# VISION GROUP

## **SMART VISION**

User Manual Sep 2023

## **Smart Vision Introduction**

The SmartVision is a BLE-enabled device that has built-in sensors to record cooler telemetry data, monitor door actions, Magnetometer, and take cooler images.



insta GNG

SMSB

The installation position of Smart Vision and Magnet are depended on the cooler model.

The next section will explain the installation position.

#### NOTE: DO NOT WAKE UP THE DEVICE BEFORE THE DEVICE INSTALL IN THE COOLER.

#### **Important Conditions for Installation:**

- Smart Vision must always be installed in the Cooler cabinet (Preferable place is on Slide #4). Edge of the door, opposite the hinge.
- Make sure the magnet should install opposite the door hinge and towards the Door sensor installed inside the cabinet.
- Clear the cooler surface using a tissue if dust or water particles are available.
- For Installation, peel the cover from the 3M adhesive tape and place the Smart Vision on the cooler Door. Allow
  it to stay for 30 seconds without any disturbances.
- If there are any changes to be made in the installation position there is only a 30-second window to move it, after 30 seconds the Device will stick permanently.



The Smart Vision device is installed at the center of the cooler door using 3M double side tape shown below image.









## Ensure that the device is installed the same as shown in the below image (Barcode should be facing toward the magnet).



#### See below the image installation positions for Camera 1 & Camera 2.



The installation position is the upper side of the installed Smart Vision



Camera 2 The installation position is the lower side of the installed Smart Vision

## Wake Up Process

After Installing the Smart Vision Device follow the below points for the further process.

- It is important to keep the magnet near the Wake-up Sensor in the gap within 1 cm between the Device and the magnet for a minimum of 20 seconds Continuous as shown in the image.
- This will ensure that the Wake-up Sensor is triggered properly, and the Device will be able to wake up. Failure to do so may result in the device setup not working correctly.
- After waking up, the device will start advertising for 15 minutes.
- During this advertisement period, the installer must complete the magnet installation on the cooler wall, and the association process with the phone application within the 15-minute time limit.
- This process needs to be completed to ensure that the device is properly configured.
- Once the installation and association process is complete, the device will be ready for use.



insta GNG



## **Magnet Installation**

The magnet installation position might depend on the cooler model.

#### **Important Conditions for Installation:**

- The magnet is always installed opposite to the SmartVision (Magnet should be installed on the Cooler wall and towards the Device Door sensors.
- The magnet must be placed on the wall of the cooler such that when the door is closed, the magnet lies <10 cm from the Smart Vision door sensor position.</p>
- Wipe the moisture from the installation spot using dry tissue.
- Peel the cover from the 3mm tape and paste the magnet in the required position.
- If there are any changes to be made in the position of the magnet there is only a 30-second window to move it, after 30 seconds the magnet will stick permanently.



If the user has a circular magnet, install it like a square one, as shown below. The magnet must be placed exactly in front of the smart vision on the inside edge of the cooler.







#### A Magnet can be installed in the below showing range area for the Door Sensor.







## How to calibrate Magnet & Device for Door Close?

Once the Smart Vision device and magnet are installed properly. Need to Calibrate the device for Door closing. After Successfully calibrate Gyro, wait for 30 Sec as the calibration process is ongoing.

Check the Door status in an advertisement – It should show as Door Close.

11:09 💼 🛇 🛇		🗙 🛛 🗟	all 55% 🗖
Smart Cooler	Installation		÷
SBC-PV1011029	52647	48:E6:95	1B:AE:38
Status			
Firmware			6.01
STM Firmware	4		6.01
Standby			
Take Picture			
Current Time	10/04/2023 1 10/04/202	11:07:34 AI 3 11:08:16	AM C
Current Event Index			28492
Last Read Event Inde	x		24147
Advertisement Freque	ency (Milliseco	onds)	800
Heartbeat Interval (In	Minutes)		5
Global Tx Power			4
Advertisement Freque Power Saving(Millise	ency conds)		5000
Global Tx Power Power Saving			0
≣	*	[	

11:09 🖪 🖨 🛇 🔸	🔌 오 🗟 all 55% 💩	
Smart Cooler In	Power Mode	
SBC-PV101102952	Device Data 🕨	
Status	Management 🕨	
Firmware	Take Picture	
STM Firmware	Download image	
Standby	Delete Image	
Take Picture	Read Image By Sequence	
Current Time	Image Calibration	
Current Event Index	STM DFU	
Last Read Event Index	24147	
Advertisement Frequency (Milliseconds) 800		
Heartbeat Interval (In Minutes) 5		
Global Tx Power 4		
Advertisement Frequency 5000 Power Saving(Milliseconds)		
Global Tx Power Power Saving	0	
≡		

12:38 🖪 🖨 😵 🔸	💐 오 🖘 all 96% 🗅
Smart Cooler Insta	Management
SBC-PV10110295264	Reset Camera Settings
Status	Restart Device
Firmware	Reset device
STM Firmware	Put device in DFU
Standby	Calibrate Gyro
Take Picture	•
Current Time 10/04	4/2023 12:35:20 PM at /04/2023 12:36:02 PM
Current Event Index 28510	
Last Read Event Index 24147	
Advertisement Frequency (Milliseconds) 800	
Heartbeat Interval (In Minutes) 5	
Global Tx Power 4	
Advertisement Frequency Power Saving(Milliseconds)	5000
Global Tx Power Power Saving	0

insta GNG



## **Application Installation**

Search the VISION IOT SmartCooler application in the Google Play store and Install it.

5:32 PM   1	5.6KB/s	R O	alil 🚧 📚 🔳	92%
← sm	nart coo	ler installation	Q	Ŷ
<b>\</b> •	Smart VISION 4.7 *	Cooler Installation IOT		
Ads · Rela	ted to	your search		
2023 Clear	her		2023	
Avast Cleanu Phone Cleanu 4.4 ★	p - er	Phone Cleaner: Virus Cleaner 4.2 ★	Antivirus & Virus Cleaner Lock 4.5 <b>*</b>	Aic Cle
You migh	nt also l	ike		$\rightarrow$
6		•	•	
Microsoft Authenticator 4.7 ★	r	Microsoft Launcher 4.6★	Microsoft To Do: I & Tasks 4.6 ★	ists Ad Sci 4.6
Connected Coolers Service VISION IOT • Tools 10 MB I 500+			~	
	CPU - Cooler Tips, Clean Lite Tools Studio • Tools • Antivirus 4.4 * 14 MB 🖬 1Cr+			
	CPU - 0 Lite Too 4.4 * 1	Cooler Tips, Clean Is Studio • Tools • Antivi 14 MB	rus	~



insta GNG

## **Smart Vision Association**

The Vision IOT Installation application is compatible only with Smartphones having Android v7.0 and above.





#### 1. Open VISION IOT SmartCooler application.

insta GNG

2. Log in using the credentials provided by your administrator – after successful login, the user will be redirected to the Outlet list view screen.

**Note:** Please ensure Bluetooth on the device is ON. The application will communicate with the device using Bluetooth.



## Device Sensor (Door, Light, Motion, Temperature)

After connection, go to the hamburger menu > Tap on "Device data"> then Tap "Read current data".

Users can see real-time sensor data, Door status, current temperature, and current light condition with current date and time.

11:09 🏛 🛇 🛇		🔺 오 🗟	all 55% 🛱
Smart v5.5	Cooler Installati	on	:
SBC-PV101	102952647	48:E6:95	1B:AE:38
Status			
Firmware			6.01
STM Firmware	e	<b>A</b>	6.01
Standby			
Take Picture			
Current Time	10/04/20: 10/04/2	23 11:07:34 Al 2023 11:08:16	AM C
Current Event	Index		28492
Last Read Eve	ent Index		24147
Advertisemen	t Frequency (Millis	econds)	800
Heartbeat Inte	erval (In Minutes)		5
Global Tx Pow	ver		4
Advertisemen Power Saving	t Frequency (Milliseconds)		5000
Global Tx Pow Power Saving	ver		0
≣	*		

11:09 🖪 會 🛇 🔸	🗮 🕈 🗟 all 55% 🗖	
Smart Cooler In	Power Mode 🛛 🕨	
SBC-PV101102952	Device Data 🔹 🕨	
Status	Management 🕨	
Firmware	Take Picture	
STM Firmware	Download image	
Standby	Delete Image	
Take Picture	Read Image By Sequence	
Current Time	Image Calibration	
Current Event Index	STM DFU	
Last Read Event Index 24147		
Advertisement Frequenc	y (Milliseconds) 800	
Heartbeat Interval (In Mi	nutes) 5	
Global Tx Power 4		
Advertisement Frequency 5000 Power Saving(Milliseconds)		
Global Tx Power 0 Power Saving		

11:09 🖪 🏛 😵 🔹	🔌 오 🗟 al 55% 🖬	
Smart Cooler Insta	Device Data	
SBC-PV10110295264	Read current data	
Status	Read Unread Events	
Firmware	Read all data	
STM Firmware	Get oldest n events	
Standby	Erase all event data	
Take Picture	View last image	
Current Time 10/04/2023 11:07:34 AM at 10/04/2023 11:08:16 AM		
Current Event Index 28492		
Last Read Event Index 24147		
Advertisement Frequency (Milliseconds) 800		
Heartbeat Interval (In Minutes) 5		
Global Tx Power 4		
Global Tx Power	4	
Global Tx Power Advertisement Frequency Power Saving(Milliseconds)	4 5000	
Global Tx Power Advertisement Frequency Power Saving(Milliseconds) Global Tx Power Power Saving	4 5000 0	

insta GNG



### **Verify Smart Vision Door Sensor**



- 1. After the Association Process of the Smart Vision and magnet, the door open and close must be validated to make sure that the magnet is placed properly. Follow the steps mentioned below to verify.
- 2. Tap on the Configuration Tab and scan for any devices in proximity.
- 3. The application lists all the SmartVision available in the proximity.
- 4. Check the Door flag for the device matching our Smart Vision serial number,

Door Status: Close, If the Door is Closed. Door Status: Open, If the Door is Open.

16:03 🖪 🛇		* ♥ 🕏	ul 100% 🗅
<b>Smar</b> v5.4.4	t Cooler Installation		:
Server : Vision Io	t	Username	: Akash_Tech
	Current Filter: 20770	43	8
SBC-PV10' Serial Number: Device Type: MAC: Updated: RSSI: Battery Level: RSSI Range: Eddystone NameSpace: 63 Instance: 100 IBeacon Major: 80 Mir TX -59 Dis UUID: 48f8c9 Cooler Id: Asset	1102077043 2077043 PencilSmartVision 48:E6:95:0E:51:E4 2023-07-31 16:03:48 -58.0db / -59.0db 100 85% NEAR 1.01 6f6b65634063656575 0008016897 tance: NEAR 1.14 ef-aef9-482d-987f-375 ±1_14909—Asset_1_14909	52f1c51da	Door : Close Health Pic
6			Ð

## Verify Smart Vision Image on Door Open / Close

16:03 🖻 🛇			<b>XI 0</b> 🗟	"ıl 100% <b>≜</b>
<b>Smar</b> v5.4.4	t Cooler Inst	allatio	n	:
Server : Vision Io	t		Usernam	e : Akash_Tech
	Current Filte	er: 2077	043	8
SBC-PV101102077043         Door: Close           Serial Number:         2077043         Door: Close           Device Type:         PencilSmartVision         Health           Updated:         2023-07-31 16:03:48         Health           Updated:         2023-07-31 16:03:48         Pic           Battery Level:         IIII 85%         RSSI Range:         NEAR 1.01           Eddystone         NameSpace:         636fbb5634063656575         Instance ::           NameSpace:         030008016897         Upaceae				
Major: 80 Min TX -59 Dis UUID: 48f8c9i Cooler Id : Asset	oor: 16897 tance: NEAR 1. ef-aef9-482d _1_14909—Asse	14 -987f-3 et_1_149(	752f1c51da 39	n
	F			
Ē	[			Ð

- 1. After the physical installing of the Smart Vision and magnet, the door open and close must be validated to make sure that the magnet is placed properly.
- 2. Take picture in the device using Door open/close event, once image data are available in the device then "Pic image" flag showing in the advertisement as below image.

- If only showing "Pic" flag in the advertainment that means no image data are available in the device.

16:05 🖪 🛇		💐 오 🗟 all 100% 🖿
<b>Smar</b> v5.4.4	t Cooler Installation	
Server : Vision Io	t	Username : Akash_Tech
	Current Filter: 20770	43 😣
SBC-PV10 Serial Number: Device Type: MAC: Updated: RSSI: Battery Level: RSSI Range: IBeacon Major: 80 Min TX -59 Dis	1102077043 2077043 PencilSmartVision 48:E6:95:0E:51:E4 2023-07-31 16:05:04 -61.0db / -56.0db 	Door : Open Health Pic Image
Cooler Id : Asse	ef-aef9-482d-987f-375 t_1_14909Asset_1_14909	52f1c51da1
Ē		¢

## Verify SmartVision Image by Take Picture App Command

Tap on the hamburger menu > Tap on "Take Picture". The device will disconnect after successful image capture. Connect the device and check the Image File table as shown below snaps for the latest image.

11:09 🛍 🛇 🛇 🛛 🛛 🔧 🛇	ി 🗟 📶 55% 🖻
Smart Cooler Installation	:
SBC-PV101102952647 48:E6:	95 <mark>:1B:AE:38</mark>
Status	
Firmware	6.01
STM Firmware	6.01
Standby	
Take Picture	
Current Time 10/04/2023 11:07:34 10/04/2023 11:08	AM at 316 AM
Current Event Index	28492
Last Read Event Index	24147
Advertisement Frequency (Milliseconds)	800
Heartbeat Interval (In Minutes)	5
Global Tx Power	4
Advertisement Frequency Power Saving(Milliseconds)	5000
Global Tx Power Power Saving	0
∷ 🔊	

11:09 🖪 會 🛇 🔹	🗮 오 🖘 al 55% 🖻	
Smart Cooler In	Power Mode 🔹 🕨	
SBC-PV101102952	Device Data ►	
Status	Management >	
Firmware	Take Picture	
STM Firmware	Download image	
Standby	Delete Image	
Take Picture	Read Image By Sequence	
Current Time 1	Image Calibration	
Current Event Index	STM DFU	
Last Read Event Index 24147		
Advertisement Frequenc	y (Milliseconds) 800	
Heartbeat Interval (In Minutes) 5		
Global Tx Power		
Advertisement Frequency 5000 Power Saving(Milliseconds) 5000		
Global Tx Power 0		
≣		

11:2	28 🖪 🏦 😵 🛛	•		* \$	) @il 64%i	2	
<b>`</b>	Smart C	ooler In	stallat	ion		:	
Doo	or Close Ang	le2(Rang	e: 20-9	0)		70	
Trig	ger Delta					1	
Can	n Sequence					1	
Imag	ge File Ta	ble		DELETE	ALL IMAGI	ES	
Status	Size	Sequen	ce#	Download	Delete		
J	51609	6	546	Ŧ			
E	52531	2	545	Ŧ			
E	24012	8	544	J.			
E	34124	8	550				
E	53068	8	549				
D	60697	6	548	Ŧ			
D	51481	6	547	Ŧ			
Imag	<b>ge Captu</b> ge Option	re Enab	ole Op	tion		1	
#DOO	DR OPEN	TIME	DA	/ & TIME	INTERVAL		
Imag	je Capture /	Time Slo	ot			5	
Imag	ge Time 1				04:30	АМ	
Imag	je Time 2				11:30	РМ	
	≣		*				

#### Various Image Status in Image Table:

- D Latest Image
- U Uploaded Image
- **E Deleted Image**

## Read Captured Image in Image table

Tap on the Download symbol shown in the Image file.

11:2	11:28 🖻 🛍 👽 🔹 🗮 🛠 🛠 🕅 64% 🖻								
<u></u>	Smart C	:							
Doo	Door Close Angle2(Range: 20-90) 70								
Trig	Trigger Delta 1								
Cam	Cam Sequence 1								
Imaç	ge File Ta	ble	D	ELETE AL	L IMAGES				
Status	Size	Sequenc	e# D	ownload	Delete				
U	51609	6	546	Ŧ					
E	52531	2	545	Ŧ					
E	24012	8	544	Ŧ					
E	34124	8	550						
E	53068	8	549		n				
D	60697	6	548		ň				
D	51481	6	547	.ŧ.	n				
Imag	ge Captu	re Enabl	e Optic	on					
Imag	e Option				1				
#DOC	OR OPEN	TIME	DAY &	TIME IN	ITERVAL				
Image Capture / Time Slot 5									
Image Time 1 04:30 AM									
Imag	Image Time 2 11:30 PM								
	≣		<b>X</b>						





## Image Capture Mode - Logic

Image capture mode	Input Value		Logic / Remarks
#Door Open	Door Open Count Value for "door open : 1 to 255"		Image will capture as per door open count during Door open event
	Image Capture / Time Slot	Value "1 to 255"	
Time	Image Time 1	Time 1 "HH:MM"	Image will capture on door open as per set time slot
	Image Time 2	Time 2 "HH:MM"	will set next day's time
	Image Time 3	Time 3 "HH:MM"	
	Image Capture / Time Slot	Value "1 to 255"	
Day & Time	Image Time 1	Set day and time 1	Image will capture on Door Open as per set day and time
Day & Time	Image Time 2	Set day and time 2	will set next week's date & time
	Image Time 3	Set day and time 3	
Interval	Image Capture Interval	Time in (Sec) : 300 to 604800	Image will capture on Door Open as per set Interval
וונכו עמו	Image capture Count	Value "2 to 255"	

## Image Capture Mode:

11:39 🖪 🖨 🛇 🔹		💐 🕈 🗟 🕼 70% 🖻		
Smart Coole	r Installation	1	:	
Cam Sequence			1	
Image File Table	D	ELETE ALL	IMAGES	
tatus Size Seq	uence# D	ownload	Delete	
516096	546	±.	0	
240129	545	*	U	
341248	550	<u>+</u>	U	
530688	549	<u> </u>		
Image Cap	ture Enab	le Option		
Image Enable Opt	ion	Door O	pen	
		Time		
In CANCEL		Dave	Time	
#DOOR OPEN TIM	ME DAY	Daya	lime	
	2.55	Interva	1	
Image Capture / Time	e Slot			
Image Time 1			04:30 AM	
Image Time 2			11:30 PM	
Image Time 3			03:30 AM	
≣	<b>S</b>			
Ш	Ο	<		

_							
	11:39	9 🖪 💼 😗 -	•		* (	<b>)</b> இ. al 70	)% 🖻
	<b>S</b>	Smart C v5.5	ooler In	stallati	ion		:
	Door	Open Angl	le1(Range	e: 1-20)			1
	Door	Close Ang	le2(Rang	e: 20-90	))		7
	Trigg	er Delta					
	Cam	Sequence					
	Imag	e File Ta	ble		DELETE	ALL IM/	AGE
	Status	Size	Sequen	ce#	Download	Dele	ete
	U	51609	6	546	Ŧ	1	
	E	52531	2	545	Ŧ	i	Ū.
	E	24012	8	544	Ŧ	1	Ŵ
	E	34124	8	550	Ŧ	1	Ŵ
	E	53068	8	549	Ŧ	1	Ū.
	D	60697	6	548	Ŧ	1	Ū.
	D	51481	6	547	Ŧ	1	Û
	Imag	e Captu	re Enab	le Opt	tion		
	Image	Option					
	#DOOI	R OPEN	TIME	DAY	& TIME	INTERV	AL
	Door (	Open Coun	t				
	Currer	nt Door Op	en				
				约			
				0		<	

11:39	🖻 🛍 🔇 🔸		* 9	ຈີ ແມ່ 71% ຄື		11:4
<b>`</b>	Smart Cool	er Installat	ion	:	:	<b>()</b>
					-	
Cam	Sequence				1	Cam
Image	e File Table	•	DELETE	ALL IMAGE	s	Imag
Status	Size Se	quence#	Download	Delete		Status
U	516096	546	Ŧ			U
E	525312	545	Ŧ			E
E	240128	544	J.			E
E	341248	550				E
E	530688	549				E
D	606976	548				D
D	514816	547	Ł			D
Image	e Capture E	nable Op	tion			Imag
_						
Image	Option				1	Imag
#DOOF	R OPEN T	I <b>ME</b> DAY	Y & TIME	INTERVAL		#D00
Image	Capture / Tim	ne Slot			5	Image
Image	Time 1			04:30 /	м	Image
Image	Time 2			11:30 F	РМ	Image
Image	Time 3			03:30 A	АМ	Image
	≣	约				
	111	Ο		<		

11:40 🖪	ê 🛇 •	•	_	* 9	ଲିଲା 71% <mark>ଜ</mark>	
<b>Sn</b> v5.5	nart C	ooler Ir	nstallat	ion		
Cam Seq	uence					1
Image F	ile Ta	ble		DELETE A		s
Status S	Size	Sequer	nce#	Download	Delete	
	51609	6	546	Ŧ		
	52531	2	545	Ŧ		
	24012	8	544	Ŧ		
	34124	8	550	Ŧ		
	53068	8	549	Ŧ.	0	
	60697	6	548	. <u>.</u>		
	51481	6	547			
Image Op	tion					2
#DOOR OF	PEN	TIME	DA	Y& TIME	NTERVAL	
lmage Ca	pture /	Time Sl	ot			5
Image Tin	ne 1			10/05/2023	3 04:30:00 /	AM
Image Tin	ne 2			10/04/2023	3 11:30:00 I	РМ
Image Tin	ne 3			10/05/2023	3 03:30:00 /	٩M
			2			
			0		<	

11:40 🗷 💼 😯 • 🛛 🔌 🔍 🗟 💷 71%								
<b>()</b>	Smart Cooler Installation							
Door	Open Angle1(R	ange: 1-20)		14				
Door	Door Close Angle2(Range: 20-90) 7							
Trigge	Trigger Delta							
Cam	Cam Sequence							
Image	e File Table		DELETE AL	L IMAGES				
Status	Size Seq	uence#	Download	Delete				
J	516096	546	Ŧ					
1	525312	545	Ŧ	0				
	240128	544	Ŧ					
Ξ	341248	550	Ŧ					
Ξ	530688	549	Ŧ					
D	606976	548	Ŧ	0				
D	514816	547	Ŧ	0				
Image Capture Enable Option								
Image	Option			3				

Image Option					3		
#DOOR OPEN	TIME	DAY &	TIME	INTERVAL	_		
Image Capture (	Count				5		
Image Capture Interval							
≣		约					
		0		<			

#### • FCC Regulatory Compliance

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this
  device may not cause harmful interference, and (2) this device must accept any interference received, including
  interference that may cause undesired operation.
- changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15
  of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a
  residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed
  and used in accordance with the instructions, may cause harmful interference to radio communications. However,
  there is no guarantee that interference will not occur in a particular installation.
- If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

#### • **RF Exposure Compliance**

• This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## VISION GROUP

## **Thank You!**