X21-25

Integrated Control Series

INSTALLATION GUIDE

Control Ready DALI / 0~10v Lamps

VABOSS

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1. Vaboss X2I-25 Lighting Control Series

Vaboss lighting controls are integrated stand-alone units that manage lighting in an individual luminaires space. Vaboss is the symbol or metaphor that best describes the way intelligent light control has evolved through rapid technological change into a highly functional, yet pragmatic single light control unit.

Ambient Control only - Single function light management that controls the level of artificial light to compliment day light levels

Ambient and Presence Control - That not only manages ambient light levels, but also turns the light on when someone arrives; or

Custom Group Control - Ambient and presence control, plus groups select lamps together so whole areas can be activated by any one of the group of lamps.

All of these control products can be installed in a wide range of lamps driven by an equally broad range of DALI, PWM and 0~10v drivers..

1.1. Standard features of X21- 25

- High performance PIR presence detection with configurable delay / validation
- Daylight harvesting trigger levels and light reduction ratio
- Wireless access to reconfiguration and reporting
- Manual dimming override control
- Independent Dwell time and Turnoff delay time.
- DALI , 0~10v and PWM control

1.1.1. X2I-25 Ambient Control Module

Ambient is single function; light harvesting the local light that occurs from time to time as a consequence of natural light coming through apertures: skylights, doors and windows together with light provided by the host lamp and any other uncontrolled lamp.

1.1.2. X2I-25 Ambient Presence Control Module

Ambient Presence is dual function; base light harvesting local light, together with detection of the presence of pedestrians and visible mobile machinery.

2. What is “Control Ready”

The Vaboss Installation Guide provides details and direction for the installation of a Vaboss X2I-25 lighting control in a “Control Ready” lamp.

The Vaboss Manufacturers Guide provides extensive information and direction on how to prepare a lamp to “Control Ready” status.

The Manufacturer's Guide is intended to guide the engineer, manufacturer or lamp importer through the “Control Readying” process for their unique range of high power lamps.

Lamps shipped “Control Ready” should be operational immediately they are unpacked. They will be driven by either a 0~10v or DALI driver; they will be wired to a 4 core cable through a 4 pole terminal block or a Vaboss Junction Control HUB (JCH) and they will provide a 4 core AWG 24 and USB female socket for attaching the control.

A Control Ready lamp doesn't need a control to run. These lamps can be installed as standard “uncontrolled” LED high bays straight out of the box. They are delivered with a dimming driver and “Control Ready” wiring/connections, just waiting to be converted into a controlled lamp by simply connecting a Vaboss control.

The control will typically be delivered in a housing with a 4 core 24 ~ 28 AWG cable and USB plug.
A mechanical connection is required to secure the housing and control to the lamp. There are many samples of manufacturers unique bracket systems. Each manufacturer is welcome to adopt or design and manufacture a strut or bracket for connecting the housing and control to the lamp.

The housing and USB cabling is usually distributed with the control, however it is available ex Shenzhen, for packing with the lamp.

2.1. Vaboss “Control Ready”

Vaboss lamp preparation for “Control Ready” is 4 core cable connected through either a terminal block or a Vaboss Junction Control HUB (JCH). Output is via a 4 core 24 ~28 AWG cable and USB female socket for attaching the control.

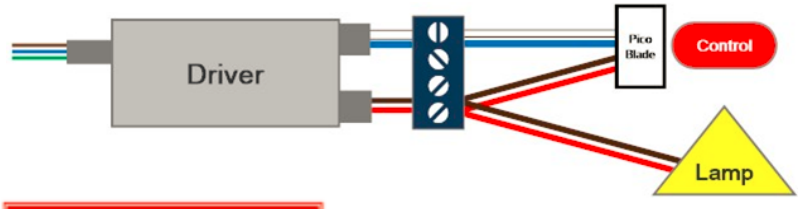
This wiring gateway performs two basis functions; managing 100% power off for 0~10v and DALI dimming drivers and providing a smooth wiring interface for LED lamps.

2.2.1. Basic / Simple Terminal Block Connections

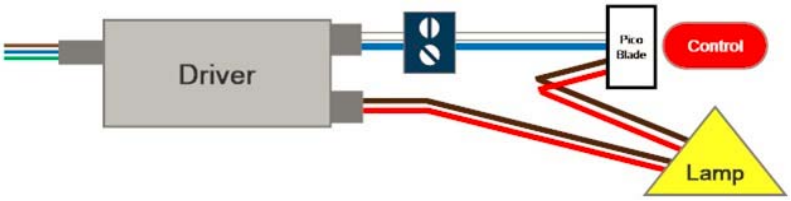
The most basic or minimalist wiring connections are made with a 4 pole terminal block. The terminal block can be terminated inside a driver housing or in a junction box. Exposed connector blocks should not be exposed to the atmosphere long term.

The Vaboss control takes a low power supply from the driver output, converting 20~80v or alternatively and auxiliary 15v supply. Driver DC output supply is available via the following 2 wiring options:

Option A.
Where DC driver output is not direct to the LED array.
*Suitable for DALI or 0~10v dimming drivers with **no Switch Off** feature.*



Option B.
Where DC driver output is direct to the LED array. Control picks up DC from the LED PCB solder points.
Suitable for DALI or 0~10v dimming drivers with ***no Switch Off*** *feature.*

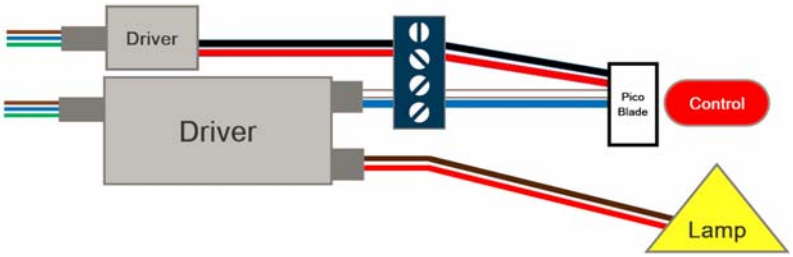


2.2.2. Auxiliary Power Supply Connection

There is a small number of driver designs that prevent a controller deriving its power from the DC output. In this case an auxiliary 2~3w 12+v driver is recommended for 0~10V.

The auxiliary wiring connections are made with a 4 pole terminal block. The terminal block can be terminated inside a driver housing or in a junction box. Exposed connector blocks should not be exposed to the atmosphere long term.

Auxiliary Option.
Where DC driver output is not stable or available for the control. *Suitable for DALI or 0~10v dimming drivers with Switch Off feature.*

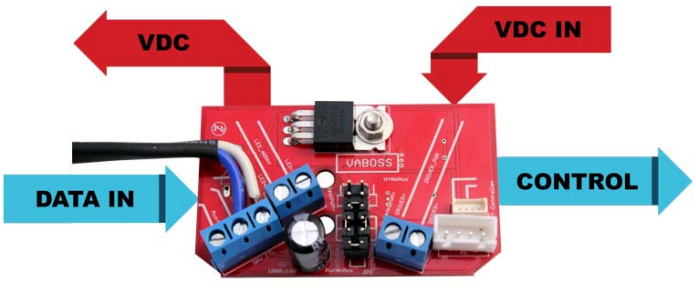


2.3.1. Vaboss Junction Control HUB - “Control Ready”

Vaboss lamp preparation for “Control Ready” recommends the inclusion of a Vaboss Junction Control HUB as standard wiring interface or gateway for Vaboss control. The JCB provide 100% power off and is suitable for DALI or 0~10v dimming drivers with or without Switch Off feature.

A simplified and product enhancing JCB is a wiring platform that exploits the full set of performance features of the Vaboss Control. It is supplied direct to lamp manufacturers so they can deliver “Control Ready” lamps for their customers, for on sale to their retail purchasers, where the decision to include control can now be made at the last minute/point of sale, because the lamp can be “Control Ready” when it leaves the factory.

If a DALI driver is connected via a JCB and is to be used without a controller, the JCB electronic switch needs to be bypassed using one of the “Switch Off Disabled” jumper settings in Control HUB Strapping Fields Set-up in Section 5.3

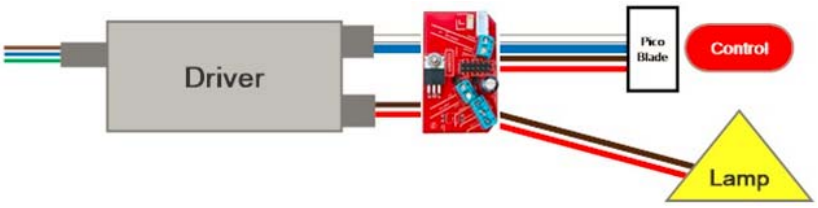


2.3.2. Control HUB extends features to include

- Connection terminations for all Dimmable driver and Controller connections.
- IP66 protection capability for the driver - Controller interface
- The ability to switch off LED current completely whilst retaining power to the Controller
- An increased range of LED voltage compatibility of the Controller from 60 volts to greater than 120 volts
- The appropriate wiring connection interface to Driver Auxiliary power supplies (if available), via a reconfigurable jumper strapping field

3.3.3. Vaboss Junction Control Hub (JCH) Wired

This wiring gateway performs two basis functions; managing 100% power off for 0~10v and DALI dimming drivers and providing a smooth wiring interface for LED lamps.



3. Housing Mount Bracket Options for Saucer and Cast Heat Sink Types Lamps

The Importers or manufacturers will have selected a control mounting bracket or spring steel strut that best provides support and attachment for the Vaboss supplied housing and brass cable gland.

4. Driver & Power Supply Compatibility

Lamp and driver manufacturers engage our engineer to test LEDs and drivers for Vaboss compatibility. Not all drivers are initially control friendly, however Vaboss programmers are almost always able to modify our software to achieve manageable control. Vaboss maintains a list of tested drivers with details of the parameter of control as follows;

0~10v Drivers are compatible provided:

- They have no auxiliary voltage and their LED output is < 80VDC
- That when a Vaboss JCH is used LED output can be up to < 170 VDC
- Output voltage will be >10%. With a Vaboss JCH output voltage can be zero
- An Auxiliary feature is >12v and > 40mA
- Compatibility

0~10v OFF is achievable with:

- The Vaboss JCH

DALI Drivers are compatible provided:

- An Auxiliary feature is >12v and > 40mA
- If not featuring Auxiliary Power, output voltage between 15~60VDC or with
- The Vaboss JCH

DALI OFF is achievable with:

- A separate 12v power supply or
- The Vaboss JCH

PWM is compatible with:

- 1~10 kHz and
- Voltage isolation via JCH
- The Vaboss JCH

5. Connection Testing

5.1. Pre Control Connection LED driver DALI Default Settings

Most constant current drivers are sized to match the partner LED array. Oversized DALI drivers should be tuned by the manufacturer prior to despatch, at wiring using the manufacturer tuning device.

CAUTION: LED arrays driven by up sized DALI drivers should not be operated without tuning to base maximum power settings. 200w LED should not be operated by 240w drivers without control.

5.2. Configuring LED driver Default Settings - 0~10v

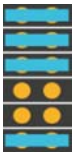
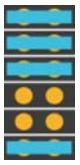
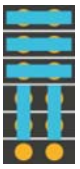
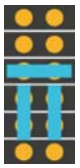
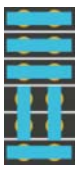
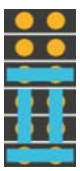
Steps:

1. Establish max driver output
2. Establish maximum LED capacity
3. Establish maximum output percentage. e.g. If the driver outputs is 200W, but the LED array maximum capacity is 150W, the maximum power output should be 75%

5.3. Control HUB Strapping Fields Set-up

Pin selection for the Strapping fields on the Vaboss Control HUB, will have been finalized and straps placed at the point of manufacture / lamp assembly. Check random lamps for the correct setup from the following options.

The unit features a 12 pin strapping field. It is essential that these pins are correctly selected and strapped by the manufacturer of your lamps or by a qualified technician post manufacturer. Selection will determined by the driver and the customer's intended use. The installer should ask the supplier to check the settings on random lamp samples.

Factory Production Test - No Distribution. • This setting bypasses the JCH electronic switch and isolates the driver control lines so that the lamp can be run and adjusted under full power	
Production Output - Customer Supply • Lamps with default “No Control” lamps. Same as a Factory Production Test	
• Lamps with 0~10v or DALI drivers with 15v + Auxiliary Power but with no JCH “off” control • Switch Off Disabled	
• Lamps with 0~10v or DALI drivers with 15v + Auxiliary Power but with JCH “off” control • Switch Off Enabled	
• Lamps with 0~10v or DALI drivers without auxiliary Power but with no JCH “off” control • Switch Off Disabled	
• Lamps with 0~10v or DALI drivers without auxiliary Power but with JCH “off” control • Switch Off Enabled	

5.3. Vaboss Control Strapping Fields Set-up

The X2I-25 Series control unit can be interfaced with either 0~10v drivers or DALI drivers. This is achieved by pin arrangement. Pin arrangement options provide for:

- DALI
- 0~10v
- Demonstration mode on either DALI or 0~10v

0~10v

DALI JCH Switch Off

0~10v JCH Switch Off

No JCH Switch Off

6. Configuration and Settings

Both Presence Ambient and Ambient Only controls come to you pre-loaded with Multiple Configurations.

Presence Ambient offers a choice of more than 60 popular setting configurations.
Ambient is pre-loaded with more than 20 choices.

When connected to a Bluetooth dongle empowered laptop or tablet and loaded with the Texas Instruments BTool Application, the operator is able to select from the broad range of configurations, that have proved to be the most commonly selected by lighting engineers and corporate customers. They are unique to Vaboss, cover all known location and building types and provide occupancy sensed and light managed for optimum energy saving and occupant comfort.

6.1. Basic Control Default Settings - Presence Ambient

Dual function controls will only turn a lamp or device on if it detects the presence of a heat omitting machine e.g. folklift or a pedestrian. When presence is no longer detected, the Vaboss control will direct the lamp to dim down and switch off. On / Off functions are rarely rapid and are usually configured to be undetectable by people within lamp range.

When the control has detected presence and turns on, the Ambient function, will manage the amount of energy directed to maintain the predetermined LUX level.

6.2. Most Popular Control Default Settings - Presence Ambient

The 15 most frequently selected Presence Ambient configurations are:

Configuration Code	Selection Code	Description	Sensor Function	LUX	Dwell Period (Minute)	Dim Period (Minute)	Min Dimm %
DemoFast_AI_400_20Sec	62	Fast Demonstration 2 Funct'n 400 LUX -Switch off 20 Sec cycle	Dual	620	252	252	Off
OpenWareH_AI_240_5>5V	1	Open Storage WareH. 2 Funct'n 240 LUX	Dual	240	5	5	6%
OpenWareH_AI_240_5>5Vz	2	Open Storage WareH. 2 Funct'n 240 LUX -Switch off	Dual	240	5	5	Off
OpenWareH_AI_80_5>5Vz	64	Open Storage WareH. 2 Funct'n 80 LUX -Switch off	Dual	80	5	5	Off
PalletRack_AI_200_2>2Vz	6	Pallet Racking WareH. 2 Funct'n 200 LUX -Switch off	Dual	200	2	2	0%
Pick&Pack_AI_300_5>5Vz	10	Pick&Pack WareH Dual Funct'n 300 LUX -Switch off	Dual	300	5	5	Off
FactAssem_AI_350_5>5V	13	Factory Assembly Dual Funct'n 350 LUX	Dual	350	5	5	6%
MachShop_AI_300_AI5>5V	17	Machinery Workshop Dual Funct'n 300 LUX	Dual	400	5	5	6%
MachShop_AI_300_5>5Vz	18	Machinery Workshop Dual Funct'n 300 LUX -Switch off	Dual	400	5	5	Off
PrecsnMach_AI_300_5>5V	21	Precision Machine Shop 2 Funct'n 300 LUX	Dual	600	10	10	6%
PrecsnMach_AI_300_5>5Vz	22	Precision Machine Shop 2 Funct'n 300 LUX -Switch off	Dual	600	10	10	Off
RetDisp_AI_400_7>8V	25	Retail Display 2 Funct'n 400 LUX	Dual	400	7	255	6%
TechProOff_AI_500_10>10V	29	Technical Processing/Office 2 Funct'n 500 LUX	Dual	500	5	5	6%
DetailMech_AI_600_5>5V	33	Detailed Mechanical 2 Funct'n 600 LUX	Dual	600	5	5	6%

6.3. Basic Control Default Settings - Presence & Ambient. Full List

Configuration Code	Selection Code	Description	Sensor Function	LUX	Dwell Period (Minute)	Dim Period (Minute)	Min Dimm %
DemoFast_AI_400_20Sec	62	Fast Demonstration 2 Funct'n 400 LUX —Switch off 20 Sec cycle	Dual	620	252	252	Off
OpenWareH_AI_240_5>5V	1	Open Storage WareH. 2 Funct'n 240 LUX	Dual	240	5	5	6%
OpenWareH_AI_240_5>5Vz	2	Open Storage WareH. 2 Funct'n 240 LUX -Switch off	Dual	240	5	5	Off
OpenWareH_AI_240_5>5a	3	Open Storage WareH. 2 Funct'n 250 LUX -Variant A	Dual	240	5	5	6%
OpenWareH_AI_240_5>5b	4	Open Storage WareH. 2 Funct'n 250 LUX -Variant B	Dual	240	2	2	10%
OpenWareH_AI_80_5>5V	63	Open Storage WareH. 2 Funct'n 80 LUX	Dual	80	5	5	6%
OpenWareH_AI_80_5>5Vz	64	Open Storage WareH. 2 Funct'n 80 LUX -Switch off	Dual	80	5	5	Off
OpenWareH_AI_160_5>5V	65	Open Storage WareH. 2 Funct'n 160 LUX	Dual	160	5	5	6%
OpenWareH_AI_160_5>5Vz	66	Open Storage WareH. 2 Funct'n 160 LUX -Switch off	Dual	160	5	5	Off
PalletRack_AI_200_2>2V	5	Pallet Racking WareH. 2 Funct'n 200 LUX	Dual	200	2	2	6%
PalletRack_AI_200_2>2Vz	6	Pallet Racking WareH. 2 Funct'n 200 LUX -Switch off	Dual	200	2	2	0%
PalletRack_AI_200_2>2a	7	Pallet Racking WareH. 2 Funct'n 200 LUX -Variant A	Dual	200	5	5	6%
PalletRack_AI_200_2>2b	8	Pallet Racking WareH. 2 Funct'n 200 LUX -Variant B	Dual	200	5	5	10%
Pick&Pack_AI_300_5>5V	9	Pick&Pack WareH. 2 Funct'n 300 LUX	Dual	300	5	5	6%
Pick&Pack_AI_300_5>5Vz	10	Pick&Pack WareH Dual Funct'n 300 LUX -Switch off	Dual	300	5	5	Off
Pick&Pack_AI_300_5>5a	11	Pick&Pack WareH Dual Funct'n 300 LUX Light -Variant A	Dual	300	5	255	6%
Pick&Pack_AI_300_5>5b	12	Pick&Pack WareH Dual Funct'n 300 LUX Light -Variant B	Dual	300	5	5	10%
FactAssem_AI_350_5>5V	13	Factory Assembly Dual Funct'n 350 LUX	Dual	350	5	5	6%
FactAssem_AI_300_5>8V	14	Factory Assembly Dual Funct'n 350 LUX -Switch off	Dual	350	5	255	Off
FactAssem_AI_300_5>5V	15	Factory Assembly Dual Funct'n 350 LUX -Variant A	Dual	400	5	5	6%
FactAssem_AI_300_5>5a	16	Factory Assembly Dual Funct'n 350 LUX -Variant B	Dual	400	5	5	10%
MachShop_AI_300_AI5>5V	17	Machinery Workshop Dual Funct'n 300 LUX	Dual	400	5	5	6%
MachShop_AI_300_5>5Vz	18	Machinery Workshop Dual Funct'n 300 LUX -Switch off	Dual	400	5	5	Off
MachShop_AI_300_5>5a	19	Machinery Workshop Dual Funct'n 350 LUX -Variant A	Dual	400	5	5	6%

MachShop_AI_300_5>5b	20	Machinery Workshop Dual Funct'n 350 LUX -Variant B	Dual	400	5	5	10%
PrecsnMach_AI_300_5>5V	21	Precision Machine Shop 2 Funct'n 300 LUX	Dual	600	10	10	6%
PrecsnMach_AI_300_5>5Vz	22	Precision Machine Shop 2 Funct'n 300 LUX -Switch off	Dual	600	10	10	Off
PrecsnMach_AI_300_5>5a	23	Precision Machine Shop 2 Funct'n 300 LUX -Variant A	Dual	600	10	10	6%
PreciseMach_AI_300_5>5b	24	Precision Machine Shop 2 Funct'n 300 LUX -Variant B	Dual	600	10	10	10%
RetDisp_AI_400_7>8V	25	Retail Display 2 Funct'n 400 LUX	Dual	400	7	255	6%
RetDisp_AI_400_7>15V	26	Retail Display 2 Funct'n 400 LUX -Switch off	Dual	400	7	15	Off
RetDisp_AI_400_7>7Vz	27	Retail Display 2 Funct'n 400 LUX -Variant A	Dual	400	7	15	6%
RetDisp_AI_400_7>7V	28	Retail Display 2 Funct'n 400 LUX -Variant B	Dual	400	7	15	10%
TechProOff_AI_500_10>10V	29	Technical Processing/Office 2 Funct'n 500 LUX	Dual	500	5	5	6%
TechProOff_AI_500_10>10V	30	Technical Processing/Office 2 Funct'n 500 LUX -Switch off	Dual	500	5	5	Off
TechProOff_AI_500_10>10V	31	Technical Processing/Office 2 Funct'n 500 LUX -Variant B	Dual	500	5	5	6%
TechProOff_AI_500_10>10V	32	Technical Processing/Office 2 Funct'n 500 LUX -Variant A	Dual	500	5	5	10%
DetailMech_AI_600_5>5V	33	Detailed Mechanical 2 Funct'n 600 LUX	Dual	600	5	5	6%
DetailMech_AI_600_5>5Vz	34	Detailed Mechanical 2 Funct'n 600 LUX -Switch off	Dual	600	5	5	Off
DetailMech_AI_600_5>5a	35	Detailed Mechanical 2 Funct'n 600 LUX -Variant B	Dual	600	5	5	6%
SportCentre_AI_400_10>10V	37	SportsCentre 2 Funct'n 400 LUX	Dual	400	5	5	6%
SportCentre_AI_600_10>10V	38	SportsCentre 2 Funct'n 600 LUX	Dual	600	5	5	6%
SportCentre_AI_800_10>10V	39	SportsCentre 2 Funct'n 800 LUX	Dual	800	5	5	6%
CommunCent_AI_200_10>15V	40	CommunityCentre 2 Funct'n 200 LUX	Dual	200	10	15	6%
CommunCent_AI_300_10>15V	41	CommunityCentre 2 Funct'n 300 LUX	Dual	300	10	15	6%
PassageCore_AI_150_5>3V	42	Passage Internal 2 Funct'n 150 LUX	Dual	150	5	3	6%
PassageCore_AI_250_5>3V	43	Passage Internal 2 Funct'n 250 LUX	Dual	250	5	3	6%
OpenOffCore_AI_300_10>10V	44	OpenOffice Internal 2 Funct'n 300 LUX	Dual	300	10	10	6%
OpenOffWin_AI_400_5>10Vz	45	OpenOffice Internal 2 Funct'n 400 LUX -Switch off	Dual	400	5	10	Off
ActOffWin_AI_400_5>10Vz	46	Active office Internal 2 Funct'n 400 LUX -Switch off	Dual	400	5	10	Off
ActOffCore_AI_300_10>10	47	Active office Internal 2 Funct'n 300 LUX	Dual	300	10	10	6%
PassOffWin_AI_400_10>10Vz	48	PassiveOffice Window 2 Funct'n 400 LUX -Switch off	Dual	400	10	10	Off
PassOffCore_AI_300_15>15V	49	PassiveOffice Internal 2 Funct'n 300 LUX	Dual	300	10	10	6%
ConferRmWin_AI_350Vz	50	Passive office Internal 2 Funct'n 350 LUX -Switch off	Dual	350	10	10	Off
ConferRmCore_AI_250V	51	Passive office Internal 2 Funct'n 250 LUX	Dual	250	10	10	6%
ClassRmWin_AI_300_15>5Vz	52	ClassRoom Window 2 Funct'n 300 LUX -Switch off	Dual	300	10	10	Off
ClassRmCore_AI_400_15>15V	54	ClassRoom Internal 2 Funct'n 400 LUX	Dual	400	5	5	6%
LibraryWinAI_500_10>10Vz	55	Library Window 2 Funct'n 500 LUX -Switch off	Dual	300	5	5	Off
LibraryCoreAI_400_10>10Vz	56	Library Internal 2 Funct'n 400 LUX -Switch off	Dual	300	5	5	Off
FoyerWin_AI_400_10>10V	57	Foyer Window 2 Funct'n 300 LUX	Dual	400	5	255	6%
FoyerCore_AI_300_10>5V	58	Foyer Internal 2 Funct'n 400 LUX	Dual	300	5	255	6%
CommAreaWin_AI_300_8>8V	59	CommonArea Window 2 Funct'n 300 LUX	Dual	300	5	255	6%
CommAreaCore_AI_250_8>8V	60	CommonArea Internal 2 Funct'n 250 LUX	Dual	250	5	5	6%
ProfRooms_AI_600_15>10V	61	ProfessConsultingRooms 2 Funct'n 600 LUX	Dual	600	5	5	6%
GenWorkArea_AI_250_5>30z	67	General Work-delayed off z	Dual	250	5	30	2%
Test-Zero	68	Test-Zero	Dual	620	252	252	2%
Reserve 2	69	Reserve 2	Dual	1000	5	5	2%
100Percent	70	100PercentPermanent	Dual	2500	255	255	2%

6.4. Most Popular Control Default Settings - Ambient

The 5 most frequently selected Ambient configurations are:

Configuration Code	Selection Code	Description	Sensor Function	LUX	Reflective Sensitivity	Min Ambient Level
OpenSpace_A_200Med	2	OpenStorageWareH. 1 Funct'n 200 LUX Med sense	Single	200	7	10
OpenSpace_A_80MedZ	17	OpenStorageWareH. 1 Funct'n 80 LUX Med sense	Single	80	7	0
PrecisionMfct_A_600Med	11	PrecisionManufact 1 Funct'n 600 LUX Med Sense	Single	600	7	10
Retail/Display_A_400Med	5	RetailDisplay 1 Funct'n 400 LUX Med Sense	Single	400	7	10
MachineShop_A_320Med	8	MachineryWorkshop 1 Funct'n 320 LUX Med Sense	Single	320	7	10

6.5. Basic Control Default Settings - Ambient

This control is designed for lamps that are circuit switched daily or for specification occupation. Lamps on these circuits are expected to operate continually while switched on. They are not triggered by presence detection.

Regular building and location features that impact on Ambient settings are:

- Placement and age of skylights. (It is recommend that skylights be restored to their original condition or replaced.)
- Reflective quality of floor and fixtures. Dark reflective surfaces will encourage the control to increase light and conversely highly reflective surfaces will suggest higher ambient light and cause the control to dim down. Adjust “Light Harvest Baseline LUX” accordingly
- Baseline LUX to meet customer specification and industry standards

Configuration Code	Selection Code	Description	Sensor Function	LUX	Reflective Sensitivity	Min Ambient Level
OpenSpace_A_160HiZ	21	OpenStorageWareH. 1 Funct'n 160 LUX High sense	Single	160	10	0
OpenSpace_A_160LoZ	19	OpenStorageWareH. 1 Funct'n 160 LUX Low sense	Single	160	4	0
OpenSpace_A_160MedZ	20	OpenStorageWareH. 1 Funct'n 160 LUX Med sense	Single	160	7	0
OpenSpace_A_200Hi	3	OpenStorageWareH. 1 Funct'n 200 LUX High sense	Single	200	10	10
OpenSpace_A_200Lo	1	OpenStorageWareH. 1 Funct'n 200 LUX Low sense	Single	200	4	10
OpenSpace_A_200Med	2	OpenStorageWareH. 1 Funct'n 200 LUX Med sense	Single	200	7	10
OpenSpace_A_80HiZ	18	OpenStorageWareH. 1 Funct'n 80 LUX High sense	Single	80	10	0
OpenSpace_A_80LoZ	16	OpenStorageWareH. 1 Funct'n 80 LUX Low sense	Single	80	4	0
OpenSpace_A_80MedZ	17	OpenStorageWareH. 1 Funct'n 80 LUX Med sense	Single	80	7	0
PrecisionMfct_A_600Hi	12	PrecisionManufact 1 Funct'n 600 LUX High Sense	Single	600	10	10
PrecisionMfct_A_600Lo	10	PrecisionManufact 1 Funct'n 600 LUX Low Sense	Single	600	4	10
PrecisionMfct_A_600Med	11	PrecisionManufact 1 Funct'n 600 LUX Med Sense	Single	600	7	10
ProfRmsCore_A_800Hi	15	ProfessConsultRooms 1 Funct'n 800 LUX High Sense	Single	800	10	10
ProfRmsCore_A_800Lo	13	ProfessConsultRooms A 1 Funct'n 800 LUX Low Sense	Single	800	4	10
ProfRmsCore_A_800Med	14	ProfessConsultRooms 1 Funct'n 800 LUX Med Sense	Single	800	7	10
Retail/Display_A_400Hi	6	RetailDisplay 1 Funct'n 400 LUX High Sense	Single	400	10	10
Retail/Display_A_400Lo	4	RetailDisplay 1 Funct'n 400 LUX low Sense	Single	400	4	10
Retail/Display_A_400Med	5	RetailDisplay 1 Funct'n 400 LUX Med Sense	Single	400	7	10
MachineShop_A_320Hi	9	MachineryWorkshop 1 Funct'n 320 LUX High Sense	Single	320	10	10
MachineShop_A_320Lo	7	MachineryWorkshop 1 Funct'n 320 LUX Low Sense	Single	320	4	10
MachineShop_A_320Med	8	MachineryWorkshop 1 Funct'n 320 LUX Med Sense	Single	320	7	10

7. Installation Steps

Connect the housing bracket or strut to the lamp according to manufacturer's instructions
Plug in the control housing USB cable.

Check that the Lamp is Control Ready. Installers can purchase a test device from Vaboss. When plugged into the socket in the housing it will:

1. Dim the lamp appreciably to establish that control is ok (0~10v)
2. Green light on means power wiring is ok

Select or check the Pin Straps on the Control. They must be set according to the table in 5.3

7.1. Configuration - Basic Control Default Settings

The basic control factory setting will be marked on the box. Refer the pages 8 ~ 11 for details. If you wish to change a configuration you will use the Texas Instruments BTool Application loaded on a laptop or tablet with a Vaboss Bluetooth Dongle. If you are a first time Installer, you refer to The Vaboss Configuration Guide.

Follow the Guide through the end Section " Multi Config Rapid Selection"