

# HISTORY OF LOCAL SWITCHING

SYSTEM NAME	DATE OF DEVELOPMENT	ADVANTAGES OR NEW FEATURES	DISADVANTAGES	SIGNALING TO	SIGNALING FROM
MANUAL	1878 to Mid 1920's	Provided Switching Characteristics	Required alot of Operators	1. Customer off-hook & 2. Voice	Off-hook, Ringing, & Voice
STEP-BY STEP	1921	1st Automatic System. Introduced Dial. A.E. Co. 1st produced Strowger invented in 1890. A.E. Co. produced until 1920	1. Large No. of trunks 2. High Maintenance costs	Dial Pulse (10 pps)	Dial Pulse
PANEL	1920's	1. Large Metropolitan areas 2. 1st Version of Common Control a. Sender b. Decoder	1. Too Mechanical 2. Too much Maintenance 3. Crosstalk	Dial Pulse	Revertive Pulsing (30 pps) PCI
NO. 1 CROSSBAR	Early 1930's <i>1938 10,000 - 50,000 del. lines</i>	1. 1st Application of Crossbar Switch 2. Common Control 3. More Efficient 4. Alternate Routing	Large amount of Equipment	Dial Pulse Mod. for TOUCH-TONE	D.P., R.P., M.F., PCI
NO. 5 CROSSBAR	1948 <i>1,000 - 35,000 del. lines</i>	1. Full Common Control 2. Max. Efficiency		Dial Pulse TOUCH-TONE	D.P., M.F., R.P., PCI, FSP
NO. 1 ESS	1960's	1. Stored Program Control--Memory System and Instructions 2. Speed Calling 3. Call Transfer 4. Conference Calls		Dial Pulse TOUCH-TONE	D.P., M.F., R.P., PCI
NO. 2 ESS	1971	Same as for No. 1 ESS		Dial Pulse TOUCH-TONE	D.P., M.F., R.P.
NO. 3 ESS	1975	CDO Version of No.2 ESS		Dial Pulse TOUCH-TONE	D.P., M.F., R.P.
No. 5A CROSSBAR	1971	Small Version of No. 5 Crossbar 800 to 2000 Lines		Dial Pulse TOUCH-TONE	D.P. or M.F.
NO. 3 CROSSBAR	1975 <i>1974 200 - 300 del. lines</i>	200 to 800 Lines		Dial Pulse TOUCH-TONE	D.P. or M.F.