



Universal Gateway

Installation Guide



CONNECTIONS

To access the dipswitches and all connections, please open the Universal Gateway case by unfastening the front screw (PZ1) and removing the lid.

fig 1

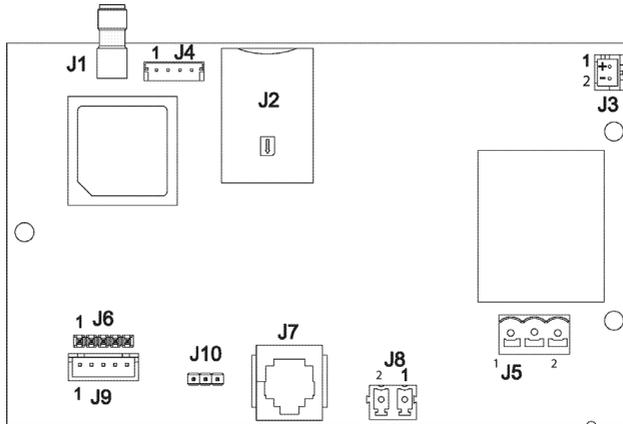


fig 2

Connector	Connector Description	Terminal	Signal
J1	Antenna		
J2	Sim Card		
J3	Battery	1	7.2V
		2	0V
J5	Power Supply	1	L
		2	N
J7 or J8	Phone Line	1	TIP
		2	RING
J10	Jumper switch for coverage meter		

INSTALLATION



Before fixing the device in place, check the network coverage within the immediate environment. The Universal Gateway can be used as a coverage meter by connecting the battery cable to J3 and changing the jumper switch J10 to ON (see fig 1). The five LEDs on the front of the unit will show the network signal level. Once a suitable location has been found, switch J10 back to OFF.

To fix the device in position, drill two holes in the wall and insert the plugs and screws provided with the device. Then hang the Universal Gateway on these two points using the tear-shaped bracket.

STARTING THE DEVICE

- + Insert SIM card in connector J2, pressing it until it clicks
- + Ensure that the antenna is screwed in completely in J1 – only use antennas from the Memco range.
- + Connect the emergency telephone to connector J7 or terminal J8
- + Connect battery to J3
- + Connect 220 VAC power to J5
- + To switch off the device, remove the power supply from J5 and then remove the battery connection from J3.

DEVICE HEALTH CHECK

See below for an overview of all LEDs. On start-up, you should see the following within 60seconds:

fig 3

	RUN LED flashes in green.	Power supply is OK
	BAT LED is always on	Battery is OK
	SIM LED is green or amber	Device is connected to the network
	Coverage LED is green or amber	Good coverage
	SLIC LED is green	Device is in standby

LED INDICATORS



 The Universal Gateway has five indicator LEDs that constantly report the device status.

 Each indicator will be fully on, fully off or flashing. Details of each indicator and function are detailed below:

fig 4

LED	OFF	ON	FLASHING SLOWLY	FLASHING QUICKLY
	CRITICAL SYSTEM ERROR		Proper operation (AC) or (BAT) Restarting system	N/A
	Low battery	Battery OK	Battery charging	Battery failure
	Initialising/Missing sim	Available GSM/GPRS	GSM/GPRS in use	Missing PIN/PUK
	Low or no coverage	High coverage	Medium coverage	Missing PIN/PUK
	Out of service or initialising	Local line ready	Local line in use	N/A

ENVIRONMENT CONDITIONS

This device is designed to be used indoors (0°C to 45°C with relative humidity between 20% to 80% not condensing). Sudden changes of temperature and humidity should be avoided.

CLEANING AND MAINTENANCE

Use a soft dry cloth. Do not use solvent or abrasive products.

SAFETY

Please read these safety instructions before starting the device.

- + Do not expose this device to liquids or excessive humidity. The Universal Gateway is an indoor device and is not waterproof.
- + Do not expose the device to fire.
- + Do not try to modify the device.
- + Do not use the device in potentially hazardous areas or where there is risk of explosion.

The Universal Gateway emits low levels of radio frequency when in operation.

BATTERY

The Universal Gateway includes a NiCd 12 V/600 mAh battery that allows it to keep functioning in the event of a mains power failure.

This battery should be replaced every 4 years. Only install batteries authorized by Avire, and only allow qualified personnel to replace the battery. Part number for replacement is est le MC-SPM10-200-0-00-000.

This battery should be properly recycled and not disposed of with unsorted household waste.

DISPOSAL

The device complies with regulations 2002/95/CE and 2003/108/CE regarding the use and disposal of hazardous substances in electric appliances.

Do not dispose of this device with unsorted household waste. Disposing of the device in an unauthorised way could result in a fine in line with local regulations.



ENVIRONMENTAL REGULATIONS

RoHS

Avire certifies that its production process complies with the 2002/95/CE European Directive of 27 January 2003 regarding the restriction of use of hazardous substances in electric and electronic appliances.

SIM CARD SETTINGS



Avire SIM cards come preconfigured to be used with our products immediately after plugging them in. If you are using a different SIM card, you may need to unlock it via its PIN code in order to connect with the mobile operator. In this case, follow either of these steps:

OPTION 1 (RECOMMENDED)

You can program the PIN code of the SIM card into the Universal Gateway using an analogue phone plugged into to the J7 connection. (See fig 1)

Enter configuration mode :

Update SIM card PIN parameter:

is the PIN code given by the service provider.

At this point, the SIM card LED will stop flashing in red. If it does not, make sure the SIM is correctly inserted and you entered the correct PIN.

OPTION 2

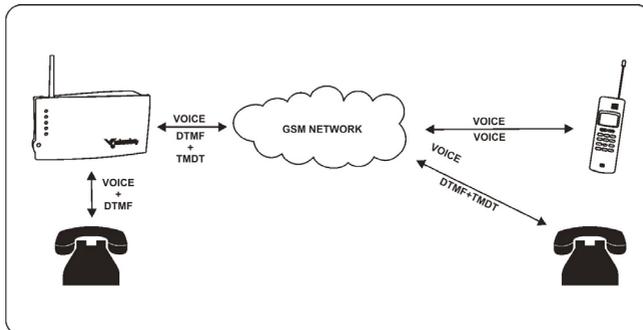
Disable the blocking PIN code using a conventional mobile phone. Plug the SIM into a different mobile device and unlock it in the device settings.

BASIC GSM GATEWAY

In this operation mode, the Universal Gateway can be used as a converter for an analogue phone line into a GSM line. It can send and receive data by DTMF and place voice calls for trapped personnel.

Parameter P020 must be set to 00 in configuration mode.

fig 5



MONITORING

Monitoring can be set up for the Universal Gateway via the Avire Hub, for example to create a notification whenever the battery back-up is used during a mains power failure. This is in compliance with EN81-28.

Alternatively, at any time a status can be retrieved using SMS as follows.

User sends an SMS to the device using the SIM telephone number:

pin1234,p007?

Assuming the device password/PIN is 1234, the Universal Gateway will reply:

MK-830: MK830 P007=B07.9VMIS1DD00000CCF

B = Battery charge status given in V; M = main status; S = signal level; D = transferred bytes in HEX

When the battery charge is under 7V, the suffix XLBO is added to the end of the code, eg.

MK-830: MK830 P007=B06.9VMIS1DD00000CCFXLBO

Our technical support team are happy to help:

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