

ViperTouch

The flexible climate and production computer for your poultry house

Viper<mark>Touch</mark> Good. Better. Best. – We never let it rest.



climate and production computer ideal for all types of poultry – broilers, broiler breeders, turkeys, ducks, laying hens – brilliantly simple operation via touch screen freely adjustable operating modes: Basic, Flex or Profi mode extremely fast processor and memory speaks 30 languages – including yours! customisable home screen integrated network interface simple alarm management compatible with the BigFarmNet Manager PC program

A new experience in terms of comfort, speed and performance

ViperTouch has a large, graphical colour display on which all functions are clearly displayed. The symbols used in the main menus are easy to interpret and facilitate navigation.

ViperTouch is currently available in 30 languages, including Chinese, Japanese, Danish, Romanian, Russian, Spanish, Polish, French, Italian, Indonesian ... Data and settings can be saved on a USB flash drive (back-up copy) by means of which it is also possible to install new programs.

ViperTouch can also be mounted in large control cabinets. If the standard version is not sufficient, the computer can be upgraded with extension boxes. These extension boxes allow incorporation of 10 to 130 additional relay modules with or without manual control, as is often requested for the American market, for example.

There are also relay modules available that can be used for direct connection of single-phase fans or motors.

Display examples - main menu

ViperTouch allows the user to select and arrange all important data for climate and production control in the main menu. This way every customer quickly gets a customised overview of the situation in his poultry house. A password protection function ensures security on up to three levels. Settings can only be changed by authorised persons.

BIG DUTCHMAN - DAY 51 14:57 - 27.04:2011			(*)
D / / TECHNICAL			
5	1	2	3
-	4	5	6
****	7		9
Enter password to get a		0	•







Example 1: standard main menu

	BIG DUTCHMAN - DAY 51 14:41 - 27.04:2011					40	۲	10	
	¢ ^	DVANCED US	ER						
1	4	0.0 %	1	0.0 %	* +	300 %	8	20.0	°C
-	ti-	1.28 m3/h/ani.	*	1.28 m3/h/ani.	1	20.0 °C	1	20.0	°C
1	*	Side	7	0.0 °C	1	20.0 °C	21-	19.0	°C
1	a -	17.0 °C	٦ŀ	19.0 °C	٥ŀ	17.0 °C			

Example 2: extended main menu

Language selection

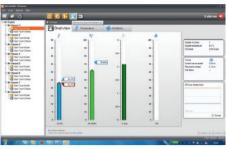
ViperTouch and BigFarmNet Manager

BigFarmNet Manager is a PC program which allows the customer to list and visualise as well as process and control the house climate and production data on his office PC. Production results can be analysed comfortably. It is also possible to make and automatically transfer settings regarding feed, water and light to other houses in the same production mode. The new broiler module provides for an exact documentation of the course of the grow-out. Several batches can be compared with each other or with reference values concerning feed and water consumption or daily weight gains or losses.

With the special breeder module, the entire production cycle in a broiler breeder house can be documented and analysed as well as compared with stored reference values from the established breeding companies.

These are the best prerequisites for the producer to be able to take advantage of the full performance potential of a flock while saving costs, and to achieve consistently good results at a high degree of efficiency.





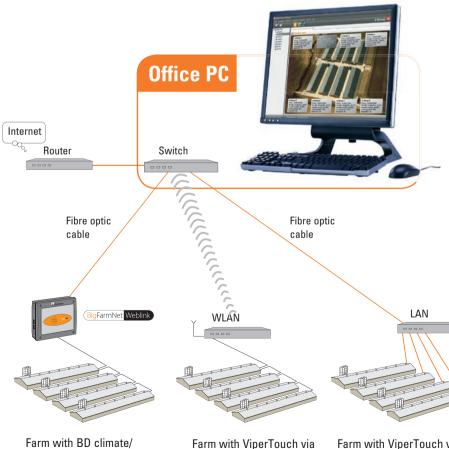
Current climate data

The advantages at a glance

- the software uses simple, easy-tounderstand symbols;
- quick data overview, both as graphs and as lists;
- detailed alarm log, history and analysis;
- communication with existing computers via BFN-WebLink:
- ✓ fast connection to the office PC via
- Ethernet LAN in combination with fibre optic cables;
- use of standard IT components;
- remote data access via network;
- Service Access Light -> the service technician can easily support users from afar.







WLAN

Farm with BD climate/ production computers

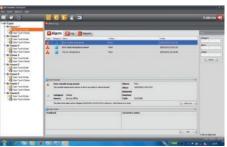
Fouch via Farm with ViperTouch via cable (max. length 100 m)



Current production overview feed conversion of broilers



Overview production



Overview alarms

Using ViperTouch as climate computer

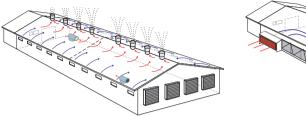
The new ViperTouch is a state-of-the-art climate computer that allows you to control the entire house environment as efficiently and as easily as possible.

In more detail, this means:

ViperTouch can be used for all established types of ventilation (natural, mechanical and combined). This includes side, cross, tunnel and CombiTunnel ventilation.

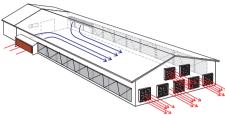
Example of side ventilation

- CL Flex wall inlets for fresh air;
- CL 600 chimneys for exhaust air:
- ✓ hot air blower JetMaster as heating system;
- ✓ Fogging Cooler cooling system.



Example of tunnel ventilation

- tunnel for fresh air;
- AirMaster for exhaust air;
- RainMaker pad cooling system.



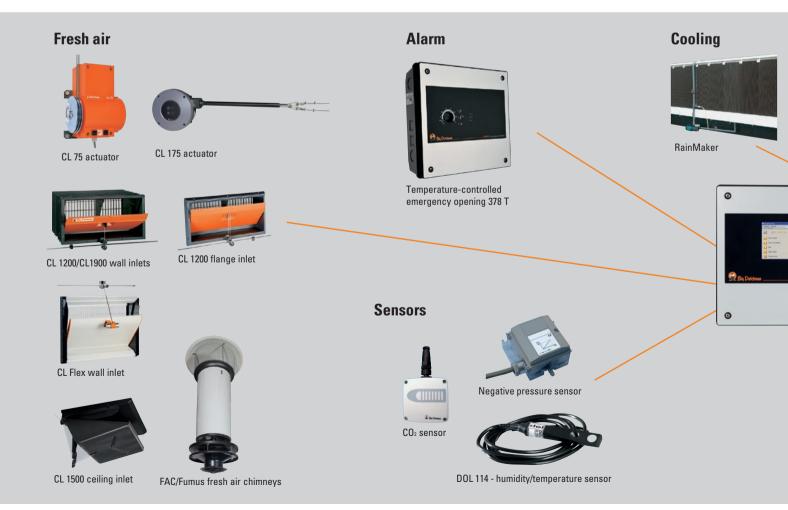
Unrivaled comfort: freely-selectable climate control levels

ViperTouch makes it possible to control the house climate on three different control levels, which can be freely selected by the user:

- Basic mode (simple control)
- Flex mode (flexible control)

Profi mode (advanced control)
Simple ventilation systems can be controlled

in Basic mode with a thermostat function. In Flex mode, fresh and exhaust air can be regulated individually. It is for example possible to switch off the fans temporarily in order to ventilate naturally through the chimneys when, in case of free-range production, the pop holes are open. Profi mode allows you to use PID control (a very precise and sophisticated system for temperature control), to display the windchill factor in case of tunnel ventilation or to view the exhaust air volume in m³/h/bird ("real-air principle").



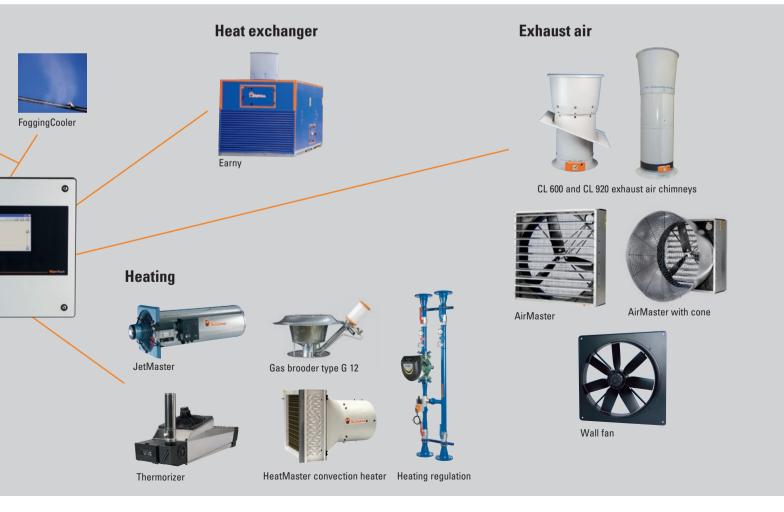
Climate control with ViperTouch: an abundance of possibilities

- connection of up to 8 sensors for room temperature and 2 sensors for inside humidity;
- control of room heating systems for up to 6 zones (JetMaster, Thermorizer, hot-water heating, infrared heaters);
- separation of the house into 2 brooding zones if the house is to be heated only partly, i.e. only a certain part of the house is heated and the rest is kept at anti-freeze temperature;
- division of the house into 2 different climate zones and individual control of temperature, minimum ventilation and humidity in these zones;
- control of up to 4 zone heaters (gas brooders or extra heating);
- control of up to 16 MultiStep[®] groups (in side and tunnel mode);
- ventilation by means of the Dynamic MultiStep exhaust air principle to increase energy savings even more;
- standard step control of fans (16 steps in side mode and 16 steps in tunnel

mode) when operating in the Basic or Flex mode;

- minimum ventilation in pulse-pause mode;
- controlled tunnel ventilation with up to 4 actuators, i.e. the tunnel openings are opened or closed based on the required air speed;
- night function, i.e. the temperature is lowered (or raised) for a defined duration after which the ViperTouch automatically switches back to normal control;
- control of cooling and humidification (RainMaker, FoggingCooler);
- several possibilities for humidity control (via ventilation and/or heating);
- control of the Earny heat exchanger, integrated into the ventilation control;
- displaying of the cooling temperature by means of up to 2 optional pad temperature sensors;
- temperature-controlled emergency opening with 378 T or 378 CT;

- connection of a CO₂ sensor for active minimum ventilation control based on the CO₂ content in the house air;
- connection of additional free sensors, for example for NH₃, air speed or outside humidity;
- active negative pressure regulation, i.e. negative pressure sensors measure the outside air pressure as well as the negative pressure in the house and the computer controls the fresh air based on these data or activates an alarm;
- optimized comfort temperature control, including air humidity;
- display of trend curves over the entire grow-out on the large colour display.



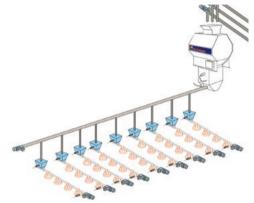
Using ViperTouch as production computer

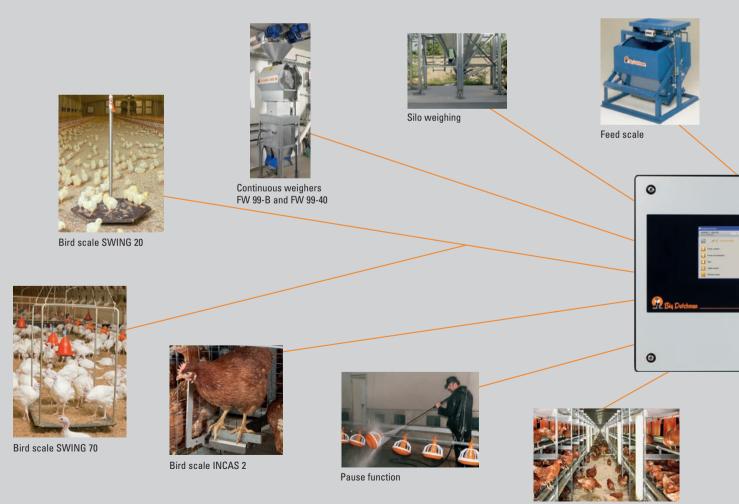
ViperTouch is not only a professional climate computer, but also a full production and management computer. It records all important data concerning production, growth, feed and water consumption and mortality. This permits the producer to react quickly to changes and to take the required action which in turn will lead to better performance results and will increase the economic efficiency of the production. The extension modules "full broiler functionality" and "full breeder functionality" provide additional functions which are especially important for broiler and broiler breeder management.

Extension modules "full broiler and breeder functionality"

With these modules, **ViperTouch** provides extended functions for broiler and broiler breeder feeding:

- the feed consumption can be recorded and up to 5 types of feed can be mixed by means of the electronic continuous weighers FW 99-B and FW 99-40;
- up to 4 electronic silo scales can be controlled by means of the scale module and also work with the continuous weigher;
- it is possible to use different feeding programs – ad libitum, time-controlled and quantity-controlled;
- up to 24 target devices (feed hoppers) per house can be controlled to fill feed into the hoppers with kg precision.





Light control

Production control with ViperTouch: an abundance of possibilities

- recording of feed consumption: total, daily and per bird with a silo, drum or pulse scale; the scale module permits the connection of up to 4 silo scales with 8 load cells each for easy monitoring of the silo content; feed deliveries are recorded and logged;
- control of target feeding: up to 24 hoppers per house can be filled with a defined amount of feed, for example for broiler breeder feeding with separate male feeding;
- the FW 99-B and FW 99-40 feed weighers permit mixing of feed components from up to 5 different silos (additional wheat feeding);
- recording of the water consumption: total, daily and per bird by means of up to 6 water meters;
- connection of up to 12 bird scales (INCAS or SWING) for the recording of bird weights;

- registration of up to 32 egg counters;
- light control via 7 different sunlight simulators with sunrise/sunset simulation; the luminous intensity can also be changed;
- connection of up to 6 freely programmable timers for individual tasks, such as EggSaver, zone light, nest expel function, folding grilles beneath the aviary;
- pause function: helps the producer to optimise the period between two growouts regarding soaking, cleaning, drying and heating of the house, thus reducing costs;
- compatible with BigFarmNet Manager, the PC program for graphical and tabular processing and visualisation of production and climate data in real time, including remote access function;

 alarm messages, for example in case of power failures, minimum silo content and deviations from set values such as temperature, humidity, water and feed consumption.



ViperTouch is available in different extension stages – based on individual requirements

ViperTouch	710	1520	2330	1500/2300	X30/X 40
A) Maximum number of analogue inputs/outputs	7	15	23	15/23	
- outside temperature sensors	1	1	1	1	
- house temperature sensors, max.	8	8	8	8	
- humidity sensors, max.	2	2	2	2	
- pad sensors	2	2	2	2	
- negative pressure sensors	1	1	1	1	
- free sensors (NH3, CO2, O2, air speed), max.	4	4	4	4	
- CO2 sensors for control of minimum ventilation*	1	1	1	1	
- external signal 0-10 V for speed control***	2	2	2	2	
- signal for CL 74 (actuator at chimney 0-10 V)***	2	2	2	2	
- CL 74 V with feedback potentiometer for stepless exhaust air***	2	2	2	2	
- actuator fresh air feedback potentiometer	6	6	6	6	
- actuator tunnel feedback potentiometer	4	4	4	4	
- water meter	6	6	6	6	
- cross auger sensor	1	1	1	1	
- counter input for pulse scale	1	1	1	1	
- bird scales (full broiler/breeder functionality) ◊	2 (4) (12)	2 (4) (12)	2 (4) (12)	2 (4) (12)	
- light dimmer, analogue output ◊	4 -7	4 -7	4 -7	4 -7	
- light sensor	5	5	5	5	
- heating, analogue output	6	6	6	6	
- gas brooder	4	4	4	4	
- manual tunnel opening	1	1	1	1	
- egg counter ◊	16 (32)	16 (32)	16 (32)	16 (32)	
B) Maximum number of digital outputs	10 (32)	22	32	10 (32)	30/40
- contacts for heating system	6	6	6	6	50/40
- contacts for gas brooder	4	4	4	Ū	4
- contacts for pad cooling*	6	6	6		6
- contacts for spray cooling*	3	3	3		3
- contacts for soaking	1	1	1		1
- contacts for humidifying	1	1	1		1
- CL 74 exhaust air chimney (2 relays per actuator)	2	2	2		2
- CL 74/75 fresh air chimney Fumus/FAC (2 relays per motor)	1	1	1		1
- side mode groups for exhaust air in MultiStep	16 (8****)	16 (8****)	16 (8****)		16 (8****
- tunnel mode groups for exhaust air in MultiStep	16	16	16		10 (0
- side mode groups for exhaust air on/off**	16	16	16		16
- tunnel mode groups for exhaust air tunnel stages**	16	16	16		16
- side inlets (2 relays per 1 actuator)	6	6	6		6
- tunnel inlets (2 relays per 1 actuator) *	4	4	4		4
	4	4	4		4
- emergency opening	4	4	•		4
- fans for recirculating air (thermostat)			4		
- silo 1 and 2	yes	yes	yes		yes
- silo 3 to 5 (full broiler/breeder functionality)	yes	yes	yes		yes
- cross auger	1	1	1		1
- light on/off ◊	4 - 7	4 - 7	4 - 7		4 - 7
- timers ◊	4 - 6	4 - 6	4 - 6		4 - 6
- feeding	1	1	1		1
- water valve	1	1	1		1
- silo scale	4	4	4		4
- feed weigher FW 99B, FW 99-40	1	1	1		1
- soaking	1	1	1		1
- targets for broiler breeders (full broiler/breeder functionality) 🛇	6 - 24	6 - 24	6 - 24		6 - 24
- alarm	1	1	1		1

It is not possible to use more analogue inputs or digital outputs than listed in row A and B. The Viper scale module can be connected to all extension stages of ViperTouch. Depending on the type of ViperTouch, stepless fans can be controlled by means of an internal or external triac.

depending on the used software

* only in Profi mode ** only in Basic or Flex mode

*** only in Profi or Flex mode



Germany: Big Dutchman International GmbH Postfach 1163 · 49360 Vechta Tel. +49(0)4447 801-0 · Fax -237 big@bigdutchman.de www.bigdutchman.de USA: Big Dutchman, Inc. Tel. +1 616 392 5981 · bigd@bigdutchmanusa.com www.bigdutchmanusa.com Brazil: Big Dutchman (Brasil) Ltda. Tel. +55 54 2101 5900 · bdbr@bigdutchman.com.br www.bigdutchman.com.br Russia: OOO "Big Dutchman" Tel. +7 495 229 5161 · big@bigdutchman.ru · www.bigdutchman.ru Asia/Pacific: BD Agriculture (Malaysia) Sdn. Bhd. Tel. +60 3 33 61 5555 · bdasia@bigdutchman.com · www.bigdutchman.com

China: Big Dutchman (Tianjin) Livestock Equipment Co., Ltd. Tel. +86 10 6476 1888 · bdcnsales@bigdutchman.com www.bigdutchman.cn

**** two-zone control in Profi mode

