



Solomon Corporation  
LTC Upgrades

# Why Is a Load Tap Changer (LTC) Control System Upgrade Right for You?

**Digital Control Advantages**

**Damaged Electrical Components**

**Increased Connectivity**

**Increased Information**

**Engineering Design Services**

**Installation and Testing**

**References**

**Field Service**



# Digital Controls Advantages

- \* Precise Adjustment of Parameters
- \* Historical Record of Parameters



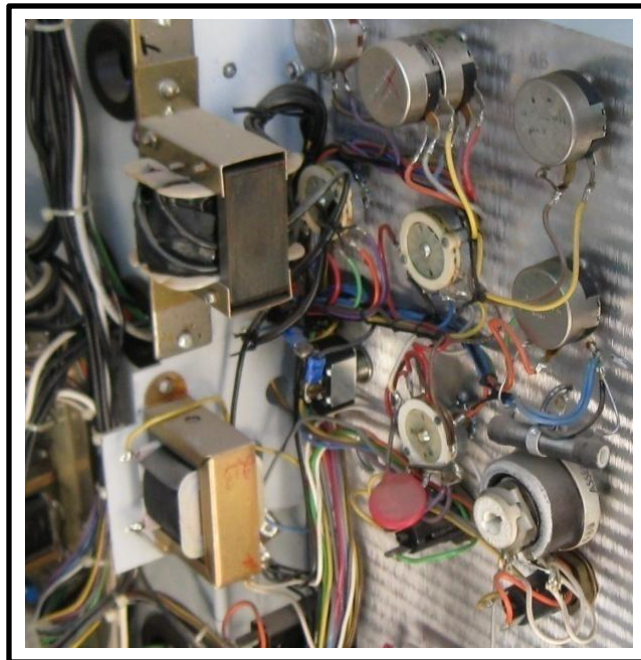
Comm Address: 1			
Control Time	15:42:53		
SECONDARY STATUS			
Local Voltage	120	V	
Source Voltage	120.4	V	
Load Current	0	mA	
Comp. Voltage	120	V	
Circulating Current	0	mA	
Power Factor	0.9	Lead	
ALARM / BLOCKS STATUS			
Lower (Tap)	OFF	Comm Block	OFF
Raise (Tap)	OFF	Current Limit	OFF
Lower (Volt)	OFF	Reverse Power	OFF
Raise (Volt)	OFF	V.Red In Effect	OFF
		DVAr I Limit	OFF
INPUT			
Counter	OFF	Non-Sequential	OFF
Neutral Tap	OFF	V. Reduction 1	OFF
Switch Status	AUTO	V. Reduction 2	OFF
OUTPUT			
Raise	OFF	Lower	OFF
Seal-In	OFF	Alarm	OFF
Close			Comm Status:

Power Direction	Forward
Operation Direction	Forward
Voltage Reduction In Effect	OFF
Voltage Reduction Step	No Red.



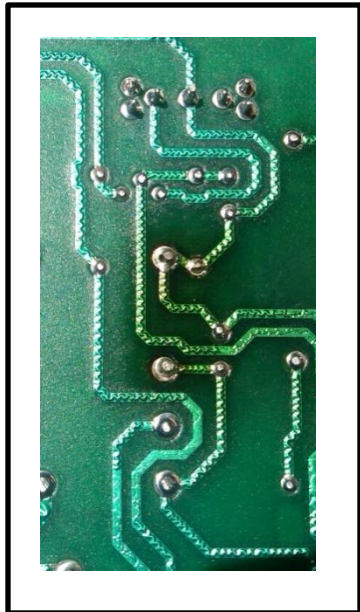
# Digital Controls Advantages

- \* **Modern Digital Technology Has Fewer Mechanical Components**
- \* **Manufacturer's Warranty on All New Equipment**



# Damaged Electrical Components

- \* **Degrade System Performance**
- \* **May Not Be Possible to Repair**
- \* **System Replacement Sometimes The Best Option**



# Increased Connectivity

- \* **Supervisory Control and Data Acquisition (SCADA) Capable**
- \* **Optical and Copper Media Available**
- \* **Nine Communication Protocols Available**
- \* **Multiple units can be Networked with Serial or Fiber Links**
- \* **Optional Backup Power Supply Available**



# Increased Information

- \* Optional Resolvers Provide Positive Tap Position
- \* Data Logging of Multiple Parameters Available



	A	B	C	D
1	Serial Nur	39180		
2	User Line 1			
3	User Line 2			
4				
5	Time	Date	Local Volt (V)	Load Curre
6	14:53:00	4/20/2011	119.9	
7	14:58:00	4/20/2011	120.6	
8	15:03:00	4/20/2011	120.2	
			119.9	
			119.1	
			119.7	
			119.3	
			115.4	
			120.4	
			119.9	
			119.9	





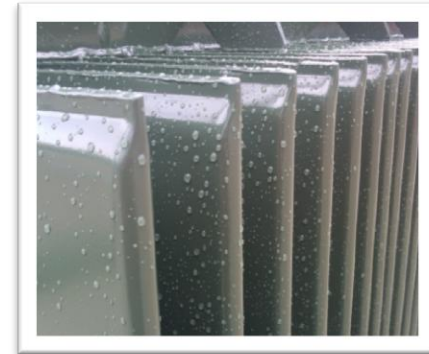
# Installation and Testing

- \* Transformer Downtime as Little as Two Hours
- \* Unit Functions are Tested
- \* The Customer is Consulted on Final Unit Parameters
- \* Parameters are Electronically Stored for Future Reference
- \* Complete Retrofit Usually Complete In One Day



# References

- \* **Ray Spraggs**      **270.871.2451**      **Murray, Ky**
- \* **Jerry Spanel**      **308.872.2451**      **Broken Bow, Ne.**
- \* **Mike Venturino**      **775.296.2017**      **Ely, Nv**
- \* **Rick Lock**      **307.686.5277**      **Gillette, Wy**
- \* **Len Couture**      **620.793.4611**      **Medicine Lodge, KS**



# Field Service

- \* Neither Snow Nor Sleet Nor Gloom of Night will Keep the Solomon Load Tap Change Experts From Solving Your Issue!
- \* Give Solomon Corporation a Call at 800-234-2867  
Eric: x313, Terry: x494 or Jim: x304.

