Enclosure Build Instructions

1.0 STAGE 1 - Enclosure Joining

This stage covers the joining of the Main and AC Enclosures.

1.1 Joining

Description	Designator	Qty	Notes
Enclosure Main	Enc-M	1	Attach the main enclosure to the AC enclosure using the fixings provided.
Enclosure AC	Enc-AC	1	
M4x6 Pan Torx	F1-ENC	40	

1.2 Attaching Mounting Bars to the Enclosure

Description	Designator	Qty	Notes
Mounting Bar	M-Bar	2	Attach the Mounting Bar to the Enclosure base. You will need to drill 3.3mm holes for the pop rivets in the positions marked. Make sure you align the bar correctly before drilling.
Pop Rivets	F2-ENC	16	

2.0 STAGE 2 - Enclosure Mains Wiring

This stage covers the enclosure mains wiring and filter.

2.1 Attaching the Conduit

Description	Designator	Qty	Notes
Conduit	per meter	2	Prepare and attach the conduit connectors to the conduit, with the connectors on the overal length should be around 1.5m (2m is allowed for wastage), the attach one end to the enclosure using the lock nut. The secong lock nut is just fitted to the free end for future.
Conduit Connector	CON1	2	
Lock Nut M20	L-Nut	1	

2.2 Attaching the Mains Filter and Tab

Description	Designator	Qty	Notes
Filter,RFI,2-stage	M-Filter	1	Attach the Mains Filter and Earth Tab in the position allowed using the fixings provided.
M4x8 G316	For Filter	2	
M4 Spring Washer	For Filter	2	
M4 Flat Washer	For Filter	2	
M4 G304 DOME NUT	For Filter	2	
Connector,Faston	Tab	1	
M4x8 G316	For Tab	1	
M4 Spring Washer	For Tab	1	
M4 Flat Washer	For Tab	1	
M4 G304 DOME NUT	For Tab	1	

2.3 Mains Filter Wiring

Description	Designator	Qty	Notes
AUS-IEC Australian IEC Power Cable (2m)	P-Cable	1	Cut the IEC end from the power cable and thread through the conduit. Prepare the ends and attach the spade terminals and covers. Then attach the apprioriate wires to the filter input terminals.
Spade F/6.35 x 0.8	Filter IN	3	
STOCKO - COVER, 6.3MM	Filter IN	3	
Mains Filter Cover	M-Cover	1	Cut the plug from the powerboard and thread it through the grommet attached to the mains filter cover. Prepare the ends and attach the spade terminals and covers. Then attach the apprioriate wires to the filter output terminals. Finally attach the cover to the main enclosuer using the
4-Way Metal Powerboard	Powerboard	1	
Grommet 9.5mm	F3-ENC	1	
Spade F/6.35 x 0.8	Filter OUT	3	
STOCKO - COVER, 6.3MM	Filter OUT	3	
M4x6 Pan Torx	For M-Cover	6	

3.0 STAGE 3 - RFI Sealing (If required)

This stage may not be necessary.

3.1 Sealing

Description	Designator	Qty	Notes
Tinned Copper 19mm	Tape	1	The enclosure should be fully seam welded, but if it is not the cover the holes with RFI tape where appropriate.

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4.0 STAGE 4 - Foam Insertion

This stage covers the assembly of the foam into the enclosure

4.1 Clock PCB Attachment

Description	Designator	Qty	Notes
798mmx829mmx50mm	LID	1	Insert the foam in the order shown in the foam insertion order document. The order is important for correct assembly.
800mmx125mmx50mm	ME7	2	
750mmx125mmx50mm	ME8	1	
998mmx498mmx50mm	ME1	1	
748mmx449mmx50mm	ME2	2	
797mmx600mmx50mm	ME4	1	
797mmx298mmx50mm	ME5	1	
228mmx48mmx50mm	ME3	2	
998mmx220mmx50mm	ME6	1	
809mmx102mmx50mm	AC3	1	
809mmx65mmx50mm	AC2	1	
586mmx95mmx50mm	AC1	2	
586mmx230mmx50mm	AC4	2	
899mmx180mmx50mm	AC6	1	
897mmx586mmx50mm	AC5	1	

5.0 STAGE 5 - Enclosure Ancillary Parts

This stage covers some ancillary parts

5.1 Ancillary Parts

Description	Designator	Qty	Notes
Insulation Protection Sheet	IP-Sheet	1	Insert the Insulation Protection Sheet into the main enclosure on top of the base foam.
RFI SEAL	Seal (m)	5	Attach RFI sealing strip around the enclosure entry hole.
Foam Tape	Tape (6m)	reel	Attach foam sealing tape around the AC Enclosure entry hole.
EMI Finger Stock	EMI (cm)	100	Attach EMI finger stock to the rear of the AC Enclosure entry hole.
Blanking Plug M25	Plug	1	Attach the blank plug to the main enclosure

6.0 STAGE 6 - Drain Pipe Attachment

This stage covers the drain pipe attachment

6.1 Drain Pipe Attachment

Description	Designator	Qty	Notes
Hose Clamp 16mm-27mm	Drain1	1	Attach the drain pipe parts in the correct order. NOTE: This design will be changed in the next version of the enclosure
Hose Clear PVC 19mm (2500cm Reel) cm	Drain2	200	
19mmxBarbed 15mm BSPM	Drain3	1	
13mmxBarbed 15mm BSPF	Drain4	1	
Hose Clear PVC 12mm (2500cm Reel) cm	Drain5	70	
Reducing Joiner 12mmx8mm	Drain6	1	
Hose Unreinforced Clear PVC 8mm (2500cm Reel) cm	Drain7	900	
CT141-B Cable Ties	F4-ENC	4	

7.0 STAGE 7 - Air Conditioner Assembly

This stage covers the insertion of the AC Assembly into the AC Enclosure

7.1 AC Assembly Insertion

Description	Designator	Qty	Notes
Air Conditioner Unit	ACU	1	Drop in the AC unit and control box which should already be assembly to the AC unit.
Air Conditioner Control Box	ACC-Box	1	

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8.0 STAGE 8 - Flow Splitter Assembly

This stage covers the insertion of the flow splitter in the Main Enclosure

8.1 Flow Splitter Insertion

Description	Designator	Qty	Notes
Gland - PG7 Grey	Gland	1	Attach the cable gland and lock nut to the flow splitter, then insert the evaporator temp sensor wire in place and secure with the nut. Insert the flow splitter into the main enclosure and secure in place around the evaporator housing.
PG7 Locknut	G-Nut	1	
Enclosure Flow Splitter	F-Splitter	1	

9.0 STAGE 9 - DoC and ATIM-T PCB Attachment

This stage covers the insertion of the DoC and ATIM-T PCB's into the Main Enclosure

9.1 Flow Splitter Insertion

Description	Designator	Qty	Notes
Flat Connector Panel	FC-Panel	1	Attach the DoC PCB's to the panel using two fixing nuts (one either side of the panel)
DoC PCB	DoC	8	
NUT, NRJ 6JACK	For Doc	32	
M3x10 Hex Spacer - MF	For ATIM-T	12	Attach the ATIMiT PCB's to the panel using the fixings provided, secure the D-type connector with the Jack Posts.
M3 Crinkle Washer	For ATIM-T	24	
M3 G316 HEX NUT	For ATIM-T	12	
M3x6 Pan Torx	For ATIM-T	12	
DB JACK POSTS 8M SCREWLOCK	For ATIM-T	2	
M4x12 Pan Torx	F5-ENC	22	Attach the panel to the Main Enclosure using the fixings provided

10.0 STAGE 10 - Internal Electronics Rack Insertion

This stage covers the insertion of the electronics rack into the Main Enclosure

10.1 Electronics Rack Insertion

Description	Designator	Qty	Notes
Internal Rack	Rack	1	Lower the complete electronics rack into the main enclosure, ensuring the unit fits correctly on to the Insulation Protection Sheet.

11.0 STAGE 11 - Cabling

This stage covers the cabling of the Main Enclosure

11.1 Cabling

Description	Designator	Qty	Notes
AUS -IEC Mains Lead C13 Black 1M	Mains Cable1	1	Connect this cable from the powerboard to the PSU Module in the Internal Rack
AUS -IEC Mains Lead C13 Black 1M	Mains Cable1	1	Connect this cable from the powerboard to the SBC Module in the Internal Rack
DoC Receiver PCB (JP1) to ATIM-T PCB (J1-J4) Cable	CAB58	8	Connect this cable from the DoC JP1 connector to the ATIM-T J1 to J4 connectors on both ATIM's
DoC to ASC Cable	CAB2	16	Connect this cable from the DoC to the ASC
ATIM-T Power Cable	CAB14	2	Connect this cable from the PSU to the ATIM-T
ATIM-T Control Cable	CAB19	2	Connect this cable from the SBC to the ATIM-T
A/C Temp Monitoring Cable	CAB17	1	Connect this cable from the SBC to the Control Box
AC Control Box Power & Control Cable	CAB52	1	Connect this cable from the SBC to the Control Box

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12.0 STAGE 12 - AC Cover

This stage covers the attachment of the Lid to the AC Enclosure

12.1 AC Cover

Description	Designator	Qty	Notes
Enclosure AC Cover Assembly	AC Cover	1	Attach the AC cover to the AC Enclosure using the fixings provided.
M4x6 Pan Torx	F6-ENC	38	

13.0 STAGE 13 - Main Enclosure Cover

This stage covers the attachment of the Lid to the Main Enclosure

13.1 Main Enclosure Cover

Description	Designator	Qty	Notes
Main Enclosure Cover	Main Cover	1	Secure the lid foam and lid stiffening to the the main cover, then attach the cover to the Main Enclosure using the securing rails and the fixings provided.
Lid Stiffening	Lid-Stiff	1	
Securing Rails	Rails	4	
Neoprene Rubber Strip (cm)	Rubber	10	
M4x12 Pan Torx	F7-ENC	12	

14.0 STAGE 14 - Air Filters

This stage covers the attachment of the Air Filters to the Main Enclosure

14.1 Air Filters

Description	Designator	Qty	Notes
Aluminium Form Washable Panel Filter	Air-Filter	3	Insert the Air Filters into the slots provided in the AC enclosure lid.

15.0 STAGE 15 - Enclosure Wheels (Prototype Only)

This stage covers the attachment of the wheels to the Main Enclosure

15.1 Wheels

Description	Designator	Qty	Notes
Enclosure Wheel Bar	W-Bar	4	Assemble the wheels using the fixings provided and insert into the mounting bars.
Swivel Castor with Total Lock	Castor	4	
HT BOLT BZP M10X50	F1-Wheel	4	
M10 Washer	F2-Wheel	8	
M10 Nyloc Nut	F3-Wheel	4	