INSTALLATION INSTRUCTION
ABiCUS DMX Gateway
A1G10-DMX / A1G20-DMX

AiSPIRE
A WAC COMPANY

SAFETY INSTRUCTION
IMPORTANT: NEVER attempt any work without shutting off the electricity.
- Read all instructions before installing.
- System is intended for installation by a qualified technician in accordance with the National Electrical Code and local regulations.

CAUTION:
All parts must be used as indicated in these instructions. Do not substitute any parts, leave parts out, or use any parts that are worn out or broken.

AVERTISSEMENT
IMPORTANT : Coupez l'électricité avant TOUTE manipulation.
- Lisez toutes les instructions avant d'installer.
- Système est destiné à être installé par un techniciene qualifié en conformité avec le code national de l'électricité et les règlements locaux.
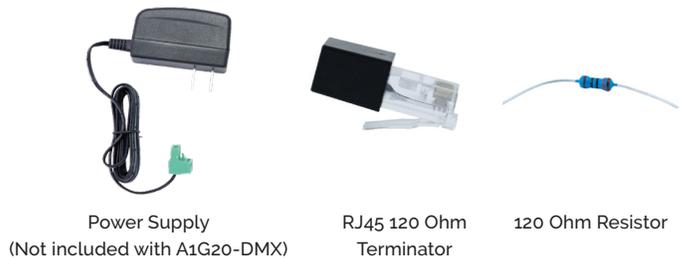
MISE EN GARDE:
Toutes les pièces doivent être utilisées tel qu'il est indiqué dans ces instructions. Ne remplacez pas les pièces, n'en laissez pas de côté et ne les utilisez pas si elles sont usées ou brisées.

THIS INSTRUCTION APPLIES TO THE MODEL(S) BELOW

A1G10-DMX

A1G20-DMX

ACCESSORIES (INCLUDED IN BOX)

Power Supply
(Not included with A1G20-DMX)

RJ45 120 Ohm
Terminator

120 Ohm Resistor

STEP 1: MECHANICAL INSTALLATION AND WIRING

"Top-Hat" DIN module & IEC/EN 60715 35mm Rail (See **FIG. 1**)
ADD: "Place & Click" - Recess Top back of module within DIN channel, rotating downward and toward lower DIN to secure, **REMOVE:** Pull down bottom orange tag gently with a flathead screw driver, rotate outward and upward from the bottom of the module.
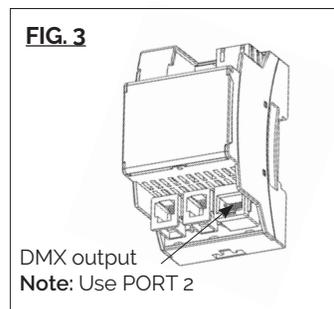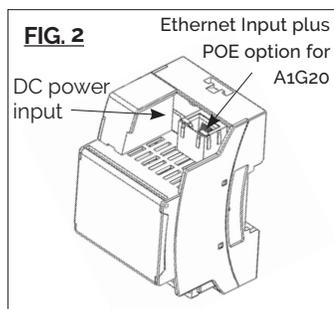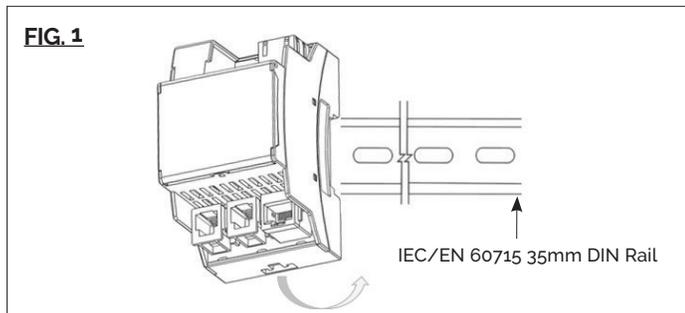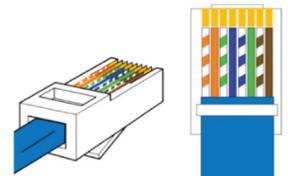
Power & Ethernet Connections (See **FIG. 2**) top of Unit Connect the ABiCUS to the DC Power Source via the two PIN Phoenix connector, A1G20 also has POE (Type 1/Class 0) capability. Connect the ABiCUS LAN (silver port marked 10/100 Ethernet) to a network switch using a standard Cat5e (or higher) patch cord. NB: Distance between ABiCUS and switch should not exceed 300' or 100m.
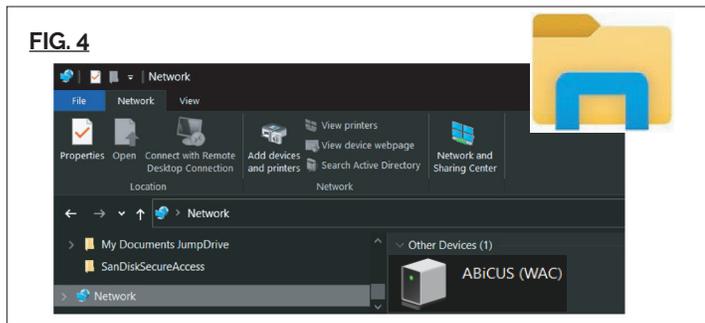
DMX Communications Connections (See **FIG. 3**) bottom of unit port 2 is used for data connection to the first DMX lighting fixture Follow DMX Design rules for subsequently connected fixtures (Daisy Chain up to 32no. Fixtures)
NOTE:
Specific PIN OUT detail for the DMX RJ45 Plug T-568B PIN 1, 2 & 7
PIN 1 = DMX (+)   PIN 2 = DMX (-)   PIN 7 = DMX (GND)

FIG. 1

IEC/EN 60715 35mm DIN Rail

FIG. 2

Ethernet Input plus POE option for A1G20

DC power input

FIG. 3

DMX output
Note: Use PORT 2

1	PIN 1 = DMX (+)
2	PIN 2 = DMX (-)
3	PIN 3 = Not Connected
4	PIN 4 = Not Connected
5	PIN 5 = Not Connected
6	PIN 6 = Not Connected
7	PIN 7 = DMX (GND)
8	PIN 8 = Not Connected

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FIG. 4

FIG. 5

FIG. 6

FIG. 7

STEP 2. ADDING ABICUS TO THE IT NETWORK

Note: confirm ABiCUS is connected to the ethernet network
Discovering ABiCUS using a MS Windows PC (See **FIG. 4**)
Open Windows File Explorer
Click "Network" at the bottom
Connected ABiCUS will appear with the symbol

ABiCUS (WAC)

Alternatively refer to the project router or network client list to determine an ABiCUS IP.
Address will be assigned by the networks router via the DHCP table. This is the recommended network configuration.
For additional guidance including using MacOS devices contact the factory.
Double click the icon and open ABiCUS Webpage (See **FIG. 5**).
Hover over the three line menu header and click Settings.
Within the Ethernet TAB It is possible to define a STATIC IP.
Contact the project network administrator.

STEP 3. UPDATING FIRMWARE

The Home Screen allows for Firmware Updates.

Good Practice: ABiCUS has file sharing capabilities, always Export (1) and save the latest configuration prior to firmware updates. See **FIG.6 (b)**. Click DMX tab, Export and save.
Click ABiCUS TAB **FIG.6 (a)** FIRMWARE should always be set to "USER" (2). Click on the UP arrow to the right of VERSION_FW for the latest version. Click "Check Web" then "Web Update" If there is a later version it will be downloaded, "written to flash" and will reboot to the Home Screen automatically
If web update takes longer than two minutes, then check Internet connectivity. There is a factory RESET available that returns ABiCUS to default settings. Click the "Factory" (3) button to initiate.
Be aware, all configured data will be lost during factory reset.
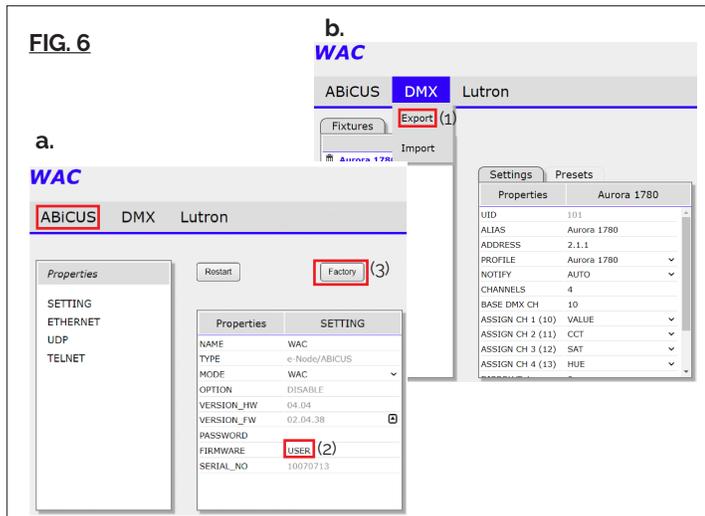
STEP 4. ADDING FIXTURES

Select the DMX Tab.
Start adding fixtures within the DMX directory. See **FIG.7 (a)**
Click the "+" symbol and add fixture types.
Create meaningful location names by editing "ALIAS" description
The example here shows Master Vanity.
ZONE, GROUP, NODE Address (2.1.1) will automatically populate.
The Z,G,N address is a tag used to identify fixtures within the Integration Platform.
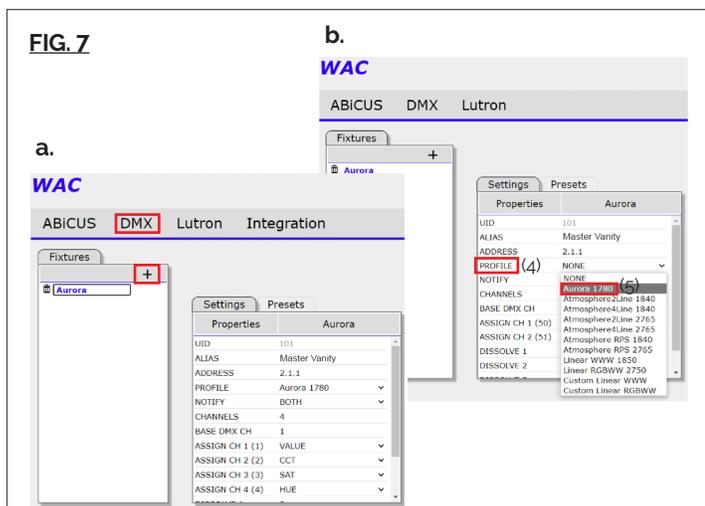
STEP 5. SELECTING PROFILES

All AiSPiRE DMX fixtures have a unique profile (4). See **FIG.7 (b)**
Click the Down arrow to the right of PROFILE and select the fixture associated with the ALIAS created. ABiCUS will automatically define base DMX channel, it's footprint, dynamic range and Presets. Ensure the configured Base DMX address matches the Fixture Base DMX address. (6) **FIG.8** (a) In this example we're adding an Aurora 1780 PROFILE (5). ABiCUS has Custom & NONE Profile selections for generic DMX fixtures.

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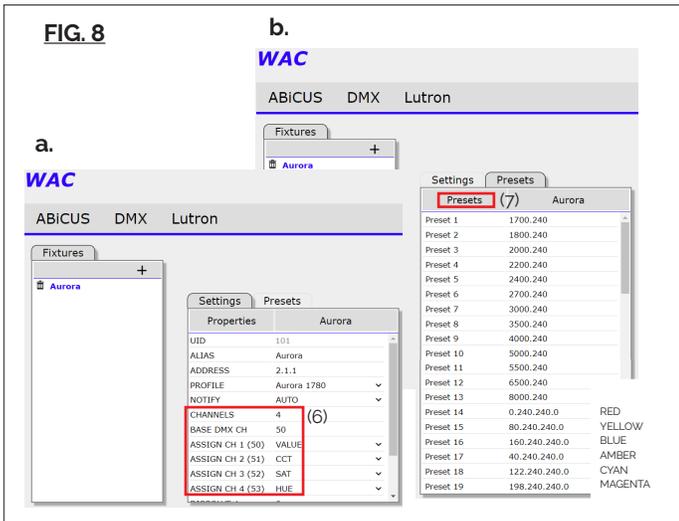
FIG. 8

Profile Details

Aurora 1780

Within the Presets (7) TAB, a set of CCT values and colors have be assigned based on the fixture profile. See **FIG.8 (b)**.

To edit a Preset highlight the value and simply overtype a new value.

NOTE: Color preset are defined by their values
Example: Preset 14 0.240.240.0 = RED Footprint creation.

These are provided as a baseline only and not representative of Industry standard colors.
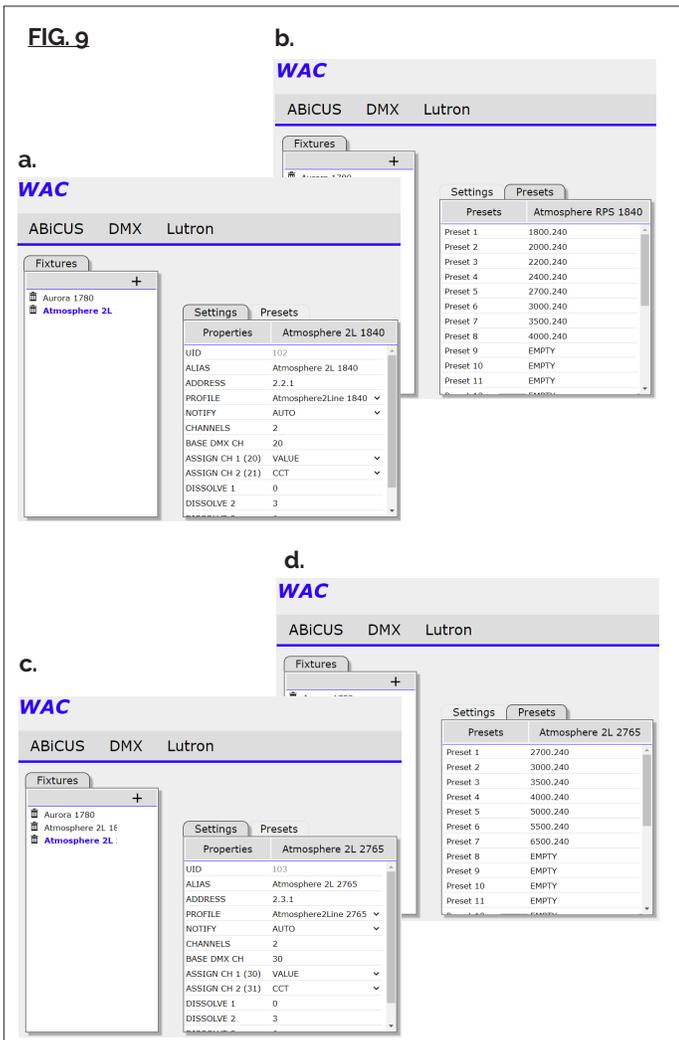
FIG. 9

Atmosphere2Line 1840
(Atmosphere 2.5" Line Voltage 1800K - 4000K)
Similarly for
Atmosphere4Line 1840
(Atmosphere 4.5" Line Voltage 1800K - 4000K)

FIG.9 (a) details the DMX footprint for Atmosphere 2.5" & 4.5" Line Voltage 1800K - 4000K.

FIG.9 (b) details the associated Preset CCT values.
To edit a Preset highlight the value and simply overtype a new value.

Atmosphere2Line 2765
(Atmosphere 2.5" Line Voltage 1800K - 4000K)
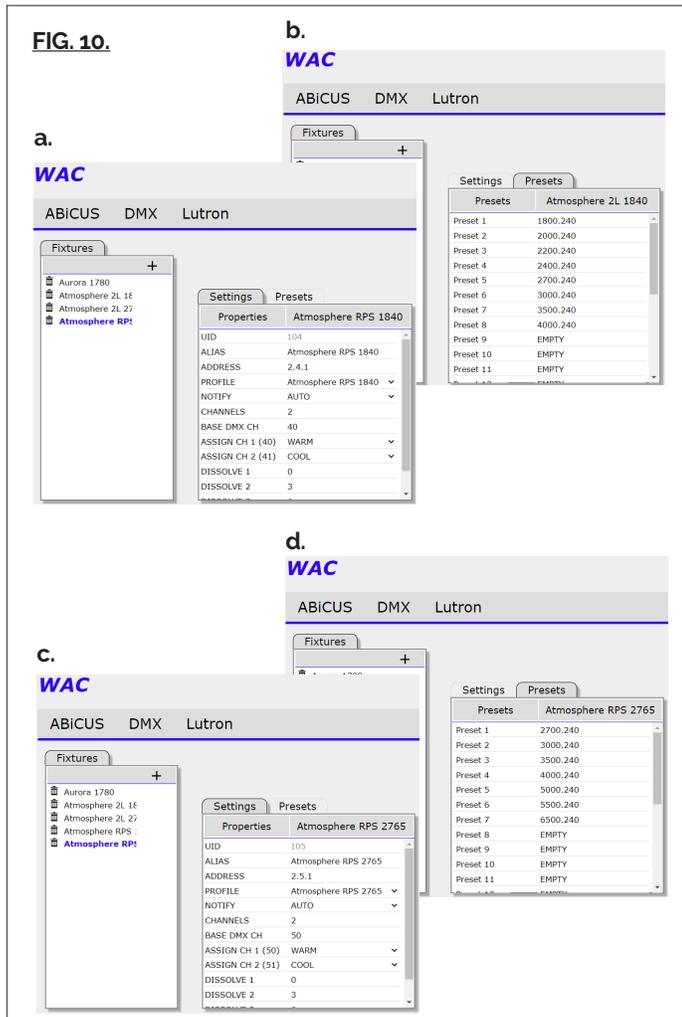Similarly for
Atmosphere4Line 2765
(Atmosphere 4.5" Line Voltage 1800K - 4000K)

FIG.9 (c) details the DMX footprint for Atmosphere 2.5" & 4.5" Line Voltage 2700K-6500K.

FIG.9 (d) details the associated Preset CCT values.
To edit a Preset highlight the value and simply overtype a new value.

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FIG. 10.

Atmosphere RPS 1840

See **FIG.10 (a)**. details the DMX footprint for Atmosphere RPS Low Voltage 1800K - 4000K.

FIG.10 (b). details the associated Preset CCT values
To edit a Preset highlight the value and simply overtype a new value.

Atmosphere RPS 2765

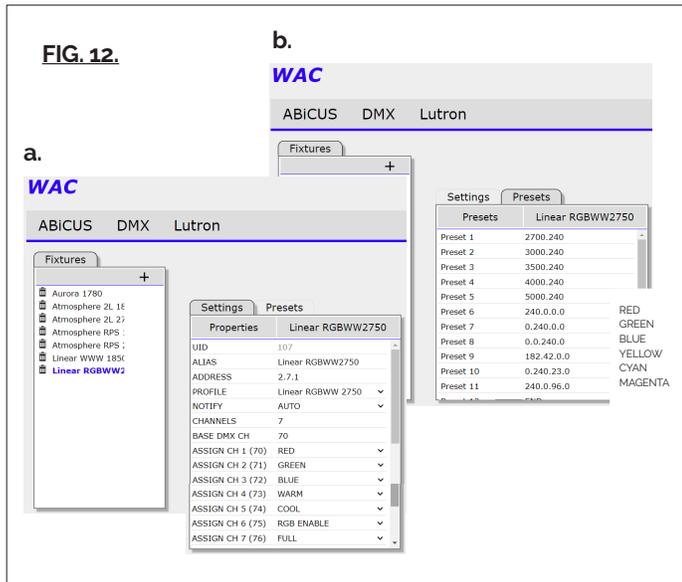**FIG.10 (c)** details the DMX footprint for Atmosphere RPS Low Voltage 2700K-6500K.

FIG.10 (d) details the associated Preset CCT.
To edit a Preset highlight the value and simply overtype a new value.
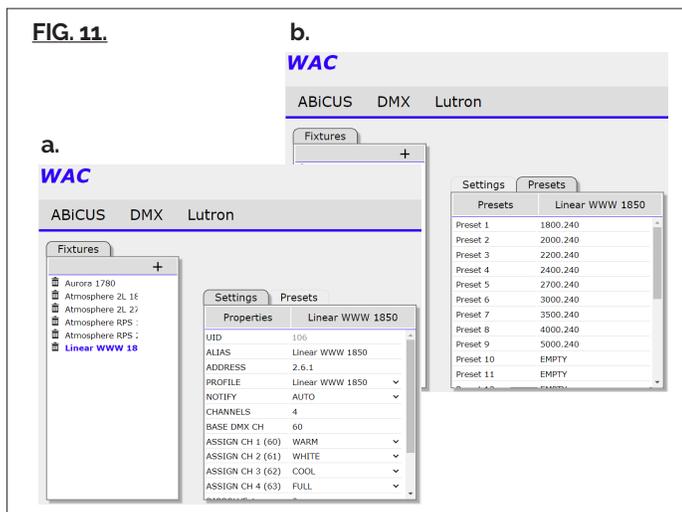
FIG. 11.

Linear WWW 1850 also applies to DPI WWW 1850

FIG.11 (a) details the DMX footprint for Linear WWW 1800K - 5000K and DPI WWW 1800K - 5000K.

FIG.11 (b) details the associated Preset CCT values.
To edit a Preset highlight the value and simply overtype a new value.

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FIG. 12.

a.

b.

Linear RGBWW 2750 also applies to DPI WWW 2750

FIG.12 (a) details the DMX footprint for Linear RGBWW 2700K - 5000K and DPI WWW 1800K - 5000K.

FIG.12 (b) details the associated Preset CCT and Color values. To edit a Preset highlight the value and simply overtype a new value

NOTE: Color preset are defined by their values.
Preset 6 240.0.0.0 = RED Footprint creation.
These are provided as a baseline only and not representative of industry standard colors.
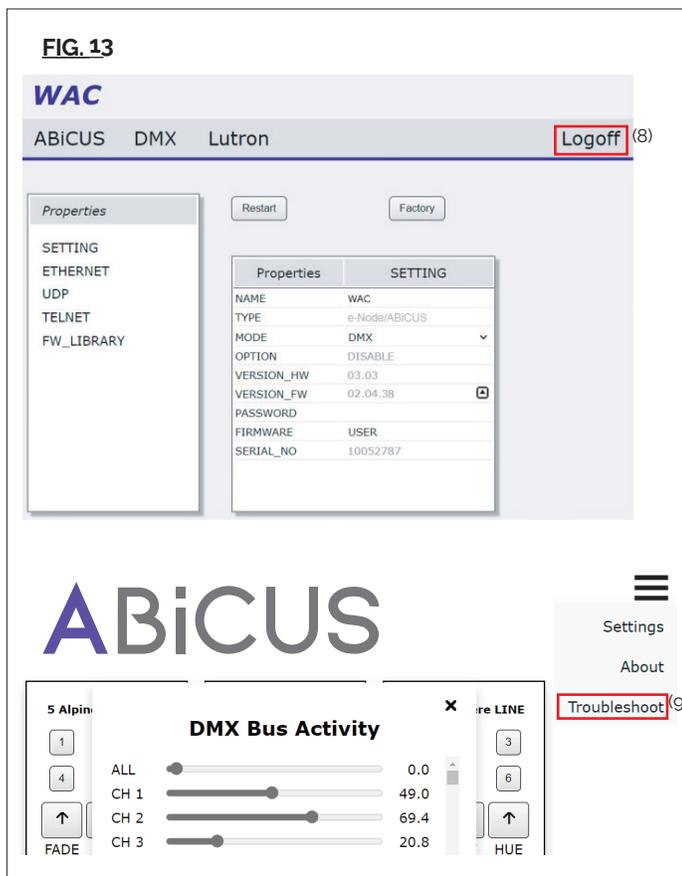
FIG. 13

STEP 6. TROUBLESHOOTING

Before moving to platform integration confirm channel functionality for each fixture. (See **FIG. 13**)

Click **Log OFF** (8) on the DMX home page

Launch **Troubleshoot** (9) from the three line menu bar.

Individual channel control is available for each fixture.

Simply drag the slider right / left to raise / lower the channel value

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