

INFINITY∞

MODEL RAILWAY CONTROL [and beyond]



Wireless Analogue Control System

USER MANUAL

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SYSTEM SPECIFICATIONS

POWER SUPPLY INPUT - 100-240v ~ 50/60Hz

Each power supply has a UK, EU and US input connector, please select the correct connector and insert in the power unit until fully engaged with a “click”.

POWER SUPPLY OUTPUT - 18.0v 1.6A DC

Always use the correct power supply, an incorrect power supply can damage your system.

TRACK OUTPUT VOLTAGE - 0-14DC 1.35A max This system is common return compatible.

ACCESSORY OUTPUT - 18vDC 1.6A max

DCC OUTPUT - 18v

USB PORT (TYPE C)

This is for updating the unit ONLY and not suitable for any other purpose.

BLUETOOTH INFORMATION - Low energy - ISM Band 2.402 to 2.480 GHz - 50m range
Range will vary on surroundings.

HANDSET BATTERIES - 2 x AA/R6/UM-3

Always store your system in warm dry conditions, power supplies and base units are for indoor use only and never let any part of your system get wet. There are no serviceable parts inside and if any part becomes damaged seek professional advice or replace the item before use.

THANK YOU FOR CHOOSING GAUGEMASTER INFINITY

Gaugemaster Infinity offers today's railway modeller complete control of their layout in a contemporary way. Infinity delivers all the benefits of conventional control with a new, modern feel and some added features we think you will love.

The INFINITY Analogue system revolutionises analogue control and redefines what conventional analogue control should be in the 21st century. Infinity Analogue allows you to control all your separate track sections with a single Remote handset.

Oh, we didn't mention it was wireless? Yes, its proven Bluetooth connectivity allows a range of up to 50m rarely afforded to modellers who use analogue control who have no desire to switch to DCC.

Infinity Solo gives you single track control in seconds. It's also extendable so if you wanted to add more tracks, this can be achieved with one of the Acolyte units and/or further Remote Units. This can give you up to ten track control.

We are proud to tell you that Gaugemaster Infinity was designed and manufactured here in the United Kingdom by our own in-house team of modellers, made with you in mind.

It's Model Railway Control [and beyond]



YOUR GAUGEMASTER INFINITY ANALOGUE SYSTEM

Your INFINITY Analogue System includes the following based on which system you have obtained

INFINITY SOLO

- 1 x Base Unit
- 1 x Handset
- 1 x Power Supply
- 3 x Green Track Connection Plugs
- 2 x AA Batteries

INFINITY DUO

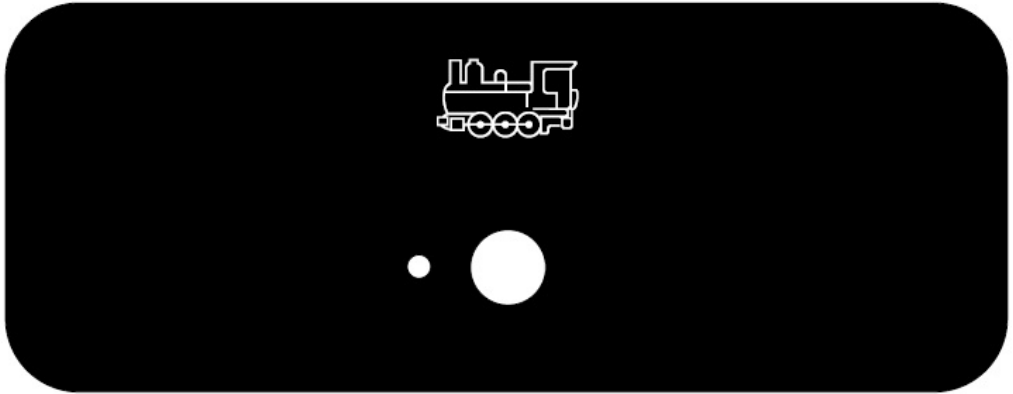
- 1 x Base Unit
- 1 x Handset
- 2 x Power Supply
- 4 x Green Track Connection Plugs
- 2 x AA Batteries

NOTE

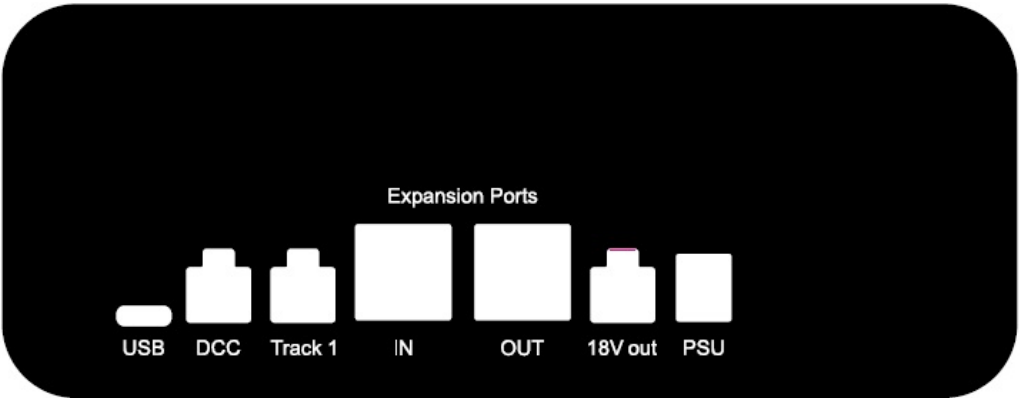
INFINITY Base Units do not feature an ON/OFF button as when they aren't in use, they draw very little current. If you prefer, you can switch the Base Unit off using the switch on your wall socket and by doing so, your INFINITY Handset will shut down around 5 seconds later. When you are ready to use your system again, simply turn on the switch on your wall socket, press the POWER button on the Handset and your INFINITY system will be ready to use again

YOUR GAUGEMASTER INFINITY SOLO BASE UNIT

FRONT



REAR



A - Track 1 Status LED

RED = Stop has been pressed

GREEN = Connected to a handset and working

GREEN (FLASHING) = Powered up but not connected to a handset

BLUE (FLASHING) = Pair Mode so a Handset can be Paired Up

B - Centre Button, used for PAIRING (Held

Down) or as an EMERGENCY STOP (Press once)

D - USB Port for firmware updates

E - DCC Feed for DCC controlled accessories*

F - Track Power Output*

G - Expansion Port IN for use with INFINITY expansion units (available separately)

H - Expansion Port OUT for use with INFINITY expansion units (available separately)

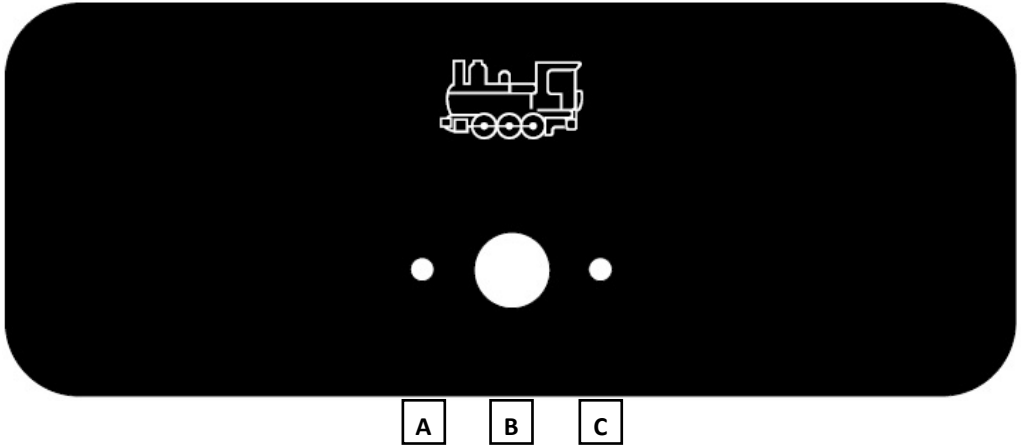
I - 18v Live Output (for Analogue Accessories)*

J - INFINITY Power Supply Unit Input.

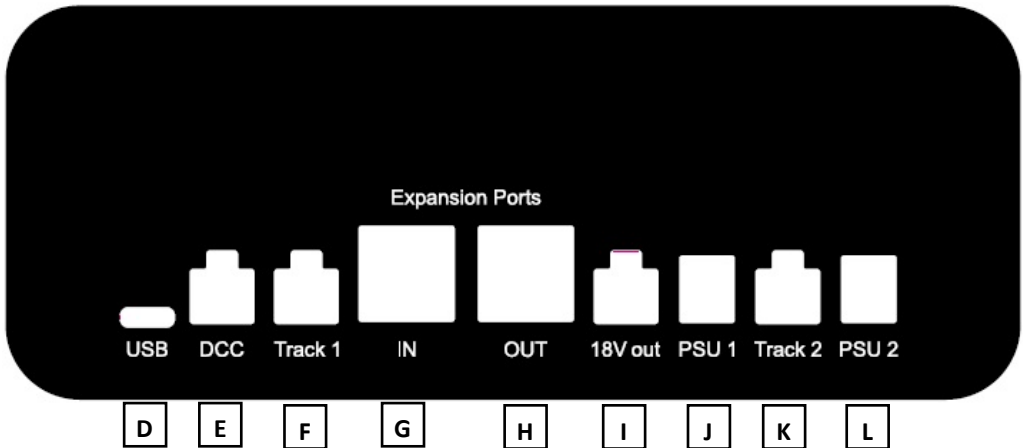
* = Green Plugs provided for easy connections

YOUR GAUGEMASTER INFINITY DUO BASE UNIT

FRONT



REAR



A - Track 1 Status LED

RED = Stop has been pressed

GREEN = Connected to a handset and working

GREEN (FLASHING) = Powered up but not connected to a handset

BLUE (FLASHING) = Pair Mode so a Handset can be Paired Up

B - Centre Button, used for PAIRING (Held

Down) or as an EMERGENCY STOP (Press once)

C - Track 2 Status LED

(As 'A' but for Track 2)

D - USB Port for firmware updates

E - DCC Feed for DCC controlled accessories*

F - Track 1 Power Output*

G - Expansion Port IN for use with INFINITY expansion units (available separately)

H - Expansion Port OUT for use with INFINITY expansion units (available separately)

I - 18v Live Output (for Analogue Accessories)

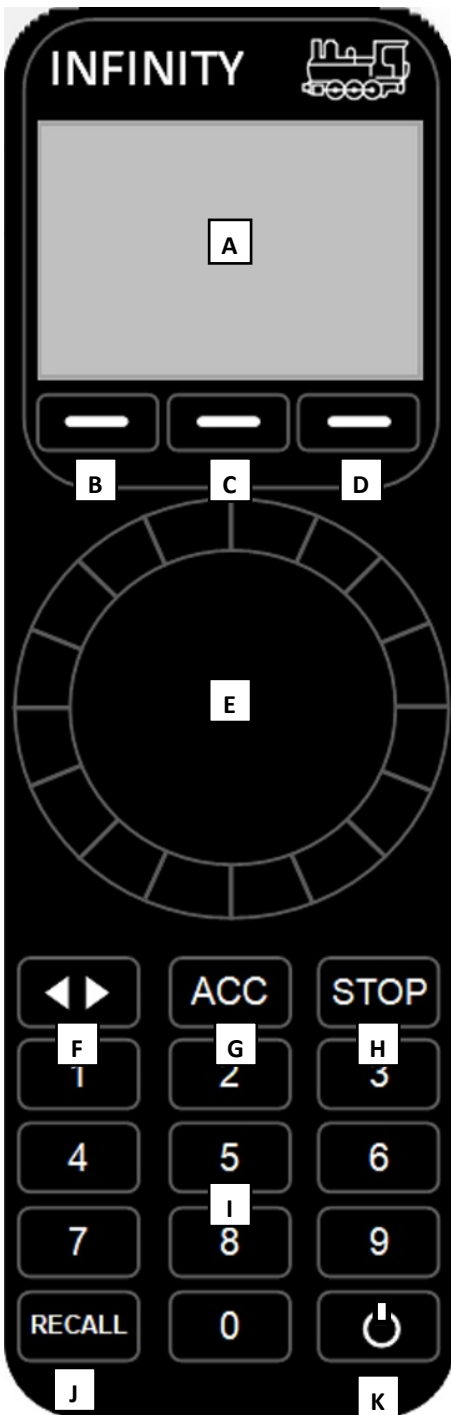
J - INFINITY Power Supply Unit Input for Track 1

K - Track 2 Power Output*

L - INFINITY Power Supply Unit Input for Track 2

* = Green Plugs provided for connections

YOUR GAUGEMASTER INFINITY HANDSET



A - LCD DISPLAY

See Right

B/C/D - SELECTION BUTTONS

The use of these buttons varies, depending on what you want to change or operate. The function of each button is displayed on the screen directly above them. On the DRIVE screen, these will access the MENU, SIMULATION and BRAKE functions

E - DIAL

This has multiple functions - it changes the speed of the track you have selected. Rotate right to increase the speed or left to slow down. When the Loco is stationary, in YARD mode, this dial can be used to switch direction. It is also used to move selection arrows in the menus

F - DIRECTION (< >)

Changes the direction of the selected track. If Simulation (SIM) is deployed, it will slow down at the current simulation setting before changing direction

G - ACCESSORY (ACC)

This takes you to the Accessories menu so you can operate all your Accessories. A second press will take you to the Accessory Sequence menu. So this single button allows you to toggle between two menus

H - STOP (STOP)

Use this button to stop (remove power to) the selected track. Continue to hold it and you will remove the power to all tracks

I - NUMERIC KEYPAD (0-9)

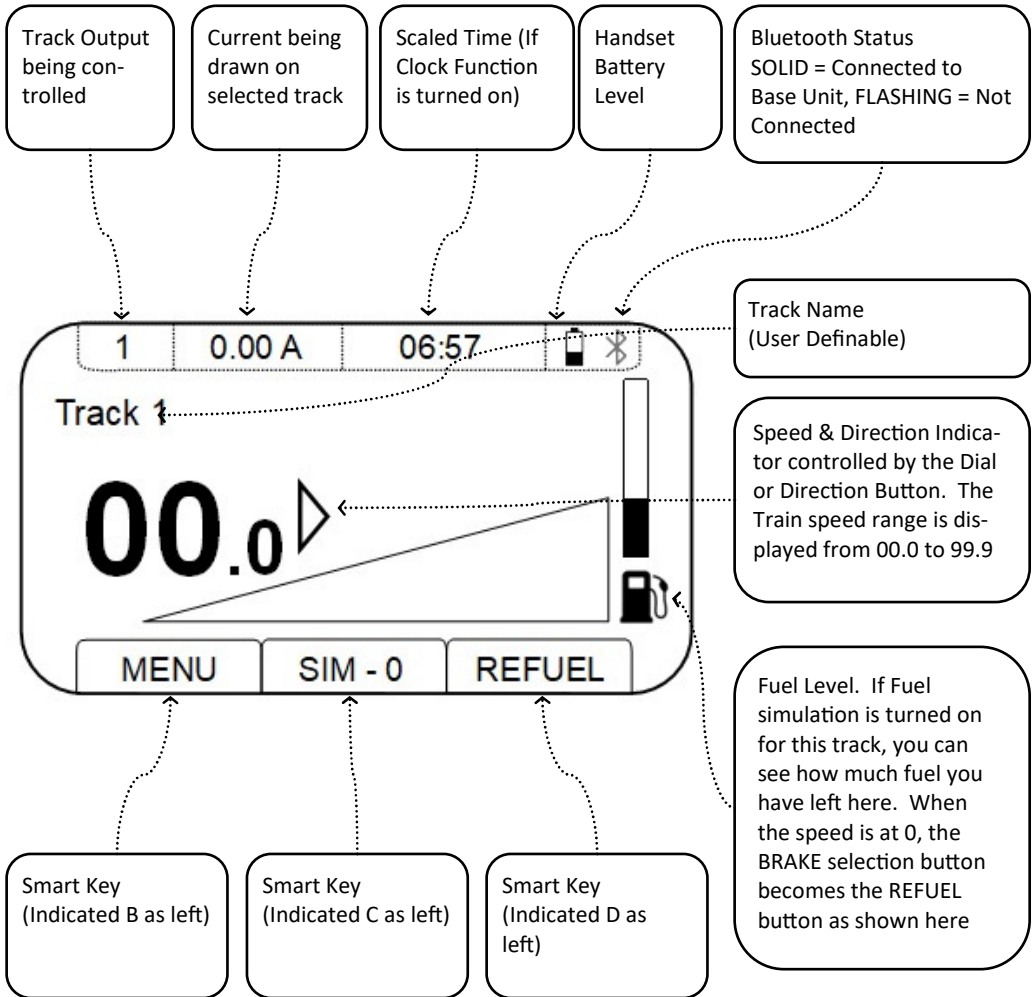
J - RECALL

Each press of this button takes you to your next track output. When it reaches the end of however many tracks you have, it reverts to Track 1 again

K - POWER BUTTON

Used to turn the Handset on and also used to exit any screen by pressing once where it returns you to the track you are controlling. Hold it down for 3 seconds to power the handset down completely

YOUR GAUGEMASTER INFINITY HANDSET LCD SCREEN



YOUR GAUGEMASTER INFINITY POWER SUPPLY

EACH POWER SUPPLY INPUT - 100-240v ~ 50/60Hz

Output: 18vDC 1.6A max

Each power supply has a UK, EU and US input connector, please select the correct connector and insert in the power unit until fully engaged with a "click".

There are no user serviceable parts. Do not attempt to repair. Not for outdoor use. Do not attempt to use if the cord is damaged. Adult use only.

BEFORE YOU GET STARTED

Having introduced you to the constituent components, it's time to consider a few things

ENVIRONMENT

This INFINITY system is a complex piece of electrical kit. Always use it in warm, dry conditions - the BASE STATION, HANDSET and POWER SUPPLIES are for indoor use only and should never be allowed to get wet. There are no user-serviceable parts inside so if any part becomes damaged, please replace appropriately or contact us for further advice. Ensure the ventilation grills are kept clear to enable heat to escape - **do not cover**. Failure to do any of the above may invalidate any warranty.

LOCATION, LOCATION, LOCATION

The BASE UNIT should be situated in a clear line of sight for best connection to the HANDSET. You'll need at least one Mains Powered socket for INFINITY SOLO and at least two for INFINITY DUO.

EASE OF CONNECTION

We've included our ubiquitous Green Plugs to make connection really easy. You'll need a small flat-head screwdriver to tighten the terminals. These are designed to accept bare wires so no special connectors are required

WIRE

Always remember to use a suitable grade of wire for all outputs and try to avoid unnecessarily long runs of wire as these can impede the flow of power. Make all connections to the best of your ability and check all insulating joints are working correctly

GENERAL LAYOUT MAINTENANCE

Although we think you will love the INFINITY system, it's important to remember that you'll enjoy it even more if your track is kept clean, your wiring sound and your locomotives serviced. A great control system will not necessarily make a bad locomotive better...

HANDSET

The HANDSET requires 2 x AA Batteries to operate (provided). The system uses low power Bluetooth and they will last for AGES. You'll need a small crosshead screwdriver to open the battery compartment when you need to fit or change them. If you are planning on not using the system for a prolonged period of time, we'd recommend taking the batteries out before you store the unit. We'd also remind you that if you ever plan on shipping the HANDSET anywhere, that carriers (including Royal Mail) have very specific rules about the transportation of batteries and could potentially confiscate and destroy any package containing batteries if their transit was prohibited. While we are taking about the HANDSET, it also features rubber feet to prevent it sliding across smooth surfaces and a recess for a lanyard or wrist strap

FUTURE PROOFING

You'll notice a USB port on the back of the BASE UNIT. This will enable you to periodically update the firmware from the Gaugemaster website. Be sure to register your INFINITY system online so we can notify you about all news and updates for your INFINITY system

SUPPORT

The Gaugemaster website is a great resource to learn about the INFINITY system and our physical shop is open 7 days a week should you ever need face to face support in a beautiful part of the world. Alternatively, you can email or phone us. Someone is here 7 days a week.

QUICK START

Bad news, there isn't a Quick Start section. We know those of you who are particularly keen wouldn't have got this far anyway and those that are more meticulous will read through everything in depth anyway.

We'd rather you took your time once and learned how to enjoy what will be the most valuable piece of your Model Railway layout.

ORDER OF BATTLE

We're going to walk you through the system in such a way that you get to run a train quickly and get to experience conventional GAUGEMASTER analogue control, in the same way you would from a COMBI, a Model D or a Model Q. The main difference will be that you will achieve this wirelessly and through a mobile, ergonomically designed purpose tooled HANDSET using contemporary technology.

Many of you might ask why we didn't simply ask you to download an app so you could simply install it on your smartphone and away you go. We were of the mind that we spend too much time on our phones as it is, that Model Railways is for relaxation and that cannot be entirely achieved with a phone in your hand. And that's before you get into the realms of what happens if it rings mid-manoeuve. So we suggest you have your phone handy but only to stick some music or a film on and message your friends while you enjoy your model railway.

So the flow is basic train operation followed by the extra features of train operation. Then we look at personalising the HANDSET to your own requirements before tackling Accessory Operation as their own section. We then go on to talk about expanding the system and complimentary products before finally talking about your warranty and guarantees. It's written by a modeller rather than by one of the designers or a marketeer, so it prioritises features that they thought were important. So apologies if it hops around a bit but it is at least from a place of good intention.

INFINITY ANALOGUE SUITE OF PRODUCTS

GMI-A01	Infinity Analogue SOLO Model Railway Control Package
GMI-A02	Infinity Analogue DUO Model Railway Control Package
GMI-A11	Infinity Analogue ACOLYTE Single Expansion Unit
GMI-A12	Infinity Analogue ACOLYTE Dual Expansion Unit
GMI-A21	Infinity Analogue REMOTE Model Railway Controller
GMI-A31	Infinity Analogue LIGHTS Accessory Interface
GMI-A32	Infinity Analogue POINTS Accessory Interface
GMI-A33	Infinity Analogue SIGNALS Accessory Interface
GMI-A41	Infinity Analogue POWER Supply

KEY SYSTEM FEATURES

- Fully extendable to up to 10 track control
- Up to 10 Handsets
- 24 x Accessories stored in the Handset library. Further accessory addresses can be added, just without names or icons
- 20 x Accessory Sequences with each storing up to 10 x Accessory Events

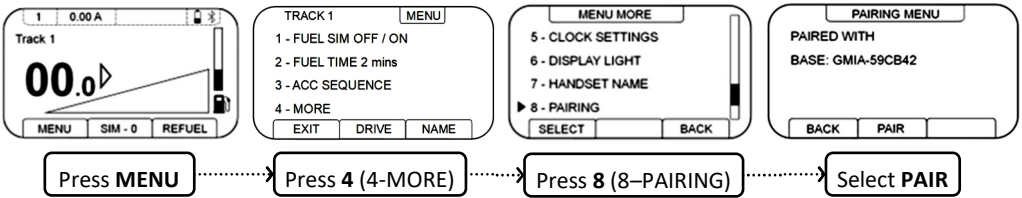
RUNNING YOUR TRAINS

Having introduced you to all the contents, it's time to get some trains running. Having done this, we can then introduce all the features beyond this in turn.

PAIRING

This only needs to be done once when initially setting up your system OR if you want to use your Handset with an alternative Infinity System (such as on a friend's layout or at a club).

To pair your Handset to the supplied Base Unit, plug the POWER SUPPLY into your wall socket using the 3 pin plug and then, using the DC Power plug, connect to the BASE UNIT via PSU socket. Turn your HANDSET on, using the POWER button (bottom right). To put your BASE UNIT into Pair mode, press and hold the large button in the centre of the BASE UNIT for around 10 seconds until it starts FLASHING BLUE. As soon as it does this, do the following



The Base Unit will now look for your Handset and Pair to it. Once this is done, the flashing blue light will turn solid green and you are ready to go.

You will only need to do this again should you use your Handset on another INFINITY system other than this one.

WIRING

Take one of the supplied Green Plugs and push each of the two wires connected to your track into the terminals on this plug. Tighten with a flat head screwdriver and plug this Green Plug into the TRACK 1 socket on the back of the base unit. With the INFINITY system already paired and waiting for action, if there is a locomotive on your track then you are ready to drive your first train.

INFINITY is an intuitive system but it's best at the outset to walk you through what's going to happen. The LCD screen will display something like this.

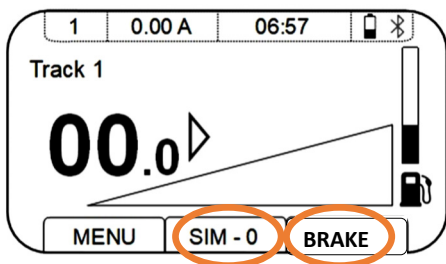
CONTROLLING YOUR LOCOMOTIVE

Select the direction you want your locomotive to travel in, using the '< >' button. If it's the opposite direction to the one you were expecting, then switch the track wires around in the Green Plug. Rotate the Dial clockwise to accelerate and anticlockwise to decelerate. You will experience the slow speed analogue control synonymous with a Gaugemaster controller, but with this INFINITY controller, it's being delivered wirelessly. Switch direction by using the '< >' button, preferably by slowing to a stop first and then starting up again. This is Analogue control as we know it.

Now let's take a look at all the other features.

We're going to look at them in what we think are the order of importance!

SIMULATION

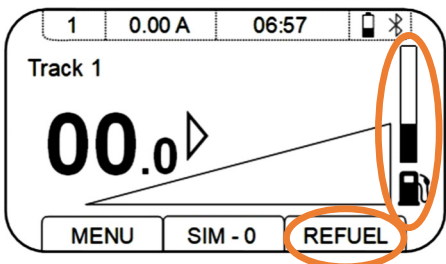


If you have historically owned a controller with SIMULATION such as a Gaugemaster Model P or Model DS, you'll have enjoyed the ability to automatically accelerate a train, allow it to coast or to be braked to a standstill. This was historically achieved with two control dials - a regulator and a brake. It is also sometimes referred to as 'Inertia' or 'Momentum'. INFINITY controllers feature this option as standard.

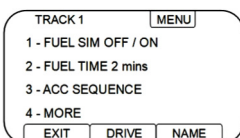
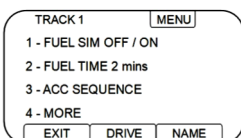
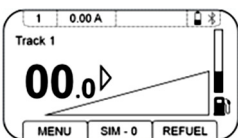
To activate simulation, hold down the smart key under the SIM command and turn the Dial. The SIM display will now display (in seconds) how long it takes to go from 0.0 to 99.0 and 99.9 to 0.0. When Simulation is activated and you turn the dial back to 00.0, the power decreases to the same rate as set for the acceleration

The BRAKE button does just that, applies virtual brakes to your train for as long as you hold the button down. Releasing the button, releases the Brake.

FUEL LEVEL



We've added some 'play' value with a FUEL LEVEL feature. FUEL LEVEL replicates your train having a full tank of fuel at the beginning of an operating session and this level reducing in proportion to how far it travels before running out and stopping. **Yes, your train will actually grind to a halt until you refuel** by simply holding down the REFUEL button (which appears) until the level returns to a workable level. Yes, we know that this isn't a thing if you operate electrics, so consider this a caffeine level for the driver!



<<< To activate the FUEL LEVEL feature, please follow these steps

Press **MENU**

Press **1 (FUEL SIM OFF)** This will change to FUEL SIM ON

Press **EXIT**

To adjust the amount of fuel that you have on board, using the same screens as above, please do the following

Press **MENU**

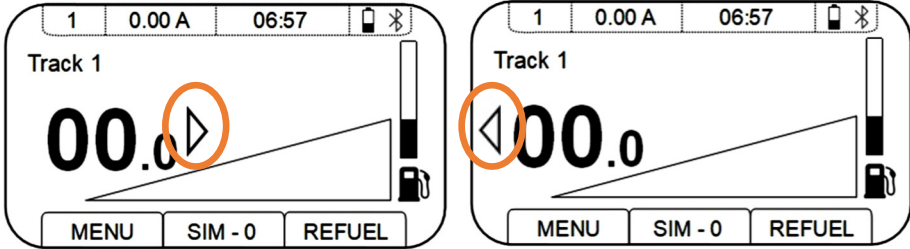
Press **2 (FUEL TIME)** The pre-set 2mins will flash, Use the Dial to increase or decrease the number of minutes until you make your selection

Press **EXIT**

DRIVE/YARD MODE

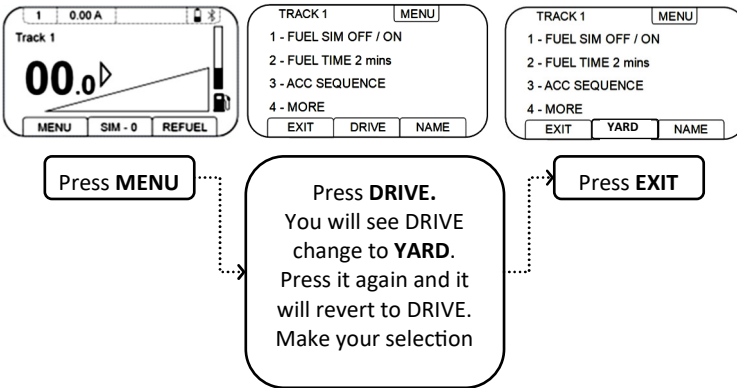
INFINITY allows you to drive your train by pressing the direction button and then turning the Dial clockwise to increase the speed of your train, and turning it anti-clockwise to slow it down. It will not change direction until you press the '< >' key.

When you press this key you will see the direction change and the display toggle between a left or right directional arrow depending on the direction of travel as displayed below



This is called **DRIVE MODE** and is the INFINITY default setting.

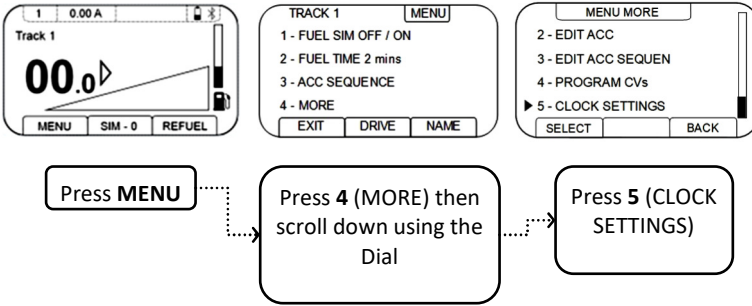
Some modellers like the idea of being able to turn the Dial clockwise or anti-clockwise and change the direction of travel this way. This might be easier when shunting or you just might prefer fewer button presses. This is called **YARD MODE** and can be activated as follows



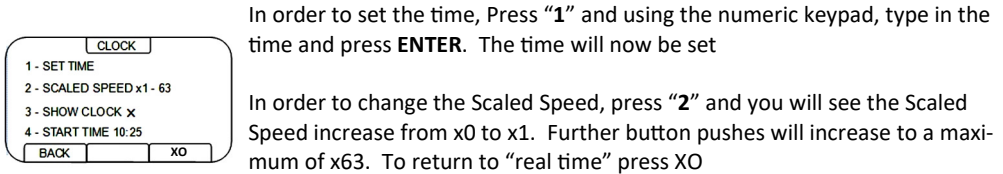
CLOCK SETTINGS

Your INFINITY system also features a clock. This is a useful feature for those of you who need to check on the actual time when operating your model railway or for a multitude of much more exciting reasons such as operating your model railway to an actual timetable. For those of you who enjoy doing this or like the idea of it, there are a number of extra features we think you will find useful. For example, you can scale the speed of the clock, so you can get through a period of prototypical operation more quickly and/or have a scheduled start time so you could perhaps begin with the first train of the day which in our case here at Ford is the 0504 arrival from Bognor Regis to Littlehampton.

In order to access the clock, follow the sequence below:



This will take you to the following screen

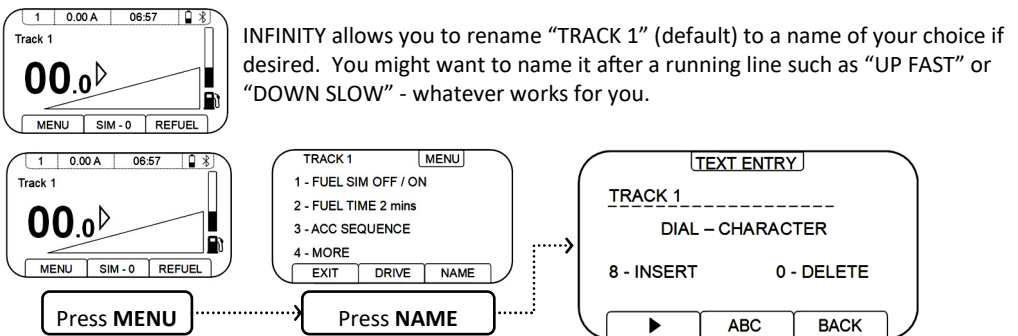


In order to change whether the Clock is displayed at all, Press “3”. If a tick appears, the clock will show and if a cross appears, then it will not display

In order to set a Start Time for your clock, please press “4” and enter the time using the numeric keypad then press **ENTER**

Pressing **BACK, BACK** and then **EXIT** (or just **RECALL** to save yourself a few button pushes) will return you to the main driving screen as below, with any changes to the clock now made.

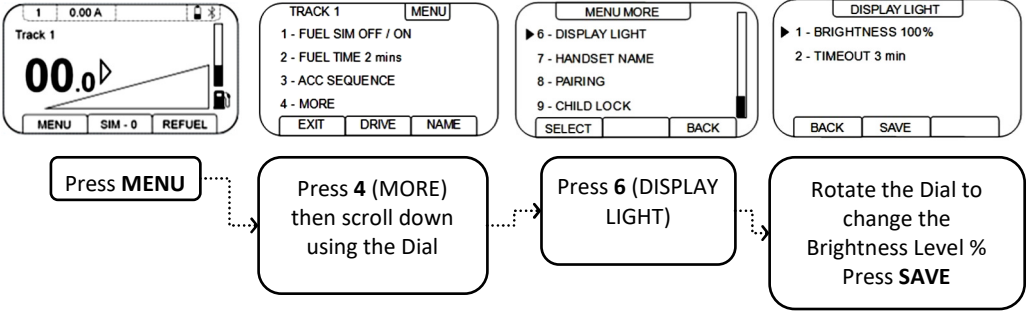
RENAME “TRACK ONE”



At this point, you use the Dial to select your chosen character and then press “>” to move on to the next one. You can use the “**ABC**” key to drop the capitals and the “<>” key to scroll to the character you want to edit. When you are finished, press “**BACK**” and your new name will have been saved and visible moving forward. Your INFINITY system will remember it for future operating sessions.

DISPLAY LIGHT

The Handset brightness can be changed from 0% to 100% If you'd prefer to change this, please follow these steps

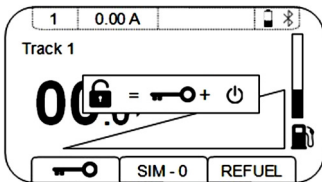
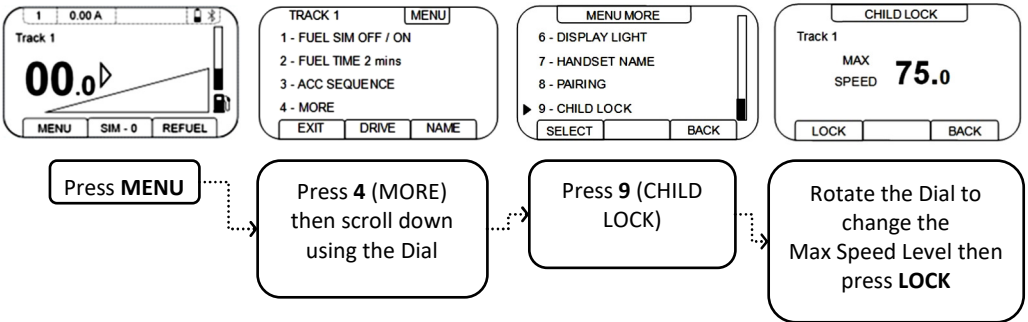


HANDESET TIMEOUT

The Handset timeout (when it turns itself off) has a default setting of 3mins. This can be changed to any figure between 0 and 60mins if desired. If you'd like to do this, follow these steps as above but on the final screen, select '2' (for TIMEOUT) and by rotating the Dial, you can change the Handset Timeout. Press **SAVE** after you've made your selection

CHILD LOCK

Use this facility to restrict the use of your HANDSET to speed, direction and refuel only which will protect your INFINITY system from any unplanned changes. You also set a maximum speed that you can drive your trains at to avoid any accidents. To deploy the child lock and to set your maximum speed, please follow the steps outlined below



<<< Once Child Lock has been deployed, you'll see a dialogue box appear. This is a reminder that in order to unlock the Child Lock, you'll need to press the KEY and the POWER buttons together

ACCESSORY OPERATION

Accessories are a significant part of realistic Model Railway Control, so for ease of use we've given them their own section of this user manual.

CONVENTIONAL ACCESSORY OPERATION

You may already have a bank of point or signal switches on your layout and you can happily use these independently using their own power source or via the 18v DC feed on the back of the BASE UNIT.

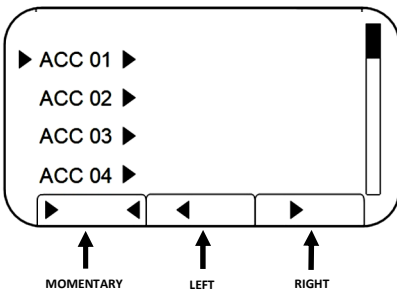
However, a new possibility is operating Digital (DCC) accessories directly from your INFINITY Handset. Such accessories will take their power and instruction from the DCC Feed at the back of the INFINITY Base Unit and will enable you to operate them remotely from your Handset, and to enjoy all the benefit of DCC Accessory operation while still running your trains in Analogue mode. If this is appealing to you, then read on and enjoy.

DIGITAL ACCESSORY OPERATION

Operating digital accessories couldn't be easier with your INFINITY Analogue system. Yes, you read that correctly. You can operate accessories Digitally with an Analogue system and enjoy the best of both worlds.

Wire your digital accessory (via the supplied Green Plug) into the DCC socket on the rear of the BASE UNIT. You can connect multiple DCC accessories to this connection. Please refer to the instructions provided with your digital accessory for programming instructions and CV lists.

Pressing the ACC button on the top row of the keypad takes you to the Accessories screen as below



You'll now see a list of 24 Accessories and how they can be set. The names and icons can be changed to match the type of accessory you are using. Use the Dial to select an accessory from 01 to 24 and then use the smart keys to operate the accessory as explained in the pictogram.

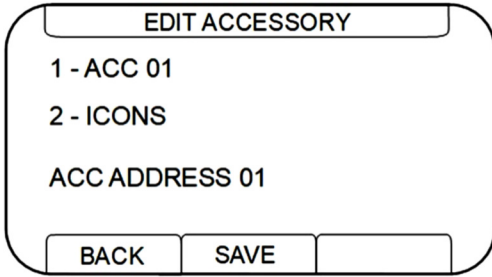
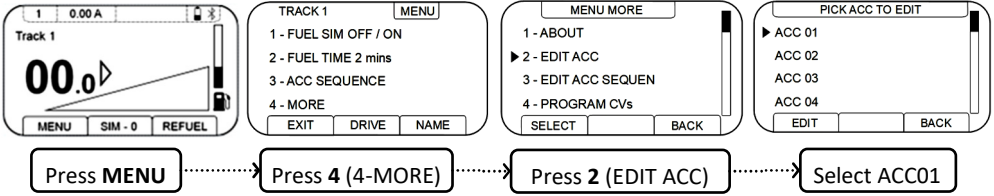
You can select addresses higher than 24 by entering them in, rather than by scrolling and selecting and these can be controlled in the same way as the stored ones, but these accessories cannot be renamed.

PROTIP - Press '< >' if you need to toggle between Left and Right quickly when operating an accessory!

You can also change the display name and icon of each accessory using your INFINITY system. This will make it clearer to you which accessory is which, without needing to remember the number of each accessory. So ACC 01 might be renamed SHED ROAD A and have the 'point open/closed' icons deployed, while ACC02 might be renamed STATION and have the 'Sound/Mute' icons used.

How to rename your accessories is explained overleaf, as well as a full list of icons that you can use.

DIGITAL ACCESSORY OPERATION - CHANGING AN ACCESSORY NAME/ICON

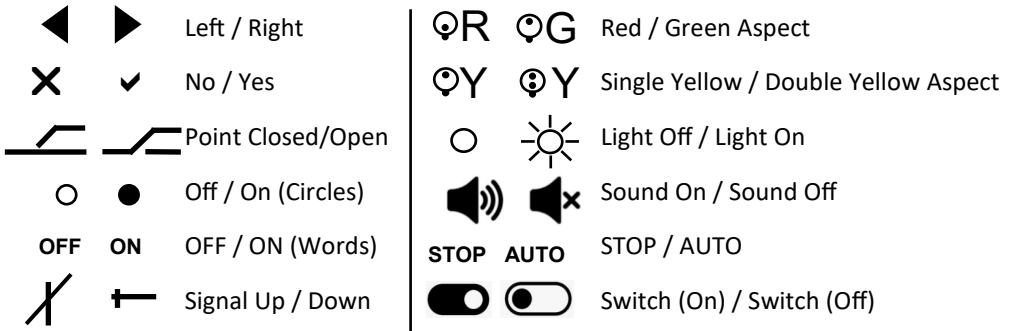


Press '1' to change the name of the accessory using the same Dial/Cursor combination (as used for re-naming your track) and described on Page 13.

You can name this accessory whatever you choose.

Press '2' to change the icon to associate with this accessory address. Keep pressing '2' until you find the icon you'd like to use and once it displays, then click SAVE using the appropriate smart key.

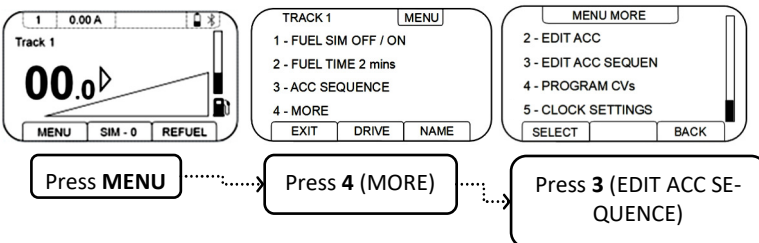
A list of icons can be viewed below:

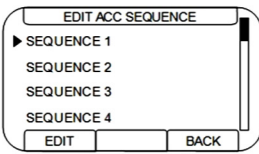


ACCESSORY SEQUENCES

Your INFINITY system also offers a feature called "Accessory Sequences". Accessory Sequences are an easy way to control multiple accessory decoders one after the other in a cascade effect. This is particularly useful when route-setting or you want to trigger a sequence of accessory events.

You can set a sequence up by following these steps

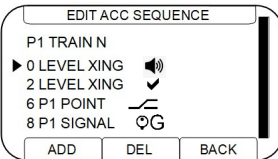




From this screen, select one of the 20 Sequences and press the EDIT key. From here you can press NAME using the centre smart key to edit the name of your sequence in the way you will now be accustomed to. After you have done this, return to this screen again by pressing BACK. Then, use ADD to add an accessory from your list to go into your sequence. You can add up to 10 accessory movements in a sequence in the direction

(on/off, left/right, up/down etc) you require as well as the timing (in seconds) between each accessory operation. There are three elements to each accessory which, in order of display, are 'Time Delay', 'Accessory' and 'Action'. 'Time Delay' is customisable - you enter a number with the keypad which represents the delay in seconds before this accessory action is activated. For example, you might leave a longer delay between Level Crossing barriers lowering and the signal for that section being changed to green, as it takes longer for the barriers to drop. If you want to insert an accessory into the middle of your sequence, simply scroll to position using the Dial and press BACK when finished. To delete one element of a sequence, select it and hit 'DEL'

Here's a worked example that you might set up. Remember, each Accessory must already be set up within your INFINITY system before you add it to an Accessory Sequence



ACC SEQUENCE 1 is renamed "P1 Train N" (Platform 1 Train North)
 0 sec = Level Crossing Sounds
 2 sec = Level Crossing Barriers lower
 6 sec = Point Changes so road ahead clear
 8 sec = Platform 1 Signal changes to Green

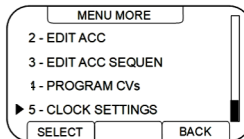
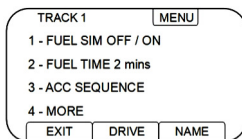
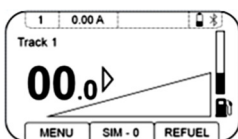
So this sequence kicks off with the level crossing sounding, 2 seconds later the barriers lower, 6 seconds later the point is changed, then 2 seconds after that the signal turns green. This is a (relatively) realistic operating sequence that can be operated by the touch of a button

If you go back into your sequence list by pressing 'ACC' then 'ACC' (again), you will notice the recently edited sequence will now operate all the accessories you selected in the order you chose when you scroll to it and press **PLAY** using the Smart Key.

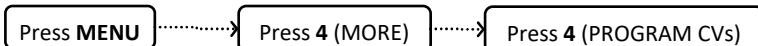
PROGRAMMING ACCESSORIES DIRECTLY

Some DCC accessory decoders will often need to be programmed to a different address and for many modules (such as those by Train-Tech, Gaugemaster and the Infinity range), this is done while in position utilising a learn button so as discussed earlier, please refer to their specific instructions on how to program them. However, INFINITY also allows you to program accessory decoders directly as well as some locomotive decoders too. To achieve this, disconnect the DCC output and attach your decoder or programming track directly to the unit.

YOU MUST DISCONNECT YOUR STANDARD DCC WIRES.

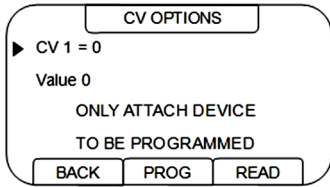


From the home screen please follow the process as below



If you want to change the CV align the arrow and then key in the CV number you require using the keypad, then move to the VALUE option and key in the new value required.

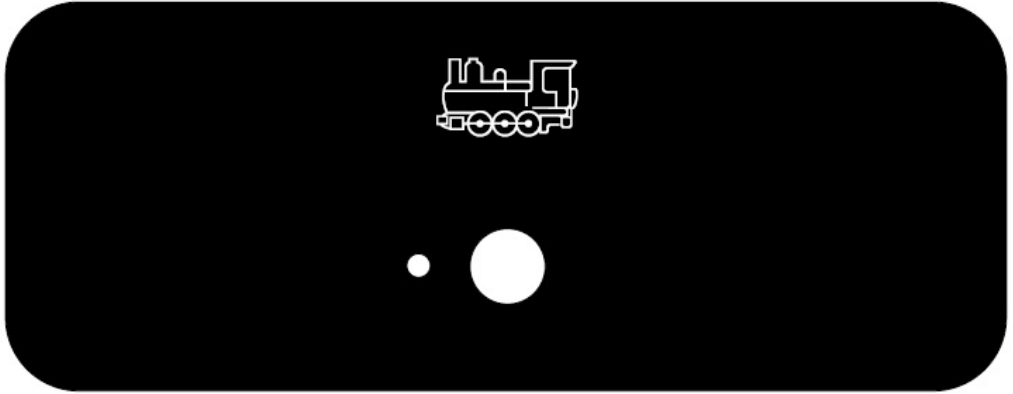
Press PROG to send this information to the attached decoder. In the VALUE section and validation message will appear if the decoder support read back of either SUCCESSESFUL or UNVALIDATED. Not all decoders support this feature but it will in fact, usually successfully program.



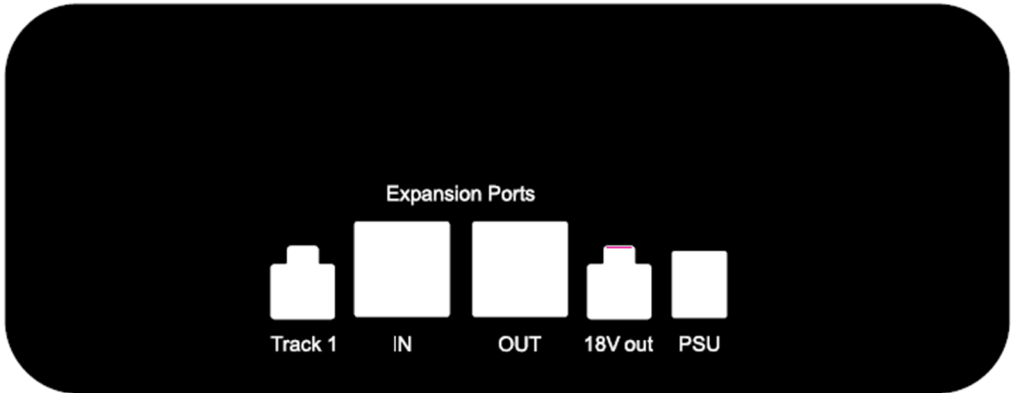
Also available is a READ option. To use this, simply key in the CV number you wish to read and press the READ key. The display will show the current value if available. Many of our Analogue customers have a Digital locomotive in their collection so your INFINITY system can be used to enable Analogue running or to adjust the volume on a DCC sound fitted locomotive too so as a bonus, you now have the tool to make these changes yourself.

GAUGEMASTER INFINITY ACOLYTE SINGLE EXPANSION BASE UNIT

FRONT



REAR



A - Track 1 Status LED

RED = Stop has been pressed

GREEN = Connected to a handset and working

GREEN (FLASHING) = Powered up but not connected to a handset

BLUE (FLASHING) = Pair Mode so a Handset can be Paired Up

B - Centre Button, used for PAIRING (Held Down) or as an EMERGENCY STOP (Press once)

C - Track Power Output*

D - Expansion Port IN for use with INFINITY expansion units (available separately)

E - Expansion Port OUT for use with INFINITY expansion units (available separately)

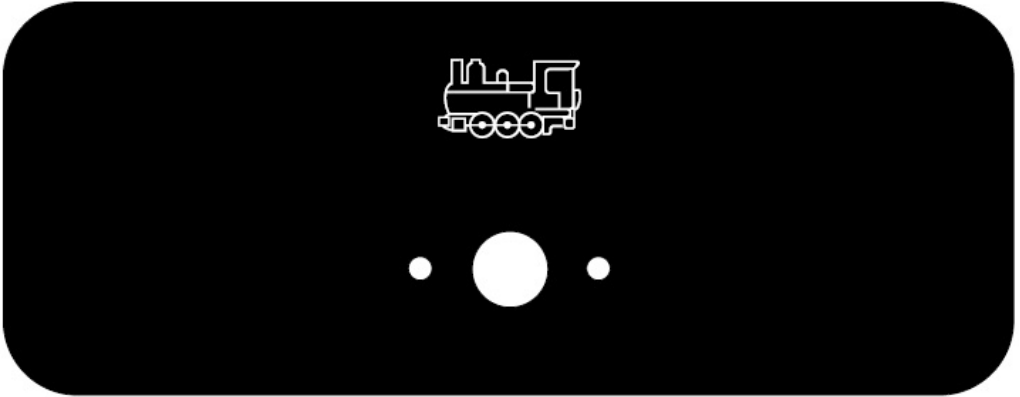
F - 18v Live Output (for Analogue Accessories)*

G - INFINITY Power Supply Unit Input.

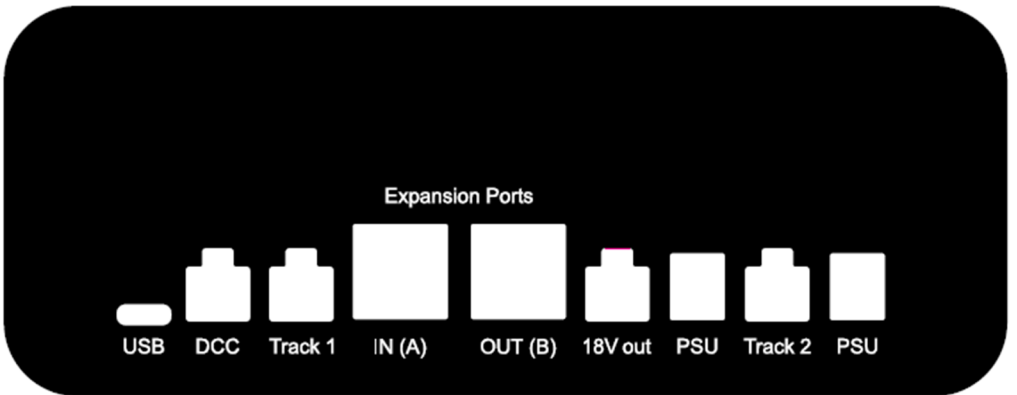
* = Green Plugs provided for easy connections

GAUGEMASTER INFINITY ACOLYTE DUAL EXPANSION BASE UNIT

FRONT



REAR



A - Track 1 Status LED

- RED = Stop has been pressed
- GREEN = Connected to a handset and working
- GREEN (FLASHING) = Powered up but not connected to a handset
- BLUE (FLASHING) = Pair Mode so a Handset can be Paired Up

B - Centre Button, used for PAIRING (Held Down) or as an EMERGENCY STOP (Press once)

C - Track 2 Status LED (As 'A' but for Track 2)

D - USB Port for firmware updates

E - DCC Feed for DCC controlled accessories*

F - Track 1 Power Output*

G - Expansion Port IN for use with INFINITY expansion units (available separately)

H - Expansion Port OUT for use with INFINITY expansion units (available separately)

I - 18v Live Output (for Analogue Accessories)

J - INFINITY Power Supply Unit Input for Track 1

K - Track 2 Power Output*

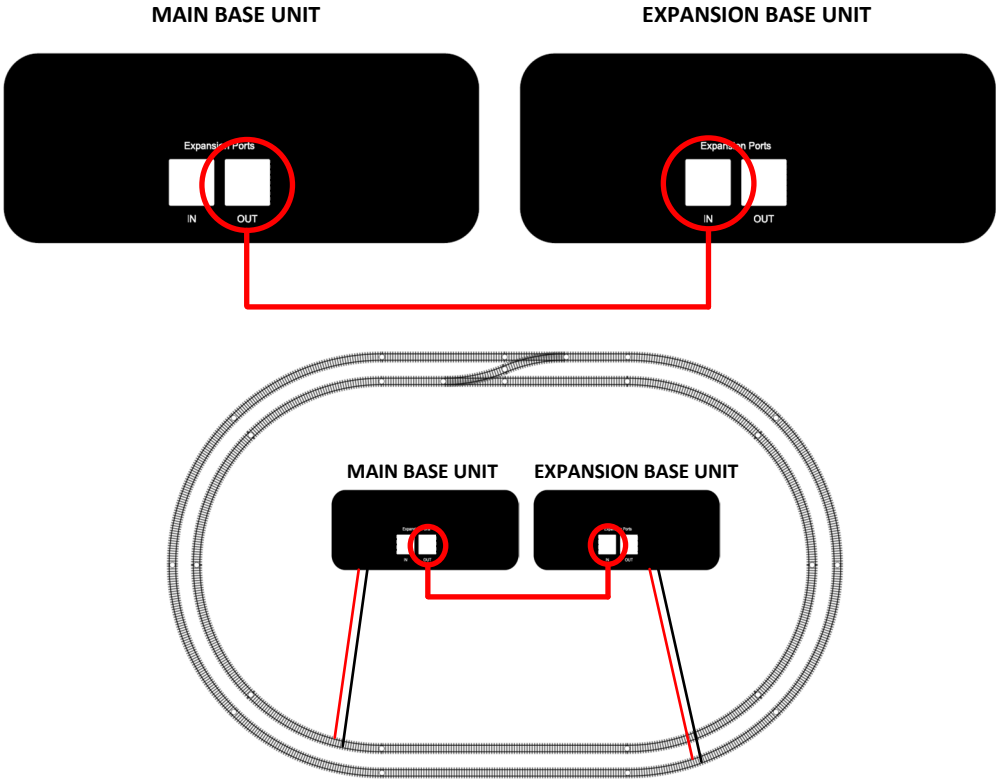
L - INFINITY Power Supply Unit Input for Track 2

* = Green Plugs provided for connections

CONNECTING YOUR ACOLYTE EXPANSION UNITS

Your INFINITY system is easy to add to, with it's initial single or double track configuration. This ensures your control system can grow with your layout and you don't need to worry as your model railway becomes larger. INFINITY's Acolyte Expansion Units are a simple way to extend the operational remit.

Connecting your Acolyte expansion units couldn't be easier! Simply plug the power supply into your new Acolyte Expansion unit (remembering to turn the power on at the wall!) and then on your main Base Unit (Infinity Solo or Duo), connect one end of the Expansion Cable into the OUT port and the other end into the IN port of your newly purchased Infinity Acolyte Single or Dual expansion base unit (Expansion Base Unit). All the lights on the base units will now show a steady green and pressing the centre button on either of the base units will stop all activity on all the base units (represented by a constant red light and your handset displaying a message accordingly)



You will now be able to control an additional 1 track (Acolyte Single) or 2 tracks (Acolyte Dual). Your handset will now be able to read the amperage per track (i.e. all tracks connected to both units) and be able to detect any short circuits.

Please note: although the Acolyte Single and Dual Base Units have the Tracks labelled Track 1 / Track 2 on each of the units, the track numbers assigned on the handset on connection will be sequential.

Pro-Tip: It is possible to common return multiple units.

ADDITIONAL HANDSETS

Having an extra HANDSET could give you even more flexibility when controlling your model railway. For example, you can run your model railway with a friend with one of you operating Track 1 and the other Track 2. Or maybe one of you as driver (Tracks) and the other as Signaller (Accessories)? Simply pair your additional HANDSET to a BASE UNIT or to an Acolyte Expansion Unit.

Additional Handsets are available from your local model shop or in case of difficulty, direct from ourselves.

TROUBLESHOOTING

If something goes wrong, please refer to this user manual to establish what it might be and then follow the guidance contained within. There is also a regularly updated FAQs page on our website which can be found at www.gaugemaster.com/InfinityFAQ

Your dealer will also be a font of knowledge and we are working hard to build their knowledge as the system establishes itself so they will also be able to help. And to be fair, none of us need much of an excuse to visit our local model railway shop?

Of course, full technical support also exists here at Gaugemaster and we will always do our very best to help you.

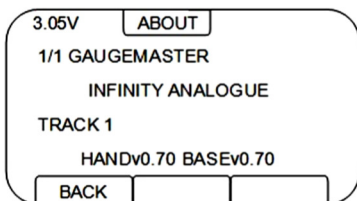
BY EMAIL - infinitysupport@gaugemaster.co.uk

BY PHONE (English Language) - +44 (0) 1903 884 321

IN PERSON - Gaugemaster, Gaugemaster House, Ford Road, Arundel, West Sussex, BN18 0BN

Please note our "In Person" opening hours are currently between 0900 and 1730 on Mondays to Saturdays and between 1030 and 1530 on Sundays and Bank Holidays. In busier periods, we may take longer than we hope to help you, so potentially there will be a wait.

Although every reasonable step has been taken to ensure this product works perfectly, out of the box and indefinitely, occasionally and as a last resort, we may ask you to return your unit for inspection and rectification. You'll be asked about the problem and also to advise us which version of INFINITY software you are running. To obtain this information, please do the following on your INFINITY handset.



ABOUT

This tells you the name of your HANDSET and the version number your INFINITY system is using. To access this screen, press **MENU**, press **4** (MORE) and then **1** (ABOUT). You'll see a screen like this. Press **BACK** to exit this screen.

STANDARD WARRANTY

This warranty applies to the following units:

GMI-A01	Infinity Analogue SOLO Model Railway Control Package
GMI-A02	Infinity Analogue DUO Model Railway Control Package
GMI-A11	Infinity Analogue ACOLYTE Single Expansion Unit
GMI-A12	Infinity Analogue ACOLYTE Dual Expansion Unit
GMI-A21	Infinity Analogue REMOTE Model Railway Controller

The Gaugemaster Infinity warranty (hereinafter referred to as “The Warranty”) on this product is valid for a period of 12 months from the date of purchase of brand-new stock from an official Gaugemaster supplier. This warranty is offered by Gaugemaster Controls Ltd. (hereinafter referred to as “Gaugemaster”).

How to claim under The Warranty.

Warranty claims are made directly with Gaugemaster, and this does not affect your statutory rights as a consumer. Please contact us on +44 (0) 1903 884321 if you are unsure on how to claim against the warranty. Items for inspection should be sent to the following address, with a note containing your address, contact details and a description of the problem you have been experiencing:

**Infinity Service
Gaugemaster Controls Ltd,
Gaugemaster House,
Ford Road, Arundel,
West Sussex, BN18 0BN
United Kingdom.**

Items arriving to the consumer with missing parts, shipping damage, or damaged packaging are not covered and, understandably, can only be claimed against the supplier of the unit.

Terms and Conditions of The Warranty.

These terms and conditions may be updated without notice. An up-to-date version of the Gaugemaster Infinity warranty can be found at www.gaugemasterretail.com/infinity_warranty

1. Proof of purchase is required when submitting a warranty claim. This includes a receipt issued from the point of sale or an invoice from online outlets. If a proof of purchase is not included with a warranty claim, the claim may not be upheld, and the unit maybe returned to the owner with return costs accrued invoiced to the owner. Purchases made from individual sellers are not covered by this warranty.
2. The warranty is limited to claims arising from manufacturing / assembly, design, or material defects.
3. Gaugemaster will look to repair any unit as soon as reasonably possible subject to parts availability. Gaugemaster will cover the hours to facilitate the repair if the product is within the warranty period and the unit has not been tampered with or dropped
4. Warranty claims will be void in the following cases:
 - a. The unit has been opened or tampered with, has been dropped, or exposed to excess temperature or moisture.
 - b. When parts are found to be worn through reasonable use of the unit.
 - c. If the installation or replacement of any electronic elements is carried out by unauthorised persons. Gaugemaster benefits from the rebuttable presumption that the cause of the defects or damages is the foreign parts or modifications.
 - d. If the unit has been used for purposes outside those outlined by the manufacturer.

e. If the instructions mentioned in the manufacturer's user manual are not correctly followed.

5. Items will be inspected prior to repairs being undertaken. If there are issues found to be outside of the warranty, customers will be advised and possible charges highlighted prior to the repair or replacement being undertaken, with the option to have the item returned at the customers expense without the work commencing.

6. The warranty period does not extend when repairs are made or replacement parts are issued unless it is deemed necessary by Gaugemaster to issue a completely new product in full, in which case a new warranty period is initiated.

7. Costs of postage.

a. The cost of postage of any warranty repair sent to Gaugemaster or any of our approved dealers is the responsibility of the consumer and will not be refunded by Gaugemaster.

b. Gaugemaster will cover postage costs of returning the item to the customer to a mainland UK address for all warranty repairs. Any postage costs for returns outside of this territory may be

charged at cost.

c. Any return found to be outside of the warranty will be returned with the postage charged at cost.

d. Any import duties incurred by Gaugemaster when the unit is returned to us will not be covered by Gaugemaster and maybe applied or added to the cost of repair at our discretion.

e. Any export duties incurred by Gaugemaster when the unit is returned to the consumer will not be covered by Gaugemaster and maybe invoiced following the repair.

f. Gaugemaster recommend items are returned to us using methods that include appropriate insurance and any item lost in transit to us is not the responsibility of Gaugemaster and will not be replaced.

g. Gaugemaster will post repairs back using the most suitable, cost-effective method for the location.

8. Gaugemaster are not responsible for any data loss within the units including but not limited to user settings arising from the updating or repairing of the system.

9. A repair service is available for any units found to be defective outside of the warranty, and these may be returned to Gaugemaster once approval has been sought. Any items in this case must first be approved by a member of the Gaugemaster team and will be chargeable.

EXTENDED WARRANTY

A REMINDER BECAUSE THIS IS IMPORTANT!

If you register your INFINITY system online and subscribe to our mailing lists, this becomes a TWO YEAR EXTENDED WARRANTY FREE OF CHARGE (subject to the conditions of the standard warranty).

Please register **WITHIN 30 DAYS** of purchase at

www.gaugemaster.com/infinity_signup

Gaugemaster Infinity

Designed, Engineered and Manufactured in the UK



This product is not a toy and contains small parts which may harm or choke a child. Not recommended for children under 14 years old unless supervised by an adult.

CONTACT

Gaugemaster Controls Ltd
Gaugemaster House
Ford Road
Arundel
West Sussex
BN18 0BN
United Kingdom

T - +44 (0) 1903 884321
E - infinitysupport@gaugemaster.co.uk
W - www.gaugemaster.com