

FPG PRODUCT MANUAL

INLINE 4000C



Ambient Cabinets



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Table of Contents

INTRODUCTION	6
Welcome	6
Future Products Group (FPG)	
Guidance and Help	6
Warranty	6
Warranty Period	
Liability Exceptions	
Specific Exclusions	
Time Limit	
Caution	7
OPERATION	8
Cabinet Layout	8
4000 Series Cabinets	8
Lighting	8
Controls	8
Light Switch	8
Preparation	9
Shelf Location and Ticketing	
Shelf Adjustment	
Power SupplyLoad Cabinet	
Turn on Lights	
Ventilation	10
TROUBLE SHOOTING	11
CLEANING	12
Cautions	
Power	
Water	
Exterior	12
Metal Surfaces	12
Glass	
Sliding Doors	
Interior	
Trays, Shelves & Air Grills	
Extraction Fan Vent	
Routines	
SchedulesInspection	
Correction	



INSTALLATION	14
Regulations	14
Compliance with Local Requirements	
Setting Up	14
Unpacking	
Site Preparation	
Cabinet Preparation	
Shelf Trays	
Grounding	
Power Supply	
Isolation	
Location	15
Ventilation	
Access	
Fumes and Odours	15
Livery	16
Custom Inserts	16
SERVICING	17
Control Gear	17
Location	17
Lighting	
Caution	
Test Lighting Components	
Access to LED Strips	
LED Strip Replacement	
Door Seals	
Seal Replacement	
Sliding Doors	
Mains Lead	
Lead Replacement	
Lead Replacement	18
SPECIFICATIONS	40
Mechanical	19
Electrical	19
Compliance	20
Standards	20
Operational Safety	20
Improvements	20
On-going Development	20



ELECTRICAL CIRCUIT DIAGRAMS	21
Model: IN 4A08	21
Model: IN 4A12	21
Model: IN 4A15	22
SPARE PARTS	23
Cabinet Serial Number	23
Location of Glass Parts	24
MECHANICAL DRAWINGS	25
Dimensions	25
IN-4A08/12/15	25
Cabinet Variants	26
Livery	20



INTRODUCTION

Welcome

AMBIENT CABINETS - INTRODUCTION

Future Products Group (FPG)

Welcome to the world of FPG! Our products are designed and engineered to give you the optimal performance that you deserve with innovative visual merchandising appeal.

We are confident that you will be delighted with your state of the art inline food service cabinet, and that it will become a valued appliance in your store.

Guidance and Help

Any new appliance can seem very complex and confusing at first glance. To ensure you receive the utmost benefit from your new inline cabinet, there are two things you can do.

- Before operating the cabinet, please read the instruction book carefully and follow its recommendations. The time taken will be well spent. These instructions both general and technical tell you how to install, operate and look after your inline food service cabinet so that you can receive the full benefits that this cabinet has to offer.
- These instructions cannot, however, cover all eventualities. If you are
 unsure of any aspect of the installation, instructions or performance of your
 cabinet, contact your dealer promptly or contact us via email to
 support@fpgworld.com.

Warranty

AMBIENT CABINETS - INTRODUCTION

Warranty Period

Future Products Group Limited warrants, to the original purchaser of an FPG manufactured food service cabinet that for ONE YEAR (12 months), from the date of purchase, any defect in workmanship or material resulting in the product malfunctioning while under correct use will be rectified.

Liability under this warranty is limited to replacing or repairing a part, without charge.

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Warranty cont.

AMBIENT CABINETS - INTRODUCTION

Liability Exceptions

Liability under this warranty does not include:

- Any loss, or damage or expenses directly or indirectly arising from use or inability to use the product or from any other cause.
- Any part of the cabinet which has been subject to misuse, neglect, alteration, incorrect installation, accident, or damage caused by transportation, use of abrasive or caustic chemicals, flooding, fire or acts of God.
- Any damage or malfunction resulting from the use of non-FPG supplied spare parts.

Specific Exclusions

The following are specifically excluded from warranty:

- Breakage of glass or plastic components or the replacement of LED lighting assemblies or gaskets.
- Failure to re-assemble the cabinet correctly after cleaning.
- Fair wear and tear.

Assessment

The liability under this warranty is dependent on an assessment by FPG, to determine the defect in workmanship or materials.

Time Limit

FPG does not guarantee that any service to be performed under this warranty will be carried out within any particular time limit.

Caution

No warranty claim will be accepted unless authorised by FPG prior to commencement of service.



OPERATION

Cabinet Layout

AMBIENT CABINETS - OPERATION

4000 Series Cabinets

The 4000 Series cabinets are available with either fixed glass or sliding glass front doors, and sliding glass rear doors.

The series includes Ambient, Heated and Refrigerated models.

The cabinet lighting and temperature controls are on the back of the cabinet.



Lighting

All cabinets are fitted with high efficiency LED lighting strips in the ceiling of the cabinet and below each shelf as standard.



Controls

AMBIENT CABINETS - OPERATION

Light Switch



The control panel is located at the top of the cabinet back.

To turn the lights on, rotate the switch, with the LIGHT symbol.



Preparation

AMBIENT CABINETS - OPERATION

Shelf Location and Ticketing



All shelves are adjustable in height and can easily be moved up or down, to match product size.

The movement is restricted to 50mm, because of the electric cables to the lights. For greater movement contact the manufacturer or supplier for advice, as electrical modifications may be required.

The front and rear edges of the shelves are profiled to carry ticketing/labels.

Shelf Adjustment

To move the shelf brackets, first remove the sliding doors and the shelf trays.

Using two people, one on each bracket, lift the brackets straight up firmly and then pull the brackets forward, to disengage them from the slots in the support

posts.

Insert the brackets into their new position, and push bracket down firmly.

The brackets may be positioned to give two different degrees of slope to the shelves.

Refit all shelf trays and doors.

N.B. Make sure brackets are pushed down as far as they can go. Failure to do this may result in shelf collapse, when loaded with product.

Power Supply

Ensure that power is connected to the cabinet.

Load Cabinet

Load the cabinet with product.

The cabinet is designed to house product at room temperature. It is not temperature controlled, and consequently, if hot or cold product is introduced, there could be a considerable delay before room temperature is reached.



Continued on next page



Preparation cont.

AMBIENT CABINETS - OPERATION

Turn on Lights When ready for service, turn on the cabinet lights.

Ventilation The cabinet is fan ventilated via louvers in the control panel, above the rear doors.

If the louvers, or the internal fan grill, are blocked; heat from the lights will raise the internal temperature of the cabinet.



TROUBLE SHOOTING

FAULT	POSSIBLE CAUSE	REMEDY
	Door not in track	Install door correctly in track
Doors are not sliding smoothly	Debris in track	Clean door tracks (see cleaning)
	Lack of lubricant	Apply food grade lubricant to door track
Cabinet does not operate	The mains isolating switch on the wall, circuit breaker or fuses are off at the power board	Turn isolating switch circuit breaker or fuses on
	Internal fuse blown	Have wiring checked and replace fuse (5A Slow Blow)
Cabinet Temperature High	Ventilation louvers blocked	Clean to remove blockage
	The light switch is OFF	Turn light switch ON
	A failed LED power supply	Replace the power supply
Cabinet lights not working	An LED strip has failed	Replace the LED assembly
	Internal fuse blown	Have wiring checked and replace fuse (5A Slow Blow)
Aluminium parts corroded	Caustic detergent damage	Order replacement parts

Service Personnel Only The table entries in *italics* indicate actions to be taken only by qualified Service Personnel.



CLEANING

Cautions

AMBIENT CABINETS - CLEANING

Power ALWAYS TURN THE POWER SUPPLY OFF BEFORE CLEANING.

Water THIS UNIT IS NOT WATERPROOF. DO NOT USE A WATER JET SPRAY TO

CLEAN THE INTERIOR OR EXTERIOR OF THIS CABINET.

Exterior

AMBIENT CABINETS - CLEANING

Metal Surfaces

Stainless steel or aluminium surfaces should be cleaned with hot soapy water or a good quality metal cleaning compound. DO NOT clean surfaces with abrasive pads or cleaners (e.g. Scotchbrite pads or Jif), as stainless steel and aluminium surfaces will be damaged.

Glass

All glass should be cleaned using a good quality glass cleaner and a clean cloth.

Do NOT clean glass with abrasive pads or cleaners (e.g. Scotchbrite pads or Jif), as the glass will be damaged.

Sliding Doors



Sliding glass doors are located by plastic guides at the top and bottom.

The doors can be removed for cleaning by sliding the door to central position, placing hands either side of the door, lifting it up and then swinging it out at the bottom.

When replacing doors, make sure that they are located in the correct slots, top and bottom. The left door should be in the inner slots, and the right door in the outer slots.

Sliding door tracks should be vacuumed out regularly to keep doors sliding freely.



Interior

AMBIENT CABINETS - CLEANING

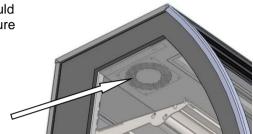
Trays, Shelves & Air Grills

Stainless steel trays, shelves, grills etc. should be cleaned with hot soapy water. Do not use abrasive pads or cleaners (e.g. Scotchbrite pads or Jif), as these may damage surfaces.

Warning: Dishwasher detergents will damage any anodised aluminium parts.

Extraction Fan Vent

The perforated fan vent inside the cabinet should be cleaned regularly with a damp cloth, to ensure free air flow.



Routines

AMBIENT CABINETS - CLEANING

Schedules	To maintain optimum performance, cleaning schedules must be regular and thorough.
Inspection	As part of the cleaning routine, the controls, mechanical parts and electrical wiring should be inspected for damage, deterioration or need of adjustment.
Correction	If any small faults are found, have them attended to promptly by a competent serviceman. Don't wait until they cause a complete breakdown.



INSTALLATION

Regulations

AMBIENT CABINETS - INSTALLATION

Compliance with Local Requirements

It is very important that your inline food cabinet is installed correctly and that the operation is correct before use. Installation must comply with local electrical, health & safety and hygiene requirements.

Setting Up

AMBIENT CABINETS - INSTALLATION

Unpacking

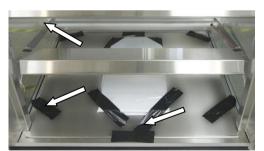
Unpack and check unit for damage and report any damage to the carrier and supplier. Report any deficiencies to your supplier.

The cabinet is supplied fully assembled, but the shelf trays are packed separately.

Site Preparation

Ensure the cabinet location and any bench cut outs are made to the precise measurements shown in the Mechanical Drawings. Position the cabinet in its allocated working position. Use a spirit level to ensure the cabinet is level from side to side and front to back.

Cabinet Preparation



Remove all tapes, ties and packers, used to prevent movement during transit.

Check that all plastic film protection has been removed from surfaces.

Assemble the trays and shelves.

Shelf Trays

Remove the shelf trays from their packing, peel off the protective plastic coating and assemble them on the support members.

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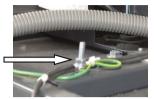
Setting Up cont.

AMBIENT CABINETS - INSTALLATION

Grounding WARNING: THIS APPLIANCE MUST BE GROUNDED TO EARTH

The grounding lead, in the mains cable, must always be connected to ground.

Terminals are also provided, to allow the cabinet to be bonded to a surge grounding conductor or to adjacent equipment.



Power Supply

Before connecting to the power supply, check that the local supply is correct to that shown on the rating plate, located on the rear of the cabinet.

Isolation

If the cabinet is not connected by a plug and socket, but is hard wired to the mains supply, a means of isolation must be provided.

If a plug and socket are used, they should still be accessible after the cabinet is installed.

Location

AMBIENT CABINETS - INSTALLATION

Ventilation	The ambient cabinet is designed to operate with free room air circulation.
Access	Access to the back of the cabinet is required for loading, cleaning, re-positioning of shelves and operation of the control panel.
Fumes and Odours	Before use, operate the cabinet for 1-2 hours, with the lights on, to remove any fumes or odours, which may be present. Open the doors periodically during this period, to allow a change of air.
	This will avoid possible tainting of food.



Livery

AMBIENT CABINETS - INSTALLATION

Custom Inserts

The silver anodised extrusions incorporate grooves, which allow appropriately coloured or printed strips of decorative laminate to be inserted. The strips are held captive by the cabinet ends.

The top strips can be easily slid upwards into the top groove, and then down into the bottom one.









The lower strip is held captive by the cabinet ends, and has to be bowed for removal and insertion.



Insert the upper edge into the narrow groove, closest to the curved surface, bow the strip to insert the end into the lower groove, then, use your thumbs to work the rest of the strip into place.

If the strip is hard to bend, a length of wooden dowel can be placed underneath to aid bowing. The dowel should be progressively withdrawn as the strip is inserted.

Note: Most metals are too rigid for insertion in this position.

Maximum strip thickness is 0.75mm. See Mechanical Drawings for dimensions.



SERVICING

Control Gear

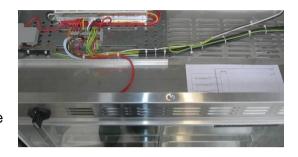
AMBIENT CABINETS - SERVICING

Location

The electrical control gear is located in the top of the cabinet.

Remove the top plate to access the control gear.

The chassis has a light switch, power supplies for the lights and a protective fuse.



Lighting

AMBIENT CABINETS - SERVICING

Caution

Do <u>not</u> service lights without isolating the cabinet from the mains supply.

Test Lighting Components

Before replacing an LED strip, check that the power supply is working.

If there is no dc voltage at the output, the power supply should be replaced.

If there is a dc output, the LED strip must be replaced.

Access to LED Strips

The LED strips are protected with plastic covers. These clip into grooves in the aluminium extrusion.

Remove the plastic cover to access the LED strip.

The top light assembly is similar to the shelf lights, but the correct replacement unit must be used.

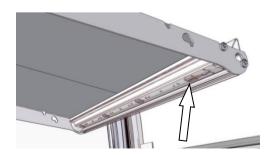


LED Strip Replacement

Individual LED modules cannot be replaced. A complete light unit must be used.

Connection is made with a plug and socket. Disconnect the supply lead from the faulty unit, and reconnect it to the replacement unit.

Replace the plastic cover.





Door Seals

AMBIENT CABINETS - SERVICING

Seal Replacement

The doors should be removed to allow the old seals to be removed and the new ones fitted. See the Cleaning section for details.

Sliding Doors

Each sliding door has a seal between the door and the cabinet end panel. The seal slides into a groove in the door extrusion, and can be withdrawn and replaced, if damaged.



A centre seal is fitted between the inner and outer doors. The Qlon seal is located in a slot in the aluminium extrusion, and can be replaced if damaged.



Mains Lead

AMBIENT CABINETS - SERVICING

Lead Replacement

If damaged, the mains lead must ONLY be replaced by a qualified service person.



SPECIFICATIONS

Mechanical

AMBIENT CABINETS - SPECIFICATIONS

	CABINET MODEL		
	IN 4A08	IN 4A12	IN 4A15
Height	1405 mm	1405 mm	1405 mm
Width	803 mm	1203 mm	1503 mm
Depth	774 mm	774 mm	774 mm
Dry Weight	96 kg	130 kg	185 kg
Cabinet Well Material	Stainless steel	Stainless steel	Stainless steel
Cabinet Colour	Grey and natural anodised aluminium.	Grey and natural anodised aluminium.	Grey and natural anodised aluminium.
Top Lighting	Standard	Standard	Standard
Shelf Lighting	Standard	Standard	Standard
Glass Type (front/back)	Single glazed	Single glazed	Single glazed
Glass Type (ends)	Double glazed	Double glazed	Double glazed
Front Doors	Sliding or Fixed options	Sliding or Fixed options	Sliding or Fixed options
Number of Shelves	Three plus base	Three plus base	Three plus base
Display Area	1.0 m ²	1.6 m²	2.0 m²
Climatic Class & IP	Cabinets are tested under Climate Class 3 conditions and have IP 20 ratings		

Electrical

AMBIENT CABINETS - SPECIFICATIONS

	CABINET MODEL		
	IN 4A08	IN 4A12	IN 4A15
Voltage	220 - 240 V 50 Hz 1ф	220 - 240 V 50 Hz 1ф	220 - 240 V 50 Hz 1ф
Power	50 W	62 W	86 W
Current	0.21 A	0.26 A	0.37 A
Connection	3 pin plug, 10 A lead	3 pin plug, 10 A lead	3 pin plug, 10 A lead
Temperature Range	Room Temp	Room Temp	Room Temp
Lighting	4 x LED strips	4 x LED strips	4 x LED strips



Compliance

AMBIENT CABINETS - SPECIFICATIONS

Standards

FPG refrigerated, controlled ambient and ambient food display cabinets are designed to meet and exceed:

- International safety standards for electrical appliances: IEC 60335-1, IEC 60335-2-89, and the equivalent country-specific standards including AS/NZS, BS EN and UL 471.
- International standards for electromagnetic compatibility/emissions: CISPR 14-1, and the equivalent county-specific standards including AS/NZS CISPR and BS EN 55014-1.
- Essential safety requirements: AS/NZS 3820 and AS/NZS 4417
- Energy efficiency for refrigerated appliances: MEPS (Australia/New Zealand)

Please contact FPG to discuss your requirements for meeting country-specific standards.

Operational Safety

This appliance is not intended for use by young children or infirm persons, unless they have been adequately supervised by a responsible person, to ensure that they can use the appliance safely.

Young children should be supervised, to ensure that they do not play with the appliance.

Improvements

AMBIENT CABINETS - SPECIFICATIONS

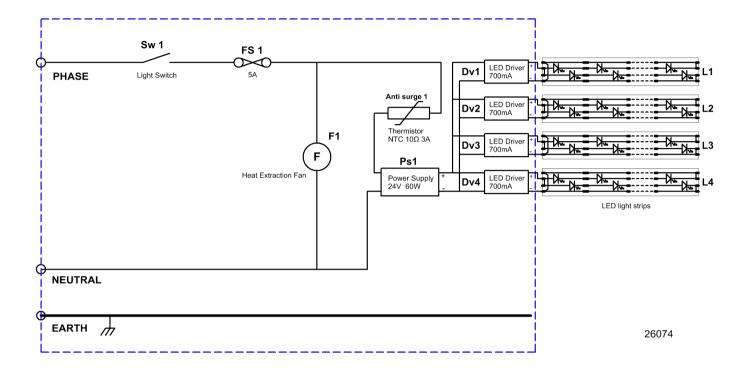
On-going Development

FPG reserves the right to change specifications and construction, as part of ongoing product improvement.

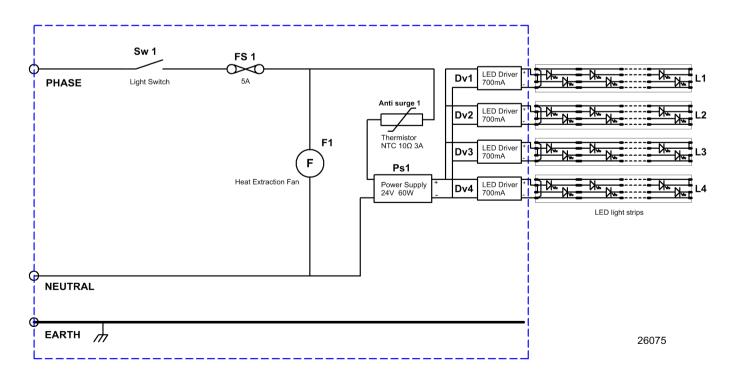


ELECTRICAL CIRCUIT DIAGRAMS

Model: IN 4A08 Inline 4000 Series, 800mm Ambient Cabinet



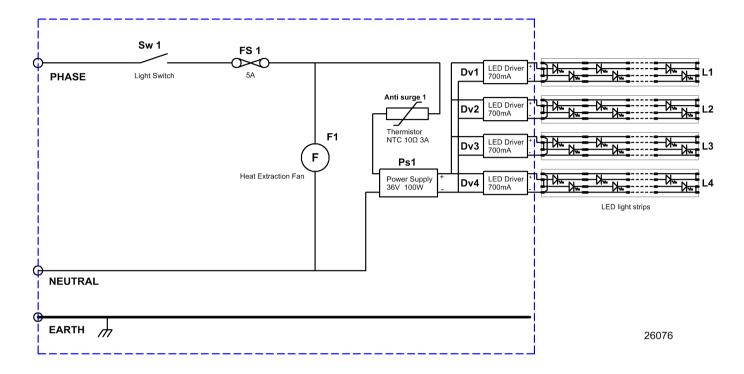
Model: IN 4A12 Inline 4000 Series, 1200mm Ambient Cabinet





ELECTRICAL CIRCUIT DIAGRAMS, Continued

Model: IN 4A15 Inline 4000 Series, 1500mm Ambient Cabinet





SPARE PARTS

Cabinet Serial Number

When ordering spare parts, it is important to quote the Serial Number printed on the label fixed to the control panel. This serial number will enable FPG to trace details of the build specification of your particular cabinet, and hence ensure that spare parts are fully compatible.

To satisfy warranty conditions, and ensure optimum performance, use only FPG supplied spare parts.

Part Description	FPG Part No.
Light Switch EGO	14372
Knob (light switch)	14374
Fuse Link (5A, 250V, Slow Blow)	13330
Extraction Fan 230V 119mm	21614
24V 60W LED power supply	21613
36V 100W LED power supply	25922
LED Driver 700mA	25762
Ant-surge Thermistor 10 Ohm 3A	22354
Polycarbonate Light Cover 1120mm	18113
Polycarbonate Light Cover 720mm	18114
Top Light Replacement Kit for 4A08	69871
Shelf Light Replacement Kit for 4A08	69839
Top Light Replacement Kit for 4A12	69858
Shelf Light Replacement Kit for 4A12	69869
Top Light Replacement Kit for 4A15	69863
Shelf Light Replacement Kit for 4A15	69424
Qlon centre door seal	13677
Slide-in rubber door seal	11424



SPARE PARTS Continued

Location of Glass Parts

In the following table, handed glass parts are labelled as viewed from the REAR of the cabinet.

Part Description	FPG Part No.
Double Glazed End Glass Kit LH	62676
Double Glazed End Glass Kit RH	62678
Back Inner Sliding Door(800 cabinets only)	62370
Back Outer Sliding Door(800 cabinets only)	62371
Back Inner Sliding Door(1200 cabinets only)	62372
Back Outer Sliding Door(1200 cabinets only)	62373
Back Inner Sliding Door(1500 cabinets only)	62374
Back Outer Sliding Door(1500 cabinets only)	62375
4K 800 Ambient SG Curved Front Inner Slider Door	62854
4K 800 Ambient SG Curved Front Outer Slider Door	62855
4K 1200 Ambient SG Curved Front Inner Slider Door	62856
4K 1200 Ambient SG Curved Front Outer Slider Door	62857
4K 1500 Ambient SG Curved Front Inner Slider Door	62858
4K 1500 Ambient SG Curved Front Outer Slider Door	62859
Front Curved Fixed Glass (800 cabinets)	62389
Front Curved Fixed Glass (1200 cabinets)	62390
Front Curved Fixed Glass (1500 cabinets)	62391
Product Manual for Inline 4000 Curved Series Ambient Cabinets	26122

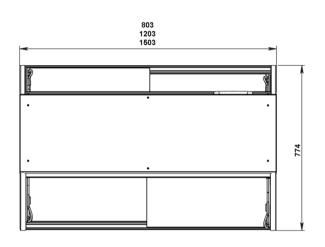


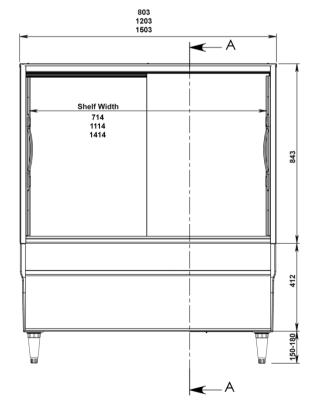
MECHANICAL DRAWINGS

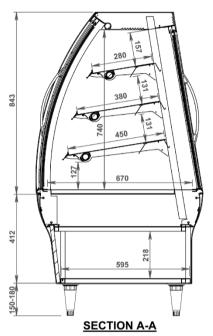
Dimensions

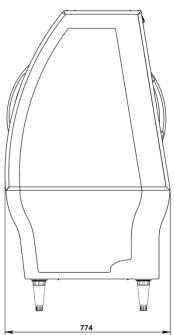
AMBIENT CABINETS - MECHANICAL DRAWINGS

IN-4A08/12/15











Dimensions cont.

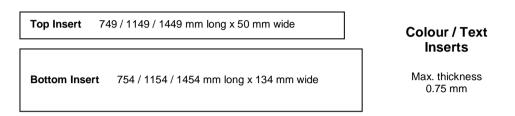
AMBIENT CABINETS - MECHANICAL DRAWINGS

Cabinet Variants

The drawings show the common overall dimensions for 800mm, 1200mm and 1500mm cabinets.

The cabinets can have a single fixed front glass, in place of the twin sliding doors shown.

Livery



If custom livery is applied to the cabinet, the insert material must be flexible, such as *Formica* decorative laminate or plastic sheet.

Most metals cannot be flexed sufficiently for insertion in the lower position.



For full contact details please visit the Contacts page on **FPGWORLD.COM** or email us at support@fpgworld.com In line with policy to continually develop and improve its products, Future Products Group reserves the right to change specifications and design without notice.

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