SeNd Technology Ltd Quick Start Guide

AVIOR WiFi, 2G & 4G IoT Telemetry



On-line guides available at www.sendtech.info/avior





Quick Check List (local configuration)

- Avior Unit!
- Antenna is connected
- Active SIM card is inserted in base
- External power connected
- USB to serial programming cable connected
- Download AviorSuite software at <u>https://www.sendtech.info/avior</u>

Local Configuration:

Download the latest AviorSuite software from <u>https://www.sendtech.info/avior</u> Unzip the folder and click on the AviorSuite.exe application.

If you have a 2 or 4G unit insert a SIM card into the base of the Avior and connect an antenna, power and the



USB programming cable to your PC.

The AviorSuite software should recognise the attached Avior and assigned COM port. Click on the USB icon to connect to the Avior unit Enter the password (default 0000).

Note: When you have set up either Wifi or the mobile APN details you will be able to configure and monitor your Avior remotely.

Initial Configuration (Housekeeping) – CONFIGURATION



The following stages set up the device name and network connection details:

1. Device – Here you can give the device a name to fit the installation of application eg "Pump Station"

Note: When you edit and make changes remember to click on the tick on the second row to save the change in the connected device.

🔨 Avio	r.Suite 1.0.1.6 NoName				_		×
	A 🚳 🔝 🕸	÷	Click the TICK to save			•	(?
⊘	×		the change!	DEVIO	CE	Ф	001
001	DEVICE	^	DEVICE NAME	Pump Station			
002	WIFI		CLOCK MODE	Automatic			~
003	PLMN		AUTORESET	168 Hours (1 Week)			~
004	BLUETOOTH		AUTOREDET	hees			-
005	GEO		PASSWORD	pooo			
006	MAIN POWER SUPPLY		INPUT SUPPLY	SUPPLY ENABLED			\sim
007	AUX POWER SUPPLY		DEVICE NAME				
008	BATTERY		IDENTIFIER FOR THIS DEVICE	UMERIC WORD			
009	TEMPERATURE		4 15 CHARACTERS, ALPHAI	IUMERIC WORD			
010	DIGITAL INPUT 1		CLOCK MODE MANUAL	RY POWER-ON			
011	DIGITAL INPUT 2			RTTOWER ON			
012	DIGITAL INPUT 3		CLOCK MODE AUTOMATIC FROM CLOUD OR CELL NETWO	RK			
013	DIGITAL INPUT 4		AUTODECET				
014	DIGITAL INPUT 5		0 DISABLED				
015	DIGITAL INPUT 6		24168 HOURS PERIODIC RE	START			
016	ANALOG INPUT 1		PASSWORD				
017	ANALOG INPUT 2		SMS, EMAIL AND CLOUD	CAL COM PORT			
018	ANALOG INPUT 3	v	4 TO 10 ALPHANUMERIC CHAP				
Restor	e the entire group to the factory						Avior



2. WiFi – Enter the local WiFI network name (SSID) and password

🔨 Avior.Suite 1.0.1.6 NoName – 🗆 🗙					
	× 🗞 🔊	*	Click the TICK to save the change!	(?	
001				~	
002	WIFI		SSID WiFi SSID Name		
003	PLMN				
004	BLUETOOTH		PASSWORD WIFI Password		
005	GEO		LOCAL IP 192.168.1.1		
006	MAIN POWER SUPPLY		ACTIVE	^	
007	AUX POWER SUPPLY		ENABLE/DISABLE THIS CHANNEL		
008	BATTERY		WIFI SSID		
009	TEMPERATURE		THE NAME OF THE WIFI NETWORK		
010	DIGITAL INPUT 1		4 32 ALPHANUMERIC CHARACTERS COMMA, COLON AND UNDERSCORE NOT ALLOWED		
011	DIGITAL INPUT 2				
012	DIGITAL INPUT 3		PASSWORD TO ACCESS THE WIFI NETWORK		
013	DIGITAL INPUT 4		UP TO 64 ALPHANUMERIC CHARACTERS COMMA, COLON AND UNDERSCORE NOT ALLOWED		
014	DIGITAL INPUT 5				
015	DIGITAL INPUT 6		192.168.1.1 AS DEFAULT ADDRESS IP		
016	ANALOG INPUT 1		ELSE ASSIGNED AUTOMATICALLY BY THE ROUTER VIA DHCP (Dynamic Host Configuration Protocol)		
017	ANALOG INPUT 2				
018	ANALOG INPUT 3	×	ANY CHANGES WILL BE ACTIVE IN THE NEXT RESTART	~	
Exit from 'File' Mode Avior					

3. **PLMN** – This is the mobile/cell network for the SIM you are using – Make ACTIVE then enter the mobile number of the SIM card (international format) and the APN, username and password required for the mobile/cell network to make a data connection. If you are unsure of these just Google your network and APN details.

🔨 Avior.Suite 1.0.1.6 NoName - 🗆 🗙						
	🛹 🍪 🔝 🞯 💈	ţ.			[?	
₫	× .	/		PLMN	003	
001	DEVICE	^	MODE	ACTIVE	\sim	
002	WIFI		PHONE	+447712345678		
003	PLMN		ADDRESS APN1	diffdaff.com		
004	BLUETOOTH		ADDRESS ANNI	gingan.com		
005	GEO		USERNAME APN1	giffgaff		
006	MAIN POWER SUPPLY		PASSWORD APN1	password		
007	AUX POWER SUPPLY		PHONE 2			
008	BATTERY					
009	TEMPERATURE		ADDRESS APN2			
010	DIGITAL INPUT 1		USERNAME APN2			
011	DIGITAL INPUT 2		PASSWORD APN2			
012	DIGITAL INPUT 3					
013	DIGITAL INPUT 4		WELCOME MESSAGE			
014	DIGITAL INPUT 5		FAREWELL MESSAGE			
015	DIGITAL INPUT 6		ACTIVE		^	
016	ANALOG INPUT 1		ENABLE/DISABLE C AVAILABLE ONLY FO	ELLULAR CONNECTIVITY OR DEVICES WITH SPECIFIC ADDITIONAL BOARD		
017	ANALOG INPUT 2		DHONE			
018	ANALOG INPUT 3	~	TELEPHONE NUMBER	R ASSOCIATED WITH THIS DEVICE	~	
Send t	o Local Device				Avior	



Initial Programming (Sending Alert Messages) – RULES

🔦 Avior.Suite 1.0.1.6 NoName	– 🗆 X
	Avior

RULES – Rules consist of a TRIGGER (eg Digital Input 1) and can be combined with up to 5 CONDITIONS (eg Input 1 value = 1 - i.e. it has closed) and a subsequent ACTION (eg send a SMS message and an email – up to 5 ACTIONS can be triggered per RULE.

🔨 Avior.Suite 1.0.2.2 NoName*				_		×
1 🖉 🍪 🔝 🗐 🔅						(?
				RULES		001
001 PumpON	•	NAME PumpON				
002	4	Digital Input 1 (din1)				\sim
003	I A	DIGITAL INPUT 1 - Input status	₽ =	1		
004		ANALOG INPUT 1 - Average measured		30		
005						
007	±					
008	$ $ \oplus		",			
009	\oplus		₿			
010	>	out1=ON				
011	>	AT+SMS=+4478381122334,"Water Pt	ump is f	Running"		B
012	S	AT#EMAIL=vou@vouraddress.com."Lo	ondon s	Site 23 - Pump is	s Runnin	
013		······································				
014						
015	>					
016	Fo	or each event associated with the resources	s (chann	els) of the device	, it is	^
017	fr	eely divided between all possible TRIGGER	events.		o total ru	1037
018	' S	chequied at TIME [nn: mm] event allows th	e use of	wildcards.		~
RULES						Avior

In this example when the TRIGGER (Digital Input 1) is closed AND the CONDITION (Analog Input1) is less that 30degC (attached NTC temperature probe) then the ACTION is performed to turn on Output1 AND send an SMS AND an EMAIL to confirm the pump is running (all in the one RULE).

There are many options here. Please look at the text at the bottom of the configuration page for context based usage or hover over the condition or action for syntax usage. Also click on the HELP icon (top right) for full documentation

We also have video guides for set up on YouTube which can be found on the Avior page of our website.

Initial Programming – USERS



USERS are people that are authorised to send commands to the remote Avior unit to change values or process ACTIONS.

Example:

A USER would like to turn on output relay 1 when they send a SMS word "start" to the Avior.

Step 1: Set the user name and their authorised mobile number

Avior.Suite 1.0.1.6 NoName*		– 🗆 X
1 🔌 🚳 🔝 🔅		
		USERS 📞 001
001 Mark	NAME	Mark TYPE TELEPHONE V
002	IDENTIFIER	+4477812345678
003	GROUP	
004	START DATE/TIME	01/01/2000 00:00
005	CTOD DATE/TIME	21/12/2000 22:50
000	STOP DATE/TIME	51/12/2099 25:59
007	WEEKDAYS	
009	TICKETS	UNLIMITED ~
010	ENABLE USER	^
011	EACH DAY AT SPEC	SPECIFIC DATE IFIC TIME YY-MM-DD hh:mm
012	STOP DATE/TIME	
013	DISABLE USER	-
014	EACH DAY AT SPEC	E IFIC TIME YY-MM-DD hh:mm
015	WEEKDAYS	
016	RESTRICT OPERATI	ON TO SPECIFIC DAYS OF THE WEEK FROM MONDAY
017	N = DISABLE	
018	Y = ENABLE	v
Q USERS		Avior

Users can be identified by their phone number or email and we can also set other Avior units as users to allow communication between units either over their own Avior LAN or remotely over the mobile network.





Step 2: Set a RULE that when a TRIGGER (incoming SMS) contains the CONDITION (the word "start") the ACTION turn relay output 1 ON is performed. In the example below a SMS is also sent confirming the action.

Avior.Suite 1.0.1.6 NoName*	- 🗆 X	
1 🖉 🍪 🔝 🕸		
	RULES 💬 00:	
001	NAME StartPump	
002	5MS from user	
003	PI MN - Last received SMS - Text of mul =start	
004		
005		
006		
007		
008		
009		
010		
011	AT+SMS=\$N23, "The pump has started"	
012		
013		
014		
015		
016	For each event associated with the resources (channels) of the device, it is possible to define one or more behavioral rules for a maximum of 500	
01/	total rules, freely divided between all possible TRIGGER events.	
V18	Scheduled at TIME [nn: mm] event allows the use of wildCards.	
RULES	Avio	r

RULES – Rules consist of a TRIGGER (eg SMS from USER) and can be combined with up to 5 CONDITIONS (eg Last SMS received contains the word "start") and a subsequent ACTION (eg Turn Output 1 ON and send a SMS to the last sender \$N23) – up to 5 ACTIONS can be triggered per RULE.

This QuickStart is just a very basic overview of what the Avior can do to get you up and running.

Monitoring and configuration can also be done remotely via the Avior Website or using the optional embedded webserver on SD-Card via WiFi. Please contact SeNdTech for help and advice with configuration and your application.

Please feel free to contact us if you have any questions or need any help with your application:

Email:		sales@sendtech.co.uk
Phone:		+44 (0)1488 762 763
WhatsApp:	S	+44 7453 758 846



MyAvior – Web Portal for monitoring and configuration

If your Avior is connected to the internet via WiFi or a mobile data connection you will be able to access it through the Avior web portal at <u>https://avior.webadmin.mobi/</u>

The Web-ID for your unit is shown above the Device Name in Avior Suite in the Configuration section. You can also request this if you have an active SIM in the Avior by sending the following SMS: 0000 at#rm=D13 (This is useful is your Avior is installed remotely and you need the Wed-ID!)

Default Password is 0000

You can then monitor, control and configure in a similar way to the instructions for local cable connection configuration.





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