V 1.6

SMART VISION AI

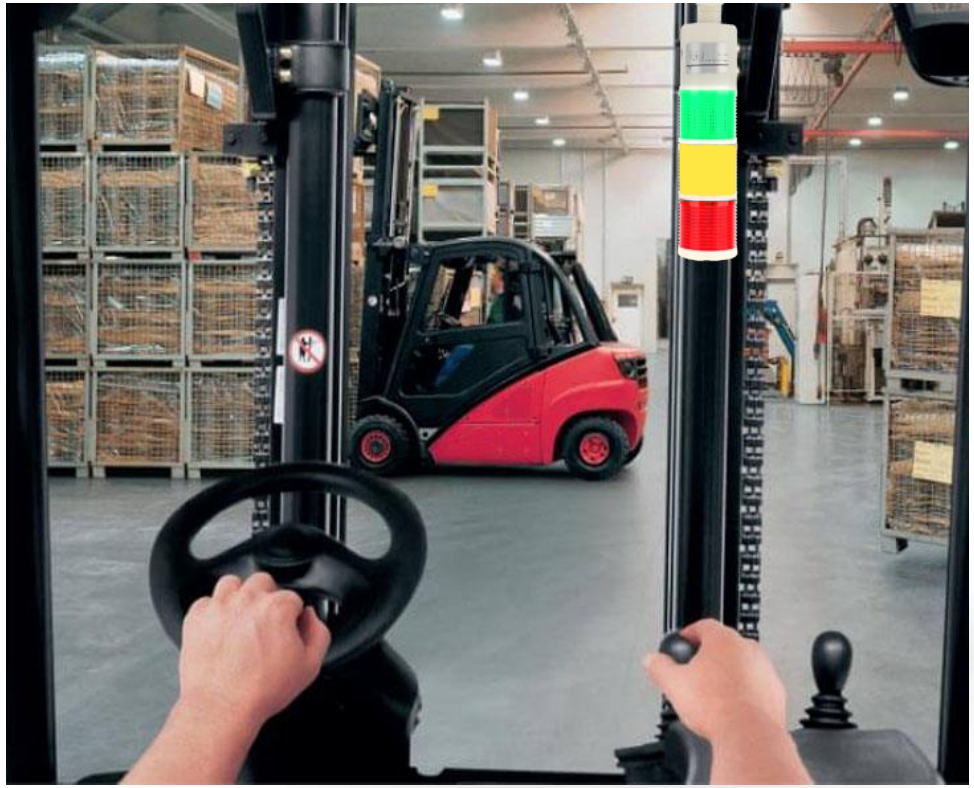
IP67 CERTIFIED

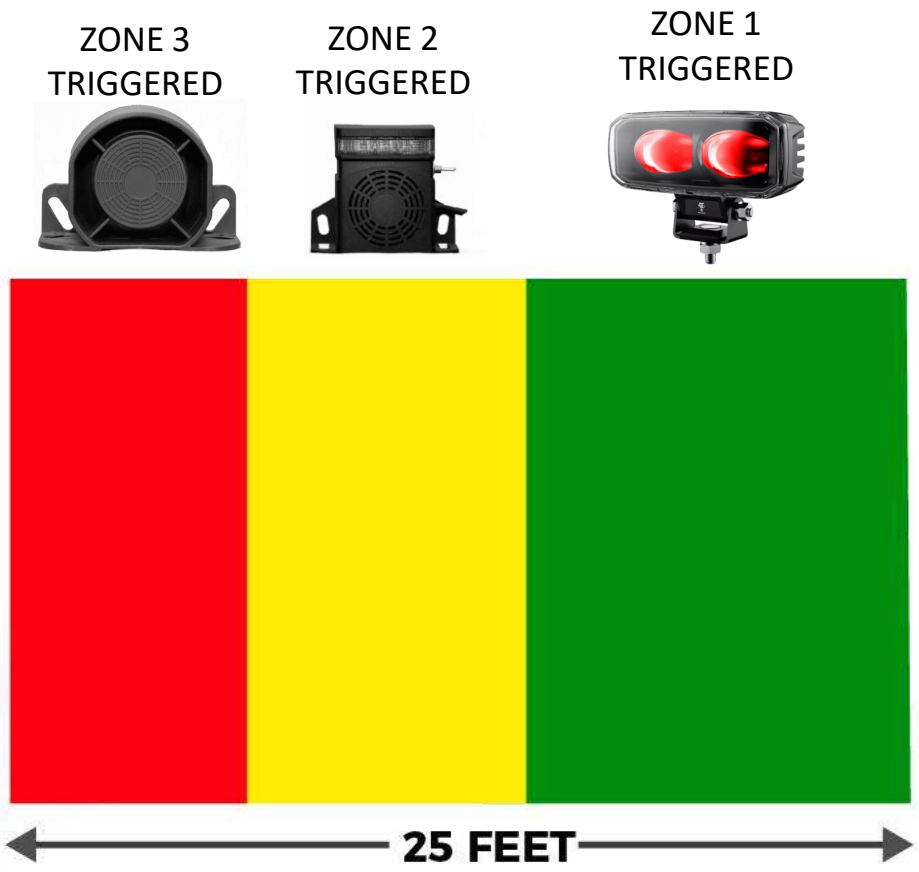
- PEDESTRIAN & FORKLIFT DETECTION
- IMPACT ALERTS WITH VIDEOS
- SMART START
- DRIVER MONITORING SYSTEM
- REMOTE ACCESS
- STORAGE MEDIA
- WI-FI & CELLULAR CONNECTIVITY
- INSTALLATION

PEDESTRIAN & FORKLIFT DETECTION

SMART VISION | PEDESTRIAN & VEHICLE DETECTION | CUSTOMIZABLE ALERTS

DRIVER VIEW WITH A STACK WARNING LIGHT AND OPERATIONAL BUZZER ALARM.





SMART VISION

PEDESTRIAN & FORKLIFT DETECTION

CUSTOMIZABLE ALERTS

EACH ZONE CAN HAVE ITS OWN UNIQUE PEDESTRIAN WARNING DEVICE.
EACH ZONE CAN BE TRIGGERED AND PEDESTRIANS WARNING ALERT SET INDEPENDENTLY.

AI CAMERA 140° ANGLE
(INCLUDED IN SMART VISION SYSTEM)

ADJUSTABLE ZONE AREAS

CAMERA MOUNT SPOT

AI CAMERA 52° ANGLE
(OPTIONAL)

ADJUSTABLE ZONE AREAS

OPERATOR VIEW MONITOR
GREEN ZONE WARNING ACTIVATED:
BRIGHT LIGHT APPEARING IN FRONT OF PEDESTRIAN.
YELLOW ZONE WARNING ACTIVATED:
STROBE LIGHT AND AUDIBLE ALARM WARNING
RED ZONE WARNING ACTIVATED:
LOUDER AUDIBLE ALARM WARNING

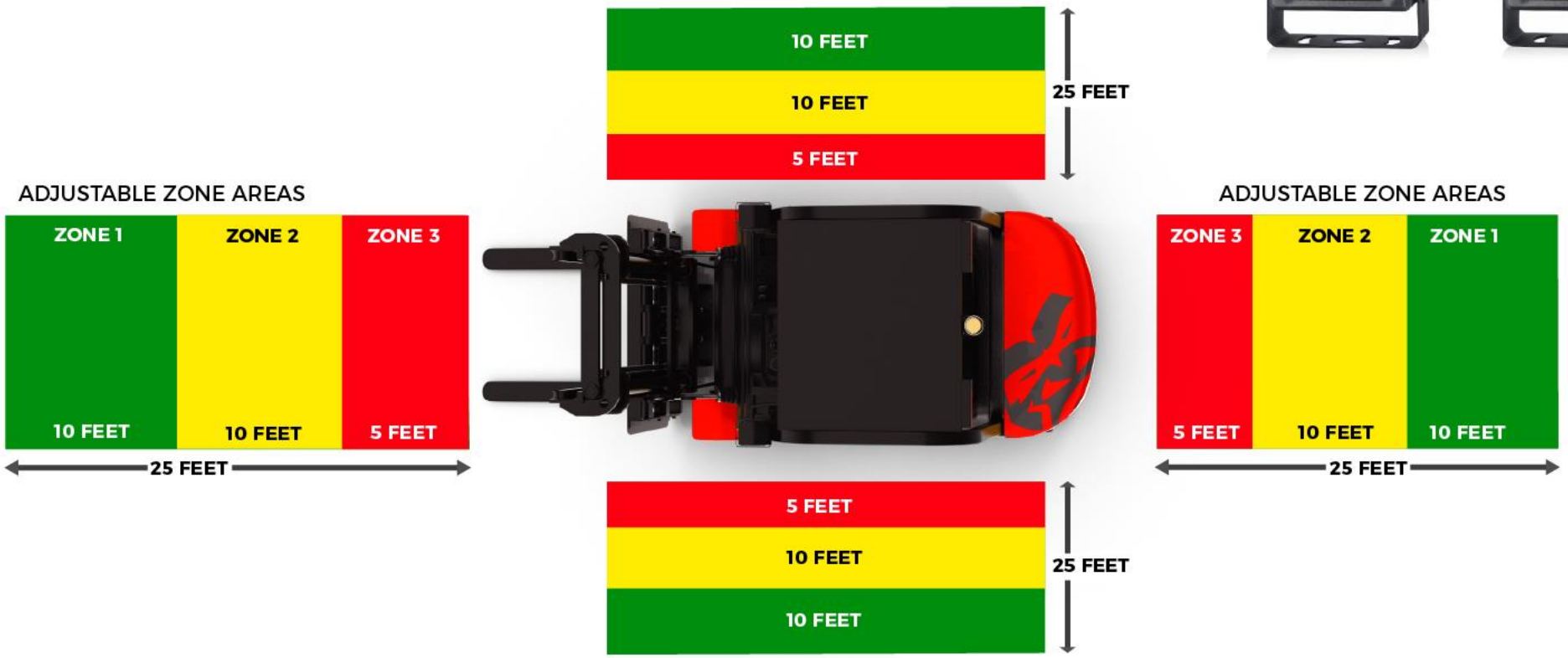
Durex

SMART VISION

PEDESTRIAN & FORKLIFT DETECTION

360° CAMERAS

EACH COMMAND CENTER CAN BE EQUIPPED WITH UP TO 4 AI CAMERAS AS WELL AS AN ADDITIONAL 4 IP CAMERAS, ENSURING MAXIMUM COVERAGE AND PEDESTRIAN DETECTION. EACH AI CAMERA HAS A COVERAGE OF UP TO 25 FEET, IN WHICH 3 UNIQUE ZONES CAN BE CREATED AND CONFIGURED VIA THE TRIGGER ALERT SYSTEM, TO SEND AUDIBLE OR OPTICAL WARNINGS TO THE PEDESTRIAN.



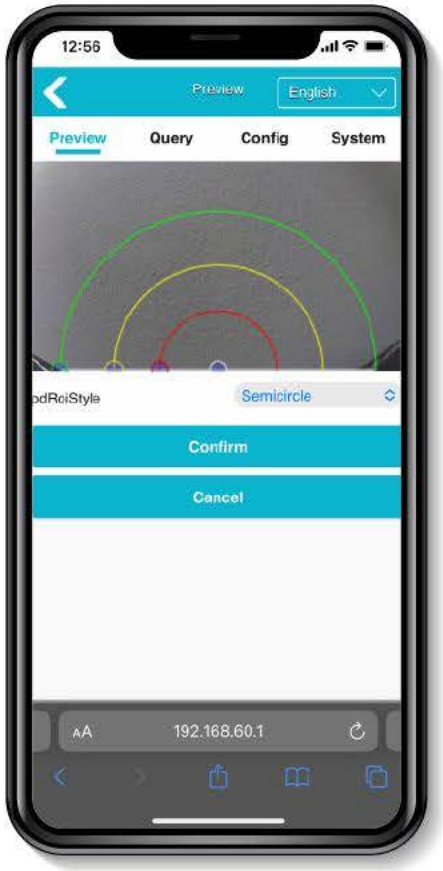
SMART VISION | PEDESTRIAN & VEHICLE DETECTION

SIMPLE CALIBRATION CONFIGURATION

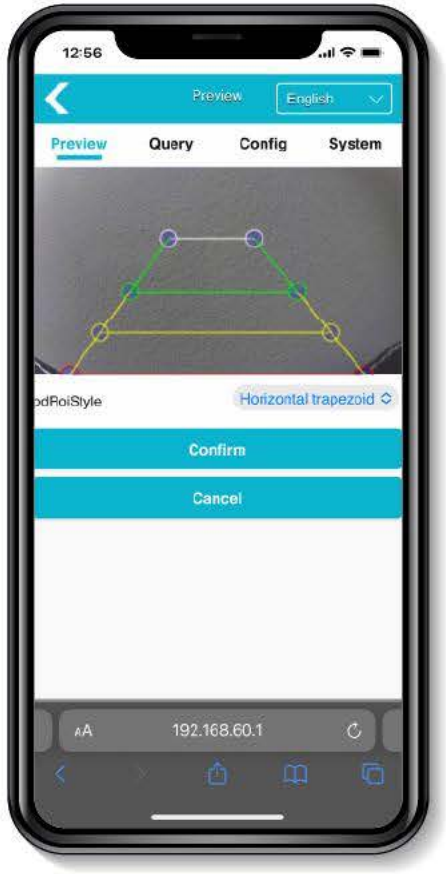
- EASY AND SECURE CONNECTION WITH ANY PC, ANDROID/IOS,
- YOU CAN: CALIBRATE RESPECTIVE ZONE COVERAGE AREAS, CHANGE ZONE COVERAGE SHAPE,
- AND MANY OTHER SETTINGS.

IMPORTANT NOTE ABOUT PEDESTRIAN DETECTION:

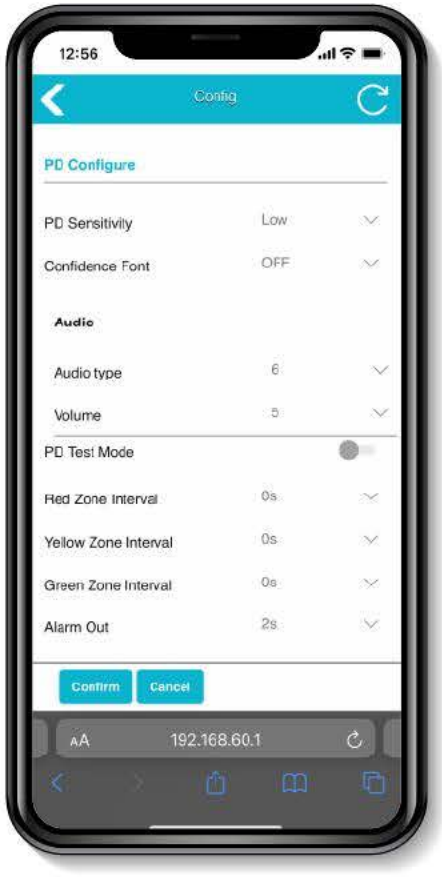
- DVR IS NOT REQUIRED TO ENABLE JUST THE PEDESTRIAN DETECTION AND ALERTS. THE AI CAMERA CAN BE EASILY CONFIGURED USING ANY BROWSER ON ANY DEVICE.
- EACH AI CAMERA CAN TRIGGER 3 SEPARATE AND UNIQUE WARNING AREAS.



ZONE CALIBRATION SEMICIRCLE STYLE



ZONE CALIBRATION HORIZONTAL STYLE



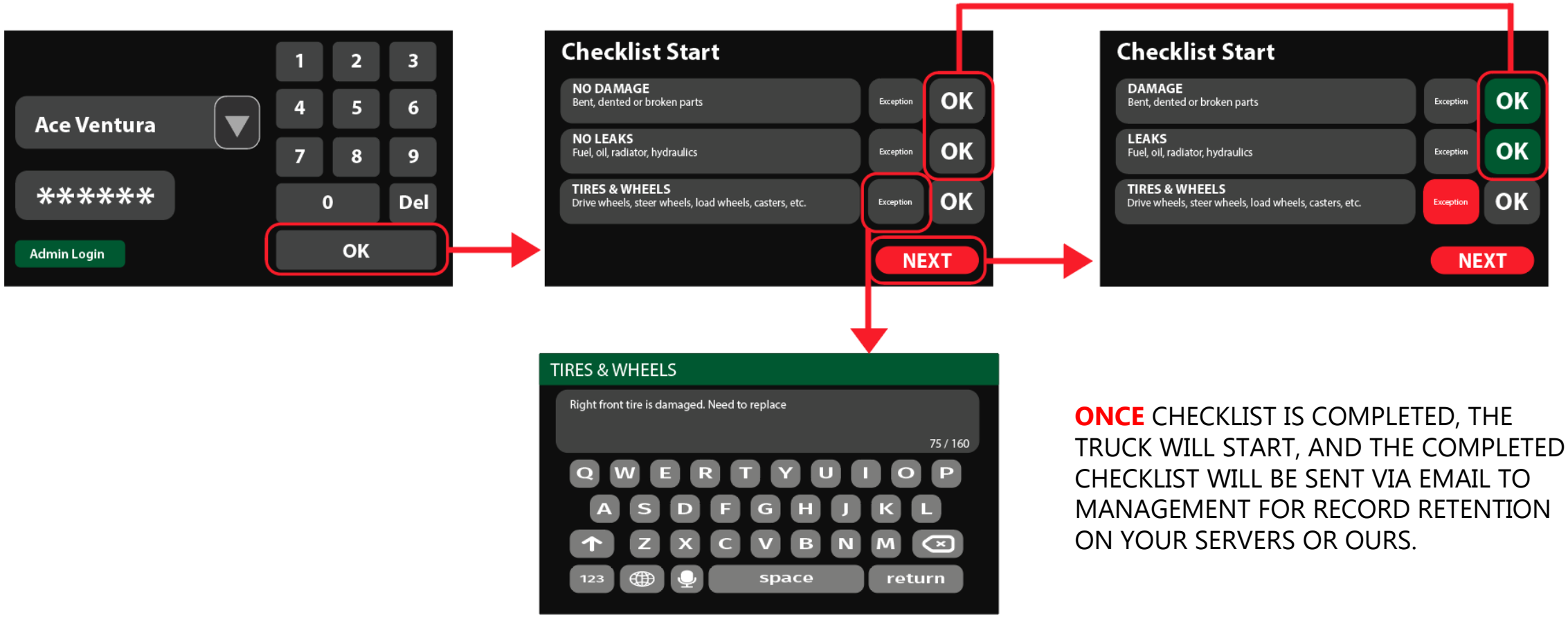
OTHER SETTINGS

SMART START

SMART VISION | SMART START |

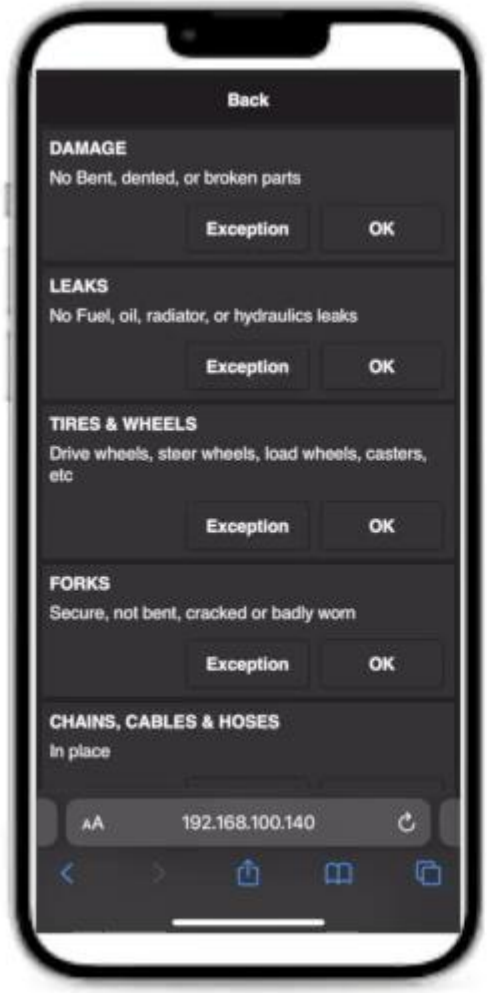
DRIVER OPERATIONAL CHECKLIST

IF DESIRED, YOU CAN CREATE YOUR OWN UNIQUE DRIVERS OPERATIONAL CHECKLIST. CONSISTING OF UP TO 20 QUESTIONS THAT MUST BE ANSWERED BY THE OPERATOR, WHO SIGNS INTO THE DVR WITH THEIR OWN UNIQUE ID AND PASSWORD. USER CONFIGURED AS TO HOW AND HOW OFTEN A CHECKLIST MUST BE COMPLETED: EVERY DAY, EVERY 8 HOURS, EVERY 12 HOURS.....



ONCE CHECKLIST IS COMPLETED, THE TRUCK WILL START, AND THE COMPLETED CHECKLIST WILL BE SENT VIA EMAIL TO MANAGEMENT FOR RECORD RETENTION ON YOUR SERVERS OR OURS.

SMART VISION | SMART START | CHECKLIST



USING WEB BROWSER

USING TOUCH MONITOR

SMART VISION | SMART START |

EXAMPLE OF A CUSTOMIZED CHECKLIST

- COMPANY NAME
- DEPARTMENT NAME
- CHECKLIST NAME
- FORKLIFT PLATE
- OPERATOR NAME
- DATE OF CHECKLIST COMPLETION
- ANSWERED QUESTIONS WITH NOTES

EMAIL NOTIFICATIONS

Smart Vision System
Checklist Notification

Hi Admin,

A Checklist has been completed for Chicago warehouse forklift ID:2104260352 at 2022-12-12 08:12:54 device time.

LOGIN

Department	Operator	Checklist
Chicago Warehouse	Mark	Forklift Safety Checklist

DAMAGE - **OK**
No Bent, dented, or broken parts

LEAKS - **EXCEPTION**
No Fuel, oil, radiator, or hydraulics leaks
Note: Oil leaking on floor

TIRES & WHEELS - **OK**
Drive wheels, steer wheels, load wheels, casters, etc

FORKS - **OK**
Secure, not bent, cracked or badly worn

CHAINS, CABLES & HOSES - **OK**
In place

BATTERY - **OK**
Battery cable and connector condition. Cable routing (not outside of truck). Battery retainer securely in place.

GUARDS - **OK**
All guards in place and condition. Overhead, load backrest, etc. Gates and side rails (SP & Turret Models)

PDF SAVED IN A DESIGNATED SERVER

Toronto Warehouse

Plate: **Forklift 1**	Operator: **Ace Ventura**	Date: **8 July, 2022**	Time: **8:00 AM**

QUESTIONS	EXCEPTION	OK
DAMAGE Bent, dented or broken parts NOTE:		✓
LEAKS Fuel, oil, radiator, hydraulics NOTE:		✓
TIRES & WHEELS Drive wheels, steer wheels, load wheels, casters, etc. NOTE: Right front tire is damaged. Need to replace	X	
FORKS Secure, not bent, cracked or badly worn NOTE:		✓
CHAINS, CABLES & HOSES In place NOTE:		✓
BATTERY **Battery cable and connector condition. Cable routing (not outside of truck). Battery retainer** securely in place. NOTE:		✓
GUARDS **All guards in place and condition. Overhead, load backrest, etc. Gates and side rails (SP &** Turret Models) NOTE:		✓
MECHANICAL SAFETY DEVICES Operator harness or seat belt, fire **extinguisher,** name/data plate, warning labels, etc. in good **condition.** NOTE:		✓
OPERATOR COMPARTMENT/CONTROLS **All controls, steer tiller, pedals, etc. in good condition. Seat locks in position.** NOTE:		✓

IMPACT ALERTS WITH VIDEOS

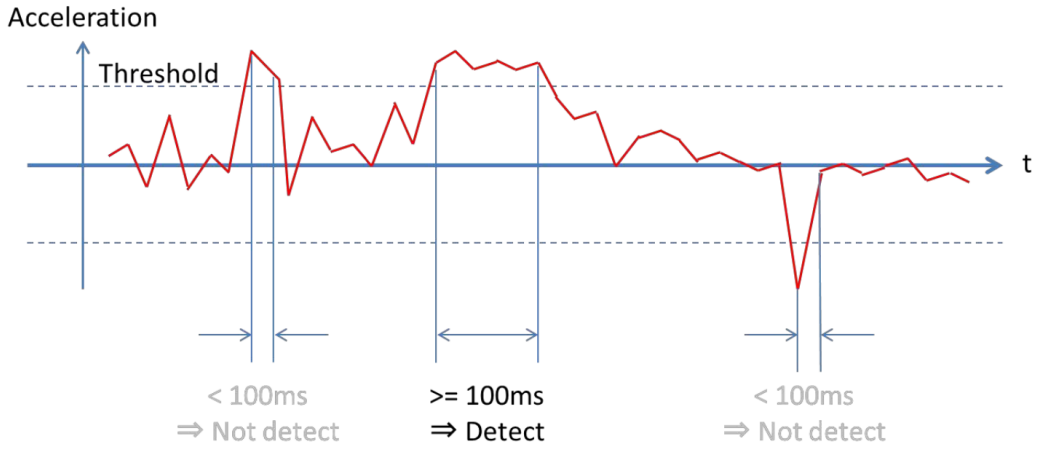
SMART VISION | G-FORCE IMPACT ALERTS WITH VIDEOS |

INTEGRATED G-FORCE & ALERTS

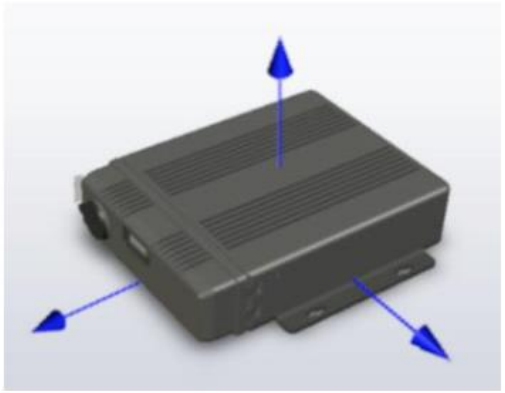
G-FORCE ALERT TRIGGERS:

- ACCIDENTS
- AGGRESSIVE ACCELERATING
- HARSH BRAKING
- DANGEROUS MANEUVERING
- EXCESSIVE IDLING

abs(X) + abs(Y) + abs(Z) * Filter



Z-axis (in vertical upward direction)



X-axis (the side with LED light)

Y-axis (the side without lock)

IMPACT ALERTS WITH VIDEOS

SMART ALERT EXAMPLES

THE SYSTEM WILL RECORD VIDEO FOOTAGE OF EVENTS THAT HAVE CAUSED A TRIGGER. THE DURATION IS CONFIGURABLE, SUCH AS TEN SECONDS BEFORE THE EVENT AND TEN AFTER THE EVENT. THE SYSTEM WILL SEND AN ALERT VIA EMAIL AND/OR WHATSAPP.

THE SYSTEM WILL SEND
AN ALERT EMAIL WHEN EVENTS OCCUR.

1 HARSH BRAKING

SMART VISION | G-FORCE IMPACT ALERTS WITH VIDEOS |

SMART ALERT EXAMPLES

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THE SYSTEM WILL SEND
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1. HARSH BRAKING
2. DANGEROUS MANEUVERING

IMPACT ALERTS WITH VIDEOS

SMART ALERT EXAMPLES

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THE SYSTEM WILL SEND
AN ALERT EMAIL WHEN EVENTS OCCUR.

1. HARSH BRAKING
2. DANGEROUS MANEUVERING
3. AGGRESSIVE ACCELERATING

DRIVER MONITOR SYSTEM

SMART VISION

DRIVER MONITOR SYSTEM

DRIVER MONITOR SYSTEM MONITOR THE OPERATOR AND SEND ALERT NOTIFICATION TO THE MANAGEMENT WHEN UNSAFE BEHAVIORS INCUR.

FATIGUE DETECTION

NO MASK DETECTION

SMOKING DETECTION

DISTRACTION DETECTION

PHONE CALL DETECTION

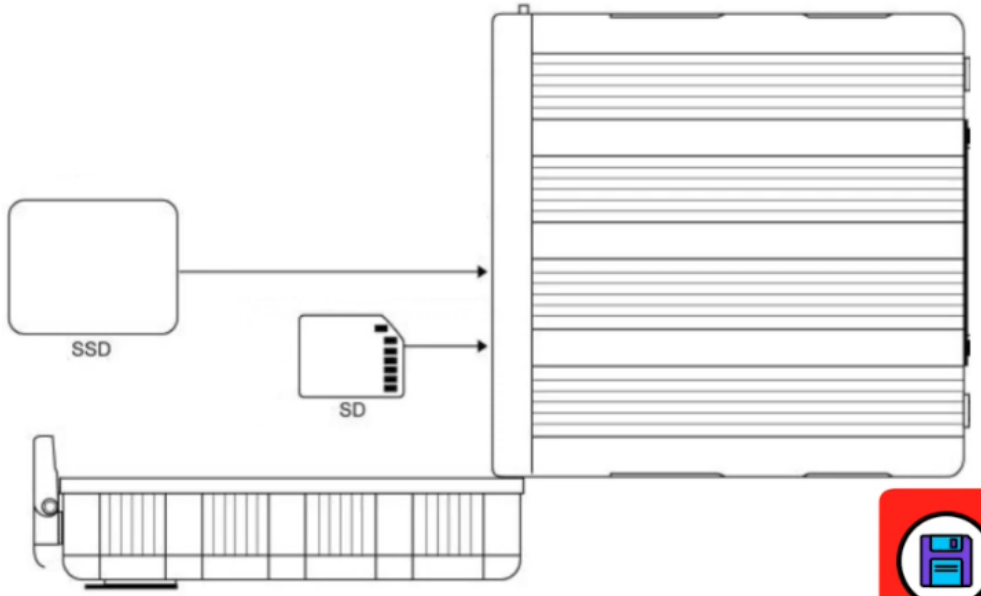
STORAGE
MEDIA

STORAGE MEDIA

STORAGE MEDIA

- SD CARD OR SSD UP TO 2TB, SLOTS INSIDE THE COMMAND CENTER FOR WATERPROOF
- 2TB RECORDS IN 1 CAMERA:
  - 1200 HOURS AT 1080P/ 4MBPS (150 SHIFTS/8 HOURS PER SHIFT)
  - 2400 HOURS AT 720P/ 2MBPS (300 SHIFTS/8 HOURS PER SHIFT)

- STORAGE MEDIA STORES:
  - NORMAL VIDEO FOOTAGES
  - EVENT VIDEO FOOTAGES
  - CHECKLIST FILES



MAXIMUM CAPACITY
2 TERABYTE

STORAGE MEDIA SD/SSD SLOTS ARE LOCATED ON THE FRONT OF THE DVR. SIMPLY UNLOCK THE TAMPER-RESISTANT ACCESS PANEL WITH THE SUPPLIED KEY.

SMART VISION

STORAGE MEDIA

STORAGE MEDIA

- SD CARD OR SSD UP TO 2TB, SLOTS INSIDE THE COMMAND CENTER FOR WATERPROOF
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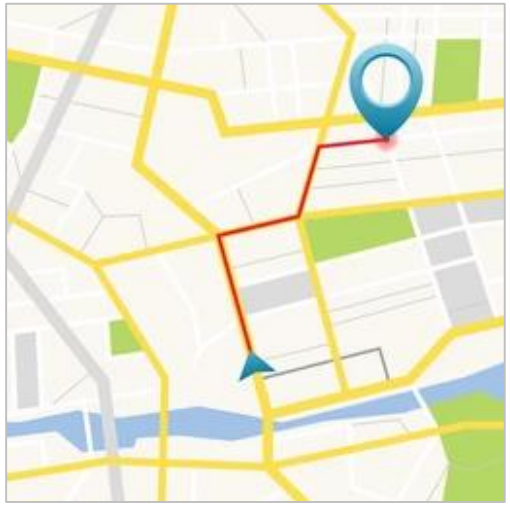
GPS

SMART VISION

GPS



GPS LIVE LOCATION
& GPS HISTORY TRACK

GPS FENCE
& ALERT EMAIL NOTIFICATION

SPEED MONITOR
& ALERT EMAIL NOTIFICATION

REMOTE ACCESS

SMART VISION | G-FORCE ALERTS

EMAIL ALERT EXAMPLE

Decelerate

Hi Moe Albader,

An event occurred for Warehous1 - ID:2301090074 at 2023-04-19 14:26:55 Alert Type: Decelerate.

LOGIN

Screenshot of Alert Video, Ch:1

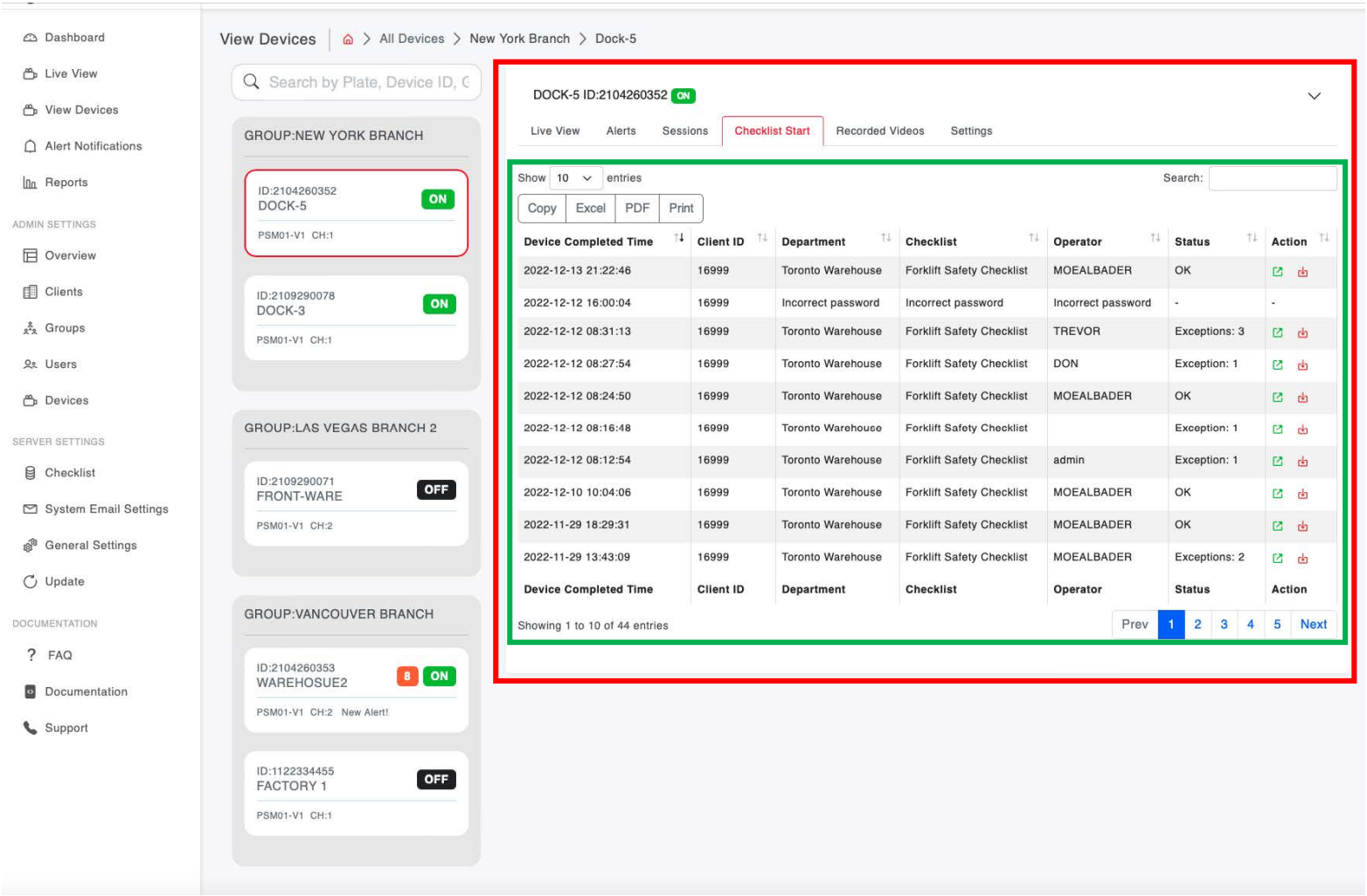
Longitude:	Latitude:
0.000000	0.000000

GX:	GY:	GZ:	Roll:	Pitch:	Yaw:
0.000	0.000	0.000	nan	nan	nan

SMART VISION | SMART START |

WEB APP VIEW FOR CHECKLISTS

VIEW, DOWNLOAD ALL COMPLETED CHECKLIST FOR EACH DEVICE VIA WEB APP.



SMART VISION

REMOTE ACCESS

CMS MANAGEMENT

- LIVE VIEW
- PLAYBACK / DOWNLOAD
- ADD UNLIMITED DVRS
- ADD UNLIMITED USERS
- ADD UNLIMITED GROUPS
- MODIFY EMAIL ALERTS
- USER MANAGEMENT
- REPORTS
- CONFIGURE DVRS
- LOCK & ADMIN ACCESS
- GPS TRACKING (WITH COMPATIBLE DVR)
- CROSS PLATFORM WEB BASED ACCESS

SMART VISION

REMOTE ACCESS

COMMAND CENTER

ROUTER

SECURE
SSL ENCRYPTION

OVER THE INTERNET
OR LOCAL CONNECTION

SERVER

SECURE
SSL ENCRYPTION

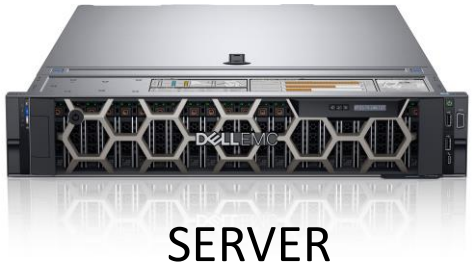
OVER THE INTERNET
OR LOCAL CONNECTION

WEB BROWSERS

COMMAND CENTER

SECURE
SSL ENCRYPTION

OVER THE INTERNET



SERVER

SECURE
SSL ENCRYPTION

OVER THE INTERNET
OR LOCAL CONNECTION

WEB BROWSERS

SMART VISION

REMOTE ACCESS

COMMAND CENTER

ACCESS POINT*
Powered by DVR
via USB port

ROUTER

SERVER

WEB BROWSERS

*SSL CERTIFICATE CAN BE INSTALLED IN ACCESS POINT