

IP Communicator Series Product Installation Document

PN 53109:I 4/26/2010 10-xxx

1 IPDACT - Internet Protocol Digital Alarm Communicator/ Transmitter

The IPDACT, IPDACT-2 and IPDACT-2UD are compact, Internet Protocol Digital Alarm Communicators/Transmitters designed to allow FACP status communication to a Central Station via the internet. Using Contact ID protocol from the FACP, the IPDACT Series convert the standard DACT phone communication to a protocol that can be transmitted and received via the internet. They also check connectivity between the FACP and Central Station.

The IPDACT Series operate in conjunction with the VisorALARM receiver, located at the Central Station. The Visor ALARM receives signals transmitted by the IPDACT Series over the internet, instead of the traditional public switched telephone lines, and sends the signals through a serial port to automation software for processing.

The installer must determine whether the FACP has enough reserve auxiliary power (24 VDC nonresettable, filtered, regulated) to supply the IPDACT Series module. The following table lists the power requirements for each version of the IPDACT.

IPDACT Model	Alarm Current	Standby Current
IPDACT	129 mA	100 mA
IPDACT-2	136 mA	93 mA
IPDACT-2UD	155 mA	98 mA

If the FACP cannot supply sufficient auxiliary power, the IPDACT Series module requires an auxiliary power supply such as the HP300ULX as described in Section 2.3.



NOTES:

1. Following installation, refer to the Quick Startup Guide, supplied with the IPDACT, for programming and activation of the IPDACT Series on the internet.
2. Although not required, the FACP Secondary Phone Line may be connected to the Public Switched Telephone Network (i.e. a POTS line) for backup reporting.
3. Installation and wiring of this device must be done in accordance with NFPA 70, 72 and local ordinances.
4. The IPDACT can only be used for commercial fire applications.

2 IPDACT Series Mounting/Wiring Options

There are several mounting options available for the IPDACT Series. The following sections describe these options. The tables below are a guide for IPDACT Series mounting.

The following models are compatible with IPDACT Series Models.

Application (Power Source)	Mounting Location	Refer to Mounting Instruction Section
No Reserve Auxiliary Power	HP300ULX Enclosure	Section 2.3 on page 12
MS-9600(UD)LS	FACP Enclosure	Section 2.1.1 on page 4
MS-9200UD(E)	IPENC Enclosure	Section 2.2 on page 10
MS-9200UDLS(E)	FACP Enclosure	Section 2.1.1 on page 4
MS-9050UD	FACP Enclosure	Section 2.1.1 on page 4
MS-5UD-3(C)(E) ¹	FACP Enclosure	Section 2.1.1 on page 4
MS-10UD-7(C)(E) ¹	FACP Enclosure	Section 2.1.1 on page 4
MS-25 ²	HP300ULX Enclosure	Section 2.3 on page 12

Table 1 IPDACT Series Mounting/Wiring Options

Application (Power Source)	Mounting Location	Refer to Mounting Instruction Section
MS-25 ²	IPENC Enclosure	Section 2.2 on page 10
FireWarden-100-2(E)	FACP Enclosure	Section 2.1.1 on page 4
FireWarden-100(E)	IPENC Enclosure	Section 2.2 on page 10
FireWarden-50	FACP Enclosure	Section 2.1.1 on page 4
SFP-5UD(E)(R) ¹	FACP Enclosure	Section 2.1.1 on page 4
SFP-10UD(E)(R) ¹	FACP Enclosure	Section 2.1.1 on page 4
411(UD) ³	HP300ULX Enclosure	Section 2.4 on page 16
411UDAC ³	HP300ULX Enclosure	Section 2.3 on page 12
NFS2-3030(E) ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
NFS2-640(E) ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
NFS-320(E)(C) ⁴	IPENC Enclosure	Section 2.2 on page 10
NSP-25 ²	HP300ULX Enclosure	Section 2.3 on page 12
NSP-25 ²	IPENC Enclosure	Section 2.2 on page 10
NCA-2 ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
XLS3000 ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
XLS140-2 ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
XLS-NCA2 ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
IFC2-3030(E) ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
IFC2-640(E) ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
IFC-320(E)(C) ⁴	IPENC Enclosure	Section 2.2 on page 10
JNCA-2 ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
Unimode 200 Plus	IPENC Enclosure	Section 2.2 on page 10
Unimode 9050UD	FACP Enclosure	Section 2.1.1 on page 4
Unimode 5UD ¹	FACP Enclosure	Section 2.1.1 on page 4
Unimode 10UD ¹	FACP Enclosure	Section 2.1.1 on page 4
Unimode 640-2 ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
ADT-NCA-2 ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
IQ-636X-2(E) ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
IQ-318(E)(C) ⁴	IPENC Enclosure	Section 2.2 on page 10
AP-NCA-2 ⁴	FACP Enclosure (IPCHSKIT) ⁵	Section 2.1.2 on page 6
MICRO-320(E) ⁴	IPENC Enclosure	Section 2.2 on page 10
E3 Series ⁶	IPENC Enclosure	Section 2.2 on page 10
GF505(W) ¹	FACP Enclosure	Section 2.1.1 on page 4
GF510(W) ¹	FACP Enclosure	Section 2.1.1 on page 4
GIF100 ²	HP300ULX Enclosure	Section 2.3 on page 12
GIF100 ²	IPENC Enclosure	Section 2.2 on page 10
5820XL ⁷	HP300ULX Enclosure	Section 2.3 on page 12
5820XL ⁷	IPENC Enclosure	Section 2.2 on page 10
5808 ⁷	HP300ULX Enclosure	Section 2.3 on page 12
5808 ⁷	IPENC Enclosure	Section 2.2 on page 10
IFP-2000 / IFP-2000VIP ⁷	HP300ULX Enclosure	Section 2.3 on page 12
IFP-2000 / IFP-2000VIP ⁷	IPENC Enclosure	Section 2.2 on page 10
IFP-1000 / IFP-1000VIP ⁷	HP300ULX Enclosure	Section 2.3 on page 12
IFP-1000 / IFP-1000VIP ⁷	IPENC Enclosure	Section 2.2 on page 10
IFP-100 / IFP-100VIP ⁷	HP300ULX Enclosure	Section 2.3 on page 12
IFP-100 / IFP-100VIP ⁷	IPENC Enclosure	Section 2.2 on page 10
IFP-50 / IFP-50VIP ²	HP300ULX Enclosure	Section 2.3 on page 12

Table 1 IPDACT Series Mounting/Wiring Options

Application (Power Source)	Mounting Location	Refer to Mounting Instruction Section
IFP-50 / IFP-50VIP ²	IPENC Enclosure	Section 2.2 on page 10
5700 ²	HP300ULX Enclosure	Section 2.3 on page 12
5700 ²	IPENC Enclosure	Section 2.2 on page 10
5600 ²	HP300ULX Enclosure	Section 2.3 on page 12
5600 ²	IPENC Enclosure	Section 2.2 on page 10
5208 ²	HP300ULX Enclosure	Section 2.3 on page 12
5208 ²	IPENC Enclosure	Section 2.2 on page 10
5104 ^{2, 8}	HP300ULX Enclosure	Section 2.3 on page 12
5104 ^{2, 8}	IPENC Enclosure	Section 2.2 on page 10
IFP-25 ²	HP300ULX Enclosure	Section 2.3 on page 12
IFP-25 ²	IPENC Enclosure	Section 2.2 on page 10

Table 1 IPDACT Series Mounting/Wiring Options

- 1 The IPDACT is powered by the HP300ULX Power Supply only (not required for the IPDACT-2 and IPDACT-2UD)
- 2 This panel is compatible with the IPDACT-2 model only.
- 3 Provides a complete communicator solution for any fire monitoring application.
- 4 Use of the UDACT Universal Digital Alarm Communicator/Transmitter is required for this application. (For more information, see the *UDACT Manual* #50050.) This panel is only compatible with the IPDACT-2 model.
- 5 If the system configuration does not support installation of the IPCHSKIT, use the IPENC enclosure.
- 6 Use of the DACT-E3 Digital Alarm Communicator/Transmitter is required for this application. (For more information, see the *DACT-E3 Installation Document* #9000-0581.) This panel is only compatible with the IPDACT-2 model.
- 7 This panel is compatible with the IPDACT-2 and IPDACT-2UD only.
- 8 This panel *must* be used with the HP300ULX Power Supply.

The following models are to be used with the IPDACT Series for retrofit applications only.

Application (Power Source)	Mounting Location	Refer to Mounting Instruction Section
MS-9600	IPENC Enclosure	Section 2.2 on page 10
Unimode 9600	IPENC Enclosure	Section 2.2 on page 10
MS-5024	IPENC Enclosure	Section 2.2 on page 10
MS-5024UD	IPENC Enclosure	Section 2.2 on page 10
MS-5210UD	IPENC Enclosure	Section 2.2 on page 10
SFP-1024	IPENC Enclosure	Section 2.2 on page 10
Unimode 5	IPENC Enclosure	Section 2.2 on page 10
Unimode 10	IPENC Enclosure	Section 2.2 on page 10
NFS-3030(E) ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
NFS-640(E) ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
NCA ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
AM2020/AFP-1010 ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
System 5000(C) ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
System 500(C) ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
AFP-300/400 ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
AFP-200(C) ¹	IPENC Enclosure	Section 2.2 on page 10
AFP-100(E) ¹	IPENC Enclosure	Section 2.2 on page 10
XLS140 ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
XLS-NCA ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
IFC-640(E) ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
JNCA ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
IFC-2020/1010 ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6

Table 2 IPDACT Series Mounting/Wiring Options for Retrofit Applications

Application (Power Source)	Mounting Location	Refer to Mounting Instruction Section
IFC-400 ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
IFC-200(E) ¹	IPENC Enclosure	Section 2.2 on page 10
Unimode 640 ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
ADT-NCA ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
Unimode 300/400 ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
Unimode 2020/1010 ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
IQ-636X(E) ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
ANSUL-NCA ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
IQ-396X ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
IQ-301(E) ¹	IPENC Enclosure	Section 2.2 on page 10
MICRO-640I(E) ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
MICRO-NCA ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
MICRO-300I/400I ¹	FACP Enclosure (IPCHSKIT) ²	Section 2.1.2 on page 6
MICRO-200I ¹	IPENC Enclosure	Section 2.2 on page 10

Table 2 IPDACT Series Mounting/Wiring Options for Retrofit Applications

- 1 Use of the UDACT Universal Digital Alarm Communicator/Transmitter is required for this application. (For more information, see the *UDACT Manual #50050*.) This panel is only compatible with the IPDACT-2 model.
- 2 If the system configuration does not support installation of the IPCHSKIT, use the IPENC enclosure.

2.1 Mounting IPDACT Series in the Fire Alarm Control Panel Enclosure

Install the IPDACT Series in the FACP backbox using the IPBRKT bracket or the IPCHSKIT, as described below.

2.1.1 IPBRKT Bracket Installation

1. Position the two tabs in the IPBRKT bracket over the two embossed protrusions in lower left corner of the backbox and slide the bracket down with tabs going under embossed protrusions as illustrated in Figure 1.

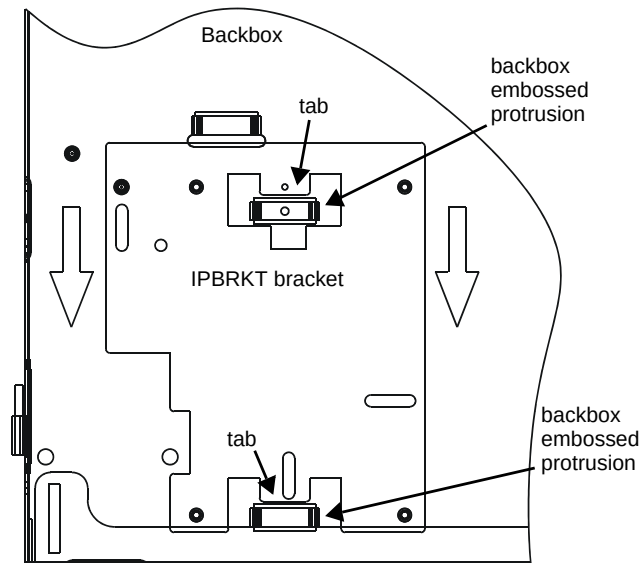


Figure 1 IPBRKT Installation

IPBRKTInstall1a.wmf

2. Secure the IPBRKT bracket to the backbox by installing the supplied screw into the top tab as illustrated in Figure 2. The screw will feed through hole in emboss and self-thread into bracket hole.

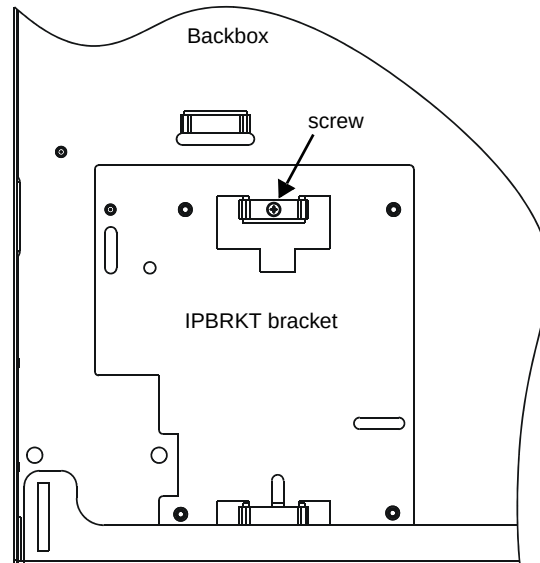


Figure 2 IPBRKT Installation

3. Secure IPDACT Module to IPBRKT bracket using the four supplied standoffs as illustrated in Figure 3.
4. Wire the IPDACT as described in the following sections of this document.
5. Attach the label/cover to the IPDACT by pressing it onto the four standoffs installed in step 3.

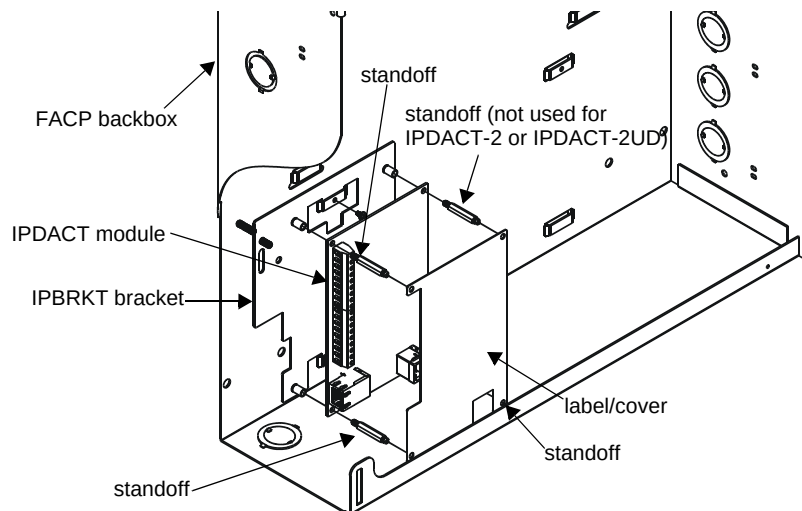


Figure 3 IPBRKT Installation

IPBRKTInstall2a.wmf

IPBRKTInstall3a.wmf

2.1.2 IPCHSKIT (Chassis) Installation

1. Secure the IPDACT Module to the IPCHSKIT mounting plate using the four supplied standoffs as illustrated in Figure 4.
2. Install the IPCHSKIT mounting plate into the chassis and secure with the supplied screws. (For specific chassis installations, refer to the *IPCHSKIT Installation Document #53294*.)
3. Wire the IPDACT as described in the following sections of this document.
4. Attach the polycarbonate cover with label to the IPDACT by pressing it onto the four standoffs installed in step 1.

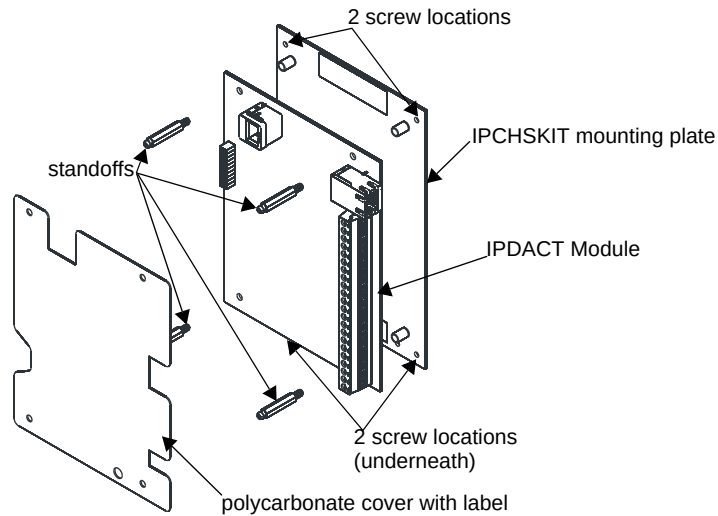


Figure 4 IPCHSKIT Installation

ipchskit.wmf

Wiring the IPDACT Series Within the Fire Alarm Control Panel Enclosure

Figure 5 and Figure 6 detail the connections that must be made between the IPDACT Series and the FACP.

RJ45 Connector for connection to RS232 serial port.

Use a Serial to USB converter if the computer does not have an RS232 port.

(FOR PROGRAMMING USE ONLY)

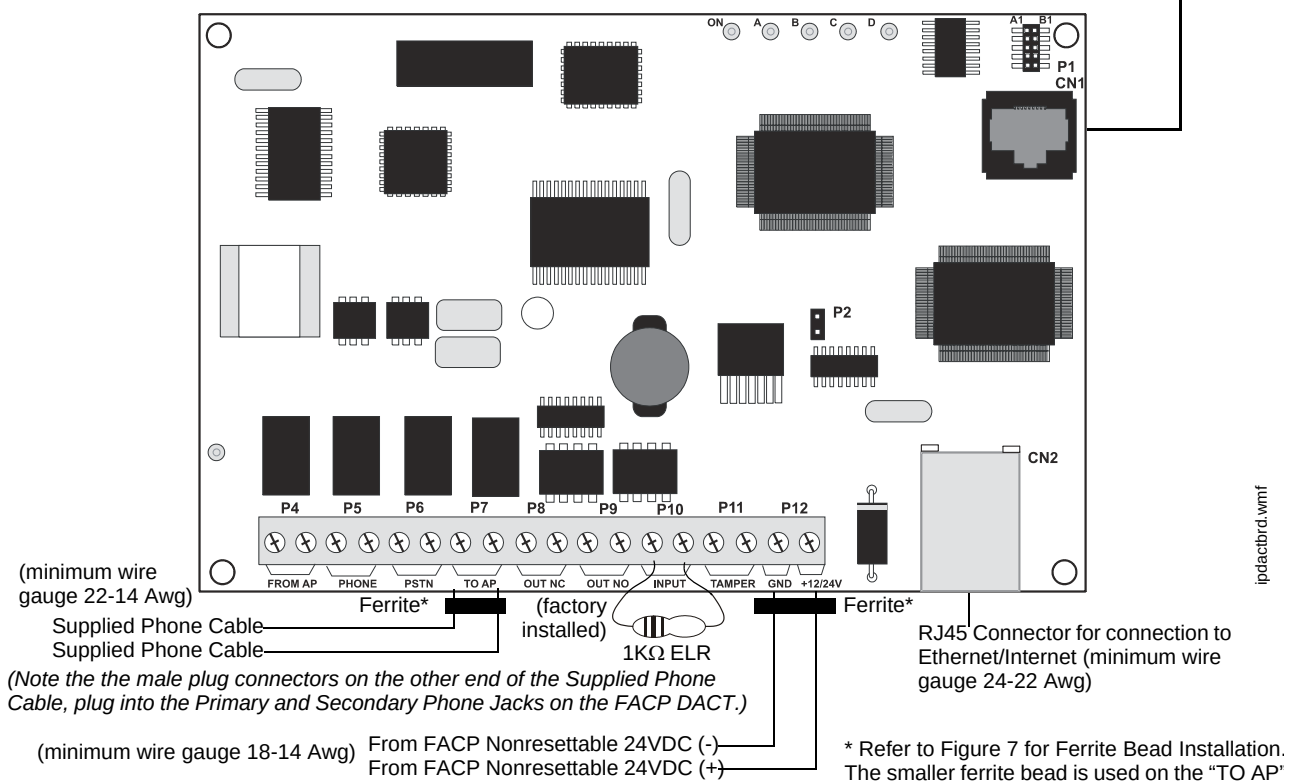


Figure 5 IPDACT Wiring

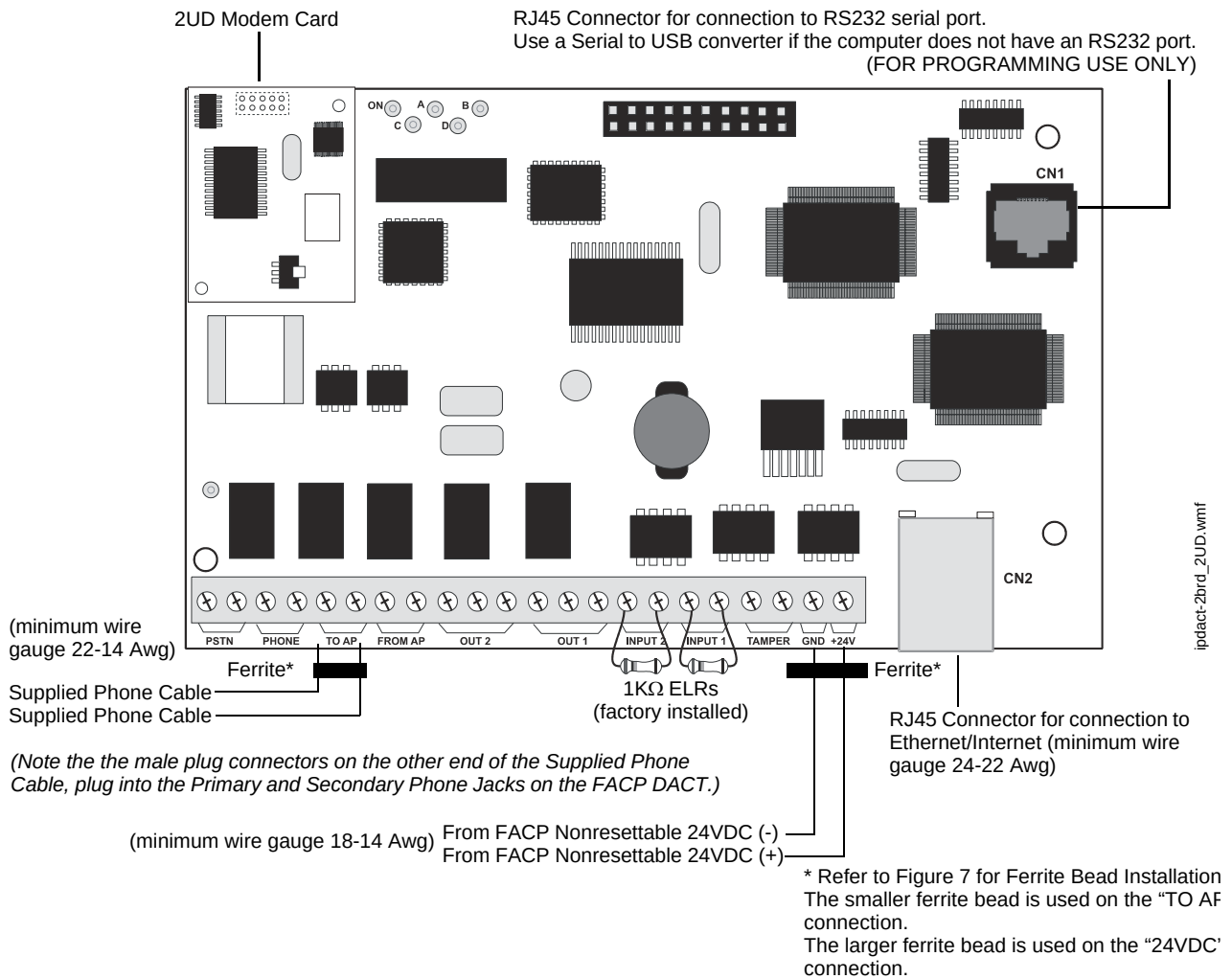


Figure 6 IPDACT-2 and IPDACT-2UD Wiring

Ferrite Bead Installation

A Ferrite Bead is required for the **TO AP** (smaller bead) to FACP Telco Line wires and for the IPDACT Series **24 VDC** (larger bead) Power Supply wires. Each wire must be wrapped twice around the Ferrite Bead at the end closest to IPDACT Series board.

Note that the following illustration depicts one wire wrapped around the Ferrite Bead. The two wires to the TO AP terminals must be wrapped around one, smaller Ferrite Bead and the -24 VDC and + 24 VDC wires must be wrapped around a second, larger Ferrite Bead.

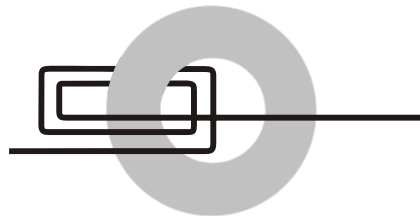


Figure 7 Ferrite Bead Installation

2UD Modem Card Installation

The IPDACT-2 can be converted to an IPDACT-2UD by installing the 2UD Modem Card. This will provide upload/download capabilities.



WARNING: DISCONNECT POWER

BEFORE PROCEEDING WITH THE INSTALLATION, MAKE SURE ALL POWER (AC AND DC) HAS BEEN REMOVED.

1. Remove the plastic label/cover from the IPDACT-2 Module.
2. Remove the jumpers from A and B pins located in the upper left portion of the IPDACT-2 module.
3. Carefully align the connector on the 2UD Modem Card with the connector located in the top left of the IPDACT-2 module and align the A and B connectors on the 2UD Modem Card with the A and B pins on the IPDACT-2 module (jumpers removed in step 2).
4. Carefully press the 2UD Modem Card onto the IPDACT-2 module connectors. Ensure that the 2UD Modem Card is securely seated, being careful not to bend or break any pins on the connectors.
5. Reinstall the plastic label/cover on the IPDACT-2UD Module.
6. Reapply all power (AC and DC) and test the system for proper operation.

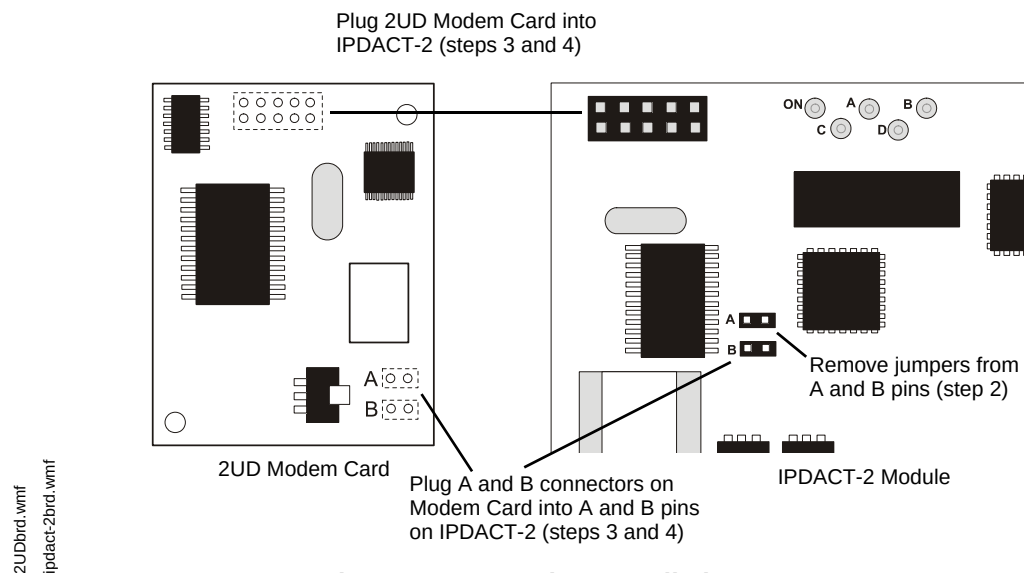


Figure 8 2UD Modem Installation

2.2 Mounting the IPDACT Series in the IPENC Enclosure

The IPDACT Series mounts to the factory-installed bracket inside the IPENC enclosure.

1. Secure IPDACT Series Module to the bracket using the four supplied screws as illustrated in Figure 9.
2. Wire the IPDACT Series as described in the following sections of this document.
3. Close the IPENC door and secure it to the enclosure with four supplied screws in locations indicated.

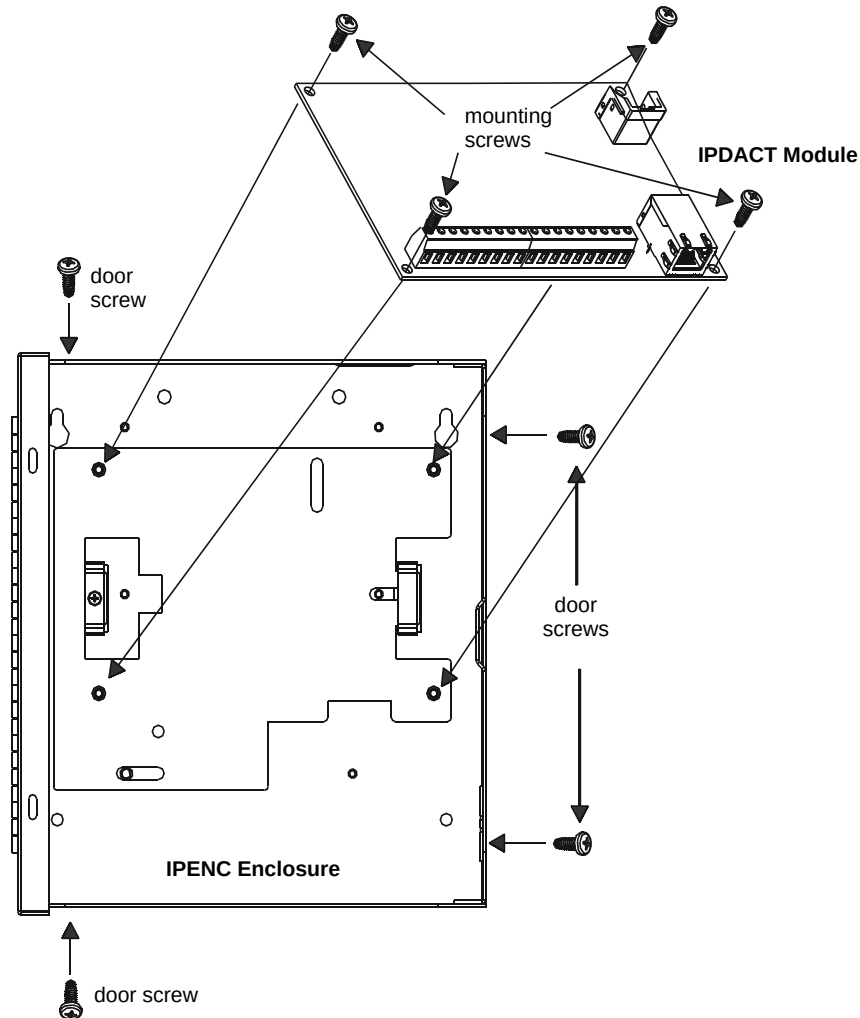


Figure 9 IPENC Installation

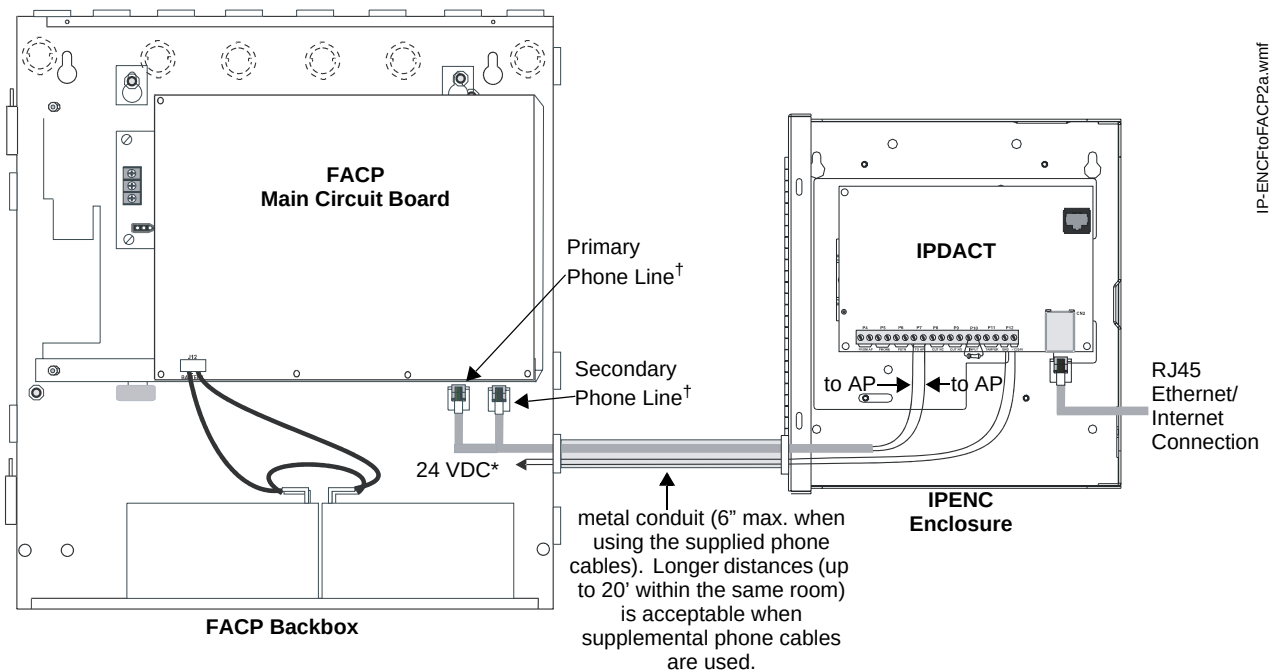
Wiring the IP Communicator to the Fire Alarm Control Panel (refer to Figures 10 and 11)

1. Remove all power (AC and DC) from the FACP before installing any wires.
2. All wiring between the FACP and IPDACT Series must be in metal conduit which is no more than 6" in length. (The IPDACT Series must be installed within the same room as the FACP).
3. Connect one end of the supplied phone line cable to the Primary and Secondary Phone Line connectors on the FACP by inserting the male plugs into the RJ45 connectors.
4. Wire the other end of the supplied phone line cable to the **TO AP** terminals as illustrated in Figures 5, 6, 10 and 11 of this document.



NOTE: Tip & Ring wire connections for **TO AP** terminal are interchangeable.

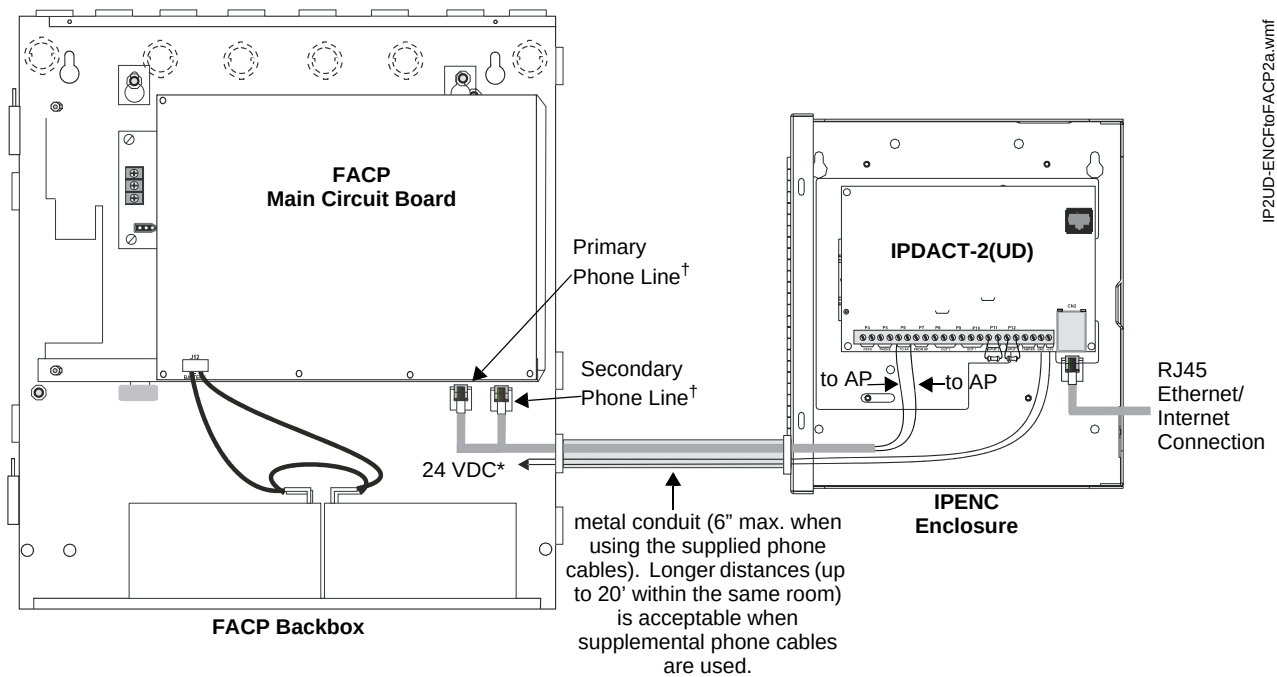
5. Connect Nonresettable 24 VDC power from the FACP to the power terminals on the IPDACT Series.
6. Connect the RJ45 connector on the IPDACT Series to an Ethernet/Internet connector.
7. Refer to the appropriate FACP manual for power specifications and wiring details and to Figures 5 and 6 in this document for IPDACT connection details.
8. Reapply all power (AC and DC) which was removed in step 1.



*FACP Power Supply requirements- refer to the table on page 1 for each version of the IPDACT Series.

†Refer to Tables 1 and 2 for applications where the phone lines must be connected to an installed UDACT/DACT-E3.

Figure 10 IPDACT Connections to FACP



*FACP Power Supply requirements- refer to the table on page 1 for each version of the IPDACT Series.

†Refer to Tables 1 and 2 for applications where the phone lines must be connected to an installed UDACT/DACT-E3.=

Figure 11 IPDACT-2 and IPDACT-2UD Connections to FACP

2.3 Mounting the IPDACT in the HP300ULX Power Supply Enclosure

The IPDACT Series can be mounted inside the HP300ULX power supply enclosure as described below.

1. Position the IPBRKT bracket mounting hole and slot over the two mounting holes in the HP300ULX backbox. Use the landmarks illustrated in Figure 12 to locate the correct mounting location.
2. Secure the IPBRKT bracket to the backbox by installing the supplied screws into the top left hole and bottom right slot of the IPBRKT as illustrated, and tighten.

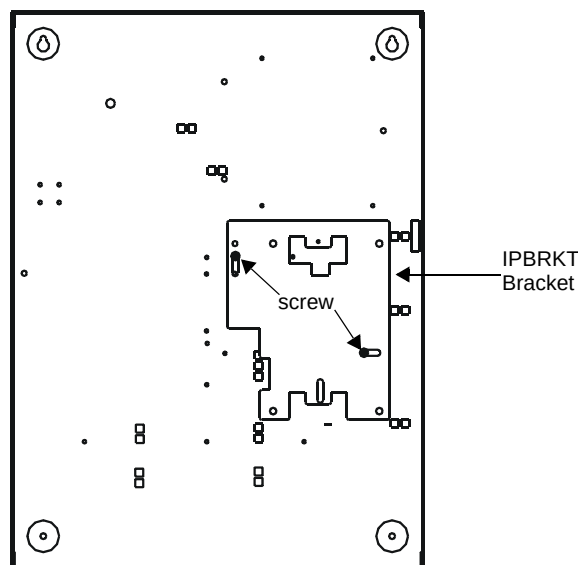
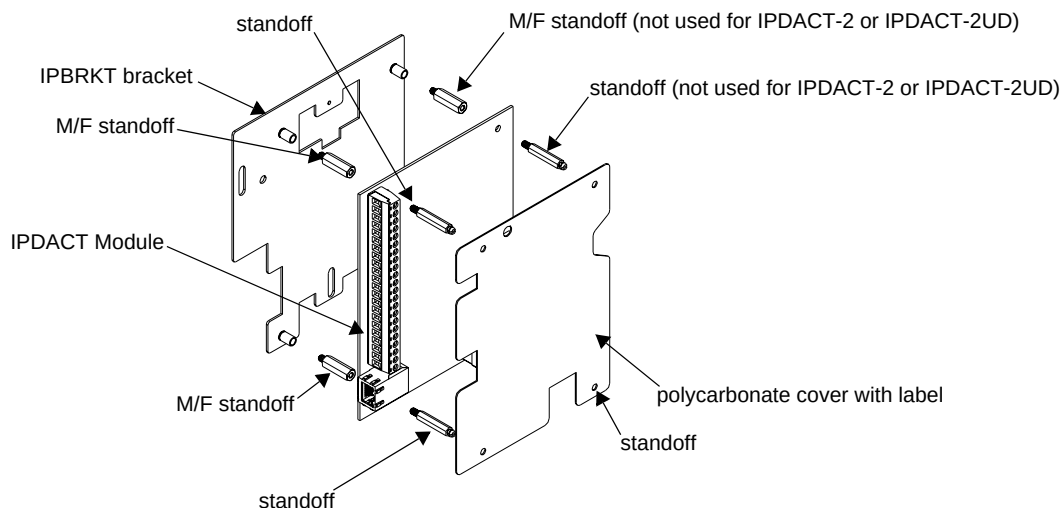


Figure 12 HP300ULX Installation

3. Attach the four supplied 0.75" M/F standoffs to the IPBRKT as shown in Figure 13.
4. Then, secure the IPDACT Series Module to the IPBRKT using the four supplied M/M standoffs (three for IPDACT-2 and IPDACT-2UD).
5. Wire the IPDACT Series as described in the following sections of this document.
6. Attach the polycarbonate cover with label by pressing it onto the four standoffs installed in step 4.



HP300ULXinstall3.wmf

Figure 13 IPDACT Series Mounting in HP300ULX

Wiring the IPDACT Series to the HP300ULX Power Supply and FACP

Note: If a 411UD is also installed, refer to for details on wiring both units.

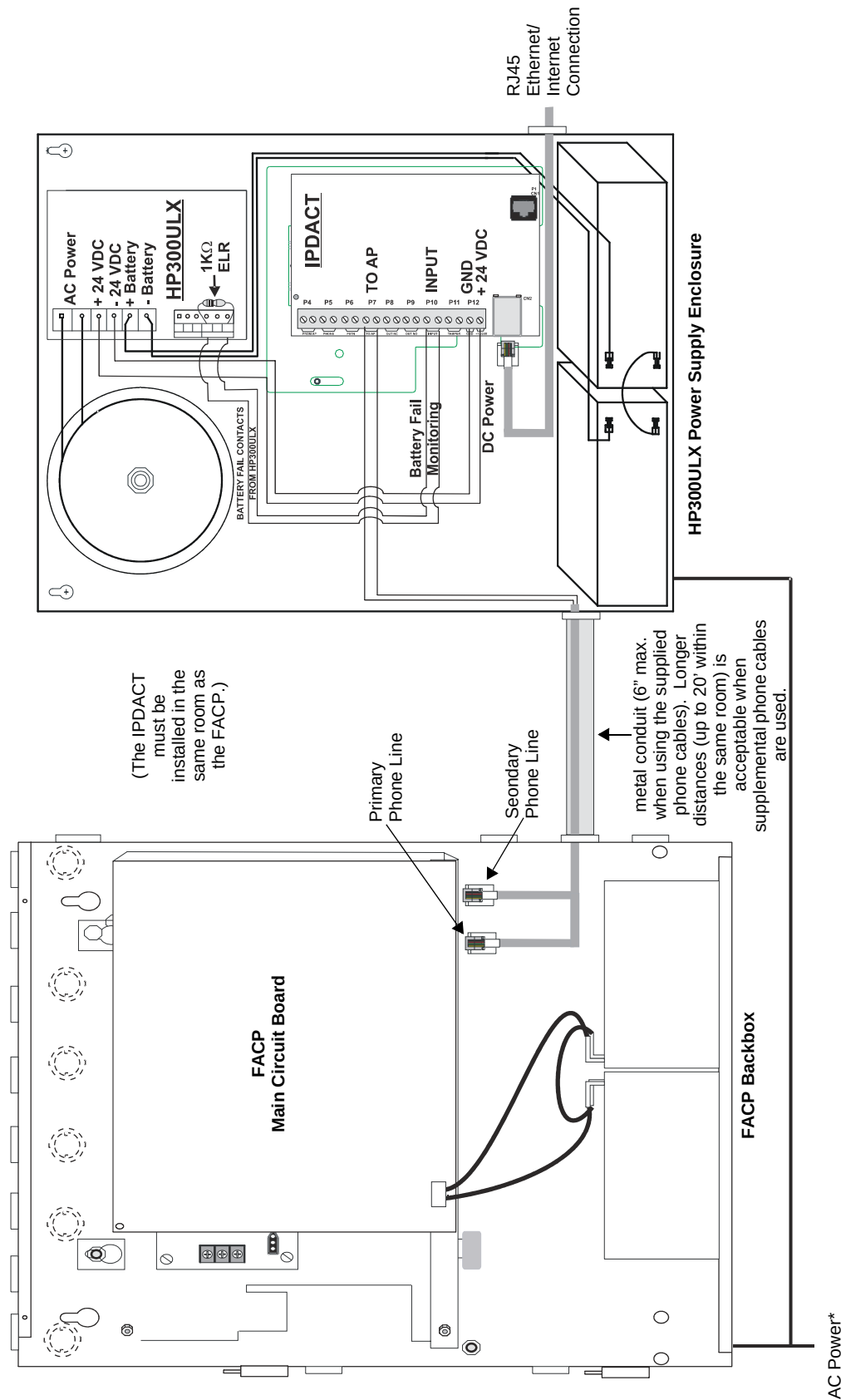
Refer to Figure 14 on page 14 (IPDACT) or Figure 15 on page 15 (IPDACT-2/UD) for an illustration of the following wiring details.

1. Connect the AC power terminals of the FACP and HP300ULX Power Supply to the same AC power main feed. A loss of AC power will cause the FACP to generate an AC Power Loss indication which will be recognized as an AC power loss for both panels.
2. The phone lines between the FACP and IPDACT Series, which is mounted in the HP300ULX backbox, must be in conduit. (The IPDACT Series must be installed in the same room as the FACP).
3. Connect one end of the supplied phone line cable to the Primary and Secondary Phone Line connectors on the FACP by inserting the male plugs into the RJ45 connectors.
4. Wire the other end of the supplied phone line cable to the **TO AP** terminals of the IPDACT Series as illustrated in Figure 14 (IPDACT) or Figure 15 (IPDACT-2/UD) on the following pages and in Figures 5 or 6 of this document.



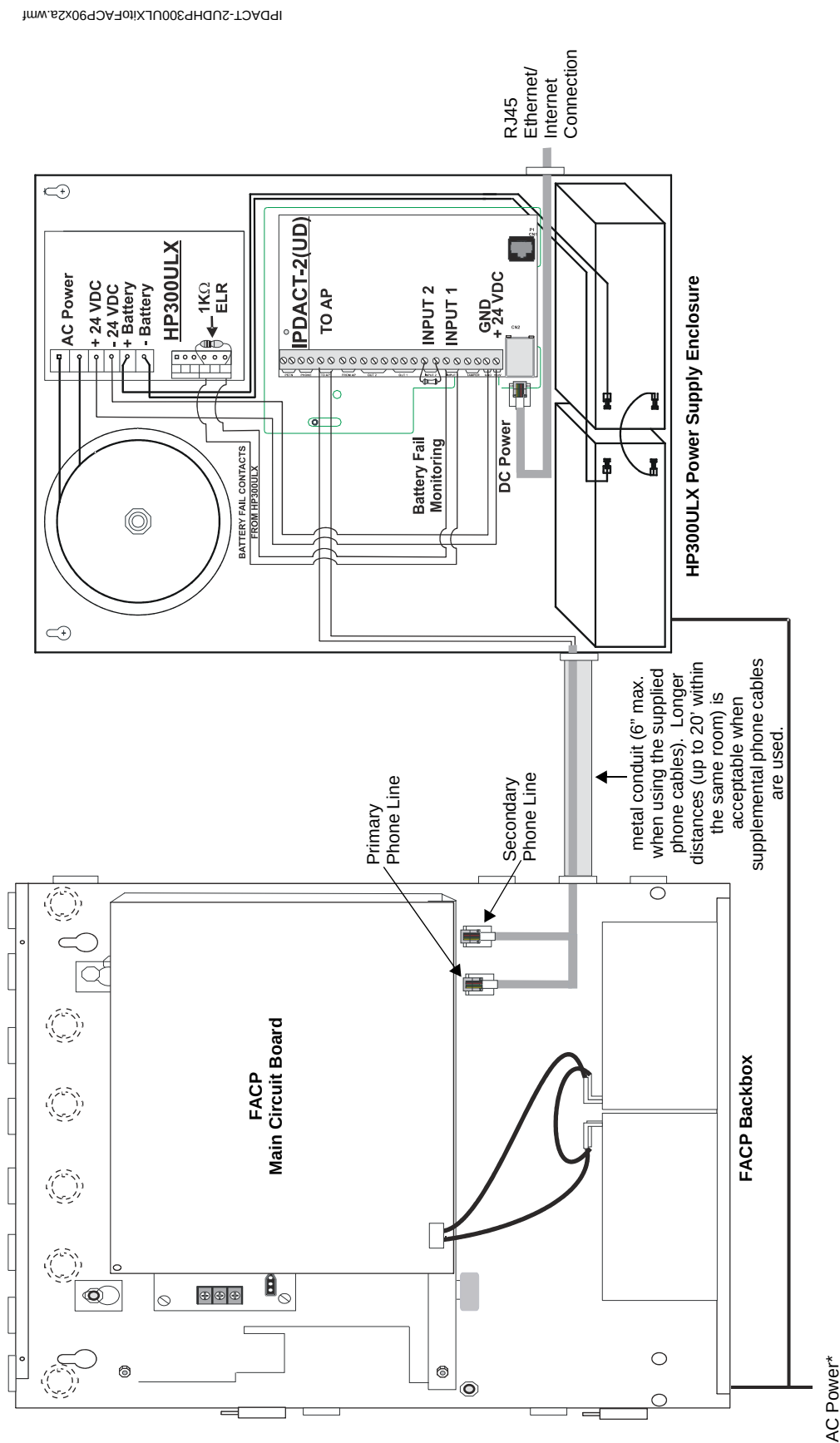
NOTE: Tip & Ring wire connections for TO AP terminal are interchangeable.

5. Connect Nonresettable 24 VDC power from the HP300ULX to the power terminals on the IPDACT Series as illustrated in Figure 14 (IPDACT) or Figure 15 (IPDACT-2/UD).
6. Connect one wire from the Battery Fail **NO (Normally Open)** contact of the HP300ULX to one of the **Input** terminals on the IPDACT Series and a second wire from the Battery Fail **C (Common)** contact of the HP300ULX to the other **Input** terminal on the IPDACT Series. This will allow the IPDACT Series auxiliary trouble input terminals to monitor for an HP300ULX battery failure.
7. Install a 1KΩ ELR across the Battery Fail **NO (Normally Open)** contact and the **C (Common)** contact to allow the IPDACT Series to supervise the wiring.
8. Connect the RJ45 connector on the IPDACT Series to an Ethernet/Internet connector.
9. Refer to the appropriate FACP manual for power specifications and wiring details and to Figures 5 or 6 in this document for IPDACT connection details.



* The FACP and HP300ULX Power Supply must be connected to the same AC main circuit. This will allow the FACP to transmit an AC fail signal upon AC loss for both panels.

Figure 14 Wiring IPDACT to HP300ULX and FACP



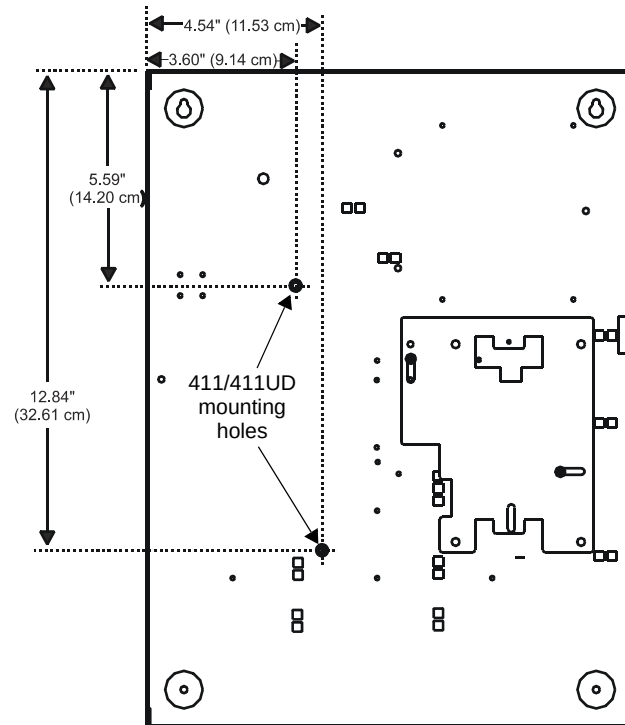
* The FACP and HP300ULX Power Supply must be connected to the same AC main circuit. This will allow the FACP to transmit an AC fail signal upon AC loss for both panels.

Figure 15 Wiring IPDACT-2 and IPDACT-2UD to HP300ULX and FACP

2.4 Mounting 411 or 411UD in HP300ULX Power Supply Enclosure with IPDACT Series

The 411/411UD can be mounted inside the HP300ULX power supply enclosure as described below.

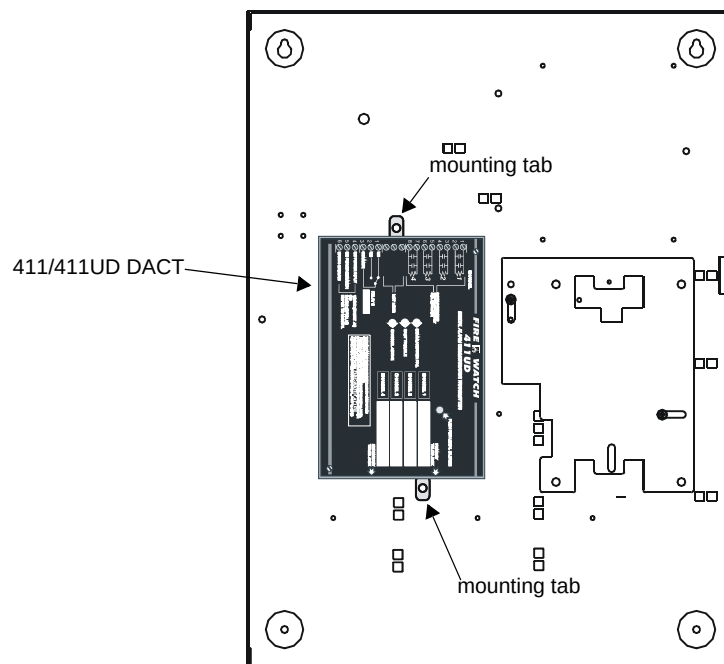
1. Position the two mounting tabs on the 411/411UD, over the two mounting holes in the HP300ULX backbox. Use dimensions and the landmarks illustrated in Figure 16 to locate the correct mounting location.



HP300ULXinstall411UD.wmf

Figure 16 411/411UD Installation

2. Secure the 411/411UD to the backbox by installing the supplied screws into the top and bottom mounting tabs of the 411/411UD and tighten. Refer to Figure 17.



HP300ULXinstall411UD2a.wmf

Figure 17 411/411UD Installation

3. Install the IPDACT Series in the HP300ULX enclosure as described in Section 2.3 of this document.

Wiring 411 or 411UD and IPDACT Series to the HP300ULX Power Supply and FACP

Refer to Figure 18 on page 18 (IPDACT) or Figure 19 on page 19 (IPDACT-2/UD) for wiring details.

1. Connect the AC power terminals of the FACP and HP300ULX Power Supply to the same AC power main feed. A loss of AC power will cause the 411/411UD to generate an AC Power Loss indication which will be recognized as an AC power loss for both panels.
2. Connect one end of the supplied phone cable to the Primary and Secondary Telco Jack on the 411/411UD.
3. Wire the other end of the supplied phone line cable to the **TO AP** terminals of the IPDACT Series as illustrated in Figure 18 on page 18 for the IPDACT or Figure 19 on page 19 for the IPDACT-2 and IPDACT-2UD and in Figures 5 or 6 of this document.



NOTE: Tip & Ring wire connections for **TO AP** terminal are interchangeable.

4. Connect Nonresettable 24 VDC power from the HP300ULX to the power terminals on the IPDACT and to the power terminals on the 411/411UD as illustrated in Figure 18 or Figure 19.
5. Connect one wire from the Battery Fail **NO (Normally Open)** contact of the HP300ULX to one of the **Input** terminals on the IPDACT Series and a second wire from the Battery Fail **C (Common)** contact of the HP300ULX to the other **Input** terminal on the IPDACT Series. This will allow the IPDACT auxiliary trouble input terminals to monitor for an HP300ULX battery failure.
6. Install a 1K Ω ELR across the Battery Fail **NO (Normally Open)** contact and the **C (Common)** contact to allow the IPDACT Series to supervise the wiring.
7. Connect the RJ45 connector on the IPDACT Series to an Ethernet/Internet connector.
8. For the 411UD only, connect one wire from the AC Fail **NO (Normally Open)** contact of the HP300ULX to one of the Channel 4 Input terminals on the 411UD and a second wire from the AC Fail **C (Common)** contact of the HP300ULX to the other Channel 4 Input terminal on the 411UD. Program the 411UD Input Channel 4 to monitor for an HP300ULX AC failure (factory default).
9. For the 411UD only, install a 2.2K Ω ELR across the AC Fail **NO (Normally Open)** contact and the **C (Common)** contact to allow the 411UD to supervise the wiring.
10. Connect a pair of wires from the Channel 1 Input terminals on the 411/411UD to the FACP Alarm Relay **C (Common)** and **NO (Normally Open)** Contacts and program the 411/411UD Channel 1 to monitor for alarms.
11. Install a 2.2K Ω ELR across the FACP Alarm Relay **C (Common)** and **NO (Normally Open)** contacts to allow the 411/411UD to supervise the wiring.
12. Connect a pair of wires from the Channel 2 Input terminals on the 411/411UD to the FACP Trouble Relay **C (Common)** and **NO (Normally Open)** Contacts and program the 411/411UD Channel 1 to monitor for troubles.
13. Install a 2.2K Ω ELR across the FACP Trouble Relay **C (Common)** and **NO (Normally Open)** contacts to allow the 411/411UD to supervise the wiring.
14. Connect a pair of wires from the Channel 3 Input terminals on the 411/411UD to the FACP Supervisory Relay **C (Common)** and **NO (Normally Open)** Contacts and program the 411/411UD Channel 1 to monitor for supervisory conditions.
15. Install a 2.2K Ω ELR across the FACP Supervisory Relay **C (Common)** and **NO (Normally Open)** contacts to allow the 411/411UD to supervise the wiring.
16. Connect a pair of wires between the **NO (Normally Open)** and **C (Common)** Trouble Relay on the 411/411UD and an addressable monitor module on the FACP SLC Loop. Program the module to monitor for 411/411UD communicator fault.
17. Refer to the appropriate FACP manual for power specifications and wiring details.

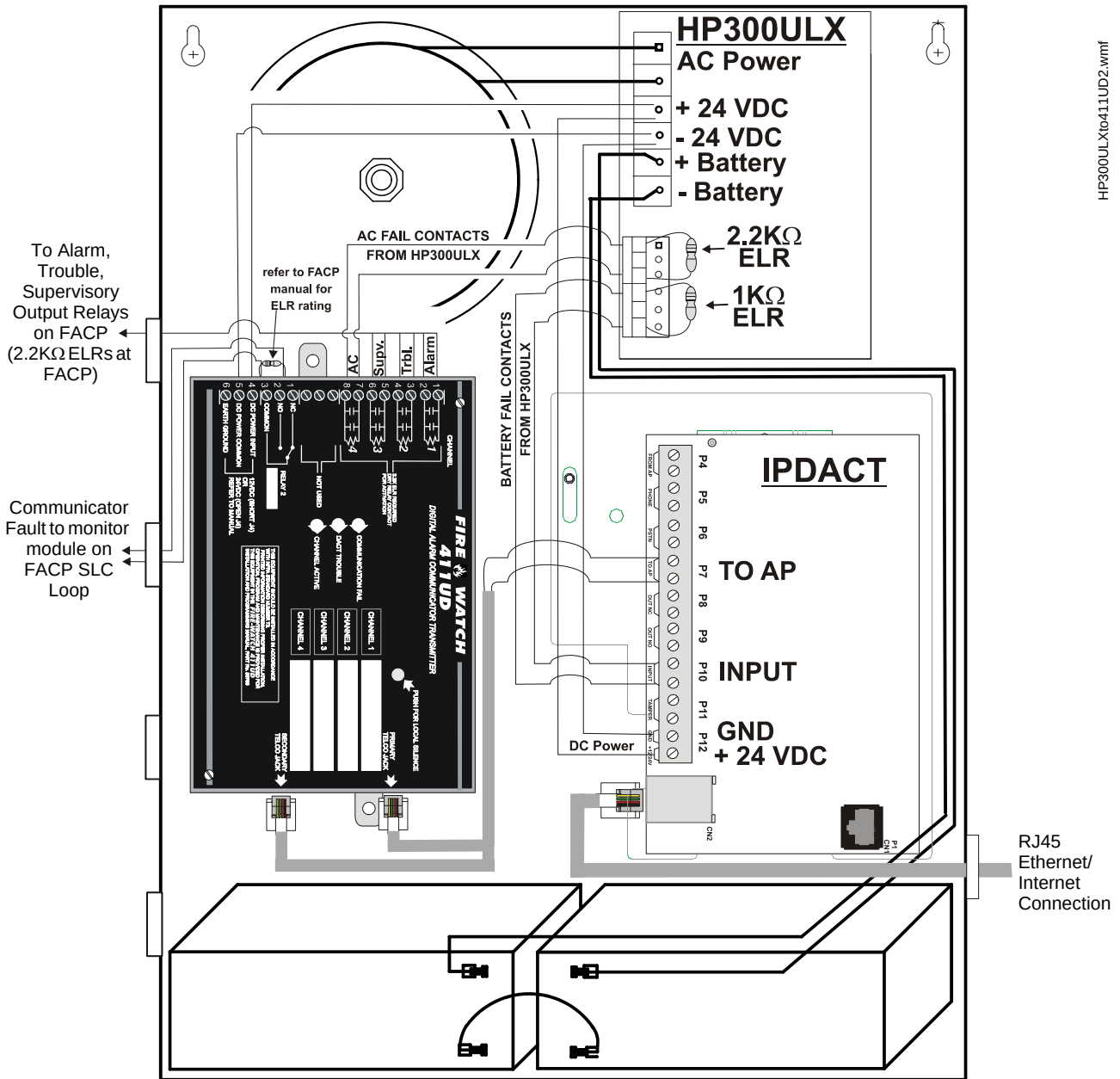


Figure 18 Wiring IPDACT to 411/411UD and HP300ULX



NOTE: When using a 411, AC Loss is reported from the FACP Trouble Relay output to the 411 Trouble Input. The 411 does not have a 4th Input Channel. The 411 does allow any of the three Input Channels to be programmed to report AC loss if desired.

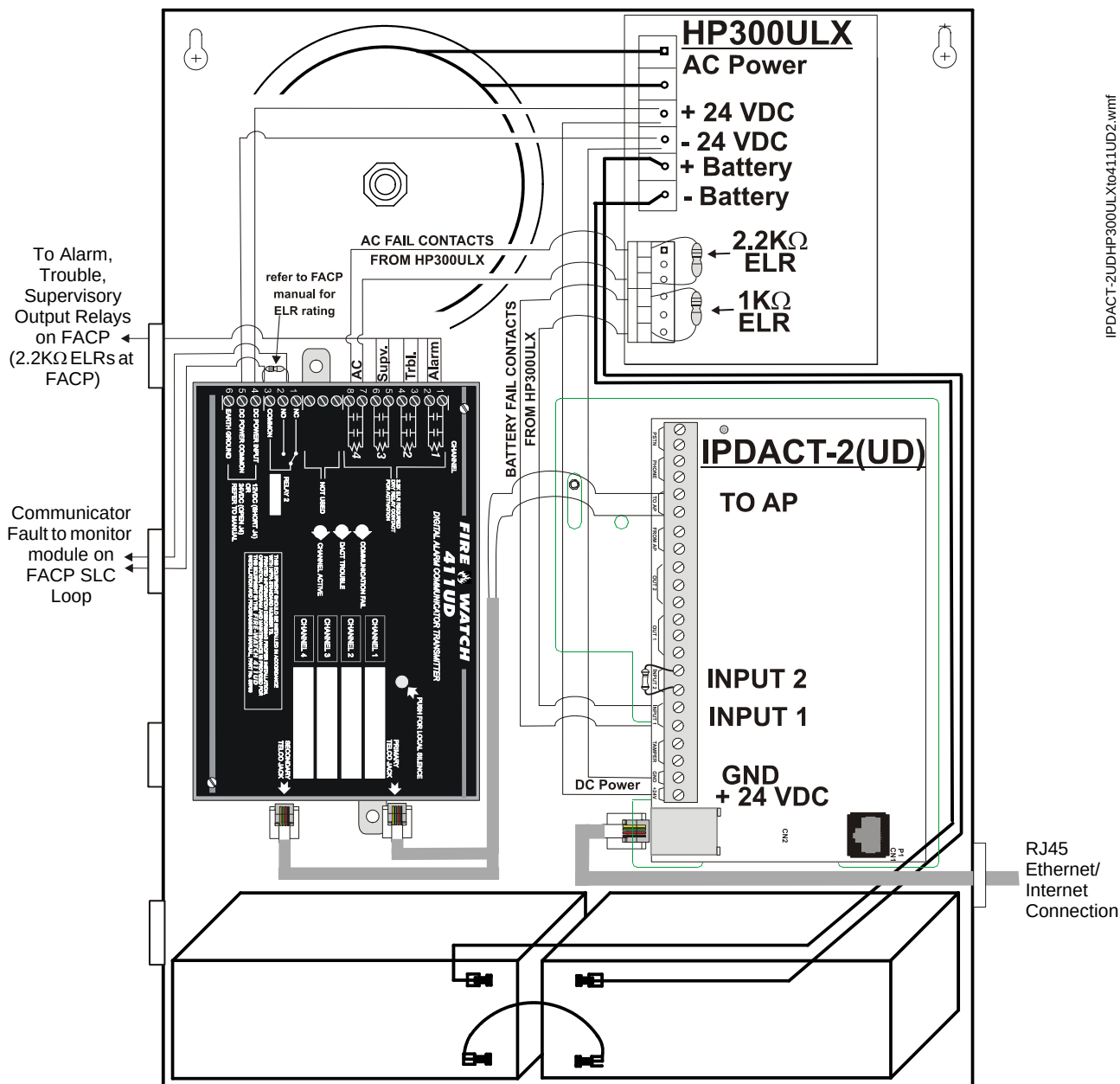


Figure 19 Wiring IPDACT-2 or IPDACT-2UD to 411/411UD and HP300ULX



NOTE: When using a 411, AC Loss is reported from the FACP Trouble Relay output to the 411 Trouble Input. The 411 does not have a 4th Input Channel. The 411 does allow any of the three Input Channels to be programmed to report AC loss if desired.