

RoadPod VT4 5904 - Guidelines

The RoadPod VT4 5904 (VT4) uses two channels and four tubes to simultaneously collect data from two neighbouring lanes, thus providing two datasets.

Using MetroCount Traffic Executive (MTE) software version 5.07 or later, the VT4 is designed to be set up in either of two modes: *Coupled* and *Decoupled*.

Coupled mode installation

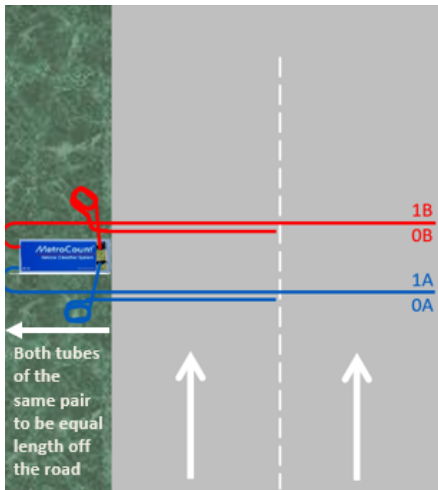
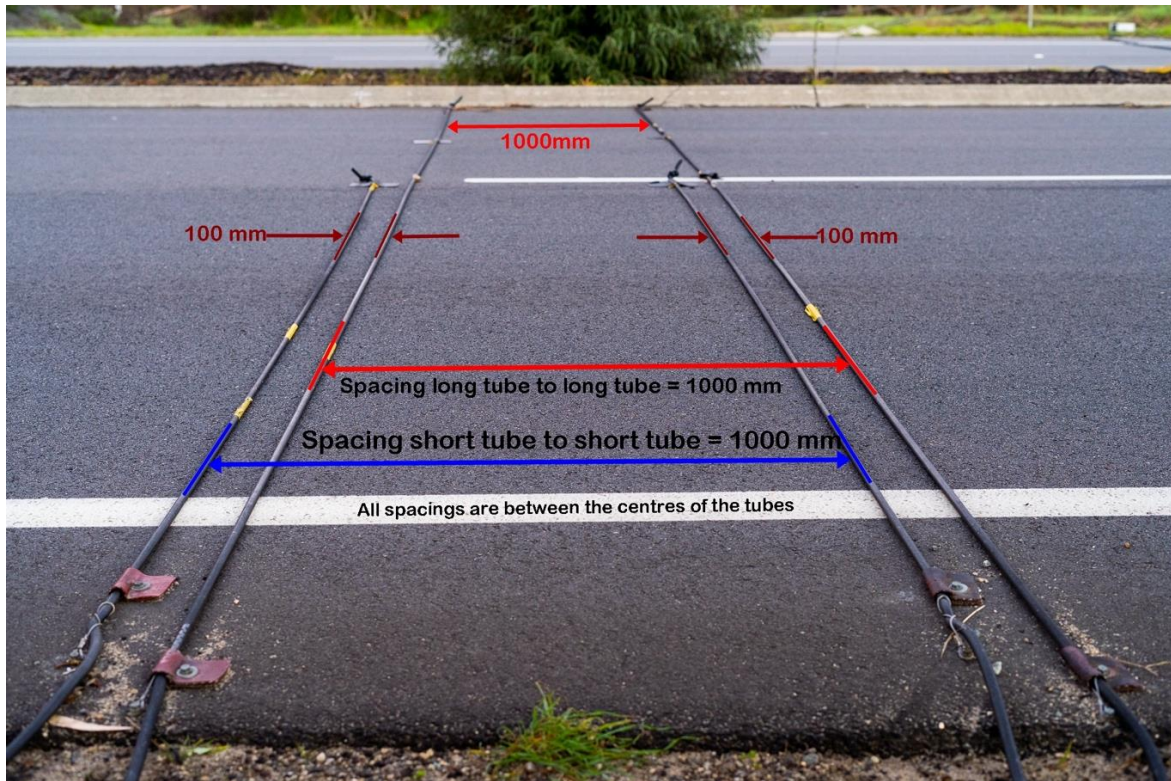
In this mode, the VT4 uses a configuration of paired short tubes and paired long tubes, for the collection of data from two adjoining lanes.



Important points to note:

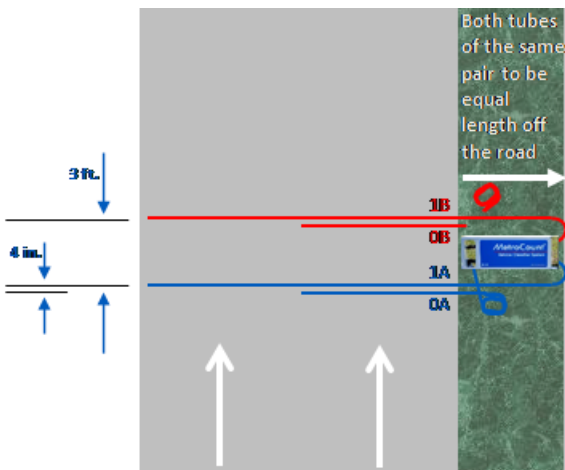
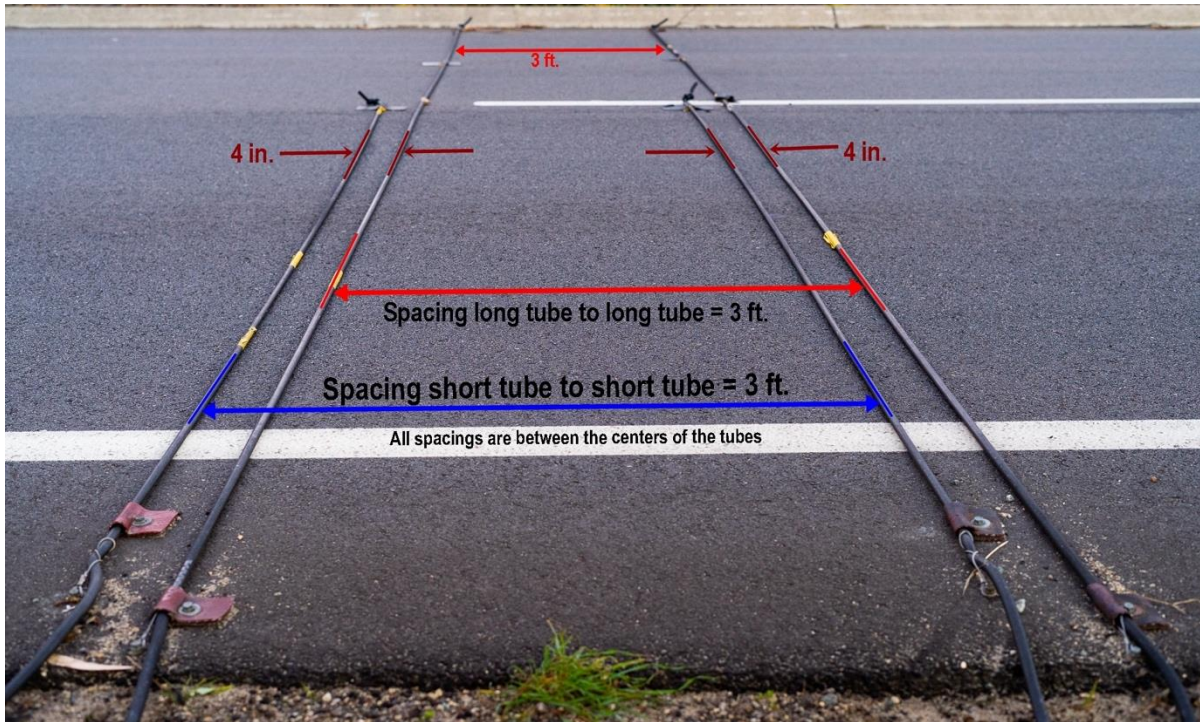
- Channel 0 = short tubes (on-road) / connected to front of VT4
- Channel 1 = long tubes (on-road) / connected to rear of VT4
- Channel 0 tubes are installed 100 mm or 4" in front of the channel 1 tubes
- All tubes can be the same length - e.g., 15m or 50' - with the long tubes having more on the road and the short tubes more off the road.
- Ensure the short tubes (channel 0) are installed on the kerb-side or outermost lane of traffic.

Left hand-drive countries (metric):



Right hand-drive countries (imperial):

For metric measurements, see the diagrams above.



Coupled mode Setup in MTE Software

The VT4 setup is a simple process and very similar to the setup of the other MetroCount two-channel devices.

Roadside Unit Setup
Set site information here

Site: 12345 Attribute: [-32.087174 +115.769582] Operator: MC Location...

Start time: Immediately Set... Lockout (ms): 10, Cross=10 Set Lockout

Site description: North Street, b/w First and Second Streets <70>

Sensor layout: Short/Long (Channel 0 is short tube) RSU: MC5904 Channel: CoSetup

Direction	Lane
0 A>B: 1 - North bound.	1
0 - Unused or unknown.	0
1 A>B: 1 - North bound.	2
0 - Unused or unknown.	0

Sensor: Spacing: 1000 mm, 3 ft 3.4 in Set...
Effective size: 0 mm, 0 ft Set...

Lockout (A->A, B->B): 10ms - Multiple lane
Cross lockout (0A->1A, 0B->1B): 10ms

Cancel OK

Site

The Site parameter is user-defined and may be up to 20 characters long. This is commonly used to represent the name or serial number assigned to the site where the RSU is placed.

The Site parameter is used as the first part of a dataset's filename when unloading data.

Attribute

The Attribute parameter is user-defined and may be up to 25 characters long. This is commonly used for site coordinates, or sub-grouping sites, for example by suburb or county.

Site Description / Text

The Site Description parameter may be up to 120 characters long. It is used to identify a survey site. It is useful to settle on a convention, such as the road name and nearby intersecting roads, landmarks or signposts.

A site's posted speed limit (PSL) can also be entered into this field using the following rules:

- Must be enclosed in angle brackets < >
- Default is km/h. Append an 'm' or 'M' for mph

Lockout

The A->A and B->B recommended lockout settings remain with the **10ms – Single lane normal** setting to be used.

The new **Cross lockout** setting (0A->1A and 0B->1B) specifies the time period after a logged sensor hit on the short tube, for which sensor hits on the long tube will be rejected.

The recommended setting is **10ms** and you may need to change this setting from the default setting as shipped in the RoadPod.

Sensor layout

Choose **Short/Long (Channel 0 is short tube)**.

RSU

Choose **MC5904**.

Channel

CoSetup is the only option.

Direction

For each lane, choose from one of the first four direction codes where only the primary (A->B) direction is specified.

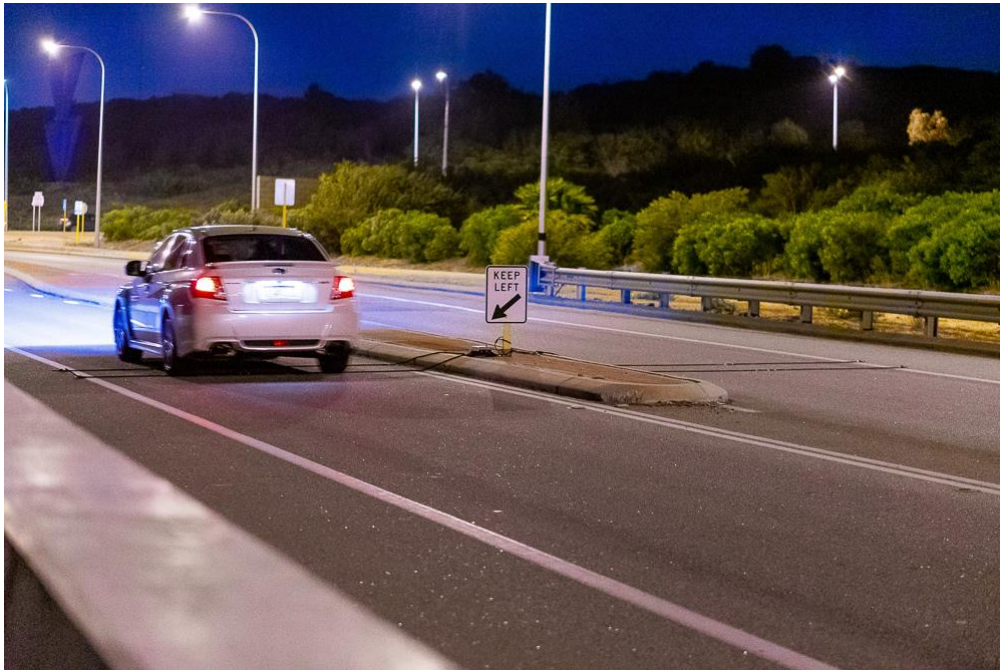
Lane

Each lane is to be set up with a unique lane number starting at 1. When data is unloaded, the lane number is included in the file extension of the suggested dataset name.

The VT4 will provide two datasets with the same filename, suffixed with **.ec1** and **.ec2**, respectively.

Decoupled mode installation

Install the VT4 on the traffic island/median with a pair of tubes to each (single) traffic lane.



Decoupled mode setup in MTE software

Add new site list item

Roadside Unit Setup

Set site information here

Site: MBs Desk VT4 | Attribute: [-32.079921 +115.753877] | Operator: MB | Location...

Start time: Immediately | Set... | Lockout (ms): 30 | Set Lockout

Site description: North Lake Road, Bibra Lake, 450 ft north of Bibra D'Ve <35 mph>

Sensor layout: Axle sensors - Paired (Class/Speed/Count) | RSU: MC5904 | Channel: CoSetup

Direction	Lane
0 A>B: 1 - North bound, A trigger first.	3
0 - Unused or unknown.	0
1 A>B: 3 - South bound, A trigger first.	4
0 - Unused or unknown.	0

Sensor Spacing: 914 mm, 3 ft | Set...
Effective size: 0 mm, 0 ft | Set...

Cancel | OK

Using your Site List, create a new site and ensure:

Lockout

Choose **30ms single lane normal**

Sensor layout

Choose **Axle sensors - Paired (Class/Speed/Count)**.

Direction

For Channels 0 and 1 are to be set with unique lane numbers.

Example for a two-lane bidirectional site

Edit site list item

Roadside Unit Setup

Set site information here

Site: 362514 Attribute: [41.90463 -87.70200] Operator: MB Location...

Start time: Immediately Lockout (ms): 30 Set Lockout

Site description: N Humboldt Drive, north of W Division St <30>

Sensor layout: Axle sensors - Paired (Class/Speed/Count) RSU: MC5904 Channel: CoSetup

Direction	Lane
0 A>B: 1 - North bound, A trigger first.	1
0 - Unused or unknown.	0
1 A>B: 3 - South bound, A trigger first.	2
0 - Unused or unknown.	0

Sensor Spacing: 914 mm, 3 ft Effective size: 0 mm, 0 ft

Cancel OK

Using your Site List, create a new site and ensure the following are correctly assigned:

Lockout

Choose **30ms single lane normal**.

Sensor layout

Choose **Axle sensors – Paired (Class/Speed/Count)**.

Direction

Choose the correct compass direction via the drop-down menu and set channels 0 and 1 with unique lane numbers.

Spacing

Ensure the correct spacing is measured; that is, 1000mm or 3ft, depending on your location.