Nayax Credit Card Reader

Crane Information and Installation Guide

Contents

Introduction

Welcome to the Kiwikrane Nayax Credit Card Reader Guide.

The information included in this document will explain how the readers work, about the new PCB Chip Programmes we have had produced for LCM machines, how to install a Nayax Reader on a Kiwikrane crane and how it works going forward.

It's important you have a good understanding of the process and what is involved before ordering your Nayax Readers.

If you have any questions please don't hesitate to contact us.

How Does The Nayax Reader System Work?

The Nayax Credit Card Readers can be installed on both LCM cranes and Knob cranes. However, knob cranes can only use coin 1 (coin) and coin 2 (credit card), where with the new LCM chip we have had developed for LCM machines means an LCM machine can have coin 1 (coin), coin 2 (note reader) and coin 3 (credit card) all at the same time. More will be explained about this in the PCB Chip section.

The Nayax Reader communicates through the Mobile Network via a SIM card (Spark Network) installed in the back of the unit. The unit itself will sit behind the glass at the bottom right side of the front of the crane (the unit will protected from vandalism by behind the glass). There will be a reverse Tap & Play sticker affixed above the Nayax Unit to attract customers to try using their credit card.

The unit will have one fixed price for a number of plays (like a note reader). A customer will tap their card on the front of the unit (the Nayax unit can read the card through the glass), their account will be debited, and the unit will send the credits to the crane.

If the crane has an error, then Nayax unit will automatically be disabled so no one can tap their cards.

There are two pricing structures you can choose from:

- $5.50 for 3 plays ($2 per play machine)
- $5.50 for 6 plays ($1 per play machine)

Why $5.50 and How Does The Money Side Of Things Work?

We currently have a Note Reader structure of $5 for 3 or $5 for 6 plays. The Credit Card pricing structure picks up this model. The extra $0.50 helps cover the transaction cost, and from a player's perspective they are still getting a $0.50 discount to play.

NOTE: For your transaction fees to be totally covered, your Nayax credit card reader needs 60 taps per month. Any taps less than this will mean you will be subsidising the cost of the reader, any more than 60 and you will make a profit on the transaction fees.

The player is charged $5.50, but only the equivalent of a $5.00 pulse is sent to the crane.

The money (after Nayax transaction fees) is deposited into a Kiwikrane Support Office account. This will then be transferred to your nominated bank account before the 20th of the month following (so you can use it to pay your Kiwikrane account 😊).

Fee Structure

Each month a $15.00 (GST exclusive) per active Nayax unit fee is charged by Nayax.

- The fee becomes payable if the unit at anytime connects to the Nayax system during a calendar month. However, nothing is charged if it doesn't connect. This means that if you are temporarily removing a crane from a site, unplug the power to the Nayax unit. This means that if you plug it in and turn it on in the warehouse the Nayax unit will not become active. When you put it back on site, replug the Nayax unit back in and you will then be charged. NOTE: In order to get your Nayax units ready for you we will need to plug them in, update firmware, download settings, etc. This means you will be charged for the month the unit is plugged in – regardless of whether you install them on to your site that month or not.

Each transaction cost, as per the table below:

Card Type	Fee Schedule (GST exclusive)
Credit Card	$0.15 + 0.85% of transaction
Debit Card	$0.15 + 0.85% of transaction
American Express	3 % of transaction
FOB (Read about this later)	1% of transaction

Analysis of Figures

In our Auckland franchise areas we have been running nine Nayax readers at Countdown sites over the past three months. Below is a breakdown of each site and then a summary.

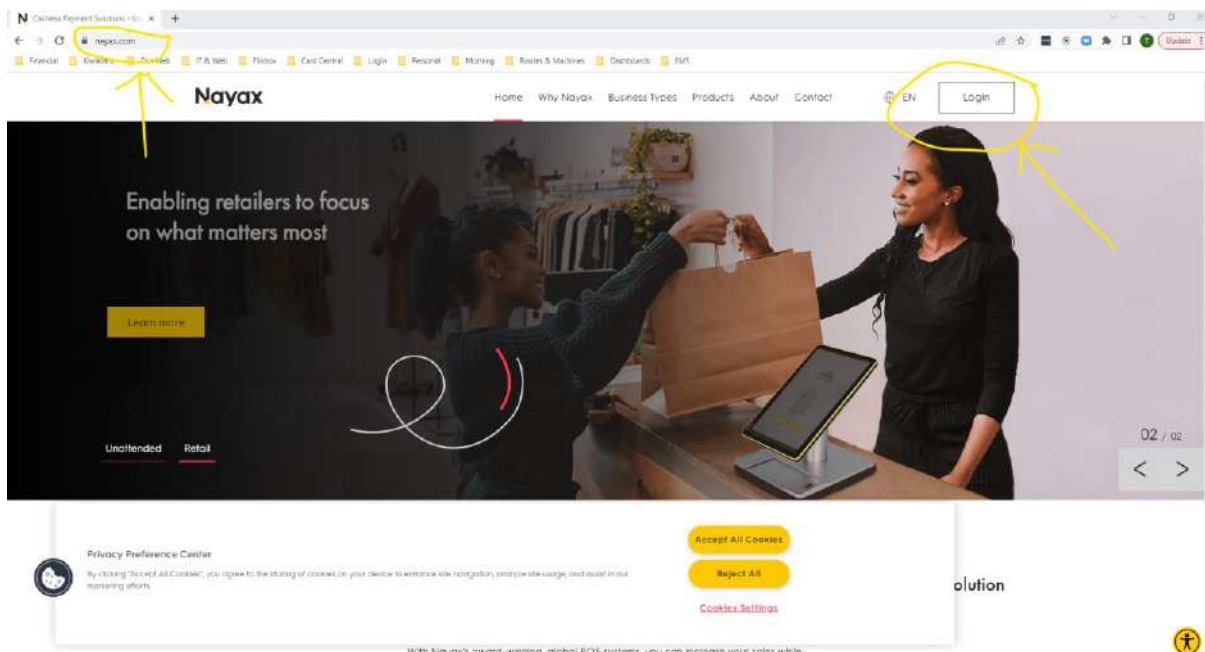|	Dec-2022				
	Coin	Note	Credit	Total	Credit Percentage of Total
AUCKLAND CITY	$ 375.00	$ 45.00	$ 120.00	$ 540.00	22%
AUCKLAND CITY	$ 323.00	$ 160.00	$ 245.00	$ 728.00	34%
BOTANY DOWNS	$ 635.00	$ 110.00	$ 170.00	$ 915.00	19%
BOTANY DOWNS	$ 355.00	$ 90.00	$ 65.00	$ 510.00	13%
HIGHLAND PARK	$ 354.00	$ 148.00	$ 65.00	$ 567.00	11%
KELSTON	$ 322.00	$ 30.00	$ 130.00	$ 482.00	27%
KELSTON	$ 118.00	$ 5.00	$ 10.00	$ 133.00	8%
LYNFIELD	$ 441.00	$ 130.00	$ 55.00	$ 626.00	9%
MT ROSKILL	$ 659.00	$ 70.00	$ 129.00	$ 858.00	15%
Total	$ 3,582.00	$ 788.00	$ 989.00	$ 5,359.00	18%
	Jan - 2023				
	Coin	Note	Credit	Total	Credit Percentage of Total
AUCKLAND CITY	$ 447.00	$ 55.00	$ 435.00	$ 937.00	46%
AUCKLAND CITY	$ 680.00	$ 300.00	$ 520.00	$ 1,500.00	35%
BOTANY DOWNS	$ 976.00	$ 110.00	$ 595.00	$ 1,681.00	35%
BOTANY DOWNS	$ 722.00	$ 115.00	$ 255.00	$ 1,092.00	23%
HIGHLAND PARK	$ 572.00	$ 120.00	$ 310.00	$ 1,002.00	31%
KELSTON	$ 736.00	$ 125.00	$ 220.00	$ 1,081.00	20%
KELSTON	$ 195.00	$ 10.00	$ 75.00	$ 280.00	27%
LYNFIELD	$ 596.00	$ 230.00	$ 180.00	$ 1,006.00	18%
MT ROSKILL	$ 1,148.00	$ 100.00	$ 335.00	$ 1,583.00	21%
Total	$ 6,072.00	$ 1,165.00	$ 2,925.00	$ 10,162.00	29%
	Feb - 2023				
	Coin	Note	Credit	Total	Credit Percentage of Total
AUCKLAND CITY	$ 313.00	$ 95.00	$ 300.00	$ 708.00	42%
AUCKLAND CITY	$ 215.00	$ 145.00	$ 190.00	$ 550.00	35%
BOTANY DOWNS	$ 608.00	$ 75.00	$ 340.00	$ 1,023.00	33%
BOTANY DOWNS	$ 383.00	$ 85.00	$ 240.00	$ 708.00	34%
HIGHLAND PARK	$ 240.00	$ 6.00	$ 70.00	$ 316.00	22%
KELSTON	$ 525.00	$ 235.00	$ 240.00	$ 1,000.00	24%
KELSTON	$ 208.00	$ -	$ 75.00	$ 283.00	27%
LYNFIELD	$ 282.00	$ 200.00	$ 200.00	$ 682.00	29%
MT ROSKILL	$ 684.00	$ 25.00	$ 180.00	$ 889.00	20%
Total	$ 3,458.00	$ 866.00	$ 1,835.00	$ 6,159.00	30%

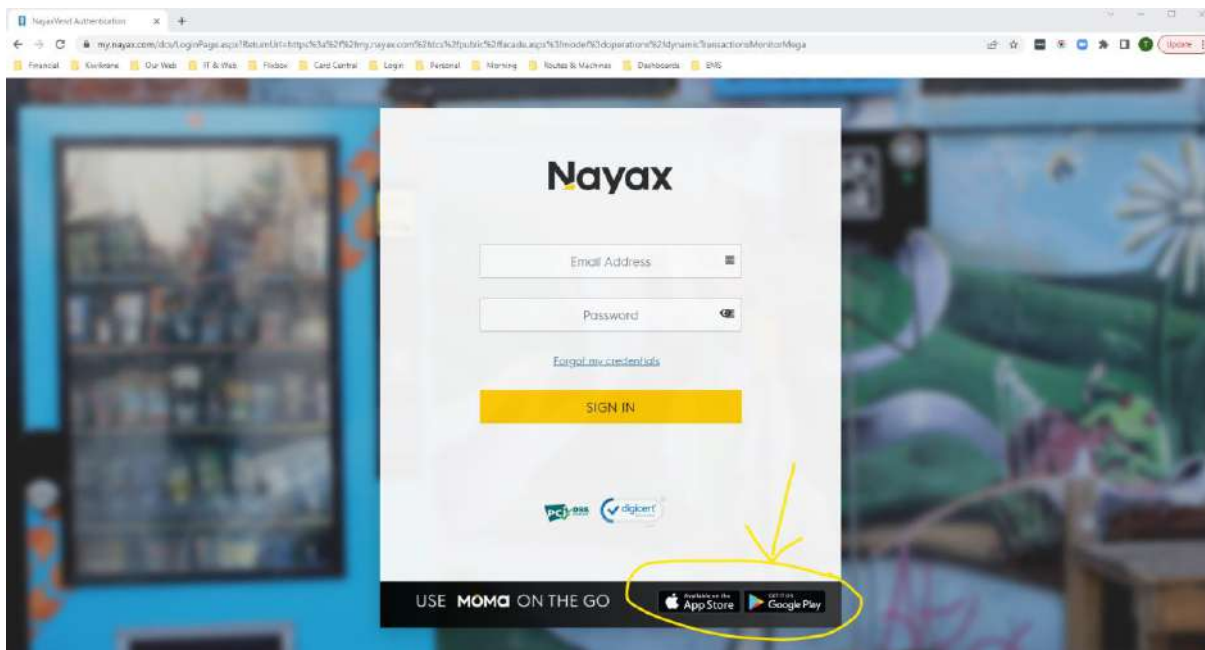| Summary of Credit Card Percentage of Total Revenue			
	Dec-22	Jan-23	Feb-23
AUCKLAND CITY	22%	46%	42%
AUCKLAND CITY	34%	35%	35%
BOTANY DOWNS	19%	35%	33%
BOTANY DOWNS	13%	23%	34%
HIGHLAND PARK	11%	31%	22%
KELSTON	27%	20%	24%
KELSTON	8%	27%	27%
LYNFIELD	9%	18%	29%
MT ROSKILL	15%	21%	20%
Total	18%	29%	30%

As can be seen from the figures above, on average the credit card sales now account for 30% of the total revenue of these nine machines. This percentage can reasonably be expected to continue increasing over the coming years.

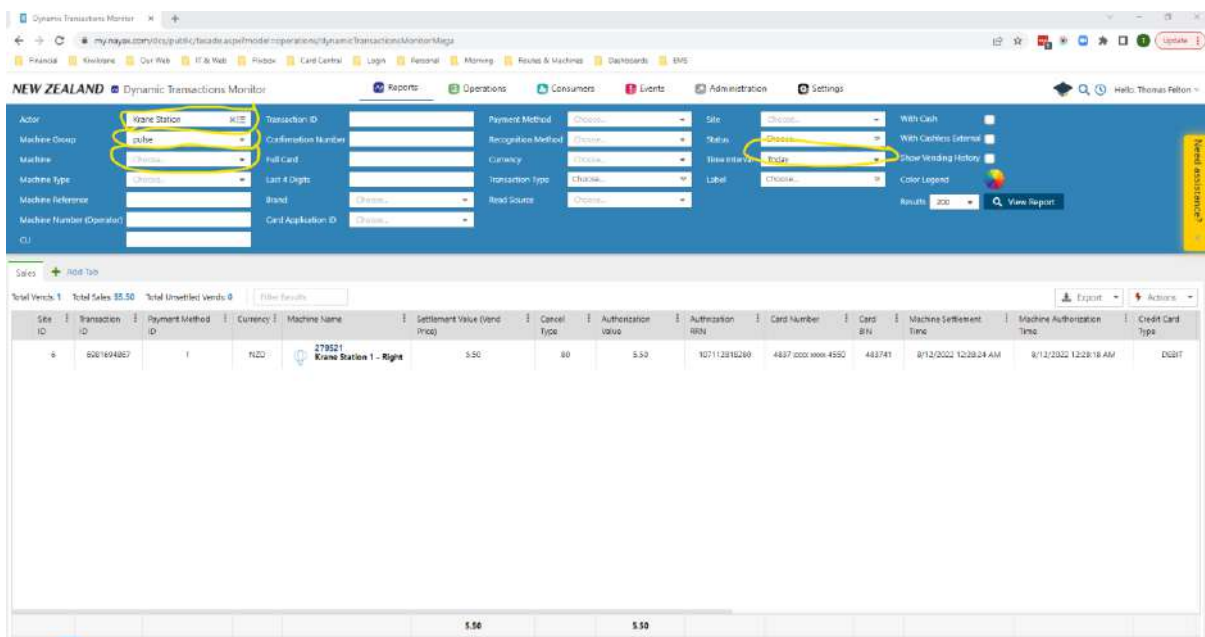## Auditing, Back End Access & Refunding Customers

You will be given on-line computer and Mobile access to see your readers (each franchisee has their own separate area and can't see other franchisees readers), the unit status, transactions, and be able to issue refunds.

Once Kiwikrane has submitted an application you will be emailed a link to enable you to login to the Nayax Site: www.nayax.com
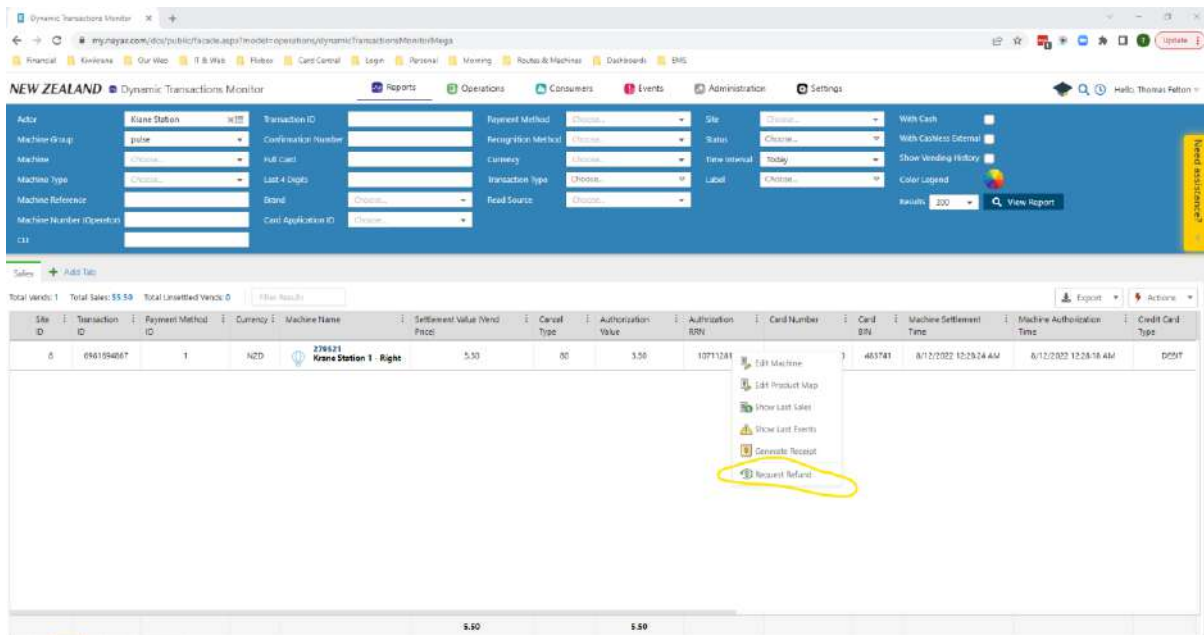
From the main screen you can select: Reports / Online Reports / Dynamic Transaction Monitor and be able to customise a transaction report.

Choose:

- Actor (Your Franchise Area)
- Machine Group (Pulse)
- Machine (Leave bank if you want all machines or choose a specific one)
- Time Interval (This defaults to today)
- Then select "View" to see the report

To refund a customer, you right click on the required transaction and select Request refund.

From the Request Refund dialogue box you can select full or partial amount to refund, provide a reason for your records, and request refund.

Request Refund

Transaction Details

Transaction DT:	8/12/2022 12:28:24 AM
Transaction Amount:	5.50
Currency:	NZD
Product Name:	Unknown(5 = 5.50)
Card Number:	4837 xxxx xxxx 4550
Card Brand:	VISA
Read Source:	CLS
Transaction Type:	EMV_Online

Machine Details

Operator Name:	KIWIKRANE FRANCHISING LIMITED
Machine Name:	Krane Station 1 - Right
Machine Type:	pulse
Machine Number:	279521
Machine Model:	Australia - VposT 6 Pulse M

Billing Provider Details

Billing Provider:	WorldPay
Terminal ID:	
Transaction ID:	6981694867
Transaction RRN:	107112818280

Refund Details

⦿ Refund Full Amount: 5.50
○ Refund Partial Amount

Refund Confirmation Email

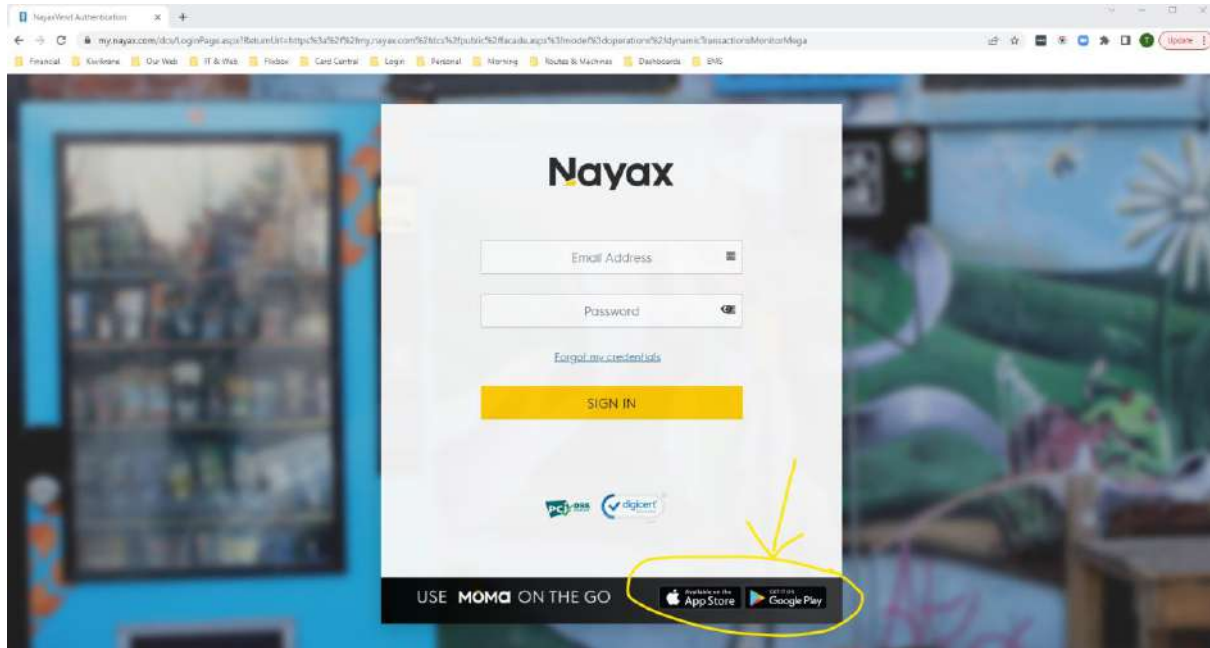thomas@kiwikrane.co.nz

Refund Reason*

Please Note:
It may take up to 4 business days for the refund
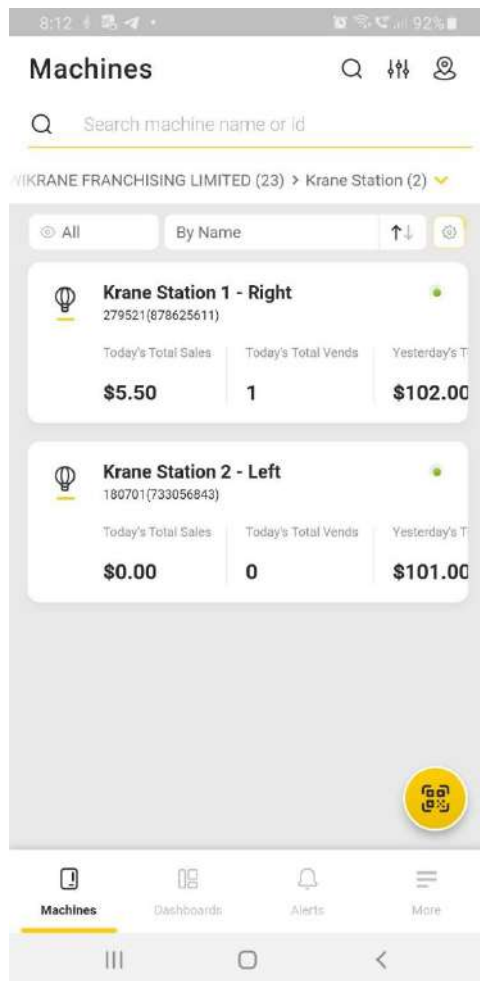to appear on the card holder's bank account."

Cancel   ✔ Request Refund

You will be able to download the mobile "Moma" app to your phone from the link on the Nayax login screen.

Moma App Screenshot Below

Installation Guide

New PCB Chips

If you have asked for a replacement LCM PCB board over the last few months you will have noticed we have sent you back a different than normal chip (programme number).

New LCM PCB chip programmes have been developed for a number of reasons:
- It automatically resolves a prize sensor error (i.e. when a child sticks their hand up the prize shoot and sets off the prize sensor). Instead of the alarm continuously sounding and a site turning off a machine, but not turning it back on. The new chip automatically clears this error after 10 seconds.
- It allows for $0.50c increments in stock price (rather than $1.00 increments) to allow greater control over percentage setting.
- The Default Settings have been changed. This means that if there is a power surge which resets the chip, the default Percentage, Pick up and Retaining are closer to a real scenario. This will help stop a crane being emptied of stock in this very rare occurrence.
- A Standard and Jumbo/Super Jumbo crane have different gantry widths. These widths are hard coded into the chip as it can then more accurately calculate pick up and drop points. This helps more accurately calculate percentage pay-out.
- It allows the use of not just Coin 1 & Coin 2, but also Coin 3 & Coin 4. This is needed if you are wanting to not only have Coin Mechanism and Credit Card Reader, but also retain a Note Reader at the same time.
- The Jumbo and Super Jumbo Chip has been developed to work with all models including those which have automatic latches on the prize door (these open for a specified time to allow a prize to be collected and then relock to stop a child crawling in the machine).

Two new LCM chips have been developed - one for standard and one for jumbo and super jumbo cranes.

Size	Machines	Programme
Jumbo & Super Jumbo	288B, 288B1, 288B1L	588BN302
Standard	288, 189L, 189N	W588N302

This has an important implication for when you are moving PCB Boards between cranes (for testing or replacement purposes). The chips have been designed for specific cranes.

In an emergency or testing situation, the chips can be swapped over and used in another size machine until the correct chip is obtained (except where a crane has automatic prize latches and can only use a Jumbo & Super Jumbo Chip). However, this is not a long term solution as the widths of the cranes are hard coded and over time could affect the percentage pay-out calculations.

You will be supplied the correct chip for the LCM crane you are placing the Nayax unit on.

Materials Included In Installation Package From Kiwikrane

The materials included in the instillation kits will depend on the specific crane the reader is being installed on, if you will only have a coin mechanism and a card reader, or you will have a coin mechanism, note reader and a card reader. We also need to know the variation you have with your current Coin 1 and 2 loom as this will depend on what additional cables you will need as well as the machine model for an additional wood mounting block.

Two Basic Kits

Nayax Kit 1 (For Knob cranes, or LCM cranes which only want a coin mechanism and credit card reader)
- Nayax Oynx unit
- Nayax – Onyx – Pulse + Ethernet Cable
- Nayax VPost/Onyx Mounting Adaptor
- Tap & Play Sticker
- Nayax FOB

Nayax Kit 2 (For LCM cranes who what the option of using coin, note reader and credit card)
- Nayax Oynx unit
- Nayax – Onyx – Pulse + Ethernet Cable
- Nayax VPost/Onyx Mounting Adaptor
- Tap & Play Sticker
- Nayax FOB
- Crane Eprom (New PCB Board Chip)
- Chip Puller
- New Coin Loom (JP7 – LCM)
- New Coin/Prize Meter Loom (JP5 – LCM)
- New Coin/Prize Meter Bracket
- New Coin 3 Meter
- New labels For Coin 1, Coin 2, Coin 3 & Win

Additional Wood Mounting Block
The mounting block for the Nayax reader is a different height for different cranes. The appropriate height mounting block will be sent with the package for that crane. (This is a white painted angle cut wooden mount with holes predrilled).

Additional Adapter Coin Meter Cable
The Nayax Unit uses a Coin plug to connect to the PCB Board. We therefore, you need to make sure there is one available. Some looms have two coin plugs. Some cranes will have one coin and one note reader plug and some may have had one coin plug cut off. In addition to the above kits you may also need:
- Wire to connect to coin 2 – 4 pin (if one has been cut off)
- Wire to connect to coin 2 – note (if you have a note reader connection)

Equipment A Franchisee Needs To Supply

To Install the Nayax Unit a franchisee needs:

- Corded or cordless drill & 30mm hole saw drill bit
- Philips Screwdriver
- Double Sided Tape
- Vivid or Marker Pen

If a new plug needs to soldered on to the Coin 2 wire you will also need:

- Soldering iron
- Solder
- Heat Shrink
- Wire strippers

#1 – Complete A Collection On The Crane and Make A Record Of Meters & Settings

Step #1 – Complete a Collection on the crane and enter the details in CoinOp.

Step #2 – Take a photo of the coin/prize meters for reference.

Step #3 – Record the Machine Settings (you will be changing the chip so these will be lost and you will need to restore these.)

NOTE:

- Standard crane – Dropping Skill = 6%
- Jumbo or Super Jumbo – Dropping Skill = 10%
- Super Clip = 0% for both

NOTE: Check your cranes have the percentage set at 230%. This will ensure you will be paying out at 30%.

#2 - Assemble the Reader & Base

<mark>Note: Some cranes won't require a wooden base to raise the height of the Nayax Reader Holder. In this case it will be directly screwed to the base board of the crane.</mark>

Step #1 – Attach the back of the Nayax holder to the top of the wooden block. Align the hole in the wood with the hole on the base.

Step #2 – Feed the yellow and black (antenna) cables through the wooden block, and out the front of the holder.

Step #3 – Feed the yellow and black cables through the holder back piece and plug in the cables into the Nayax Reader.

Step #4 – Screw the back holder onto the Nayax Reader.

Step #5 – Attach both parts of the holder together.

If you have done this successfully it should look like the example below.

#3 Install the Reader & Base

<mark>Note: If no base is required follow the same steps below – just without the base.</mark>

Step #1 – Position the reader on the front right side of the crane. It should be pressed against the glass, 35mm from the right side of the metal frame.
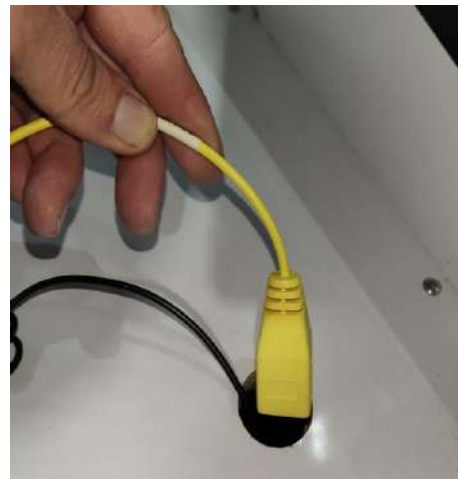

Step #2 – Tilt the positioned unit and mark the centre of the hole with a vivid marker.

Step #3 – Using a 30mm drill bit drill the hole you have marked.

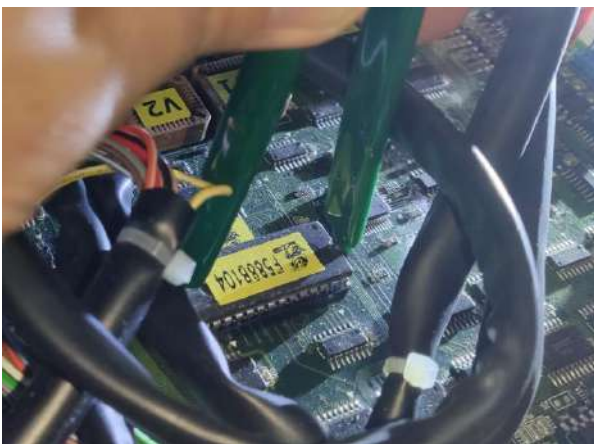Step #4 – Feed the yellow and antenna cables through the hole.

Step #5 – Place double sided tape on the bottom of the wood base, and then fix the wood base to the floor of the crane with the provided screw.

#4 Replace the PCB Chip

If you have selected Kit 2 (the ability to use coin, note and credit – as well as the additional features of the new chip) – you will need to replace the PCB chip. Using the provided IC Extractor Tool, extract the main PCB programme chip on the PCB board and replace with the new provided chip as shown below.

If you have never replaced a PCB Chip before watch the below video or one like it before doing so.

https://www.youtube.com/watch?v=Vmu6mrNb8rI

Please Note:

- When using the chip puller make sure you only pull on the chip and not on the chip holder which is soldered to the PCB board.
- Pull straight up.
- When replacing the chip please look carefully as PCB chips are only designed to

go one way on the board. On one end of the chip holder and on the chip itself you will find a small circle marking. These two ends need to be aligned. Inserting the chip any other way will cause damage.

- Insert the legs of the removed chip into the foam the replacement chip came in (This will need to be returned to Kiwikane or there will be a charge to replace this chip).
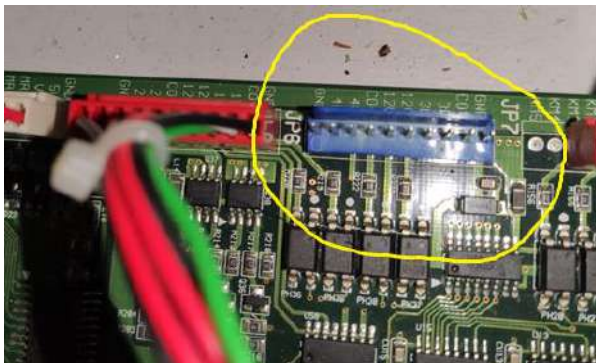
#5 Add Additional Coin Cable

Step #1 – Locate the extra Coin Mechanism cable. It has a red plug marked JP6.

Step #2 – You will already have a red JP6 plug plugged into the JP6 socket. Leave this there and plug the extra JP6 plug into the blue JP7 plug next to it.

#6 Position the Antenna

Place the Nayax Credit Card Reader Antenna in a suitable location using double sided tape.

In most instances this will be in the back of the crane somewhere near the PCB board.
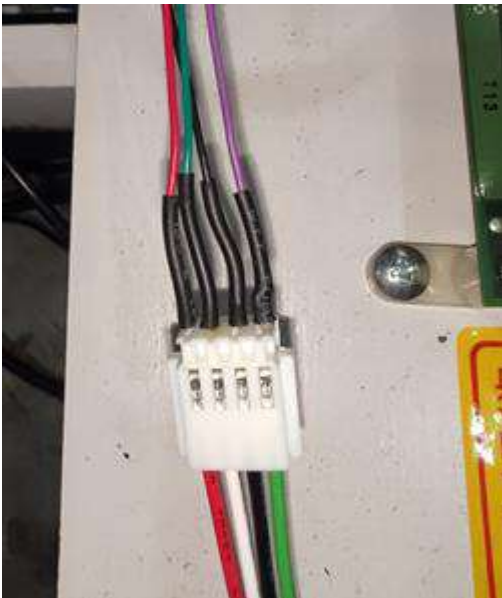
If the unit struggles to gain reception once it has been turned on, you may need to move the position of the antenna higher in the crane.

#7 V.1 Connect Nayax Unit To The Coin Cable

Attach the Nayax unit to the Coin 2 cable in the front of the machine. As per the below photo.

If your Coin 2 plug is a Note Reader Plug then use the included adaptor.

If your Coin 2 plug has been cut off, then solder on the included plug – connecting the same coloured wires together. Make sure you use heat shrink to protect the solder joints. Give us a call if you have any questions.

#7 V.2 Connect Nayax Unit To The Coin Cable

Attach the Nayax unit to the new Coin cable you installed into the JP7 socket. As per the below photos.

#8 Connect The New JP5 Plug

Step #1 – Find the new JP5 cable (Coin/Prize Meters Cable) and thread this from the front console (by the coin meters) to where the PCB board is situated. Make sure you leave the wires in the console area to be used later.

Step #2 – Located the JP5 plug and cable on the PCB Board. Disconnect this plug, but do not remove from the machine (there are a couple of other wires connected in the loom that still need to be attached for the crane to work correctly.)

Step #3 – Plug in the new JP5 Loom into the JP5 Socket.

#9 Connect The New JP5 Plug To The Meters
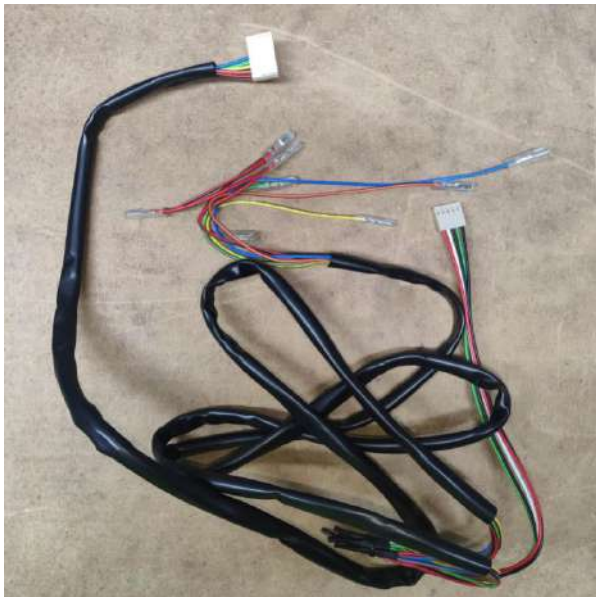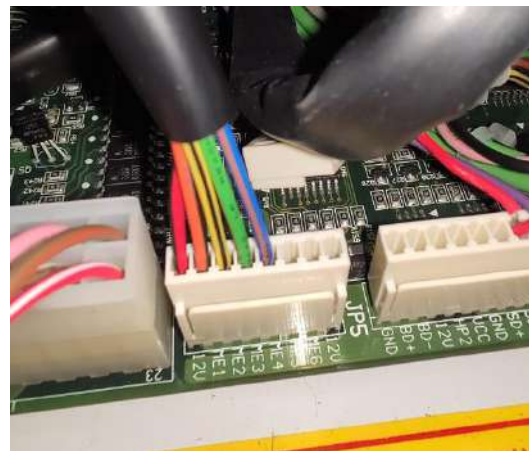
NOTE: If you are using Coin Mechanism, Note Reader and Credit Card Reader follow these instructions.

If you are only using Coin and Credit Card you do not need to do this - move to the next step.

Step #1 – Unscrew the existing meter holder from inside of the front console.

Step #2 – Remove the wires from the back of the existing meters.

Step #3 – 'Pop Out' or remove Coin 1, Coin 2 and Win meters from the original metal holder and insert them in the new four meter metal holder. (Keep the Coin 1, Coin 2 in the same position, but move the Win meter to the bottom of the four meters so the order goes: Coin1, Coin 2, Coin 3 (Credit) and Win.

Step #4 – Label the meters with the labels provided.

Step #5 – Connect the wires from the new JP5 loom onto the meters. Follow the wiring colours below:

- Coin 1: Orange (Top Lug)
- Coin 2: Yellow (Top Lug)
- Coin 3 (Credit): Blue (Top Lug)
- Win: Green (Top Lug)
- Common: Red (Bottom Lug)

The Red is a common wire and loops to all the bottom lugs.

Step #6 – Screw the new Coin Meter holder to the inside wall of the console.

#10 Install the Tap & Play Sticker

Install the provided Tap & Play Sticker above the Nayax Credit Card Reader (it's a reverse sticker so will need to go on the inside of the glass).

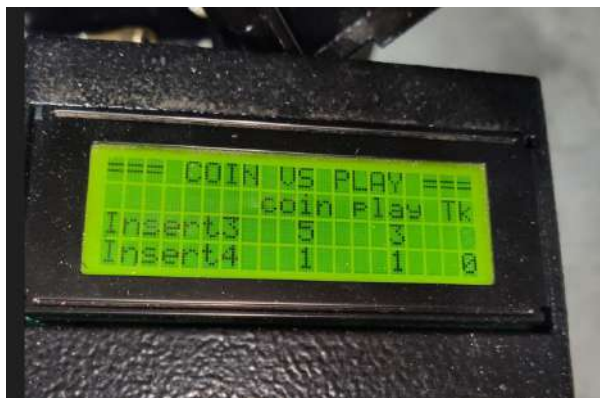## #11 Turn On The Crane and Restore The Internal Settings

With changing the PCB Chip, all the previous settings will have been lost.

Step #1 - Use the photos you took at the beginning to restore the original settings.

Step #2 – On the Coin vs Play screen – change the appropriate Insert.

- If having one coin mech and credit card, then change Insert 2 to 5 Coin and 3 Play.
- If having one coin mech, note reader and credit card then change Insert 3 to 5 Coin and 3 Play. (See below photo

NOTE: Always test to make sure the settings are giving the correct number of plays as you may have your coin 1 and coin 2 wires around the wrong way.

#12 – Test The Machine

Step #1 – Once booted, your Nayax Credit Card Reader screen should look like the photo below (for $2 per play).

Step #2 – Hold the Yellow Nayax Fob in front of the Reader. The Reader should recognise the FOB, authorise the transaction and put 3 credits on the crane.

#13 – Record & Notify The Meter Readings

Step #1 – After you have completed several tests using the FOB take a photo of the meter.

Step #2 – Record the new Coin 3 meter on your crane Commission Slip.

Step #3 – Send the new Coin 3 (Credit) meter number to office@kiwikrane.co.nz , along with the serial number, location of the crane, date you installed, asking for this new meter to be added.

#14 – Congratulations You Have Installed Your Nayax Credit Card Reader

If things haven't worked as planned, please give us a call.

Otherwise, congratulations on installing your Nayax Credit Card Reader! Sit back and admire your handywork. 😊

#15 – Going Forward

FOB

The FOB is a way to test the Nayax unit is working correctly. It only charges 1% of the transaction value + GST (it's cheaper than using your credit card).

You don't need to do this every time you visit the crane. This will only need to be done if there is an issue or we are asking you to test the Nayax Unit for a particular reason. You can tell if the Nayax Unit is working by looking at the screen and you can see the transaction records online.

Commission Slip & CoinOp

Enter Coin 3 (Credit) as you would normally on to the Commission Slip and into CoinOp.

Paying Commission

We recommend moving any crane sites you install a Nayax Credit Card Reader on onto a bank transfer, rather than cash. Most sites will already be like this.

Please Note: Although the reader charges a customer $5.50 – only $5 is recorded on the meters (and therefore also recorded on the Commission Slip and CoinOp).

Commission should only be paid on the $5.00, not the $5.50 as the extra $0.50 is covering transaction charges.

If you have refunded someone electronically, please remember you will need to add Test Credits to the Commission Slip to account for this.