APPLICATION BRIEF

Combining ETS DR Dimming Solutions with Full Light Output IIS Micro Inverters

The **IOTA ETS DR** delivers increased energy savings by allowing for the presence of local controls without compromising the fixture's Life Safety performance.

IOTA IIS Micro Inverters provide emergency AC power to the designated fixture(s) up to its rated output. LED, incandescent, or fluorescent loads will operate at full brightness when a power loss occurs.

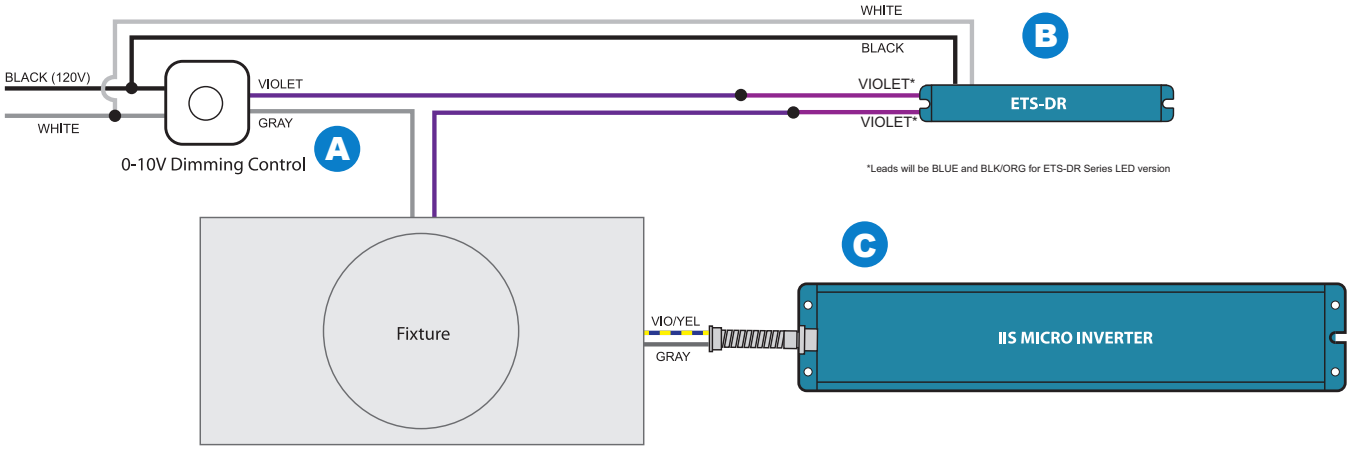
Combining the wide load compatibility and full light output of an IIS Micro Inverter with the additional energy-savings capability of the ETS DR creates a powerful and effective luminaire package that operates the way occupants want during normal power, and how they need it to during an emergency egress situation.

Using the two IOTA units jointly is relatively simple:

A Here, a typical **0-10V dimming control** is used in conjunction with the fixture, allowing the fixture to operate at desired dimmed levels for occupant needs and for added energy efficiency.

B The Violet dimming control lead and the Gray fixture dimming lead connect with the Dimming Relay leads of the **ETS DR**. The Black and White leads of the **ETS DR** connect ahead of the dimming control to sense the presence of power to the control. Remaining ETS DR leads are not needed and are capped off individually.

C The **IOTA IIS Micro Inverter** wires to the fixture normally. In this illustration, only the Violet/Yellow and Gray leads that deliver power to the fixture are indicated. See reverse side for the complete IIS Micro Inverter wiring.



Normal and Emergency Operation

During **Normal Operation**, the fixture will provide full or dimmed brightness as desired by the setting of the local control, or be OFF as determined by the local ON/OFF switch. When a loss of normal power occurs, the ETS DR senses the drop in power and overrides the dimming control settings, forcing the fixture to operate only at 100%. The **IIS Micro Inverter** also senses the loss of power and delivers AC power from the battery supply to the fixture without interference from the local dimming control or wall switch.

Learn more on our YouTube channel

SCAN ME

ETS DR Specfications

Input Voltage	120-277V, 60Hz
Input Current	40 mA
Maximum Switching Current	3 Amps @ 120V 3 Amps @ 277V
Dimming Compatibility	For use in 0-10 volt dimming circuits up to 100 mA
Emergency Operation	The ETS DR allows operation of any lamp type in the designated fixture for the duration of the auxiliary supply
Initial Illumination	The ETS DR allows operation of the designated load at full light output
Operating Temp	0° to 55° C
Weight	1.0 lbs.
Dimensions	8.0″ x 1.18″ x 1.15″
Certifications	UL 924 Listed ALCR Control Device

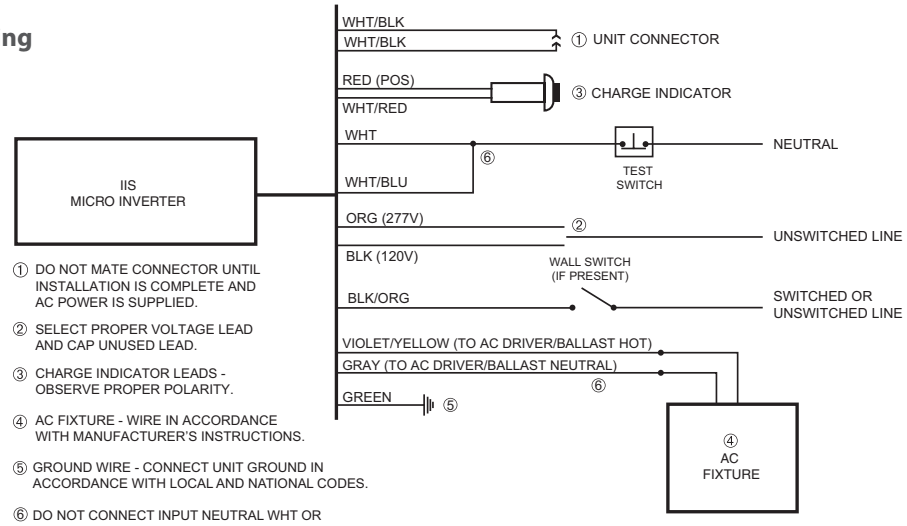
The **ETS DR** is typically used to shunt power around local wall switching for fixtures connected to an auxiliary generator supply, eliminating the need for Always-On or 24/7 fixtures. The Dimming Relay (DR) within the unit provides additional capability to defeat the 0-10V dimming signal. In the ETS DR/ IIS Micro Inverter scenario, the IIS inverter already has the ability to bypass the local wall switch, but uses the ETS DR to override the dimming control.

IIS Micro Inverter Model Reference

IIS Micro Inverter	Output Watts	Input Rating (max)	Dimensions	Weight	Certifications
IIS 25 I	25W	32W	17.77″ x 3.0″ x 2.75″	6.5 lbs	cUL Listed
IIS 35 I	35W	44W	17.77″ x 3.0″ x 2.75″	6.5 lbs	cUL Listed
IIS 35 HE	35W	43W	19.94″ x 2.88″ x 2.75″	6.5 lbs	UL Listed, CA T20
IIS 50 I	50W	60W	22.5″ x 3.0″ x 2.75″	9.0 lbs	cUL Listed

IIS Micro Inverter Complete Wiring

The IIS Micro Inverter delivers AC power (120V or 277V) to the designated fixture(s) to allow the fixture to operate in the emergency mode just as it would under normal power conditions. The IIS unit uses an unswitched input (Orange and Black wires) for maintaining the standby battery in a state of readiness. Normal power is passed through to the fixture via the Black/Orange lead (switched or unswitched.) In an emergency, the IIS internally senses the loss of power and operates the fixture with AC power from the battery supply.



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② SELECT PROPER VOLTAGE LEAD AND CAP UNUSED LEAD.

③ CHARGE INDICATOR LEADS - OBSERVE PROPER POLARITY.

④ AC FIXTURE - WIRE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

⑤ GROUND WIRE - CONNECT UNIT GROUND IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.

⑥ DO NOT CONNECT INPUT NEUTRAL WHT OR WHT/BLU TO OUTPUT NEUTRAL GRAY.