

SmarTrunk Systems

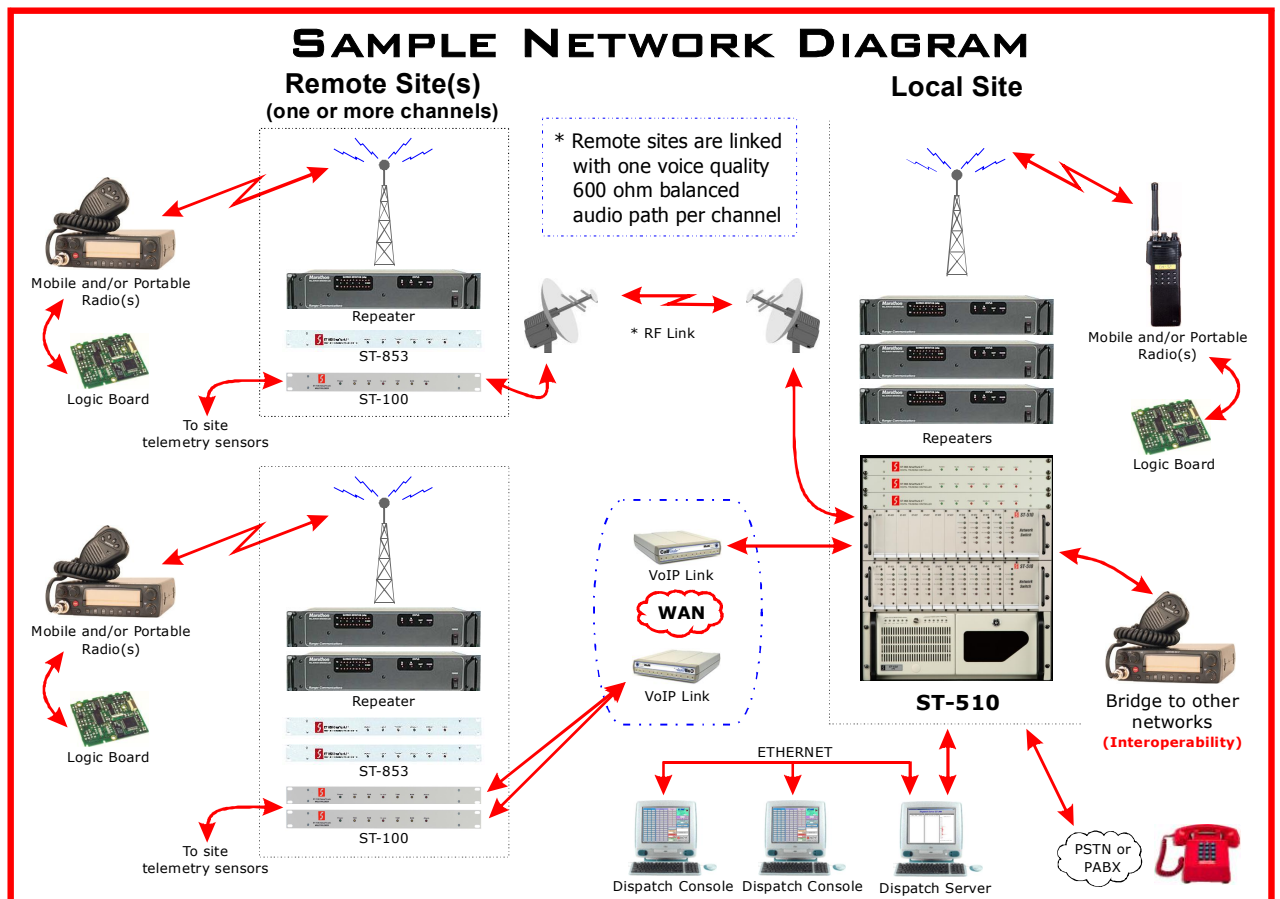
SmarTrunk Delivers Enhanced Features to Single or Multi-Site Systems



With over 6,000 systems sold over 14 years, SmarTrunk has been chosen by radio professionals in over 125 countries. We specialize in cost effective and feature rich trunking systems which can be expanded to accommodate growth. Entry level or full-featured, SmarTrunk can make your radio network much SmarTer!

WHY SMARTRUNK?

- Most conventional repeaters and radios can be trunked with existing licenses
- Even a single repeater can be upgraded to offer selective and group calling, radio kill, call records, emergency overrides and Smart PABX/PSTN interface
- No control channel, no exclusive license needed, no pirated radios
- Radio caller ID, caller ID scrolling and optional encryption (most radio brands)
- Radio alpha display of group tags (most radio brands)
- Conventional and SmarTrunk operation possible in same radio
- Instant PTT transmissions after initial access (channel is acquired once)
- Most cost effective multi site roaming system
- Late to join and lost radio rejoin with ST-310, ST-510LT and ST-510
- Remote roaming sites can be one or more channels
- Remote site telemetry option
- Automatic roaming and power on radio registration
- Different multi-site linking options including VoIP
- Full system can offer voice mail, call forwarding, call transfer, general access announcements, smart voice logger, billing and more.
- Optional dispatch console can dynamically create one time conference groups
- Optional gateway to other radio systems or protocols for interoperability
- Can share a repeater with most LTR controllers for a dual protocol system



With SmarTrunk, you can now have powerful calling features...



The ST-853 controller is the basic building block of a SmarTrunk system (one per repeater). It tracks user status, keeps call records and manages trunking functions in systems of more than one channel. Also manages the PABX/PSTN interconnect features.

- Easy to interface to almost any repeater
- Capacity for 4,096 subscribers and 4,500 call records
- Encrypts over the air page codes (Unit and Group ID's)
- Can keep call records for all users or only ones so designated
- Each user has his own unit ID (Enables selective calling and caller ID's)
- Many features can be easily assigned or denied on a per-user basis (Courtesy beep, mobile activity timer, telephone line access, call restrictions by various attributes).
- Two telephone lines (PBX or Outside) can be accessed on a programmable basis
- Emergency system override through an incoming telephone line
- Intuitive routing of different classes of calls
- Can operate together with CTCSS tone panel for migrating conventional users
- Immediate PTT operation after initial channel access
- Radio-to-radio caller ID
- Privacy between users during individual or group calls

The ST-310, ST-510LT and ST-510 family of switches can expand and enrich a basic SmarTrunk system by adding many new features. These products can all bring multi site roaming capability to a basic SmarTrunk installation with a features list that allows for expansion as a system grows. Even the entry level, firmware based ST-310 can be expanded into a full ST-510 without wasting any previously purchased hardware.

Features available on all models:

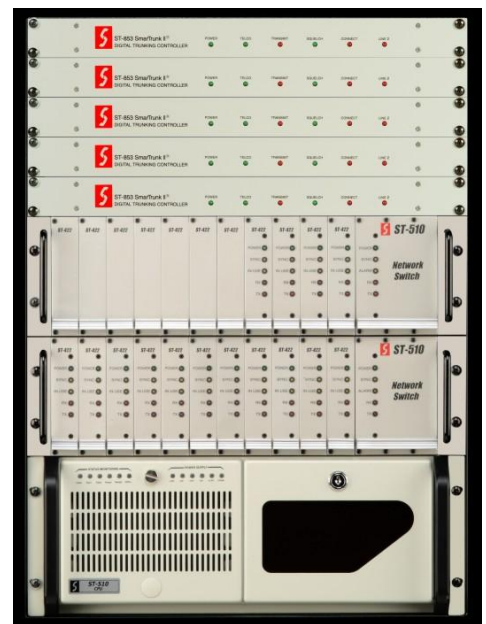
- Wide Area-Multi Site roaming
- Automatic user registration at a new site or upon radio power on
- Late-to-join or lost radio rejoin capability
- Network statistical reports
- PABX or PSTN interface

Additional features available on the ST-510LT and ST-510

- Dispatch Console with graphic one click calling, one time conference groups (dynamic regrouping) and pre-programmed emergency routines
- Selected radios can all join on a single channel for one time conference
- Gateway to non SmarTrunk radios

Additional features available on the ST-510

- Voice Mail
- Call Forwarding to another radio or telephone
- On-the-Air call transfer of PSTN call to another individual radio or group
- Pre-Recorded Information Service open to all subscribers
- Voice logger (Searchable by user, date, time, destination, type of call, length of call)
- Detailed usage data base with billing option

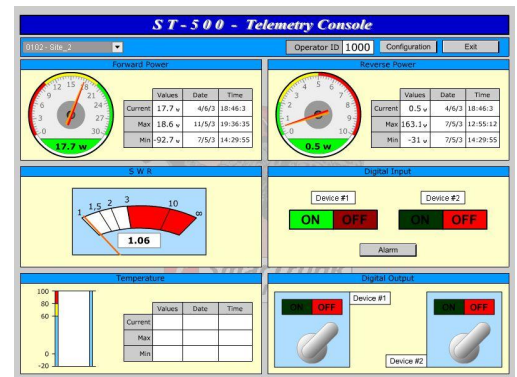


...once thought only available from wireless carriers.



The ST-100N Multiplexer is used to link a remote ST-853 controller to any of our roaming switches (ST-310, ST-510LT or ST-510). One is required per remote channel. At the switch side, ST-422 Multifunction interface cards provide the interface to the links and therefore to the remote ST-100N(s).

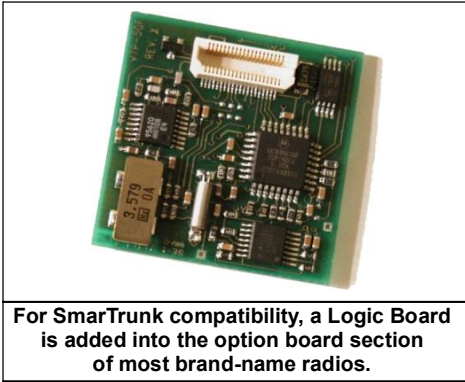
- Simplifies linking requirements
- ST-853 audio and data transfer can be done over voice grade circuits
- Allows for many linking options (leased lines, spread spectrum, microwave, T1/E1, RF, phone line extenders, Voice over IP, etc)
- Fast voice/data switching
- Built-in remote site telemetry I/O's (4 analog, 2 digital in, 2 digital out)
- Analog input range is between 0 and 12VDC (adjustable)



Summary of Products and Features

Features	ST-853	ST-310	ST-510LT	ST-510
Selective Calling	✓	✓	✓	✓
Fleet Dispatch	✓	✓	✓	✓
Instant PTT Operation After Initial Channel Access	✓	✓	✓	✓
Voice Encryption	✓	✓	✓	✓
Caller ID	✓	✓	✓	✓
PABX/PSTN Interface	✓	✓	✓	✓
Detailed Usage Database	✓	✓	✓	✓
LTR Infrastructure Sharing	✓	✓	✓	✓
Emergency Override if All Channels are Busy	✓		✓	✓
Roaming Capability		✓	✓	✓
Automatic User Registration		✓	✓	✓
Power-On Registration		✓	✓	✓
Late-to-Join		✓	✓	✓
Lost Radio Rejoin		✓	✓	✓
Network Statistical Reports		✓	✓	✓
Dispatch Console			✓	✓
Dynamic Regrouping			✓	✓
Interoperability with Non-SmarTrunk Radios			✓	✓
Billing			✓	✓
Traffic Queue with Available Channel Notification			✓	✓
Voice Mail				✓
Call Forwarding to Another Radio or Telephone				✓
Call Transfer of PSTN Call to a Radio or Group				✓
Pre-Recorded Information Service				✓
Voice Logger				✓

SmarTrunk Logic Board Features:



For SmarTrunk compatibility, a Logic Board is added into the option board section of most brand-name radios.

- Block decode for monitoring multiple groups
- Memory dialing of radios, groups or PBX/PSTN numbers
- Last number redial
- Different ring tones for different types of calls
- Clear channel alert when one becomes available
- SmarTrunk and conventional operation possible for talk-around
- Two levels of remote radio kill for disabling illegal radios
- Voice inversion encryption on most models
- Radio alpha display of group tags (Most radio brands)
- Automatic site registration upon power-on or site change
- Scroll through last 10 calls received & return call with simple PTT
- Enables conversion of existing radios to trunking

SmarTrunk II™ Product List

Logic Boards - Portables

ST-866ICF	3G Ready - ICOM IC-F3/F4; F3S/F4S; F3GS/F4GS; F3GT/F4GT; F30/F40GT/GS; (F33/F43GT/GS; F34/F44GT/GS***)
ST-866ICFS	3G Ready - ICOM IC-F3/F4; F3S/F4S; F3GS/F4GS; F3GT/F4GT; F30/F40GT/GS; (F33/F43GT/GS; F34/F44GT/GS***)
ST-865KW2	Kenwood TK-270/278/370/378
ST-865KW4	3G Ready - Kenwood "G" Series: TK-260G/270G/272G/278G/360G/370G/372G/378G; 2160/3160
ST-865M	Motorola GP88/GP300/GP350
ST-865M3	Motorola GP-68
ST-865M4	Motorola P1225
ST-865M5	3G Ready - Motorola PRO5150/7150/9150; HT750/1250; GP140; GP328/338 (Num Caller ID, Alpha Num Group Tags)
ST-865M5S	3G Ready - Motorola PRO5150/7150/9150; HT750/1250; GP140; GP328/338 (Num Caller ID, Alpha Num Group Tags and Scrambler)
ST-865M6	Motorola PRO3150/CT250/CT450/P040/P080/GP308
ST-865M7K	3G Ready - Motorola CP160/180; GP3688, EP450, PR400 (Numeric Caller ID, Alpha Numeric Group Tags)
ST-865M7KS	3G Ready - Motorola CP160/180; GP3688, EP450, PR400 (Numeric Caller ID, Alpha Numeric Group Tags and Scrambler)
ST-865M8	3G Ready - Motorola CP140, GP3688, EP450, PR400 (Numeric Caller ID, Alpha Numeric Group Tags)
ST-865M8S	3G Ready - Motorola CP140, GP3688, EP450, PR400 (Numeric Caller ID, Alpha Numeric Group Tags and Scrambler)
ST-865VT60F	3G Ready - Vertex VX400/410/420/424/427/600/800/820/900/920 (Numeric Caller ID, Alpha Numeric Group Tags)
ST-865VT60FS	3G Ready - Vertex VX400/410/420/424/427/600/800/820/900/920 (Numeric Caller ID, Alpha Numeric Group Tags and Scrambler)

Logic Boards - Mobiles

ST-868-02	Alinco DR-130/140/430/108
ST-868-07	Alinco DR-605 cross band
ST-866ICF	3G Ready - ICOM IC-F110/F210; F111/F121; F211/F221; F310/F320; F410/F420; F1000/F2000; (IC-F520/F521; F620/F621***)
ST-866ICFS	3G Ready - ICOM IC-F110/F210; F111/F121; F211/F221; F310/F320; F410/F420; F1000/F2000; (IC-F520/F521; F620/F621***)
ST-865KW2	Kenwood TK-760/768/860/868
ST-865KW4	3G Ready - Kenwood "G" Series: TK-760G/762G/768G/860G/862G/868G, TK-7100/7102/8100/8102
ST-868-05	Motorola M216/GM300
ST-868M350	Motorola GM350; GM950/950E/950Plus
ST-865M4	Motorola M1225
ST-865M5	3G Ready - Motorola PRO3100/5100/7100; CDM750/1250/1550; GM140/160; GM338/398
ST-865M5S	3G Ready - Motorola PRO3100/5100/7100; CDM750/1250/1550; GM140/160; GM338/398
ST-865M7K	3G Ready - Motorola GM3688; CM160; EM400; CM300/PM400 (Numeric Caller ID, Alpha Numeric Group Tags)
ST-865M7KS	3G Ready - Motorola GM3688; CM160; EM400; CM300/PM400 (Numeric Caller ID, Alpha Numeric Group Tags and Scrambler)
ST-868SM	Standard GX-1608
ST-868-05	Tait T-2000 Series
ST-868-04	Telemobile TM-MDT25
ST-868-01	Vertex FTL-1011/2011/7011; VX-2000/3000U/3000V
ST-865VT60F	3G Ready - VX-2500/3200/4000/4100/4200/5500/6000 (Numeric Caller ID, Alpha Numeric Group Tags)
ST-865VT60FS	3G Ready - VX-2500/3200/4000/4100/4200/5500/6000 (Numeric Caller ID, Alpha Numeric Group Tags and Scrambler)

Trunking Controllers

ST-853CI	SmarTrunk II Enhanced Trunking Controller with Caller ID
ST-853 E&M	SmarTrunk II Enhanced Controller with E&M Interface
ST-853AUS	SmarTrunk II Controller meets AUSTEL (Australian) Specifications

*** 3G Fully Compatible

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