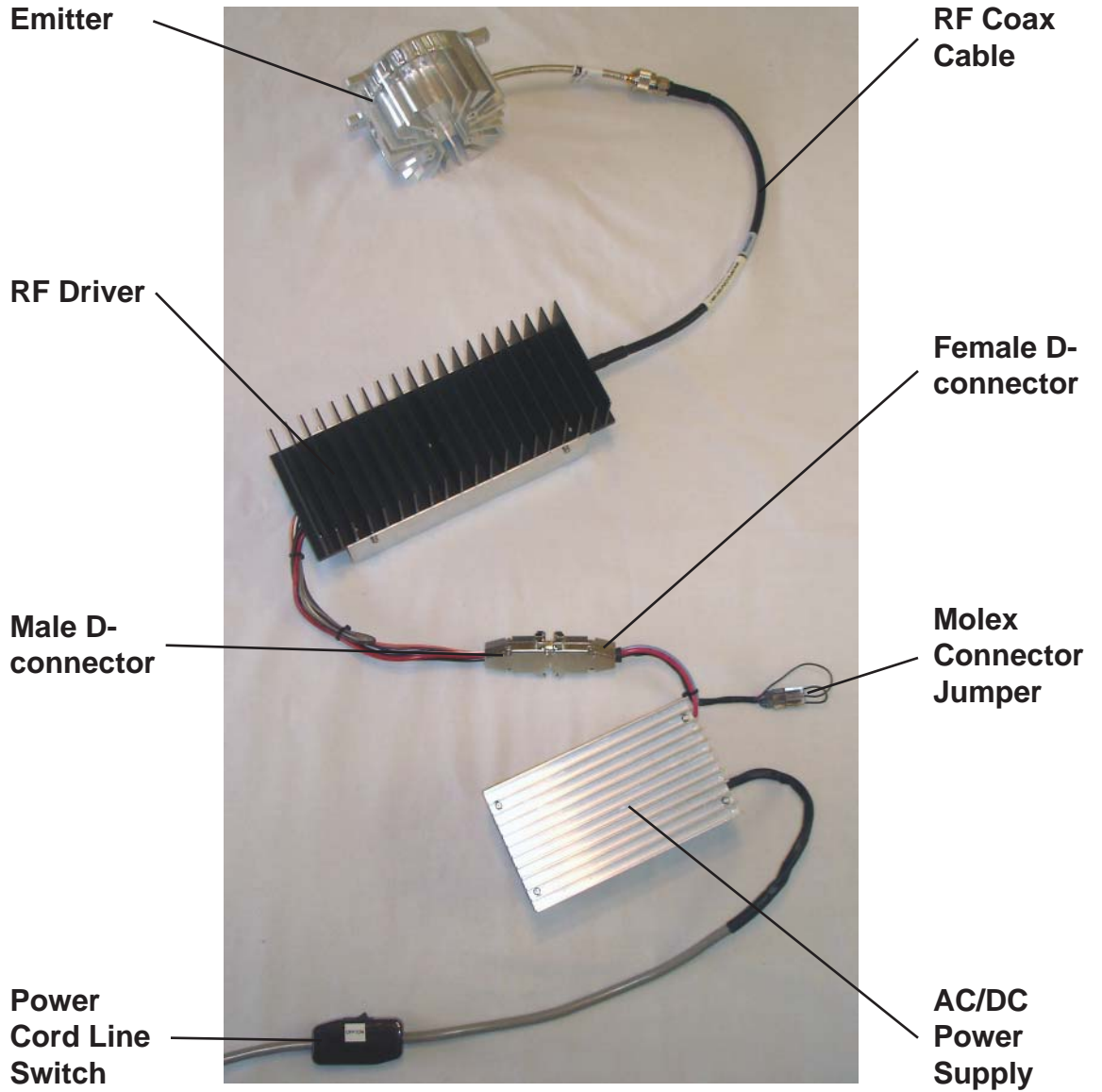




AN016: LiFi[®] DEVELOPMENT KIT SETUP INSTRUCTIONS

FOR USE WITH ALL ENT-31, STA-40 & STA-41 DEVELOPMENT KITS
FOR STAND-ALONE USE

AN016 Basics



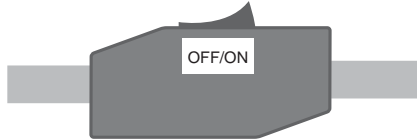
CAUTION



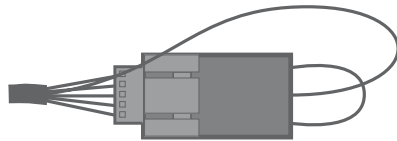
Make sure that Emitter Assembly is on a heat resistant surface. USE CAUTION WHEN HANDLING. Emitter temperature can exceed 100° C. RF Driver temperature can exceed 70° C.

Hardware Set-Up

1. Place the AC/DC power supply and RF driver on a suitable surface with the heat fins pointing up for ideal heat conduction.
2. Make sure the power cord line switch on the AC/DC power supply is in its off position (0).

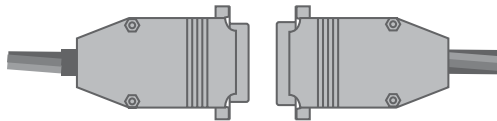


3. Ensure the 5-pin black male Molex connector jumper (shorts pins 1 & 5) is securely connected to the female Molex connector.

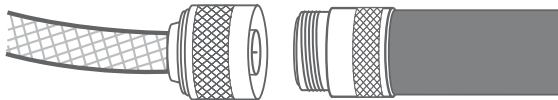


The jumper by-passes the digital communications mode and turns the lamp ON in basic mode.

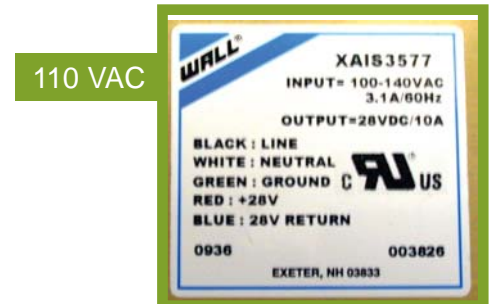
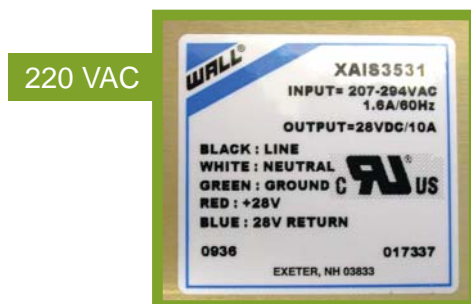
4. Connect the female D-Connector of the AC/DC power supply to the male D-Connector of the RF Driver.



5. Connect the RF Coax Cable to the RF Driver and to the Emitter Assembly. Make sure the connector is finger tight.



6. Be certain you are connecting the AC power cord to the appropriate outlet (i.e. 110VAC Edison, 220 VAC two pin European style), for the type of input power specified on the label of the AC/DC power supply.



ON/OFF INSTRUCTIONS

Once the Hardware Setup is complete, the lamp can be turned-on by switching the power cord line switch ON (1). Please allow the lamp about 5 seconds to ignite and at least one minute to power-up to full power. To shut the unit off, flip the power cord line switch OFF (0).

NOTES

If taking lumens or photometric measurements, allow the lamp to warm-up for a minimum of 10 minutes.

The lamp will require up to 2 minutes to re-strike if it has been running at its maximum temperature.

LAMP CLEANING

In the event that the quartz envelope of the bulb is touched or contaminated, it will need to be cleaned to remove oils or other contaminants. Use Isopropyl alcohol (90% - 100% alcohol) and lens tissue or foam-tipped swab to clean the bulb surface. Care must be used not to allow the alcohol to collect at the base of the bulb (in the powdered packing material around the bulb seated in the puck) as this can potentially damage the packing material when the lamp is turned on.

DISPOSAL

1. Quartz bulb contains trace amount of mercury (Hg). Dispose according to appropriate regulatory standards.
2. Quartz bulb contains trace amounts of Krypton 85 (Kr-85). Dispose according to appropriate regulatory standards.

SAFETY INSTRUCTIONS

1. Never touch the bulb.
2. Intense light beam - do not place hand/body part in a focused light beam as this may cause burning. do not look directly at the light source during operation.
3. Lamp surface is hot – do not touch during operation. Allow 15 minutes after shutoff for the lamp to cool before handling.
4. Operating the lamp without the DC Driver lid can result in higher levels of EMI radiation.
5. It is advised to ground the lamp body to the light box.
6. Maximum voltage on PCB during normal operation is less than 30 V DC.
7. Over-voltage protection is not implemented in the light source.
8. Protection for wrong polarity of input power is not implemented in the light source. Polarized connector is used to prevent wrong polarity. Reversing polarity from mis-wiring may cause damage to the lamp.
9. Gasses in the quartz bulb are at high pressure during operation. Quartz bulb failures are very rare and not expected but may be possible. When lamp is off, there is no positive pressure and therefore is safe to handle.
10. CAUTION: UV emitted from the lamp. Possible skin or eye irritation can result from exposures exceeding 15 minutes in a day (ANSI/IESNA RG-2). UV Shielding must be part of the OEM fixture design and incumbent on the fixture manufacturer to verify. Use a 4mm thick cover glass (Soda lime or equivalent) as a minimum. Ref. UL1598, Section 9.4