

Owners Manual for Danduct Clean[®] Intelligent Airnozzle



Danduct Clean[®]

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1.1 Introduction.

We are pleased that you have chosen the danduct Clean[®] intelligent airnozzle for your company.

We are sure that you will be satisfied with the equipment, but would however urge you to read this manual for obtaining a good and trouble free operation of the inspection equipment.

1.2 Guarantee

The equipment is covered by a 12 months guarantee from the date of delivery to the customer. *The guarantee period comes into force after danduct Clean[®] having received the signed delivery report.*

The guarantee covers parts and replacement in our factory, or by our distributor. It is however a condition of the guarantee, that the instructions in this Owners manual have been followed, and that the equipment has been properly maintained.

Our guarantee however is depending on the filled out return of delivery report to our dealer, and the observance of this Owners manual.

Equipment, which has been repaired locally without our written consent, is not covered by this guarantee.

Claims to the guarantee from third party are not covered by this guarantee.

2.1 Assembly of the equipment for operation

The intelligent air nozzle consists of the following items:

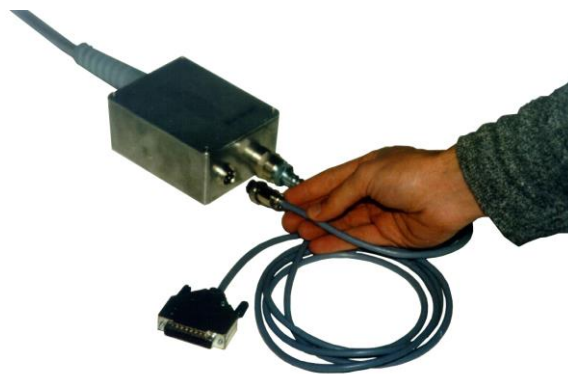
- ◇ Airnozzle head with build-in camera.
- ◇ 20 meter of hose for compressed air.
- ◇ BNC antenna cable
- ◇ Power supply (option)

2.2 The equipment is connected in the following way.

Connecting to a Danduct Clean control box:

If you already are the owner of a Danduct Clean control box for the inspection equipment or Multi Purpose Robot then the 25 or 15 pin connector can be connected to the control box.

The other end should be connected to the air/video control box

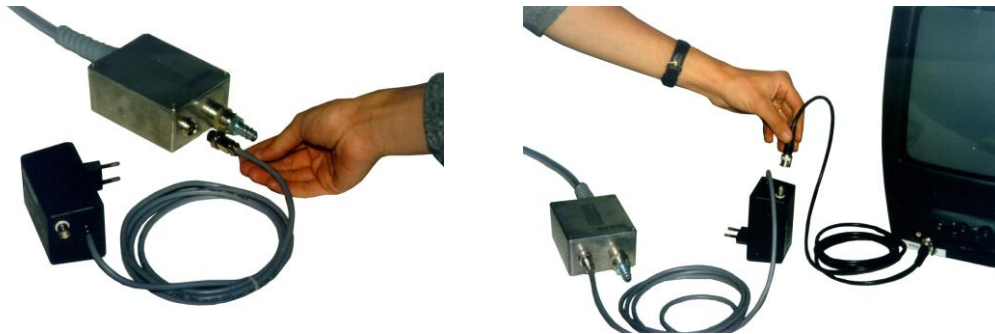


danduct Clean[®]

Connecting with the power supply (option):

Connect the power supply to a 220 V / 110 V power supply.

The signal from the miniature camera in the airnozzle is transmitted through a wire inside the air hose to the air/video control box. From the air/video control box the signal is transmitted to the powersupply and from the powersupply through a standard BNC video cable to a monitor.



From the compressor a feeding compressed air hose of minimum 2/4 inch should be used and connected to the air/video control box with C-1/4 inch standard connector. A reducing valve with handle can be attached to the air/video control box which will enable you to open and close the air supply.



Air supply.

The air is coming from any compressor or fixed installation providing clean, oil and water free air at 10 bars (160 psi) and 900-1000 litre of air per minute (35 cfm ??)



3.0 Operating the equipment.

Controlling the direction of the airnozzle.

With the build-in camera you will be able to see you position in the ductwork. During operation the camera will be rotating and orientation is in some sense difficult. To see where you are and what you have cleaned the air pressure should be reduced.

The direction of the airnozzle is controlled by turning the hose with your fingers

The position of the outlet holes at the back of the airnozzle make the head operate close to the ductwork following the sides of the ductwork.

The light on the airnozzle is infrared and can not be seen by looking at the light ring. To check the light the airnozzle must be inserted into a duct or similar.

3.1 Using the airnozzle in connection with the ductcleaner.

Using both compressed air and brushes is the most efficient way of cleaning ventilation systems. The airnozzle should be positioned approx. 60-80 cm behind the rotating brushes and attached to the shaft with a strap.

This way you have not only the best cleaning effect but you can also see what and where you are cleaning.



4.0 Operating environments.

The inspection equipment is designed to be used in dry ventilation ducts. The intelligent airnozzle is classified as IP 54 (dust-proof).

The intelligent airnozzle is not designed to be waterproof. The use of the equipment in wet, greasy, explosive, or any other environment, which is not dry, may cause damage to the equipment.

The equipment should not be used in temperatures under +0° C and above +60° C. Humidity max. 80 %.

5.0 Maintenance

The equipment requires a minimum of maintenance. The following should however be carried out in order to let your equipment work for a long and trouble free period.

5.1 Cleaning the equipment

Having operated the equipment for one day, it might have become very dirty. A daily cleaning with compressed air is recommended. If the equipment has become dirty, the dirt should be removed by means of a piece of clothes moistened with a cleaning material (degreaser). Do not use any solvent.

5.2 Storage

The equipment can be stored in temperatures of - 5 to +40 ° C.. Please note, that temperature changes over night of 20° C might cause dew inside the electronics, which can cause damage to the equipment.

7.0 Troubleshooting

The intelligent airnozzle will work satisfactorily for many years under the circumstance that it had been well maintained and operated under the guidelines mentioned in this manual.

However, if a breakdown should occur, the following scheme can be used for troubleshooting.

Problem	Possible cause	Solution
No picture on screen	No connection to the monitor	Plug in BNC video cable
	No power to the monitor	Connect power supply
	Monitor not activated	Press "O" on the remote control

In all other situations we kindly ask you to contact your dealer for further instructions. For possible problems with the monitor please refer to the enclosed "owners manual" for the monitor.

8.0 Technical data

Voltage:	240 V AC	110 V
Frequency:	50 Hz / 60 Hz	50 Hz / 60 Hz
Current:		
Power:		
Diameter of airnozzle, head	30 mm	
Weight intelligent airnozzle, head	57 gram	
Weight intelligent airnozzle, complete	2,5 kg	

9.0 EU Agreement statement

Supplier:

Company Name: Støvsugerspecialisterne Danmark A/S (Danduct Clean[®])
Address: Teglvaenget 63
7400 Herning
Denmark
Phone: +45 97 12 30 30 Fax: +45 97 22 54 44

hereby declare that

Machine: Name: Intelligent airnozzle
Type: CEM
Serial no.:
Year:

is in conformity with:

the COUNCIL DIRECTIVE of 14 June 1989 on mutual approximation of the laws of the Member States on the safety of machines (89/392/EEC as amended by directives 91/368/EEC, 93/44/EEC and 93/68/EEC) with special reference to Annex 1 of the Directive on essential safety and health requirements in relation to the construction and manufacture of machines.

- COUNCIL DIRECTIVE of 3 May 1989 on the approximation of the laws of the Member States relating to electromagnetic compatibility (89/336/EEC)

- COUNCIL DIRECTIVE of 19 February 1973 on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits (73/23/EEC)

was manufactured in conformity with the following national standards that implements a harmonised standard:

EN 292-1 Safety of machinery-Basic terminology, methodology
EN 292-2 Safety of machinery-Tech. Principles + specification
EN 60204-1 Safety -Electrical equipment of machines
EN 50081-1 Electromagnetic compatibility, Light industry
EN 50082-2 EMC: Immunity - Industrial environment

Position: Managing Director
Name: Tim Larsen
Company: Støvsugerspecialisterne Danmark A/S (danduct Clean[®])

Date

Signature

10.0 Delivery report.

Dealer name:

Owner's name:

Owner's address:

Equipment number: 0597 - 36 E

Extent of delivery:

- Intelligent airnozzle with 20 meter of hose for compressed air and air/video control box
- Power supply (option)
- Antenna cable
- Cable for controlbox 15 or 25 pin

Signed: _____
Dealer

Date: _____

Delivery report - to be completed by the end-user.

I have received:

- Operation and maintenance manual for danduct Clean[®] inspection equipment

The equipment has been delivered to me in a satisfactory condition, and I fully understand that the warranty is for a period of 12 months after the date of delivery. I accept that neglect of misapplication of the equipment as well as unauthorized modifications shall cause to void this warranty.

End-user's signature: _____

Title: _____

Date: _____

Warranty of the above equipment will not be effective before this form has been completed, properly signed and this original returned to

Støvsugerspecialisterne Danmark A/S (Danduct Clean[®])
Teglvaenget 63
7400 Herning
Denmark

within 20 days after delivery.

Comments: _____

