46 = 0 bits / 0%

#### OTHER INFORMATION

Failure of the internal ChromaBank IP 5 Amp, 5x20mm Power Supply Fuse, usually indicates an internal fault requiring servicing by a qualified engineer.

If the front glass becomes cracked or broken, disconnect from the mains immediately and have the unit repaired. Replacement glasses are available from Pulsar.

The PMX/DMX connections (input and thru) are protected against inadvertent shorts to 240Vac and static damage.

PORTABLE APPLIANCE TESTING - The Pulsar ChromaBank IP 100, 200 and 300 may be safely Earth Bond and Insulation Tested.

STANDARDS - The Pulsar ChromaBank IP 100, 200 and 300 comply with the following International and National Standards:

Electrical Safety - IEC65, EN60065, BS415

EMC - EN50081-1. EN55022. EN50082-1

Index of Protection - IP65



Marking Directive 93/68/EEC - The Pulsar ChromaBank IP 100, 200 and 300 meet the EMC Directive 89/336/EEC and the Low Voltage Directive

GUARANTEE - 12 months from the date of original purchase. The guarantee is limited to parts and labour. The guarantee is void if the unit is misused, the cable connections are not in a dry environment or made using an IP68 rated connector, or unauthorised persons perform repairs. In the unlikely event of a fault occurring, do not use without repair. Return the unit to your supplier with a description of the fault, or direct to Pulsar for immediate attention

### **DIMENSIONS AND WEIGHTS**

	Code	Unit	/	Width	Height	Depth	Weight
				mm	mm	mm	kg
	CBankIP	100 ChromaBank IP 100W 6	segment g	598.0	132.0	132.0	5.3
	CBankIP	200 ChromaBank IP 200W 12	segment 1	198.0	132.0	132.0	12.4
-	<b>CBankIP</b>	300 ChromaBank IP 300W 12	segment 1	198.0	132.0	132.0	12.4



# CHROMABANK IP 100 / 200 / 300 CHANNEL ASSIGNMENTS TABLES

(3) 6 Channel Mode			
1	All Red		
2	All Green		
3	All Blue		
4	Chase Select (see Chase Table)		
5	Chase Speed		
6	Chase Level		

(9) 10 Channel Mode		
1	All Red	
2	All Green	
3	All Blue	
4	Chase1 Select (see Chase Table)	
5	Chase1 Speed	
6	Chase1 Level	
7	Chase2 Select (see Chase Table)	
8	Chase2 Speed	
9	Chase2 Level	
10	Global Grand Master	

	36 Channel Mode						
	ChromaBank IP 100 18 Channels / Fixture				ChromaBank IP 200/300 36 Channels / Fixture		
	Fixture 1 of 2		Fixture 2 of 2		Chiomabank if 200/300 30 Chaineis / Fixture		
1	Red 1	19	Red 1	1	Fixture 1 Red 1		
2	Green 1	20	Green 1	2	Fixture 1 Green 1		
3	Blue 1	21	Blue 1	3	Fixture 1 Blue 1		
16	Red 6	34	Red 6	34	Fixture 1 Red 12		
17	Green 6	35	Green 6	35	Fixture 1 Green 12		
18	Blue 6	36	Blue 6	36	Fixture 1 Blue12		

	42 Channel Mode				
	ChromaBank IP 100 18 Channels / Fixture		ChromaBank IP 200/300 36 Channels / Fixture		
	Fixture 1 of 2	Fixture 2 of 2	Chilomadank ir 200/300 30 Chaimeis / Lixture		
1-6	as 6 Channel Mode	1-6 as 6 Channel Mode	1-6 as 6 Channel Mode		
7	Red 1	25 Red 1	7 Fixture 1 Red 1		
8	Green 1	26 Green 1	8 Fixture 1 Green 1		
9	Blue 1	27 Blue 1	9 Fixture 1 Blue 1		
22	Red 6	40 Red 6	40 Fixture 1 Red 12		
23	Green 6	41 Green 6	41 Fixture 1 Green 12		
24	Blue 6	42 Blue 6	42 Fixture 1 Blue 12		

	46 Channel Mode					
ChromaBank IP 100 18 Channels / Fixture Fixture 1 of 2 Fixture 2 of 2		) 18 Channels / Fixture	ChromaBank IP 200/300 36 Channels / Fixture			
		Fixture 2 of 2	Chilomabank if 200/300 30 Chamles / Fixture			
1-9	as 9 Channel Mode	1-9 as 9 Channel Mode	1-9 as 9 Channel Mode			
10	36 x RGB Grand Master	10 36 x RGB Grand Master	10 36 x RGB Grand Master			
	OR Global Grand Master	OR Global Grand Master	OR Global Grand Master			
11	Red 1	29 Red 1	11 Fixture 1 Red 1			
12	Green 1	30 Green 1	12 Fixture 1 Green 1			
13	Blue 1	31 Blue 1	13 Fixture 1 Blue 1			
26	Red 6	44 Red 6	44 Fixture 1 Red 12			
27	Green 6	45 Green 6	45 Fixture 1 Green 12			
28	Blue 6	46 Blue 6	46 Fixture 1 Blue 12			



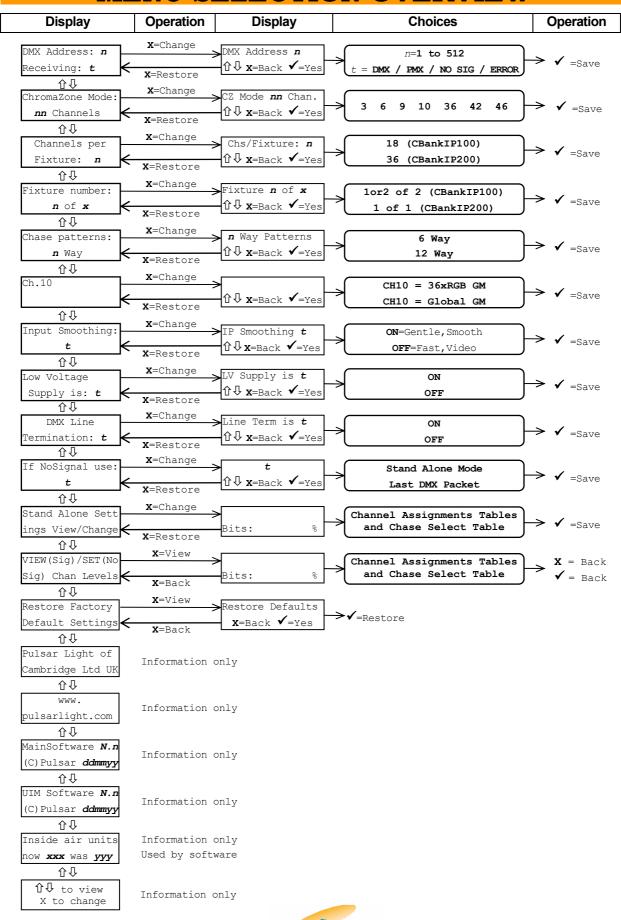
## ChromaZone<sup>™</sup> Software Version 4.0

Pulsar ChromaZone / ChromaZone RM / ChromaBank / ChromaBank IP / ChromaFlood / ChromaBatten Software Version No. 4.0 (MAIN micro 4.0 06-02-06 or later + UIM micro 1.0 07-03-05 or later) has many exciting features. Two built in Chases – allowing superimposition of effects and crossfading between chases. Chase 1 and 2 use the same table of 31 chases but there are differences to give you more choice - Chase 1 uses the ALL Red, Green and Blue Channels, 1, 2 & 3, to change the colour of some chases (see table) while Chase 2 stays white and uses them to give a background colour. The chases have a very wide range of speeds.

- 7 operating modes: 3, 6, 9, 10, 36, 42 and 46 Channel Modes.
- A Master Dimmer Channel (Ch.10) for the 36 individual RGB channels, which may become a Global Grand Master for the All R/G/B and Chases Levels too.
- Input Smoothing may be disabled for fast display of video graphics and video frame rate capability.
- Please see the *Channel Assignments Table* page for details of the Operating Modes and how to select them, Channel Listings, and further information.

Chase	%	Bit	Chase	Notes
No.	Input	No.	Description	
15	100	255	Auto Chase	
	95	244	Green Yellow Red Bar Graph Reverse	Use Channel1
	92	236	Green Yellow Red Bar Graph Forward	Use Channel1
14	89	228	Rainbow Strobe	
13	86	220	White / Any Colour Strobe	Channels 1, 2 & 3 set colour
	83	212	White / Any Colour Crossover	Channels 1, 2 & 3 set colour
12	80	204	Blue-Yellow Wave Reverse	
	77	196	Blue-Yellow Wave Forward	
	73	188	Green-Magenta Wave Reverse	
11	70	180	Green-Magenta Wave Forward	
	67	172	Red-Cyan / AnyCol/Op.Col Wave Forward	Channels 1, 2 & 3 set colour
10	64	164	Red-Cyan / AnyCol/Op.Col Wave Reverse	All 3 at 0% = Red-Cyan
9	61	156	Black-White/AnyColour Wave Forward	Channels 1, 2 & 3 set colour
	58	148	Black-White/AnyColour Wave Reverse	All 3 at 0% = White.
8	55	140	Random Cols. Chase1 Crossfade, Chase2 Snap	
	52	132	Rainbow 2 Crossfade Forward	Wider primary colours to
	48	124	Rainbow 2 Crossfade Reverse	compensate for extra diffusion
7	45	116	Rainbow Crossfade Forward	Equal width primary &
6	42	108	Rainbow Crossfade Reverse	secondary colours
	39	100	"Follow 3" 18 Contrasting Colours Reverse	
5	36	92	"Follow 3" 18 Contrasting Colours Forward	
	33	84	18 Crossfading Colours Reverse	
4	30	76	18 Crossfading Colours Forward	
	27	68	White/AnyColour/AutoColour Cascade Reverse	Channels 1, 2 & 3 set colour.
	23	60	White/AnyColour/AutoColour Cascade Forward	All 3 at 0% = White. All 3 at 100% = Auto Colour Change
3	20	52	6 Crossfading Pastel Colours	
	17	44	Colour Wipes	
2	14	36	6 Crossfading Colours	
1	11	28	6 Separate Colours	
	8	20	Red Green Blue Bar Graphs Reverse	Use Channels 1, 2 & 3
	5	12	Red Green Blue Bar Graphs Forward	Use Channels 1, 2 & 3
0	0	0	No Chase	

## CHROMABANK IP MENU SELECTION OVERVIEW



### **IMPORTANT SAFETY INSTRUCTIONS**

Read the Product Instruction Leaflet and this Safety Instructions Leaflet before attempting to install or operate this apparatus.

Keep this leaflet and the Product Instruction Leaflet for future reference.

Observe ALL warnings indicated by the symbol, both in the Product Instruction Leaflet and on the apparatus.

Follow ALL instructions given in the Product Instruction and this Safety Leaflet. Failure to do so may result in serious injury or death.

Protect the power cord from being walked on or pinched, particularly at plugs, auxiliary outputs, and the point where they exit from the apparatus.

Only use attachments/accessories specified by the manufacturer (Pulsar Light of Cambridge Ltd. UK).

Use only with the stand/bracket or other mounting arrangement specified in the Product Instruction Leaflet. In case of doubt, consult with the manufacturer (Pulsar Light of Cambridge Ltd. UK).

Unplug this apparatus before lightning storms or when unused for long periods.

Refer all servicing to suitably qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug 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.

DO NOT block any of the ventilation openings. Install the apparatus as specified in the Instruction Leaflet.

DO NOT defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is for YOUR safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete unit.

#### UNLESS THIS APPARATUS HAS AN IP RATING OF 65 OR GREATER

Clean only with a DRY cloth.

Protect the apparatus from dripping and splashing.

DO NOT place objects containing liquids on the apparatus.

DO NOT use this apparatus near water or in a condensing atmosphere.

#### Mains Supply Cable colours

Green/Yellow = \_ Earth / Ground
Brown = Live / Phase / Hot

Blue = Neutral / Grounded Conductor

