GE Interlogix

ARITECH

ATS Control Panel

Installation Guide

Version 2.0 , March 2004

CONTENTS

IMPORTANT NOTE

This manual provides information for all ATS2000, ATS3000 and ATS4000 control panels in all variations.
When referring to the ATS Control panel, this can be read as any variant of the ATS2000, ATS3000 or ATS4000 control panels, unless specifically stated otherwise.
When referring to the ATS2000, ATS3000 or ATS4000, this can be read as any variant of these.

List of known panel variants (not all types might be available):

ATS2000/3000 variants			ATS4000 variants		
Type	**Box**	**Power supply**	**Type**	**Box**	**Power supply**
ATS2000 ATS3000	ATS1641	2 Amp	ATS4000	ATS1640	2 Amp
ATS2100 ATS3100	ATS1641	3 Amp	ATS4500	ATS1642	2 Amp
ATS2200 ATS3200	ATS1646	2 Amp	ATS4600	ATS1642	3 Amp
ATS2400 ATS3400	ATS1646	3 Amp			
ATS2500 ATS3500	ATS1642	2 Amp			
ATS2600 ATS3600	ATS1642	3 Amp			

1. GENERAL INSTALLATION INFORMATION

1. Mains Power connection

Use the Mains Connector Terminal for connecting the mains-supply. A fixed cable or a flexible mains lead to an earthen mains outlet can be used. In case fixed wiring is used, insert a dedicated circuit breaker in the power distribution network. In all cases, the mains connection has to comply with local regulations.

IMPORTANT: Disconnect the mains power before opening the cabinet!

⚠️ Disconnect AC mains plug from AC Mains wall socket.   Or

Disconnect the mains with the dedicated circuit breaker.

CAUTION: this unit can be provided with lead battery inside. Dispose of this battery according to chemical waste regulations only.

2. Mounting

The unit is mounted with screws or bolts through the four mounting holes in the base.

Ensure that the unit is mounted on a flat, solid, vertical surface such that the base will not flex or warp when the mounting screws/bolts are tightened.

Leave a 50-mm clearance between equipment enclosures mounted side by side and 25 mm between the enclosure and the sidewalk.

The battery mounting facility inside the housing is only useful for steady state use of the control panel. Remove the battery for transport of the control panel.

Take also care that wire terminals are isolated. Use tie wraps to prevent contact with any other wires or circuits in case wiresbreak

3. Defaulting the panel

⚠️ **IMPORTANT:** Before installing and programming the system, default the panel (refer to the Quick programming guide) to ensure that you have the correct country defaults according to your local regulations.

4. General installation guidelines

The ATS control panels have been designed, assembled and tested to meet the requirements related to safety, emission and immunity with respect to environmental electrical and electromagnetic interference, as of current relevant Standards.

If the following guidelines are followed, the system will give many years of reliable service.

In addition to the following guidelines, during the installation of the ATS control panel, it is essential to follow any country dependent installation requirement of local applicable standard. Only a qualified electrician or other suitable trained and qualified person should attempt to wire this system to the mains or to the public telephone network.

1. Ensure that there is a good earth available for the alarm system.

2. Maintain a separation between low voltage and mains supply cables. Use separate points of cable entry to the control panel cabinet.

3. If, the upper and/or lower cabinet entry cable holes are used to route wiring into the control panel, always use a proper pipe fitting system by means of an appropriate conduit and junction box. For this purpose, use only materials of suitable flammability class (HB or better).

4. For Mains Power connection, use the mains connector terminal either through a permanent wiring or a flexible mains cable to an earthed mains outlet. Always use cable ties to fix mains cable, at the dedicated fixing point provided near the mains terminal connector.

    a. In case of permanent fixed wiring, insert an easily accessible, dedicated bipolar circuit breaker in the power distribution network.

    b. Never attempt to solder mains connection wires end where they will be wired to the terminal connectors.

5. Avoid loops of wire inside the control panel cabinet and route cables so that they do not lie on top or underneath the printed circuit board. The use of cable ties is recommended and improves neatness of the wiring within the box.

6. The battery used with this unit, must be made of materials of suitable flammability class (HB or better).

7. Any circuit connected either directly to the on board relay's contact or to external relay's contact through the on board

electronic output, must be of **SELV** (**Safety extra-low voltage**) operating circuit.

    a.   Mains switching relay must not be fitted inside the control panel cabinet

    b.   Always place a suppression diode (e.g. a 1N4001) across the relay coil

    c.   Use only relay with good insulation between the contacts and the coil.

8.   The minimum clearance between equipment closures is 50 mm (between equipment vents).

9.   Only use units in a clean environment and not in humid air.

5. Installation ATS 2000/3000 variants
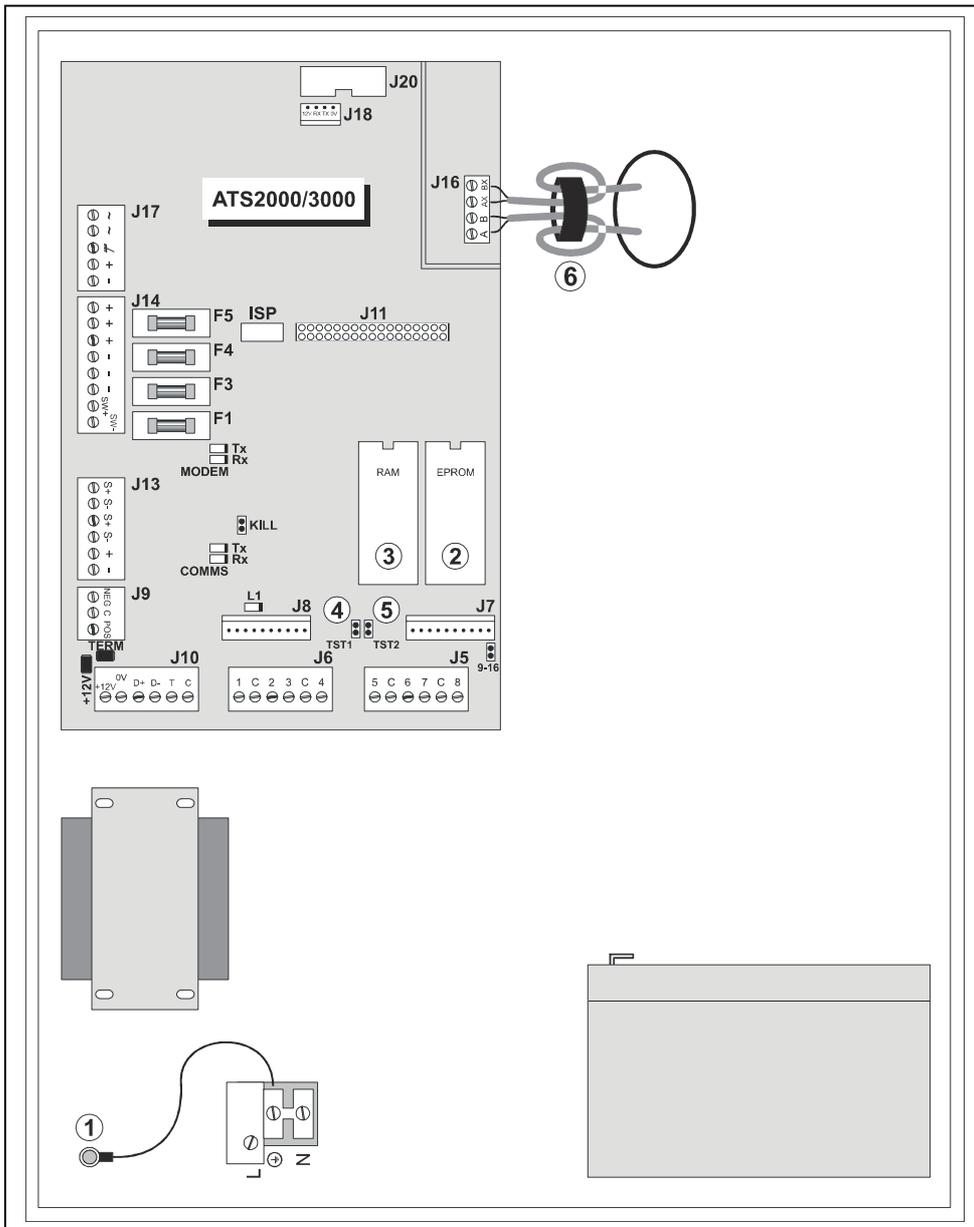
(1)   Earth connection. Use also for cable screen and lid of box.

(2)   Eprom (Factory fitted)

(3)   RAM or IUM (ATS2400/2600/3000 variants only)

(4)   TST1 restore master user code

(5)   TST 2 factory use only

(6)   Ferrite for PSTN. Requires 1 loop each for incoming and outgoing cables. Feed the cable through the nearest hole out of the box.

J5-J6   Zones

J7   Interface to ATS1202 input expanders

J8   Clock-out Interface to plug on output expansion or 4-way non-clocked.

J9   On board relay output.

J10   RS485 system databus and box tamper connections

J11   Connector to printer or printer/PC board (ATS1801)(ATS3000 only)

J13   Siren and strobe connections

J14   Auxiliary power output (SW+ & SW- ATS2400/2600/3000 variants only)

J16   PSTN line connection

J17   Power connections

J18   Serial connection (RS232)

J20   Connector to ISDN/Audio

J2, J3, J4, J15, J19 - Not fitted

To conform with CEI 79-2 regulations at level 2, the use of the pry-off tamper is mandatory (ST580 kit) For detailed information on the PCB, see connection diagram on page 7.

Connection diagram (ATS2000/3000 variants)

(1) Ferrite (required). Both incoming and outgoing PSTN wires require 1 loop.
(2) AC connection from transformer
(3) System earth (see details page 12)
(4) 12 V battery
(5) Switchable auxiliary output (ATS2400/2600/3000 variants only)
(6) External 8 Ohm siren speaker or siren
(7) 1K resistor must be fitted if external siren not connected
(8) Internal 8 Ohm siren speaker
(9) 12 V strobe
(10) System databus
(11) Normally closed front panel tamper contact
(12) Normally closed rear panel tamper contact
(13) Normally Closed Alarm Contact
(14) Normally Closed Tamper contact
(15) ATS1810/11/20 power selection
(16) RAM or IUM (ATS2400/2600/3000 variants only, optional)
(17) EPROM (factory fitted)
(18) Kill - Factory default control panel when shorted
(19) Zone 9-16 jumper. Short when ATS1202 is connected to J7.
(20) Test 2 – Factory use only
(21) Test 1 – Use for resetting the Master Engineer code
(22) ISP Circuit programming connector used to program the CPL. (factory used)

J5-J6 Zones
J7 Interface to ATS1202 input expanders. Short 9-16 jumper when using zone 9-16.
J8 Clock-out Interface to plug on output expansion or 4-way non-clocked.
J9 On board relay output.
J10 RS485 system databus and box tamper connections
J11 Connector to printer or printer/PC board (ATS1801) (ATS3000 variants only)
J13 Siren and strobe connections
J14 Auxiliary power output (SW+ & SW - ATS2400/2600/3000 variants only)
J16 PSTN line connection
J17 Power connections
J18 Serial connection (RS232)
J20 Connector to ISDN/Audio
J2, J3, J4, J15, J19 Not fitted
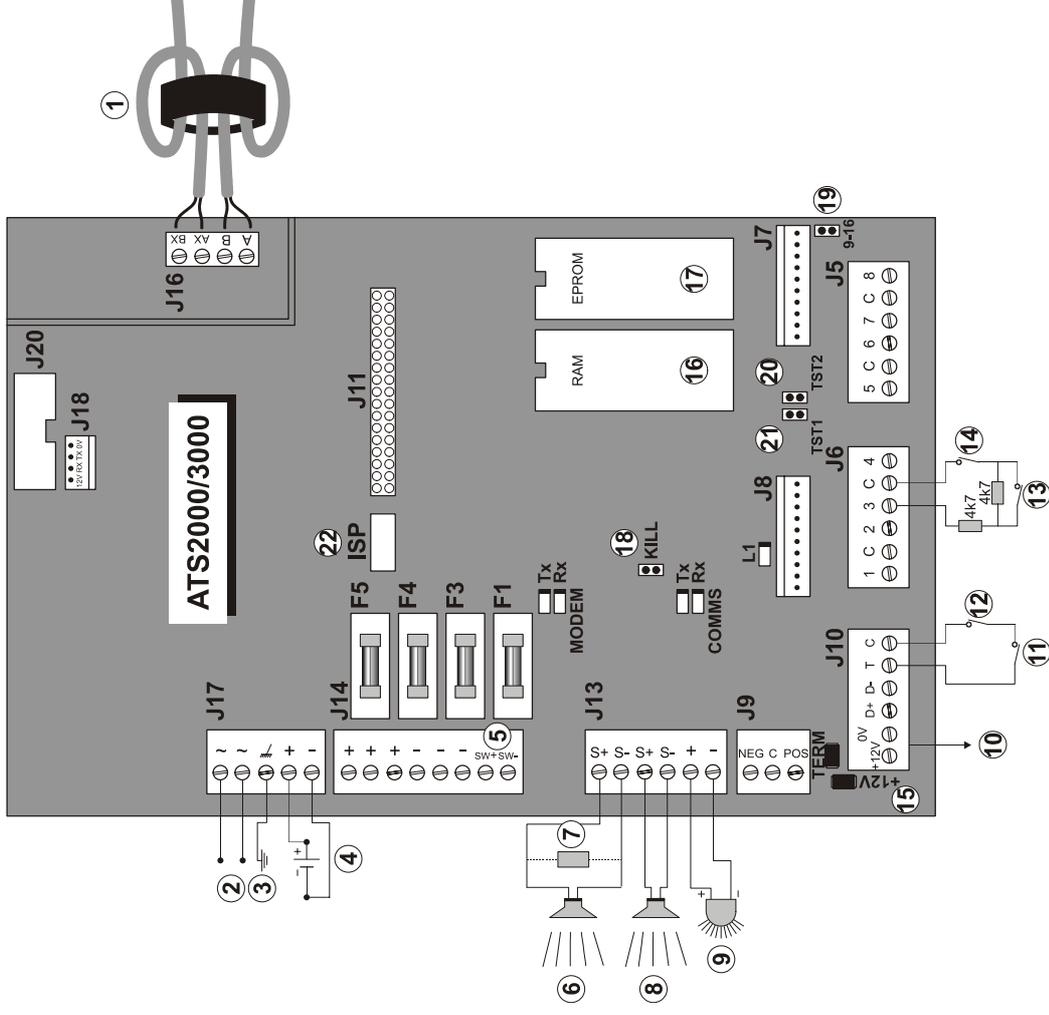
Temporary service connection – serial port (J18)
Use the ATS1630 programming cable.

6. ATS4000 variants
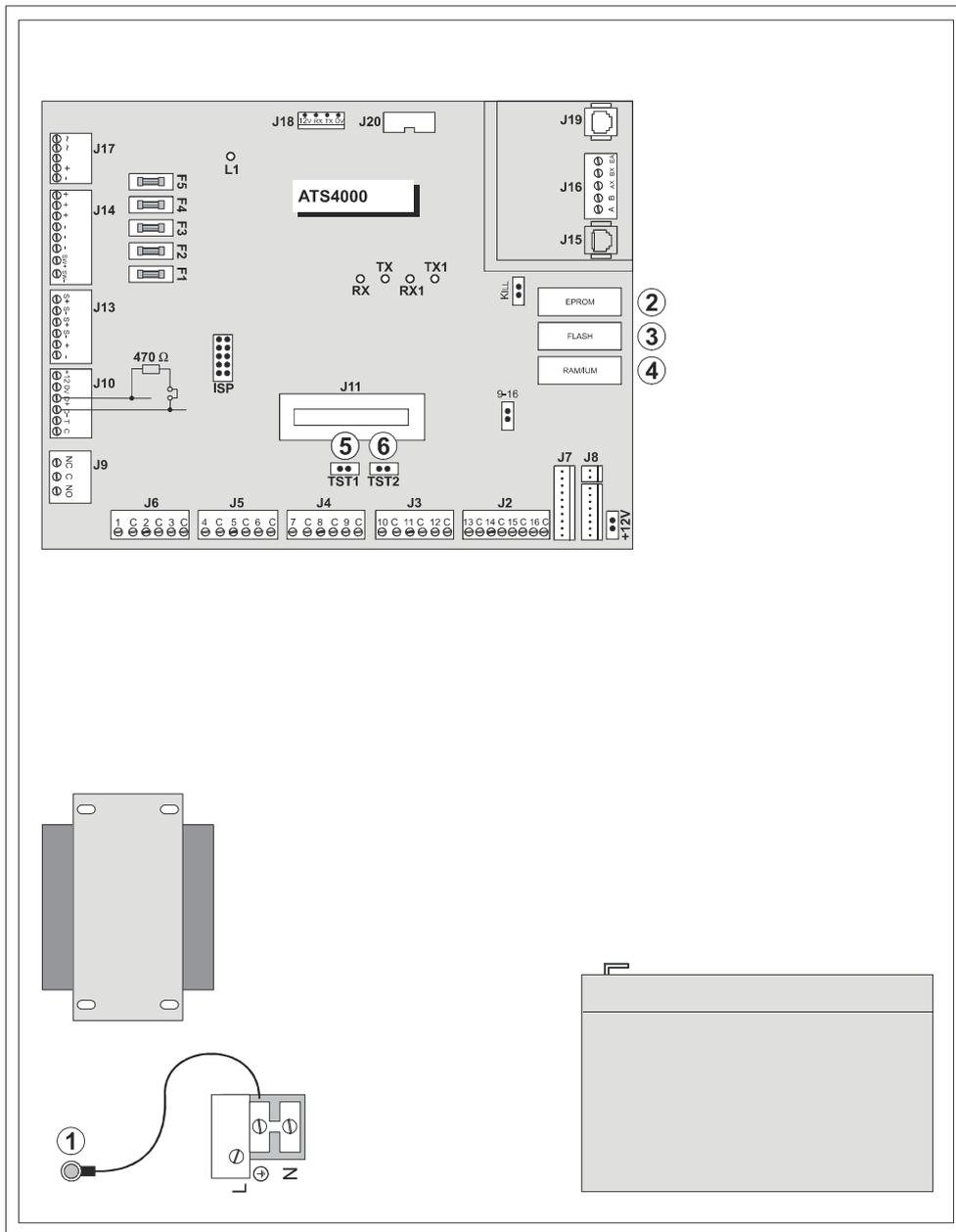
(1)   Earth plug for shields from data cable.
(2)   Eprom (Factory fitted)
(3)   Flash (Factory fitted)
(4)   RAM or IUM (optional)
(5)   TST1 restore master user code
(6)   TST 2 factory use only

J2-J6   Zones
J7   Interface to ATS1202 input expanders
J8   Clock-out Interface to plug on output expansion
J9   On board relay output.
J10   RS485 system databus and box tamper connections

J11   Connector to printer or printer/PC board
J13   Siren and strobe connections
J14   Auxiliary power output
J16   Not fitted
J17   Power connections
J18   Serial connection (RS232)
J19   RJ11 PTT connection
J20   Connector to ISDN/Audio

To conform with CEI 79-2 regulations at level 2, the use of the pry-off tamper is mandatory (ST580 kit) For detailed information on the PCB, see connection diagram on page 9.

Connection diagram (ATS4000 variants)

(1) Ferrite (required). Both incoming and outgoing PSTN wires require 1 loop.
(2) AC connection from transformer
(3) System earth (see details page 12)
(4) 12 V battery
(5) Switchable auxiliary output
(6) External 8 Ohm siren speaker or siren
(7) 1K resistor must be fitted if external siren not connected
(8) Internal 8 Ohm siren speaker
(9) 12 V strobe
(10) System databus
(11) Normally closed front panel tamper contact
(12) Normally closed rear panel tamper contact
(13) Normally Closed Alarm Contact
(14) Normally Closed Tamper contact
(15) ATS1810/11/20 power selection
(16) RAM or IUM (optional)
(17) EPROM (factory fitted)
(18) Kill - Factory default control panel when shorted
(19) Flash
(20) Test 2 – Factory use only
(21) Test 1 – Use for resetting the Master Engineer code
(22) ISP Circuit programming connector,
     used to program the CPLD (factory used)
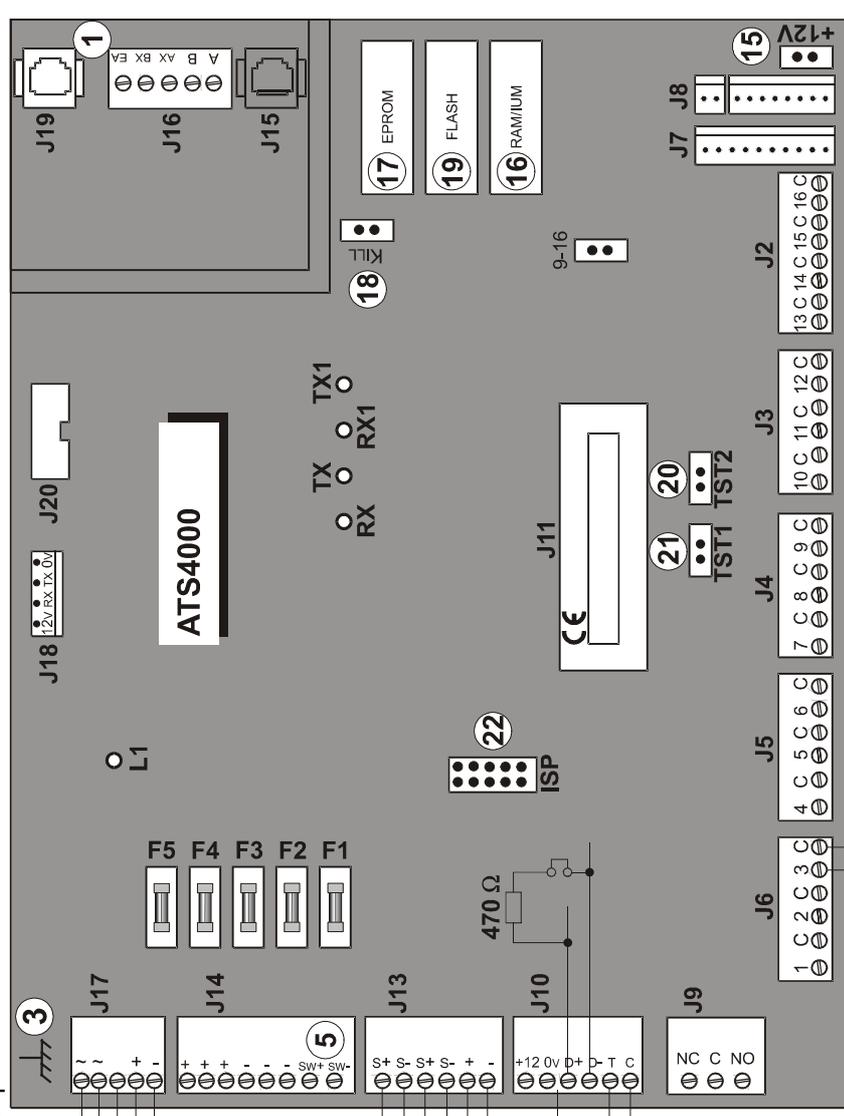
J2 - J6	Zone wiring
J7	ATS1202 Zone expansion
J8	CLKOUT (ATS1810/1820)
J9	Programmable relay output
J10	Comms and panel tamper wiring
J11	Computer/printer expansion (ATS1801)
J13	Sirens/Strobe Connection
J14	Auxiliary power
J15	RJ45 PTT connector (not fitted)
J16	PSTN Line connection
J17	Power
J18	Serial connection (RS232)
J19	RJ45 PTT connector
J20	ISDN/Audio Interface

Temporary service connection – serial port (J18)
Use the ATS1630 programming cable.

7. Cabling (ATS2000/3000 variants)

System databus connection diagram preferred wiring.

The "TERM" link is on the first and last devices on the system databus. In a "star" wiring configuration, the "TERM" link is only fitted on the devices at the ends of the two longest system databus cable runs.

TERM link fitted (first device on local databus)

Control Panel ATS2000/3000 variants

ATS1105 LCD RAS (TERM switch not set to ON)

Separate 12 V power supply. (Required if RAS is more than 100 m from the nearest panel or DGP. Connect "-" to "-" of the databus.)

Preferred data cable type is WCAT 52 (2 pair twisted).

TERM link <u>fitted</u> (last device on local databus)

Earth connection to connect shield*

Any data gathering panel like ATS1201, ATS1210, ATS1220 or ATS1250.

*Connect cable shield to one device only.

See: System databus connection and Earthing details on page 12

LEDs

L1:   Flashes slowly when the panel is operating (the microprocessor is running)

COMMS

Rx: Yellow LED flashes when remote units (RAS and DGP) are replying to polling.

Tx: Red LED flashes when panel is polling remote unit(s). It must always be active.

MODEM

Rx1:   Yellow LED flashes when data is being received from a device connected to the PTT line (J15/J16/J19) (central station or dialler modem) or J18 (serial port (RS232 PC).

Tx1:   Red LED flashes when data is being sent from the panel to a device connected to the PTT line (J15/J16) or J18 serial port..

ATS2000/3000

ATS1105

ATS1201
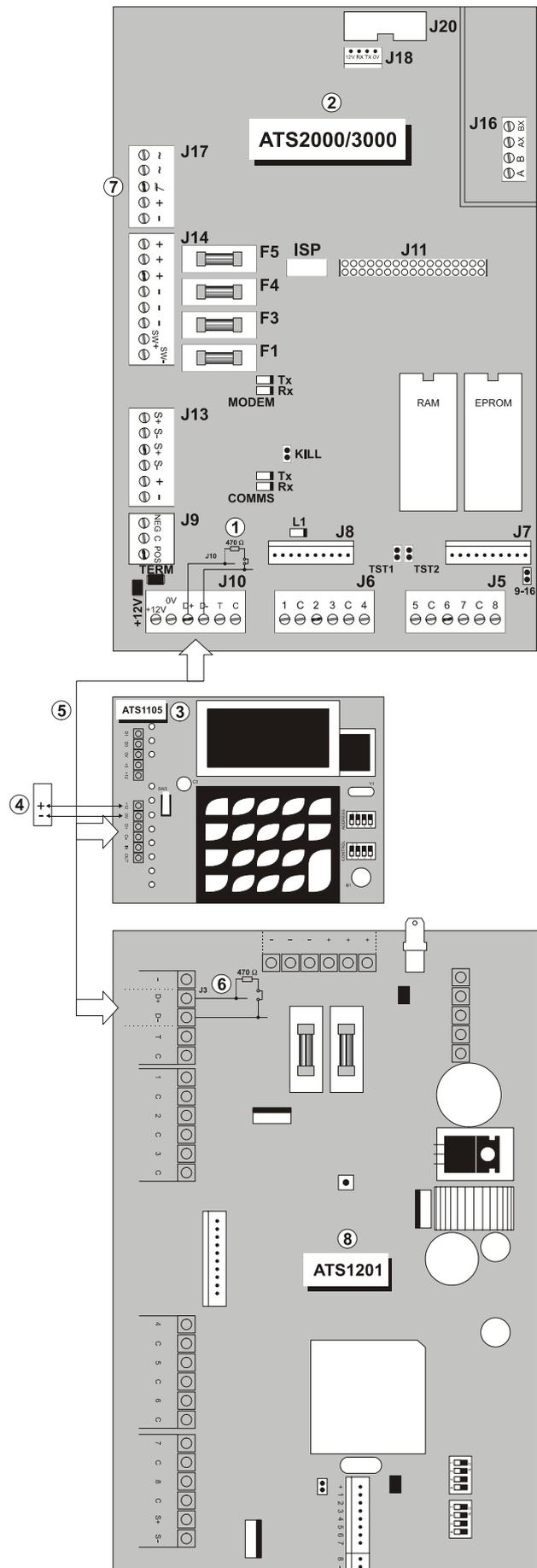
8. Cabling (ATS4000 variants)

System databus connection diagram preferred wiring.

The "TERM" link is on the first and last devices on the system databus. In a "star" wiring configuration, the "TERM" link is only fitted on the devices at the ends of the two longest system databus cable runs.

TERM link fitted (first device on local databus)

Control Panel ATS4000 variants

ATS1100/1105 LCD RAS (TERM switch not set to ON)TERM link not fitted

Separate 12 V power supply. Required if RAS is more than 100 m from the nearest panel or DGP. Connect "-" to "-" of the databus.

Preferred data cable type is WCAT 52 (2 pair twisted).

TERM link fitted (last device on local databus) TERM link fitted (last device on local databus).

Earth connection to connect shield*

Any data gathering panel like ATS1201, ATS1210, ATS1220 or ATS1250.

* Connect cable shield to one device only

See: System databus connection and Earthing details on page (10)

LEDs

L1:   Flashes slowly when the panel is operating (the microprocessor is running)

COMMS

Rx: Yellow LED flashes when remote units (RAS and DGP) are replying to polling.

Tx: Red LED flashes when panel is polling remote unit(s). It must always be active.

MODEM

Rx1:   Yellow LED flashes when data is being received from a device connected to the PTT line (J15/J16/J19) (central station or dialler modem) or J18 (serial port (RS232 PC).

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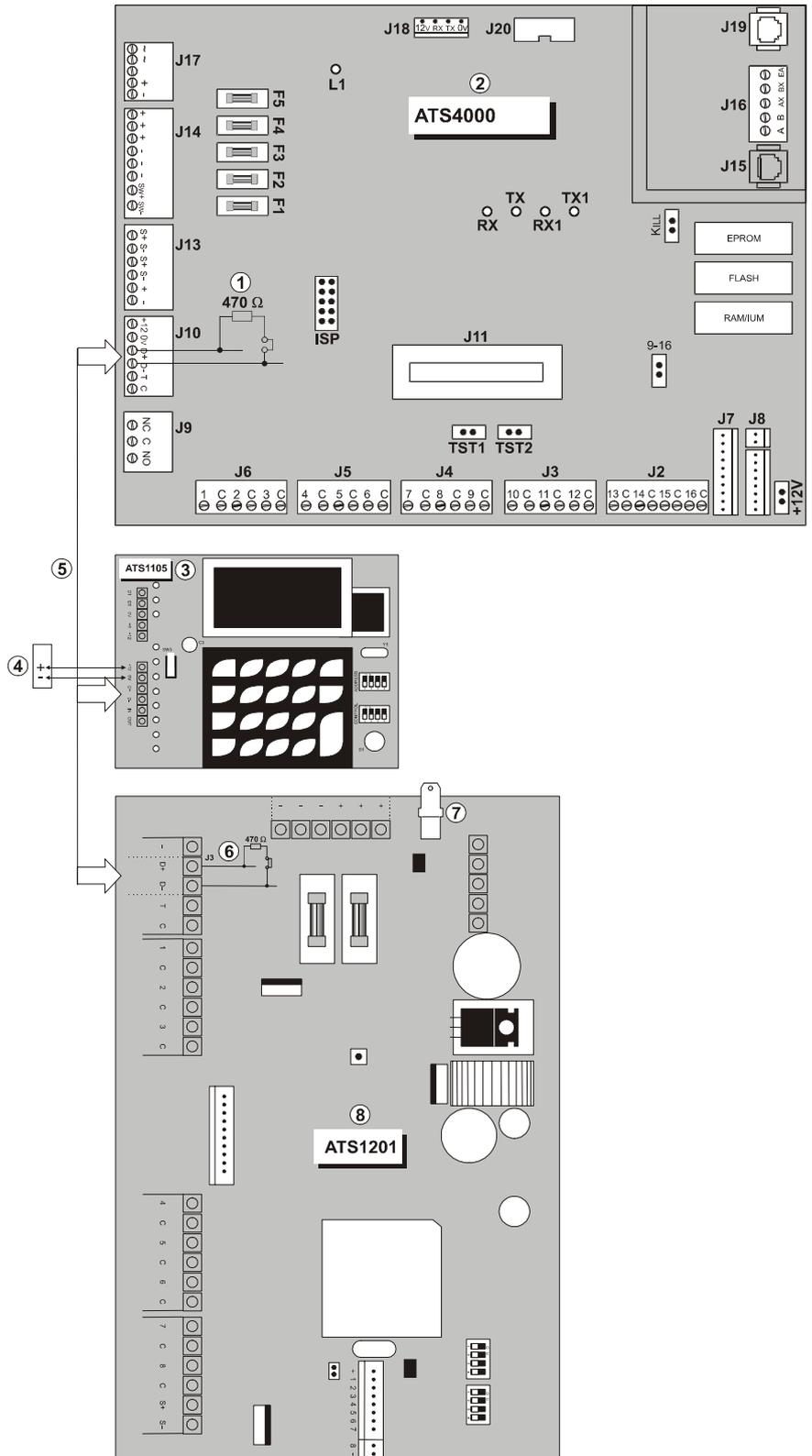
9. System databus connection

The system databus is used to connect Data Gathering Panels (to provide extra zones) and Arming Stations to the ATS control panel. Remote devices can be up to 1.5 km from an ATS control panels.

Arming stations and Data Gathering Panels must be connected via a 2 pair twisted shielded data cable from the system databus connection. (WCAT 52 is recommended)

The shield of the data cable should be connected to earth at the ATS control panel and should be left disconnected at any other end.

It is recommended that where the distance between the arming station and the nearest device is more than 100 meters, a separate power supply must be used to power the arming station.

To power the arming station, **do not** connect '+' from the system databus. Connect '+' of the local power supply to '+' on the arming station and connect 0 volts from the power supply **and** 0 volts from the system databus to the arming station terminal marked '-'.

See Cabling on page 10 and 11.

10. Mains connection

Make sure that before connecting the mains power, the mains power supply is disconnected (see page 4).

When installing the mains power, use strain

relieves like cable ties and coupling PG16's to ensure proper wiring. In all cases, local regulations should be applied.

11. Earthing

⚠ WARNING! Correct Earthing procedures must be followed.

Earthing of one cabinet containing several devices.
All devices designed for the system have earth connections via metal studs to the metal housing. Take care, that these metal studs make good connection to the housing (beware of paint).
The earth connections of every piece of equipment in the system, can be used for connecting the shielding of shielded cables.
If a device is placed in a plastic housing the earth lug of this device does not have to be connected.

Earthing panels in a single building.
In one building several cabinets or devices are earthen to safety ground.
The safety earth of this building has to be checked by a licensed contractor.

Earthing panels in more buildings.
If the wiring extends to separated buildings, more than one common earth system will be used. Use isolator/repeaters ATS1740 to isolate the system databus. In this way the system is protected against variations in earth potential.

Shielding
The shielding of all shielded cables used in the system, should only be connected at ONE side to one common earthing point in a building (see figure) If a shielded databus cable is routed via more than one plastic device the shielding from incoming and out-going cable has to be connected.

1.	Mains power with local earth	4.	Earth lug	7.	Device in metal housing
2.	Mains power connector	5.	Building 1	8.	Device in plastic housing
3.	System databus	6.	Building 2	9.	ATS control panel

12. Mounting the hardware – Addressing

All data gathering panels (DGP's), zones and outputs are numbered according to a set formula. This is used when determining the physical numbers/locations of DGP's, outputs etc. when programming.

Table 1: zones and outputs allocated to each DGP

Control panel	1-16	DGP 8	129-144
DGP 1	17-32	DGP 9	145-160
DGP 2	33-48	DGP 10	161-176
DGP 3	49-64	DGP 11	177-192
DGP 4	65-80	DGP 12	193-208
DGP 5	81-96	DGP 13	209-224
DGP 6	97-112	DGP 14	225-240
DGP 7	113-128	DGP 15	241-256

Zone configuration ATS control panels

Up to 8 zones can be connected to the ATS2000/3000 control panel, which are numbered from 1 to 8. Up to 16 zones can be connected to the ATS4000 control panel, which are numbered from 1 to 16. DGP 1 through 15 have zone numbers as shown in table 1. The ATS2000/3000 control panel can be expanded to a maximum of 24 zones using ATS1202. The ATS4000 control panel can be expanded to a maximum of 32 zones using ATS1202.

The ATS2000 and ATS3000 variants will allow only for 32 (ATS2000) or 64 zones (ATS3000) to be programmed with a zone type other than 0.

The ATS4000 variants will allow for the full extension of 255 zones other than type 0.

A standard DGP can have eight zones connected to it. Some of them can be expanded in increments of 8, up to 32, so a DGP can have 8, 16, 24 or 32 zones.

Expanding the number of zones connected to the control panel or a DGP to more than 16 using ATS 1202 is the same as combining two DGP addresses. The additional zones are taken from the next DGP. Do not include the next DGP for polling. This way of operation is used to maintain consistent numbering.

e.g. DGP1 has 32 zones (DGP2 consequently cannot exist as DGP1 has used the zones allocated to its address. DGP2 should not be used)

DGP3 is therefore the second physical unit. If it has 24 or 32 zones, DGP4 cannot exist and so on.

ATS1250 and ATS1260 are also DGP's, and their zones follow the standard zone numbering.

e.g. ATS1250 1 is DGP1 and has 16 zones, which the ATS control panel identifies as zones 17 to 32.

8-32 zone DGP programming (ATS1201, ATS1210, ATS1211, ATS1220, ATS1221, ATS1250)

For each DGP programmed to be polled, the ATS control panel expects to see 16 or 32 zones, depending on the setting of Dipswitch 5.

If a DGP is connected with only 8 or 24 zones, the unused zone numbers in the system must be programmed in the Zone Database as type 0 (Zone disabled). The same applies to the control panel if only more then 8 zones are connected.

e.g. DGP 1 has 24 zones (2 zone expanders fitted & Dipswitch 5 on). Therefore, zones 41 to 48 must be programmed as Type 0.

Outputs

Output controllers are used to expand the number of outputs on a DGP or control panel. Each output controller expands the outputs by eight.

A DGP can have two output controllers connected, increasing the outputs to a maximum of 16 per DGP.

An ATS control panel can have up to 32 output controllers, which allows a maximum of 255 outputs.

✍ *If there are more than 16 outputs connected to the main ATS control panel, the outputs from output number 17 are duplicated on the DGP. When this is done, one of two options can be used: - Do not use the outputs on the DGP, or - both outputs are activated together.*

e.g. The ATS control panel has 24 outputs available and DGP 1 has 8 outputs available. When output 17 is active, the first output on the third ATS1811 output controller connected to the ATS panel; and the first output on DGP 1 are both activated.

Output and zone numbers are always the same as the first 16 zone numbers on the DGP they are connected to. If a DGP does not exist because the previous DGP has an expanded number of zones, the output numbers of that DGP address cannot be used.

The output numbers can be used if output controllers are connected to the ATS panel that corresponds to those output numbers.

e.g. DGP1 has 32 zones: 17-48
DGP1 outputs (max 16): 17-32
(DGP2 outputs 33-48 are not used)
DGP3 has 32 zones: 49-80
DGP3 outputs: 49-64
(DGP4 outputs 65-80 are not used)

Outputs on a DGP only exist if the DGP exists.

Siren outputs

The internal and external siren speaker outputs on the ATS control panel, are always treated as output 16.

On DGP's with siren speaker outputs, the last of the 16 output numbers associated with that DGP address is the siren output. For example, on DGP3 the siren speaker output is output 64 (See table 4).

Table 4: Siren output numbers

DGP no.	Siren output no.	DGP no.	Siren output no.
1	32	9	160
2	48	10	176
3	64	11	192
4	80	12	208
5	96	13	224
6	112	14	240
7	128	15	-
8	144		

To enable the siren speaker output, the output number representing the siren output must be assigned to the required "Siren Event Flag Number". The "Siren Event Flag Numbers" are programmed in programming menu 2 – Area Databases.

Output control groups

Output control group numbers are a way of identifying a group of eight outputs controlled by the control panel, a DGP or an arming station.

When an output control group is assigned to an arming station, the Open Collector output (or "OUT") terminal follows the FIRST output of the output control group.

For further information refer to programming menu 3 - Arming Stations.

Door and lift numbering

Door numbers are determined by the address of the arming station or reader connected to the ATS system databus or 4-Door DGP local databus, and the 4-Door DGP address if applicable.

Doors 1 to 16 are reserved for arming stations 1 to 16 that are connected to the ATS system databus and used for door control functions.

Doors 17 to 64 are used for door or lift numbers that are controlled by a 4-Door/4-Lift DGP (ATS1250 or ATS1260). (See table 5).

Table 5: Door/Lift numbers allocated to each DGP

Unit	Door number			
RAS 1 to 16	1 to 16 (Door only)			
Door or Lift	1st	2nd	3rd	4th
DGP1	17	18	19	20
DGP2	21	22	23	24
DGP3	25	26	27	28
DGP4	29	30	31	32
DGP5	33	34	35	36
DGP6	37	38	39	40
DGP7	41	42	43	44
DGP8	45	46	47	48
DGP9	49	50	51	52
DGP10	53	54	55	56
DGP11	57	58	59	60
DGP12	61	62	63	64

Values for end-of-line resistors.

The following list contains the values to be used for end-of-line resistors. Both the resistance and the voltage over the zone are shown. The voltage will differ for other power supply voltages measured.

To get the current power supply voltage measure the voltage over the zone when it is open. The end of line resistor used is based on the setting for the end of line resistor code as programmed in the system options (see ATS control panel programming guide).

EOL code 0 (10 kOhm resistors)		
Status	Rzone (kOhms)	Vzone (V)
Short circuit	< 2.9	< 5.26
Active zone	2.9 - 6.8	5.26 - 8.2
Normal zone	6.8 – 13.5	8.2 - 10.26
Active zone	13.5 – 42k	10.26 – 12.44
Open circuit	> 42	>12.44
EOL code 1 (4.7 kOhm resistors)		
Status	Rzone (kOhms)	Vzone (V)
Short circuit	< 1.2	< 2.8
Active zone	1.2 – 3.2	2.8 –5.58
Normal zone	3.2 – 6.4	5.58 – 7.95
Active zone	6.4 - 17	7.95 – 10.8
Open circuit	> 17	>10.8
EOL code 2 (2.2 kOhm resistors)		
Status	Rzone (kOhms)	Vzone (V)
Short circuit	< 0.5	< 1.32
Active zone	0.5 – 1.4	1.32 – 3.16
Normal zone	1.4 – 3	3.16 – 5.48
Active zone	3 – 7.2	5.48 – 8.29
Open circuit	> 7.2	>8.29

2. TECHNICAL SPECIFICATIONS

1. Mains Power Specifications

Mains Input Voltage	230 VAC ± 10% - 50Hz ± 10% - 58 VA
Current consumption at 230V~	250 mA max.
Main board supply voltage (AC:J17)	23 VAC typical

2. Power Supply Specifications

Power supply voltage	13.8 VDC ± 0.2 V 14.4 VDC ± 0.2 V at SW+ (ATSx100/x400/x600)
Power supply current	2.0 A max. at 13.8 VDC ± 0.2 V (ATSx000/x200/x500) 3.0 A max. at 13.8 VDC ± 0.2 V (ATSx100/x400/x600)
Auxiliary Power output (AUX. POWER: J14)	13.8 VDC ± 0.2 V 500 mA max. (ATSx000/x200/x500) 13.8 VDC ± 0.2 V 680 mA max. (ATS2100/3100/2400/3400/2600/3600) 13.8 VDC ± 0.2 V 600 mA max. (ATS4600) Note: maximum permanent current to power devices external to the control equipment in the absence of alarm conditions.
Battery Power output (BAT:J17)	13.8 VDC ± 0.2 V 1300 mA max. (ATSx000/x200/x500) 13.8 VDC ± 0.2 V 2200 mA max. (ATSx100/x400/x600)
Battery Type	lead acid rechargeable 18 Ah 12 V nom. (BS131)[1]
Main board consumption	200 mA at 13.8 VDC ± 0.2 V 120 mA at 13.8 VDC ± 0.2 V (ATS2100/3100/2400/3400/2600/3600 only)

3. General Feature Specifications

Nr. of combination of codes	From 10,000 (4 digits) to 1 Billions (9 digits)		
End of line resistor	4.7 KOhm, 5% 0.25 W (Standard), 10 KOhm, 2.2 KOhm		
Standard On board Output *Note: see general installation guidelines*	Programmable relay (J9)	NC/NO Relay	Rating: 2 A at 13.8 VDC
	Ext.siren & Strobe (EXT STRB: J13)	Electronic output	Rating: 1 A at 13.8 VDC
	Internal siren (INT J13)	Electronic output	Rating: 1 A at 13.8 VDC
Programmable output by event flag 251 * not available in the ATS2000/2200/2500	Switched Output (SW+/SW: J14)-	Electronic output	Rating: 1 A at 13.8 VDC

Housing	Panel	Dimensions	Colour Beige
ATS1646	ATS2000/3000/2100/3100	315x388x85 mm	
ATS1640	ATS4000	315x445x88 mm	
ATS1646	ATSx200/x400	475x370x160 mm	
ATS1642	ATSx500/x600	475x460x160 mm	

Environmental	Operating temperature	0° to + 50 °C
	Humidity	95% non condensing
	IP protection grade	IP30

4. Fuses

F1	Ext. siren + strobe	1 A, fast 20x5	F4	12V aux. - (ATS3000/3200/3500 also SW+/SW)	2 A, fast 20x5
F2	ATS2000/3000/2200/3200/2500/3500	Not used	F5	Battery	3.15 A, fast 20x5

	ATSx100/x400/x600/4000 Switched aux. Output (SW+/SW-)	1A, fast 20x5			
F3	System databus	1 A, fast 20x5		Mains fuse *	630 mA, fast 20x5

* Mains Fuse is part of the mains terminal block.

⚠ **WARNING!** Before removing the mains fuse, mains power must be disconnected (see page 4)

!¹ The specifications depend on the battery capacity. The above table gives BS131 as an example.

Battery requirements

The lists below show the available battery and auxiliary current for a given battery per approval.

ATSx000, x200, x500 Control panels

Approval Grade	Discharge Time (h)	Charge Time (h)	Current (mA)	Battery				
				7.2Ah	18Ah	25Ah	36Ah	2 x 25Ah
EN 1&2	12	72	Aux	350	1200	1300	1300	1300
			Battery	1245	395	295	295	295
EN 3&4	60	24	Aux	=	85	200	300	300
			Battery	=	1510	1395	1295	1295
Nfa2p - 3	36	30	Aux	=	225	450	550	550
			Battery	=	1320	1145	1045	1045
Nfa2p - 2	72	30	Aux	=	10	125	275	300
			Battery	=	1585	1470	1320	1295
VdS - B	30	24	Aux	30	380	575	575	575
			Battery	1565	1215	1020	1020	1020
VdS - C	60	24	Aux	=	85	200	300	300
			Battery	=	1510	1395	1295	1295

ATS4600

Approval Grade	Discharge Time (h)	Charge Time (h)	Current (mA)	Battery				
				7.2Ah	18Ah	25Ah	36Ah	2 x 25Ah
EN 1&2	12	72	Aux	350	1200	1750	1800	1800
			Battery	2245	1395	845	795	795
EN 3&4	60	24	Aux	=	85	200	375	500
			Battery	=	2510	2395	2220	2095
Nfa2p - 3	36	30	Aux	=	225	450	750	950
			Battery	=	2370	2145	1845	1645
Nfa2p - 2	72	30	Aux	=	10	125	275	450
			Battery	=	2585	2470	2320	2145
VdS - B	30	24	Aux	30	380	575	900	900
			Battery	2565	2215	2020	1695	1695
VdS - C	60	24	Aux	=	85	200	375	500
			Battery	=	2510	2395	2220	2095

ATS2100/3100/2400/3400/2600/3600

Approval Grade	Discharge Time (h)	Charge Time (h)	Current (mA)	Battery				
				7.2Ah	18Ah	25Ah	36Ah	2 x 25Ah
EN 1&2	12	72	Aux	450	1300	1800	1800	1800
			Battery	2230	1380	880	880	880
EN 3&4	60	24	Aux	=	175	290	475	575
			Battery	=	2505	2390	2205	2105
Nfa2p -	36	30	Aux	=	330	500	775	1000

3			Battery	=	2350	2180	1905	1680
Nfa2p - 2	72	30	Aux	=	110	200	340	520
			Battery	=	2570	2480	2340	2160
VdS - B	30	24	Aux	110	450	700	975	975
			Battery	2570	2230	1980	1705	1705
VdS - C	60	24	Aux	=	175	290	475	575
			Battery	=	2505	2390	2205	2105

Notes:

All data based on board without external equipment
For NFa2p 10.8V is minimal auxiliary voltage and 10.4V for all others.
Maximum auxiliary current can be limited by :
    1) discharge duration or
    2) available charge capacity for battery or
    3) auxiliary fuse value (2Amp)

GE Interlogix

SECURITY LIFESAFETY
COMMUNICATIONS

MANUFACTURERS
DECLARATION OF CONFORMITY

For

Product identification:
Model/type   : ATS2000/ATS3000   BOM revision level   : See attached model listing

Category (description)   : Intrusion Control Panel
Brand   : InterlogiX/Aritech / SLC Technologies / Sentrol/ESL/ITI/Caddx/Cqsi Rusco/Tecom

Manufacturer: GE Interlogix
                            Greenhills Road
                            Tallagt Dublin 24
                            Ireland

EU Representative: InterlogiX Europe & Africa.
                            Kelvinstraat 7
                            6003 DH Weert,
                            The Netherlands

Concerning	RTTE		
	EMC	**Safety**	**Telecom**
A sample of the product has been tested by:	Interlogix, Bicon	Dare	Dare/KTL
Test report reference	CE qualification plan: 01.0075		
Applied standards	EN50130-4(1995) +A1(1998) EN50081-1(1992) EN55022(1998) EN61000-3-2(1995) +A14, class A(2000) EN61000-3-3(1995)	EN60950(2000)	PSTN: CTR21(1998) +EG201121(1998)

Equipment class identifier *(RF products falling under the scope of R&TTE)*

[X] Not Applicable   [ ] None (class 1 product)   [ ] ⓘ (class 2 product)

Means of conformity

We declare under our sole responsibility that this product is in conformity with Directive 93/68/EEC (Marking) and all other relevant provisions of the 1999/5/EC (R&TTE) based on test results using (non)harmonized standards in accordance with the Directives mentioned.

Date   : 6 april 2004   Number: 01.134a

MANUFACTURERS DECLARATION OF CONFORMITY

For

Product identification:

Model/type	: ATS4000 system (see attached model listing)	BOM revision level	: See attached model listing
Category (description)	: Intrusion Control Panel		
Brand	: InterlogiX/Aritech / SLC Technologies / Sentrol/ESL		

Manufacturer:

GE Interlogix
Greenhills Road
Tallagt Dublin 24
Ireland

EU Representative:

GE Interlogix B.V.
Kelvinstraat 7
6003 DH Weert,
The Netherlands

Concerning	RTTE		
	EMC	**Safety**	**Telecom**
A sample of the product has been tested by:	Dare, GE Interlogix, Bicon	Dare	KTL-Telefication
Test report reference	QA plan : 00002 Version 2.18h		
Applied standards	EN50130-4(1995) +A1(1998) EN50081-1(1992) EN61000-3-2(1995) +A1(1995) +A2(1998) +A14(2000) EN61000-3-3(1995)	EN60950(1992) +A1(1993) +A2(1993) +A3(1995) +A4(1997) +A11(1997)	CTR21(1998) +EG201121(1998)

Equipment class identifier *(RF products falling under the scope of R&TTE)*

[X] Not Applicable   [ ] None (class 1 product)   [ ] (!) (class 2 product)

Means of conformity

We declare under our sole responsibility that this product is in conformity with Directive 93/68/EEC (Marking) and/or complies with the essential requirements and all other relevant provisions of the 1999/5/EC (R&TTE) based on test results using harmonized standards in accordance with the Directives mentioned.

Place   : Weert

Date   : 6 april 2004

Number: 02.18h

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