

In-EX

OWNER'S MANUAL

FOR THE

FOAM MARKER FM24



In-Ex
PO Box 1010
145 Harts Road, Tiritea
Palmerston North
Ph: 06 354 6060
Fax: 06 355 3199

SAFETY PRECAUTIONS

Warnings are mandatory instructions to prevent serious injury or permanent damage.
Cautions are advisory instructions to ensure reliable operation of the equipment.
Notes are for convenient operation.

WARNING

Making pesticides is a most dangerous time as it involves handling the concentrated material. For toxic compounds, use protective clothing such as overalls, hat, gloves, boots and respirator.

When using concentrated sprays, full protection is necessary.

When using diluted sprays, wear at least a hat, long-sleeved cotton overalls and boots. If you use pesticides regularly it is a good idea to always wear a respirator to avoid cumulative effect ... other protection may be required – check the label. It may have specific directions for that particular chemical.

Protective clothing should always be properly cared for. Rinse heavily contaminated clothes in the open before washing in the laundry.

Wash and dry these clothes every day – but keep them separate from other washing.

Respirators need special care ... clean respirator after spraying. Use soapy water then rinse and allow to dry completely before storing in a clean plastic bag. Replace canisters in respirator after every 8 hours use.

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TABLE OF CONTENTS

2	Safety
3	Contents Description Specifications
4	Warranty
5	Installation
6	Do's and Don'ts
7	Parts Diagrams

DESCRIPTION

The 24 litre model foam marker is available as a single tank and one dropper, mounted in a zinc plated steel frame.

The foam marker is compatible with the 600 and 1000 litre In-Ex model sprayers only, and comes complete with zinc plated steel mounting bracket. The tank is moulded from tough, high quality translucent UV stabilised polyethylene.

It is supplied with a 12V compressor with adjustable rate air control, electric remote switch box, battery lead, and 5 metres of tough non-kinking foam hose.

SPECIFICATIONS

(Specifications subject to change without notice)

Frame	Zinc plated steel
Tank	UV stabilised polyethylene
Tank Size	24L
Lid	Non-vented screw-on
Compressor	12VDC, 5A current draw, 19psi max continuous pressure
Air control	Adjustable bleed valve

WARRANTY

1 WARRANTY AND LIABILITY

Use of the equipment

- 1.1 You must satisfy yourself as to the suitability of the equipment for your intended use(s) of the equipment.

Your relationship with the retailer

- 1.2 Where you consider you have a warranty claim (or any other claim) in relation to the equipment, you must contact the retailer who sold you the equipment, not C-Dax directly. The retailer is responsible for liaising with C-Dax in respect of your claim.

Warranty

- 1.3 C-Dax warrants to the original purchaser that the equipment is sold free from defects in materials and workmanship for a period of 12 months from date of first retail sale (6 months from date of first retail sale if the equipment is sold in the U.K.) subject to the terms set out below.
- 1.4 C-Dax will at its option repair or replace the defective equipment (or part of the equipment) or notify the retailer of the equipment to refund the purchase price for such defective equipment to you in the event of a breach of this warranty, subject to the terms set out below.

Liability

- 1.5 Except for the warranty set out in clause 1.2 above, all warranties and representations (including those expressed or implied by law) in respect of the equipment or advice relating to the equipment provided to you by C-Dax are excluded to the extent permitted by law.
- 1.6 Notwithstanding anything else in this manual, C-Dax's maximum liability to you (in the event that such liability exists) in respect of any breach of warranty, any matter set out in this manual, or for defective equipment or advice relating to the equipment provided is limited at C-Dax's option to:
- (a) repairing or replacing the equipment (or part of the equipment); or
 - (b) notifying the retailer of the equipment to refund the price for the equipment paid by you.
- 1.7 Notwithstanding anything else in this manual, in no event will C-Dax be liable, whether in contract, tort (including negligence) or otherwise:
- (a) where you have altered or modified the equipment, misused or misapplied the equipment, or the equipment has been subjected to any unusual, excessive or non-recommended use, service or handling (including as set out in this manual);
 - (b) where the equipment is not transported, stored, handled or used in accordance with any directions given by C-Dax (or the retailer) to you (including as set out in this manual);
 - (c) where the equipment:
 - (i) has been subject to neglect, accident or hireage, or the damage arises from fair wear and tear, battery damage or chemical attack;

- (ii) has been built to a customer's specifications; or
 - (iii) has been dismantled, repaired or serviced other than by an authorised service agent of C-Dax;
- (d) for loss or damage caused by any factors beyond C-Dax's control; or
- (e) for any loss of profit or revenue, or for any special, indirect, incidental or consequential damage, loss or injury of any kind suffered by you.
- 1.8 Where C-Dax elects to repair or replace the equipment it will use reasonable endeavours to do so as soon as practicable but will not be liable for any delay in doing so.
- 1.9 You agree that the transactions entered into between you and the retailer (and C-Dax) are for the purposes of trade and that, having regard to all relevant circumstances of the transactions, it is fair and reasonable that the provisions of the Consumer Guarantees Act 1993 (NZ) do not apply to those transactions to the fullest extent permitted by law.

INSTALLATION

The In-Ex Foam Marker differs from all other types of Foam Marker in that the compressor is a unitised 12 volt motor and diaphragm compressor - maximum continuous pressure 275 Kpa, 19 psi (1.3 bar) with 6-7 amp draw. It is therefore necessary to connect the motor directly to the battery of the vehicle. The cable, switch and fuse are supplied for this purpose.

NOTE

Negative to earth vehicles, put the fuse in the positive lead. Positive to earth vehicles, put the fuse in the negative lead.

Bolt the foam tank in position where it is easy to fill. Factory mounting holes are provided on both the 600 and 1000L InEx three point linkage frames. These mounting holes are on the side rail of the sprayer. For ease of fitting, the tanks need to be lifted slightly and bolts placed through the sprayer frame and into the foam marker frame.

Bolt the dropper in a position so that the foam comes in the least contact with the spray.

NOTE

It may be necessary to use a flip over extension kit to achieve this.

Black clips are provided to attach the foam hose to the tank outlet and dropper. Take care to avoid tight bends, or cutting the foam hose too short.

Connect the electric supply lead.

RATE OF FOAM PRODUCTION

The rate of foam production (blobs per minute) is determined by the air input into the tank. The lower the rate the more time between refills.

For example, on flat pasture it is unnecessary to have blobs close together. Therefore increase the area covered per tank by reducing the air input, conversely in rough conditions or when spraying mature crops, blobs can be put closer together.

To regulate the air input an adjustment is made on the air relief valve at the outlet of the compressor.

To reduce the rate of foam production, turn the air regulator valve anti-clockwise. To increase the rate of foam production, turn the valve clockwise.

WATER QUALITY

Water quality will affect foam production.

Hard water will require a higher rate of foaming agent than recommended, while soft water may require less. If in doubt the user should experiment with rates under his/her specific conditions.

Anti-freeze used in some cold weather spraying could slightly reduce a foam's persistence and quality. Slightly higher mix rates should help to compensate for this problem.

Read the foaming agent instructions carefully. Some have water softeners or similar additives, which may be affected by residues of other foaming agents. Hence it is always advisable to flush the foam tank before stitching to another foam. This can be done quickly by using a hose and allowing the water to flow out the top of the tank. (Do not wet the compressor!)

CAUTIONS

The foam blobs will dissipate within an hour, or within a day, depending on environmental conditions. High temperature, low humidity, high winds, and rainfall or overhead irrigation will shorten the foam's life.

High temperature, low humidity, and high winds will not only affect the life of the foam, but also the life and effectiveness of the spray droplets. **As a guide**, it would be wise to **stop spraying** if the foam is not lasting more than 10 to 15 minutes on the ground. In such cases most of the droplets will be evaporating before passing chemical to the target. Also there is a great risk of some chemicals drifting and damaging nearby susceptible crops.

DO'S AND DON'TS

- DON'T make the mix stronger than recommended,
- DON'T overfill the foam tank, leave about 20% from the top for best results.
- DO expect to mark about 10 hectares from one tank of mix, when using a 12 metre boom.
- DO turn on the marker about two minutes before starting to spray

Item No.	QTY.	e9 part no	e9 description
1	1	1072-5590	Arm-Dropper-Foam Marker-ZP
2	1	1200-8900	Body-Valve-Air-Foam Marker-11/16UNFMx1/4BSPFx1/8BSPM-Brass
3	1	1280-1600	Boot-Clutch-Convolutd-CDIT300/400-Rubber
4	1	1300-4400	Bracket-Foam marker dropper-ZP
5	1	1500-3000	Cable-Electrical-Loom-1 Switch Box-3.0M
6	2	2000-0032	Clamp-Hose-Herbi-P-Ratchet-32.0<>34.8mm-Black-Nylon
7	4	2000-2015	Clamp-Hose-Oetiker-Single Ear Stepless-15.3<>18.5mm-S/S
8	1	2170-2400	Compressor-Electrical-Foam-12VDC
9	2	2840-0635	Fastener-Bolt-Hex-8.8 Grade-M6x35-ZP
10	2	2840-0670	Fastener-Bolt&Nut-Hex-8.8 Grade-M6x70-ZP
11	4	3170-0006	Fastener-Nut-Nyloc-M6-ZP
12	3	3170-0008	Fastener-Nut-Nyloc-M8-ZP
13	2	3290-0620	Fastener-Set Screw-Hex-8.8 Grade-M6x20-ZP
14	1	3290-0825	Fastener-Set Screw-Hex-8.8 Grade-M8x25-ZP
15	2	3290-0840	Fastener-Set Screw-Hex-8.8 Grade-M8x40-ZP
16	2	3310-6006	Fastener-Washer-Flat-M6-ZP
17	1	3500-4600	Frame-Foam Marker-FM24S-ZP
18	1	3700-9170	Gasket-Washer-26x40x3-Rubber
19	1	4100-0010	Hose-Spray-Delivery-40 Bar-10mm ID-Yellow (0.45m)
20	1	4100-0010	Hose-Spray-Delivery-40 Bar-10mm ID-Yellow (0.45m)
21	1	4100-3025	Hose-Suction-Wire Reinforced-25mm ID-Clear Plastic
22	1	5000-1100	Lid-Filter-C-Dax 'U' 2 Port-'H' 3Port-Black-Nylon
23	1	5450-2220	O'Ring-Imperial-1/8"x5/8"-N70
24	1	5450-2340	ORing-Imperial-1/8"x2 5/8"-EPDM-Foam Marker Lid
25	1	6200-2400	Pipe-Fitting-Elbow-10 Shankx1/4NPTM-Nylon
26	1	6200-2430	Pipe-Fitting-Elbow-10x1/4BSPM-Brass
27	1	6200-2620	Pipe-Fitting-Elbow-Thru Tank-25 Shankx25 Shankx1BSPM-Nylon
28	1	6200-5550	Pipe-Fitting-Nut-Swivel-11/16UNFF-Plastic
29	1	6200-6260	Pipe-Fitting-Plug-Thumb Screw-3/8BSPM-Black-Plastic
30	1	6200-8220	Pipe-Fitting-Straight-10 Shank-Swivel-Suit Fly Nut-Plastic
31	1	6200-8510	Pipe-Fitting-Straight-25 Shankx3/4BSPM-Plastic
32	1	7500-1405	Rota-Cover-Compressor-Foam Marker-Blue-MDPE
33	1	7500-3145	Rota-Tank-24L-Spray-Natural-MDPE
34	1	8900-1520	Valve-Check-Teejet-Top Hat Style
35	1	8900-5200	Valve-Needle Adjustable-1/4BSPM-No Filter-Brass

NOTES: