Radford.

# Installation Manual

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(25/05/22)

Revision 2.2

Scan & Go – Alphagate by ITAB

Radford.

# Alphagate “Scan & Go” Installation Manual

This manual has been designed for Woolworths, specifically to support the installation of the customised “Scan & Go” ITAB Alphagate exit gate.

This configuration incorporates an inbuilt module pre-programmed to operate from a direct input from the Woolworths’s scanner (plug and play) unit.

**Important information:**

The ITAB Alphagate and inbuilt “Scan & Go” modules operate independently and do not integrate (or interrogate) the Woolworths POS system.

The Scan & go software and scanners are not supplied, commissioned, or supported by Radford Retail Solutions P/L (Radford) or Radford related parties.

**Step 1.** Unpack crate, layout equipment, check all items are present and in good condition.

**Bill of materials:**
1 x Alphagate bollard complete with prewired model and PEC fitted.
1 x Glass arm complete
1 x Reflector pad

**Step 2:**
Remove front (bottom) cover from Alphagate bollard to expose the inside of the bollard base. Measure and mark the position of the gate bollard on the ground and align with centre position cut-out on baseplate (move gate arm assembly to approx. centre position, which will “roughly” be aligned with base plate cut-out) and align the cut-out notch with the 90-deg. closed arm position - see below base plate drawing for dimensional details.

**Ground fixing installation notes**:
**Slab scan**: consideration should be given to having a slab-scan thus identifying underground obstacles such as power cables, reinforcement steel rods and slab type etc. before any drilling occurs. A slab scan is recommended **prior** to installation and should be presented to the builder/architect managing the site for final inspection.

**Floor marking:** ensure you mark the dead centre of the base plate cut-out holes before drilling, this will allow you to move the gate bollard left or right (if required) for final alignment.

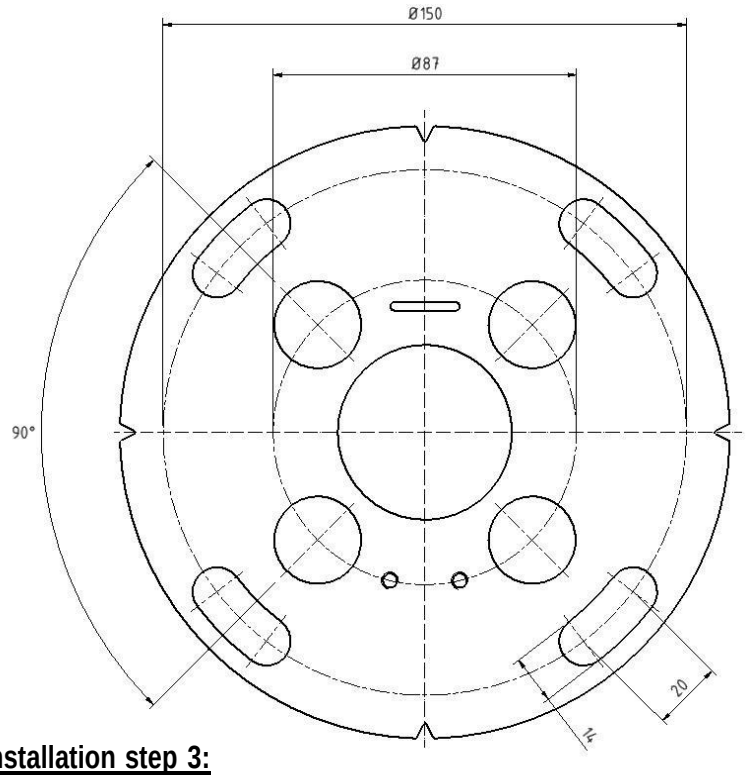
**Ground fixings**: gate arm movements (during normal opening and closings) take its toll on fixings, therefore good quality fixings are very important – we recommend the use of metal strong metal anchor fixings, strong flat washers along with good quality spring washers.

Floor fixings dimensions (particularly ground penetration dimensions) should be determined by the builder or Architect managing the site. In an ideal situation a minimum of 75mm of the fixing should penetrate the ground. **Important to note**: if the concrete in the ground is not strong enough to support a Dynabolt fixing, consideration should be given to using Chemset solution with booker-rod instead.

**Cable entry to gate bollard:** gate bollard power cables (data cables in separate conduit) are recommended to enter the gate bollard from underneath the concrete floor – ensure cables enter the dead centre of the base plate aperture thus allowing as much room as possible for entering cables to be free from obstructions. Using 90 deg. conduit elbows at bollard base plate cable entry point is recommended.

**Drill ground holes:** only after you have considered and applied all the above points (particularly carefully marking the drilling positions correctly) should you drill fixing holes.

**Floor chasing:** chase floor for cable penetration and insert cables, within conduit, then position gate bollard into situ and securely bolt bollard into the ground.

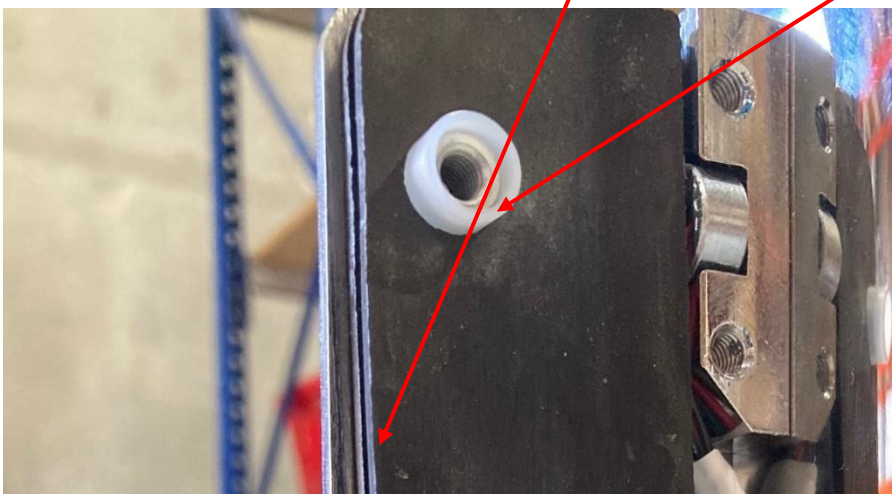



**Installation step 3:**

**Step 3, Fit glass arm to gate bollard**:
Carefully remove fixings from gate arm plates ensuring not to lose the internal white plastic spacers and fit glass arm into place.

**Note**: to avoid breakages the glass arm is designed not to come into direct contact with metal parts, to this end ensure plastic spacers and rubber gaskets are correctly in place before inserting the glass arm onto the mounting brackets.

When fitting gate arms into their brackets ensure the (2 per gate bollard) plastic backets spacers are in place (**making sure there are no direct metal bracketry to gate arm contact**) and are fully inserted into the (2 gaskets per gate bollard) rubber gaskets which sandwiches the arm and in turn separates the gate arm panels from the metal brackets.

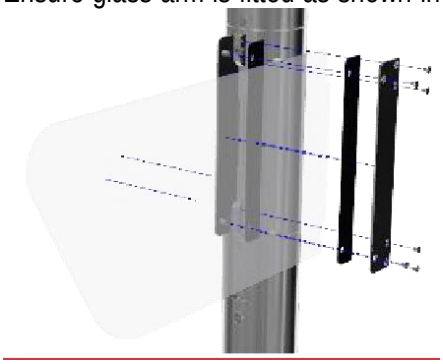


Gently tighten gate arm bracket screws until the plastic spacer flattens up tight to the polycarbonate arm panel. Make sure check that the rubber gasket and plastic spacers are not overlapping each other, and all components are aligned correctly before firmly tightening (all 12 Allen bolts with pre-applied to screws) gate arm fixings plate into place.

Please note operating the gates with loose base plate, gate arm-fixings, missing screws or missing rubber gaskets may damage the gate bollard, particular the glass arms.

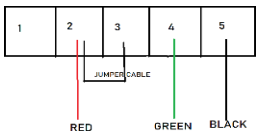
**GLASS ARM ORIENTATION**

Ensure glass arm is fitted as shown in below image. (Nose up)



**Step 3**
Check gate arm LED cables are terminated on main PCB, as per below:

The Glass Arm should be terminated illuminate as follows.



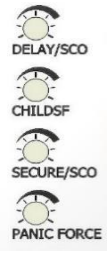

- Red while at rest.
- Green while opening
- Red while closing. (See wiring LED wiring terminations on main PCB)

**Step 4:**
Install the (photocell eye) PEC reflector onto the opposing checkout counter or wall – ensuring the dead centre of the reflector is aligned with the PEC eye which is mounted at the bottom of the gate bollard.

**Step 5:**
Connect the scanner data cable (usually entering the gate bollard from underground) to plug and play module, which is already fully terminated and mounted inside the gate bollard.

**Step 6:**
Check Scan & Go potentiometer and dip switch settings, located on control board, as follows:

Scan & Go Alphagates are workshop pre-programmed and commissioned with the intent of creating minimalist on-site commissioning – settings should be checked in line with the below:



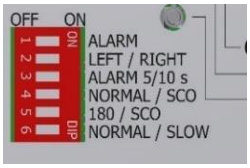

DELAY/SCO: set to mid position.

CHILDSF: set to full left position.

SECURE/SCO: adjust pot to hold arm open for 15 seconds (full left is least / full right = 30 seconds)

PANIC FORCE: set to mid position (gate bollard mechanism resistance while forcing arm to move)

<u>Check dip switch settings</u>:
1 = right position
2 = left **or** right as required
(approached from store exit)
3 = right position
4 = right position
5 = right position
6 = right position

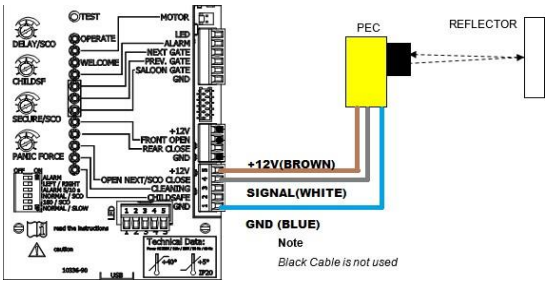


**Step 7, Override Sensor:**

This is an optional device designed to **reset** the time the gate remains open, after a patron scans themselves out – check installation requirements for this device with the site manager on a site-to-site basis.

a. check the sensor is terminated to gate board, indicated by LED signal.
b. fit reflector to a solid surface (wall, checkout counter or post) directly opposite the PEC.

- Blue = ground,
- Brown = + 12V
- White = front open




Trim the vertical and horizontal angle of the PEC (see adjustment screws in gate bollard PEC bracketry) until the yellow LED is showing a steady light – a **flickering** light is **not** optimal.

- GREEN LED will be steady when powered.
- YELLOW LED will be steady when fully aligned.

Once the sensor beam is activated the by a customer existing, the remaining programmed gate opening time will reset and the gate will instantly drive to the closed position ready for scan from next patron.

**Step 8, Ethernet module:**

Check the ethernet module has been fitted inside the Alphagate Scan & Go bollard.
Ethernet module is usually pre-fitted inside gate bollard and programmed with allocated IP address prior to shipping to site.

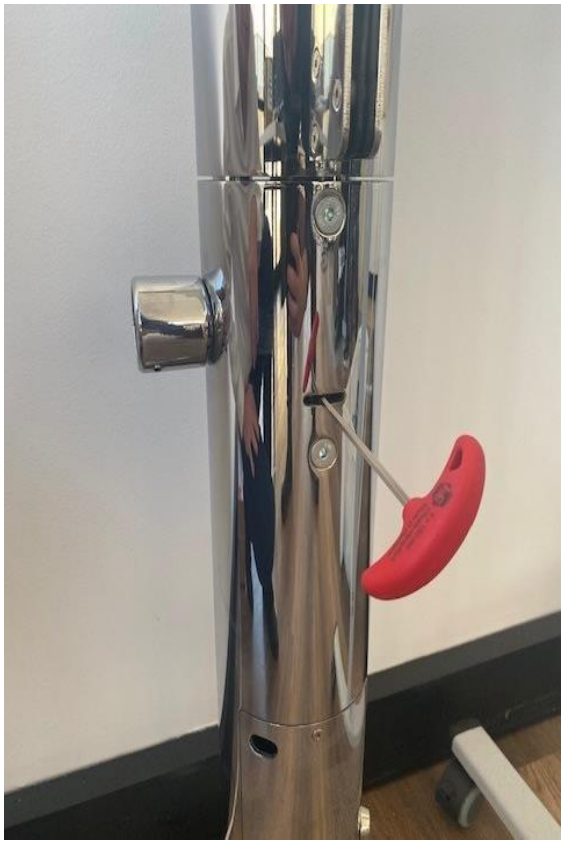
- I.P address will be noted inside the lower tube lid for your reference.
- Scanner connection to gate bollard is plug and play.

**Step 9, Gate arm fine adjustments:**
If the gate arm needs to be adjusted, loosen the screw that holds the coulisse (electronic encoder circuit/position sensor) with 3mm Allen key and adjust l as required, ensure power is on before adjusting.

Coulisse is highly sensitive, please adjust minimally as small adjustments equate to significant arm movement. When the gate arm is satisfactorily adjusted, **gently** fasten the coulisse fixing screw again.

**Important**: always make sure there are **no** sensors (****Disconnect all radar, PEC and Child safe sensors completely) in circuit while the Allen key is in Coulisse.

**Important**: if the sensor triggers and activates the motor, the Allen key will move with the shaft and jam against the stops and **may** seriously damage the coulisse beyond repair and **void** all warranty!



- Move Allen Key to the right = gate arm moves to the left ←
- Move Allen Key to the left = gate arm moves to the right →

**Step 10:** install lead in rail – see below details.

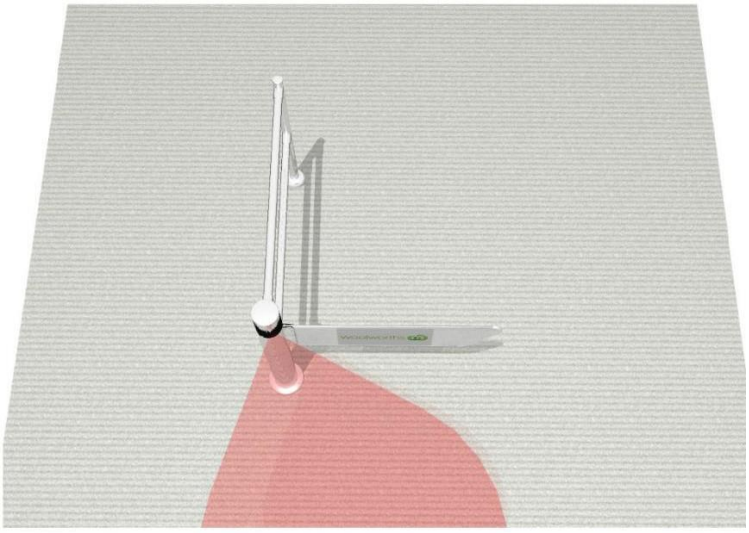
Install the guide rail as shown below: cut to size as per the dimensions shown and ensure there is a min of 50mm gap between the end of the glass arm and opposite enclosed wall or rail.

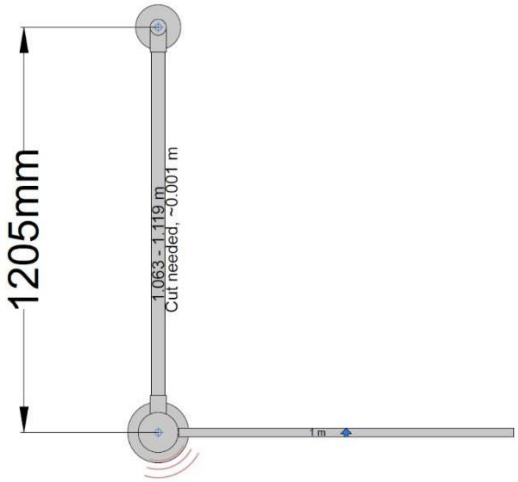
Cut cross rails first, then fit rails into upright post cups and gate bollard cups then line up rail assembly in its intended position before marking the holes to be drilled.
**Important**: open the gate arm to its full 90 degree “stopped” position and **ensure** the glass arm sits directly under the cross rail of the lead in rails, before marking holes to be drilled.

Once satisfied the dimensions have been marked correctly, remove rail assembly and drill holes.

Fit post and rails ensuring adequate fixings are used on upright post base plate.

Ensure all cross rail cup set screws are tightened with Allen key.



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# Post Installation Checklist

## (To be completed upon successful installation and final commissioning)

I,_____can confirm that ITAB Alphagate has been successfully installed, commissioned and is in full working order to the best of my knowledge.

Please initial each completed point to confirm successful installation:

1. LED colour set and sequence correct. (See Step 3 for correct wiring)
    - Red while closed
    - Green while opening
    - Red while closing

2. Timing - gate should stay open for 15 seconds - timer starts once gate has **fully** opened and finishes as gate **starts** to close (See Step 6 “Secure Sco”)

3. Glass arm orientation - (nose up) and screws tightened (Step 3)

4. Glass arm alignment – is set at 90 degrees. (See Step 9)

5. I.P address labelled (located on inside of controller lid)

6. Hand over - keys provided to site manager (keys originally located behind control board lid).

7. Alarm test – confirm alarm sounds for 10 seconds when activated. (See Step 6)

8. Decommissioned equipment – is previously installed asset returned to site manager.

Store ID: ……..

Technician: ……..

Signature: …….

Site manager: …….

Signature: …….

Date: …….