

The JODEL Piglet System



Installer's Manual

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A Introduction

This manual provides installation and wiring information for the JODEL System.

This system consists of:

JODEL Controller

Sensor pad – 1 only per JODEL controller

Slave pads – up to a maximum of 23 per JODEL controller

The JODEL system should only be installed by suitable qualified individuals; this will ensure that the Heat pads will operate in a safe and reliable manner.

The Heat pads must be checked for damage that may have occurred during transit, before installation. All Heat pads are tested thoroughly before leaving the factory. If any damage is present contact your supplier before continuing.

The power gland from the pad can be either end or bottom exit. Bottom exit glands can only be used on flooring where the cutting of the floor to allow the gland to fit through will not interfere with the structural integrity of the floor.

B The JODEL Controller.

The JODEL Temperature controller is based on normal distribution board wiring systems to make the installation safe and reliable. The installation of the Heat pads to the controller is simple if these few steps are taken.

The wiring diagram is shown in Figure 2.

All wiring excluding the Heat pad, sensor connections and power input is done by the manufacturer.

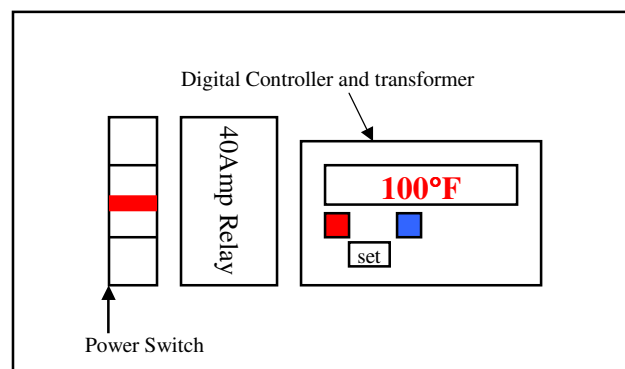


Figure 1



Wiring Diagram for JODEL Controller

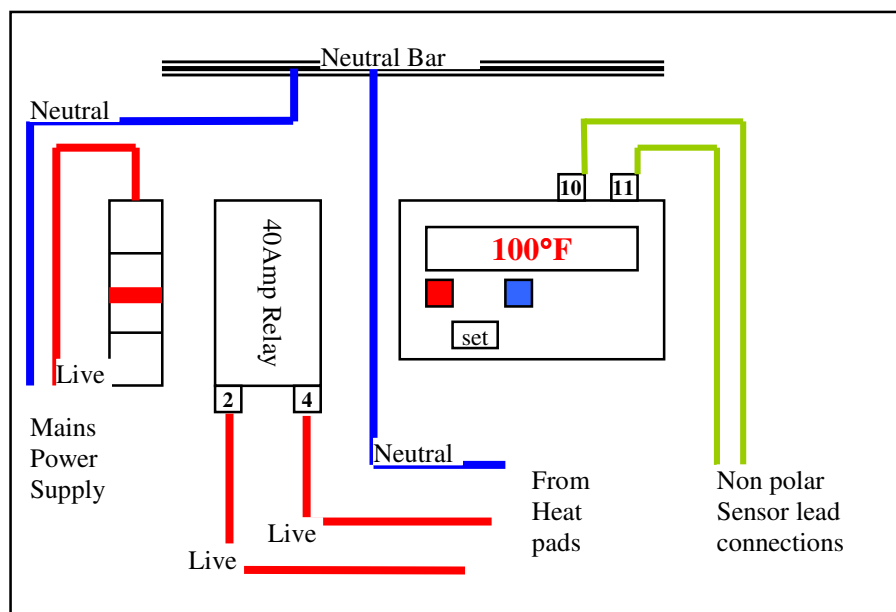


Figure 2

The live feed from the heat pads should be divided equally between outputs 2 & 4 on the relay.

The neutral wires from the heat pads are attached to the neutral bar.

The controller should be wall mounted in a passageway or in a clean, dry area. Care should be taken to seal the fixing points to prevent the ingress of water into the Controller.

All entry and exit points should be on the bottom of the controller.

C Digital Read-out.

Each controller is supplied with a multilingual digital read-out manual. This manual should be retained for reference.

Setting the temperature of the controller is generally left to the user. Correct temperature settings optimise the comfort of the piglets.

The controller is normally set to 100°F (38°C), with the temperature being reduced as the pigs grow. This is done by pressing the “set” button on the controller and then using the arrows to increase/decrease the set temperature.



The default settings for EWDR 902 are:

Parameter	Description	Default
d1	differential	1
LS1	Lower Set	32
HS1	Higher Set	130
od	output delay	1
Lci	Lower current input	
Hci	Higher current input	
CAL	CALibration	0
PSE	Probe SElection	
HC1	Heating/Cooling	H
rP1	relay Protection	ro
LF1	Led Function	di
dP	decimal point	no
hdd	half digit display	n
tAb	Table of parameters	

D Heat Pad

The Heat pads must be **fixed securely** to the floor (Fig.3 & 4). Method of fixing is dependent on slat type and the power gland exit on the heat pad.

End exit JODEL Heat pad Fixings

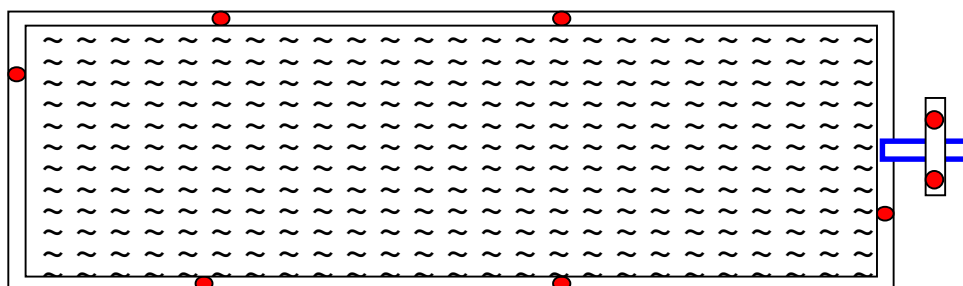


Figure 3

- Stainless steel screws or toggle bolts dependent on floor type.
- ▭ ABS pipe covering gland – end of pipe should be heated with heat gun and then pushed over gland and fixed in position using bracket and stainless steel screws.

Bottom exit JODEL Heat pad Fixings

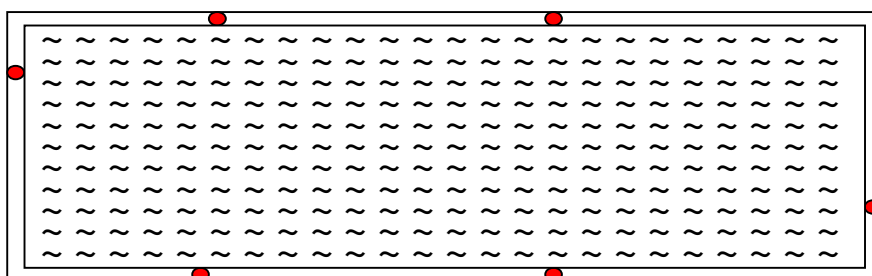


Figure 4

- Stainless steel screw – **MUST** be fitted into centre of plastic slat bar. On plastic slats use bottom exit gland pads.



Bottom exit glands can only be used on flooring where the cutting of the floor to allow the gland to fit through will not interfere with the structural integrity of the floor.

Chemical fixing should **not** be used on plastic flooring unless the manufacturers' specification states that it is safe to use on polypropylene and polyethylene.

E Sensor Pad.

In each group of Heat pads there will be one sensor pad. This pad includes a 20mm port, which accepts the sensor lead from the control unit. The sensor lead takes the temperature of the sensor pad and relays it to the control unit, which generates the temperature for all the Heat pads in that group.

It is important that the sensor lead is sealed in heavy-duty conduit.

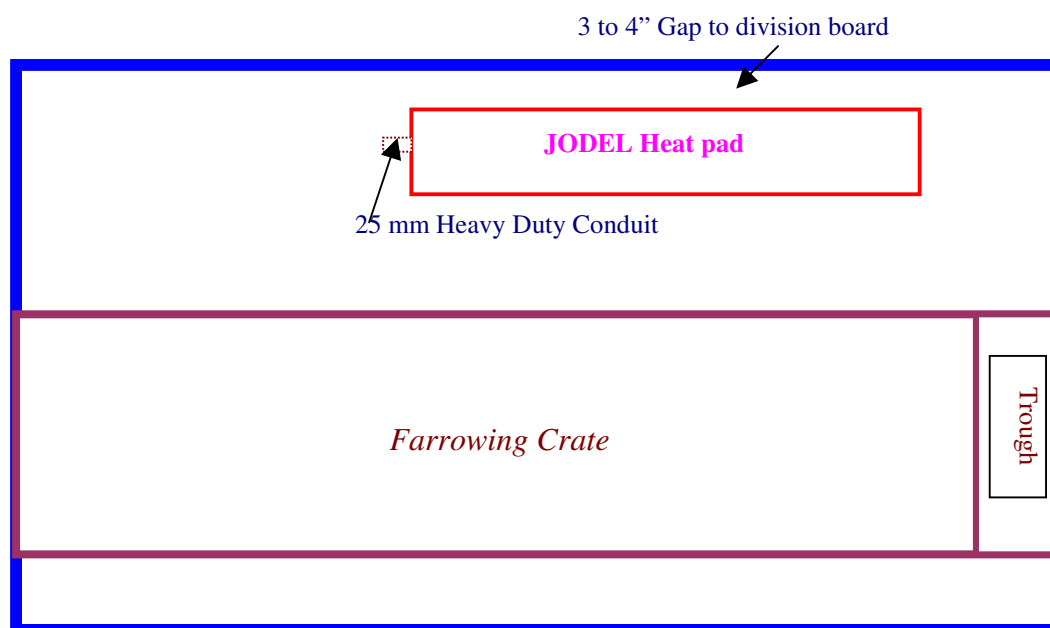
It is important that the sensor pad is installed away from any drafts or water splashes from sow nipple, which could result in false temperature readings.

When extending sensor lead please use an equivalent 2 core screened cable.

The conduit to the Sensor port must be run straight from the junction box to the pad DO NOT PUT IN BENDS.

F Slave Pads

Sample Farrowing Pen Layout



(Drawing not to scale) Fig 5



Ideally the Heat pad should be positioned approximately 3 to 4" (75 to 100mm) from the division board if space allows.

Do not set heat pad **LESS** than 3" (75mm) from division board as piglets may get trapped between side of pad and division. In narrow farrowing crates it is best to position heat pad beside partition.

G Room Wiring:

All cabling within room must be enclosed in 20mm heavy-duty conduit.

It is important that the PG11 gland is covered using 25mm heavy-duty conduit to prevent damage by the animals. The 25mm conduit when heated will fit directly over the gland and should be bracketed to the slats.

Conduit joints should be made using IP65 approved cable junction boxes to prevent moisture penetration and damage to the system.

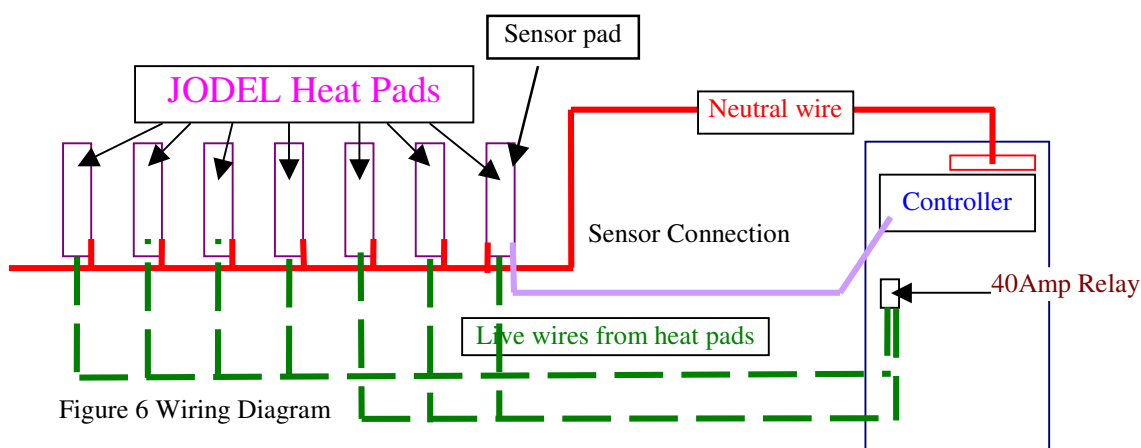


Figure 6 Wiring Diagram

Technical Data:

Voltage 110-120v @ 50/60Hz

Output Power 125w max.

Dimensions 4ft (1.22m) X 1ft (0.31m) - Height 1.17inches (0.03m)

Care should be taken in specifying size of supply cable to the farrowing room to cover total power requirement of the room (one pad draws 1.136Amp@110v).

The heat pad load should be equally divided on two live wire feeds from the 40 Amp Relay (positions 2 & 4) in the controller.

The JODEL Heat pad being a double insulated appliance has only a live and a neutral wire.

All wires must be protected from damage from any source.

Do not over fill conduit with cables keep to manufacturer's recommendation.



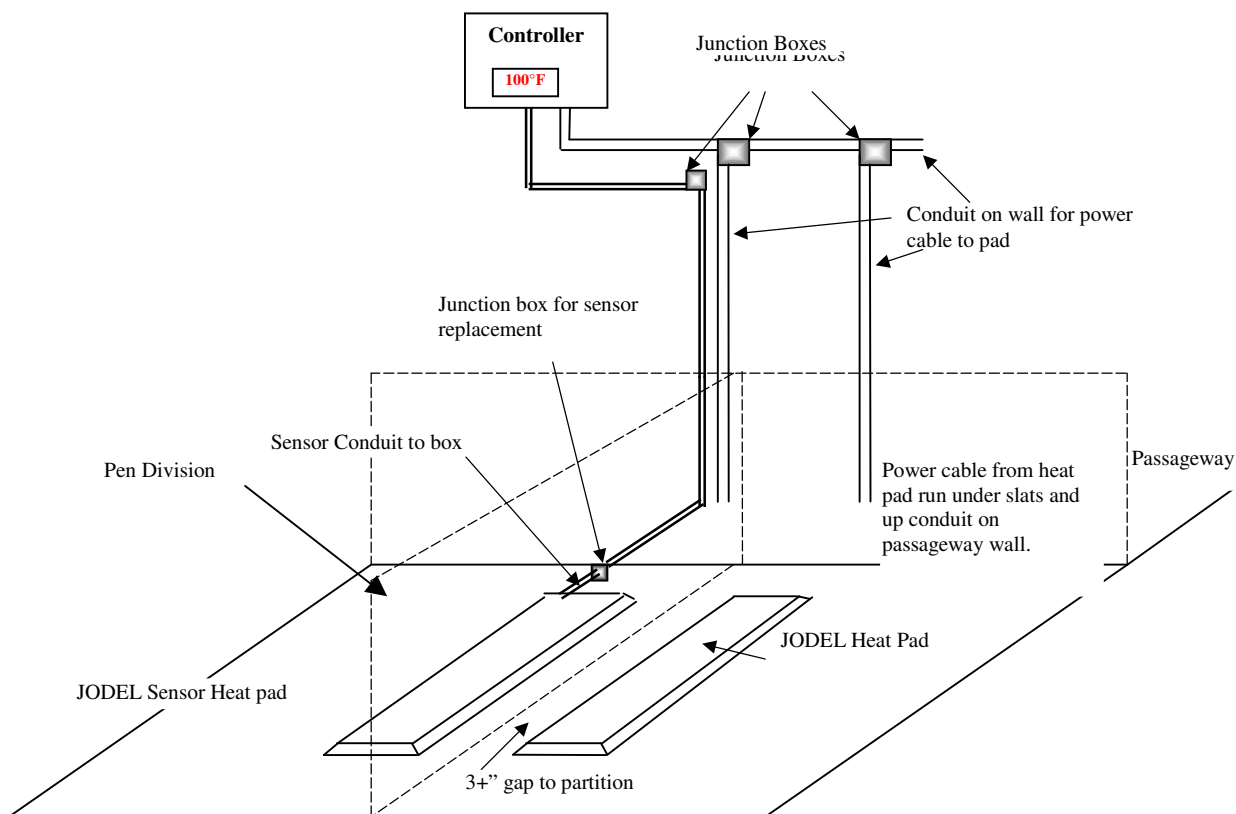


Figure 7

H General guidelines

1. Electrical safety & compliance.

Use properly qualified and trained installers.

Be aware of maximum load requirement and size electrical cable accordingly.

All cables should be run through suitable sized heavy-duty conduit to protect from damage.

2. Mounting & Fixing.

Fix controller to a dry wall in a dry environment.

Seal fixings inside controller box.

Position so that it can be easily read and adjusted.

Ensure that it is protected from physical damage.

All entry and exit glands should be from the base of controller.

