DataREMOTE 90X1 Moving Data Over Wireless Router

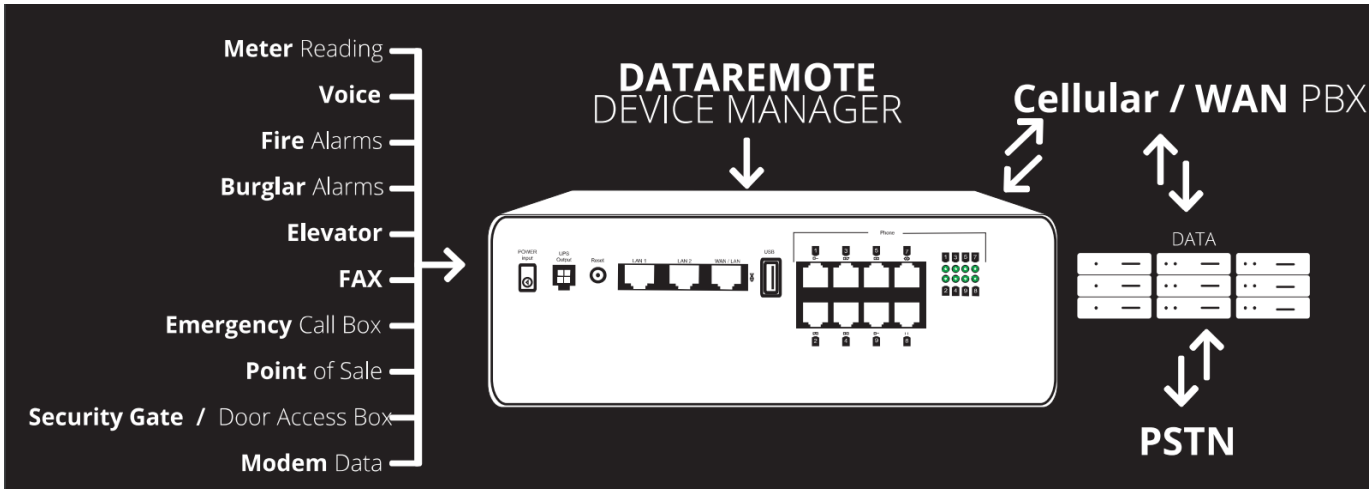
DataREMOTE 90X1 Moving Data Over Wireless Router User Guide

Contents

DataREMOTE 90X1 Moving Data Over Wireless Router

ONE DEVICE
TO REPLACE ALL LANDLINES

DataRemote® offers enterprise-grade solutions for traditional landline replacement. The DataRemote suite of products converts all existing legacy landlines to next-generation service via VoIP and SG / LTE cellular network, be it voice, FAX lines, burglar, fire alarms, elevators, ATMs, emergency call boxes, point of sale systems and more.



The DataRemote 90X1 POTS line solution with VoIP is a backup device that facilitates clear and reliable voice quality over the Internet. It is fully compatible with Session Initiation Protocol (SIP) industry standards and can integrate with many other SIP devices and software on the market.

HARDWARE INSTALLATION

FOLLOW ALL THE STEPS AS SHOWN IN THE PICTURES AND DESCRIPTIONS. FOR ANY QUESTIONS RELATED TO THE HARDWARE INSTALLATION, PLEASE CONTACT THE SUPPORT NUMBER PROVIDED IN YOUR DEVICE'S BOX.

WHAT COMES IN THE BOX

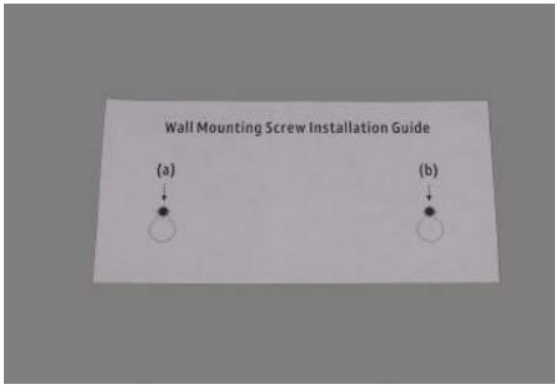
DATAREMOTE 90X1 DEVICE

Wi-Fi AND LTE ANTENNAS

AC POWER ADAPTER

Phone (RJ-11) and Ethernet (RJ-45) cords

SET OF MOUNTING HARDWARE



MOUNTING DIAGRAM

BEFORE INSTALLING THE DEVICE

Before connecting the DataRemote 90X1 device to the Internet for use, it must have access to high-speed Internet. A high-speed internet connection can be accessed through DSL, SG / LTE wireless network, cable modem, Wi-Fi access point, or a leased line.

Make sure the new DataRemote 90X1 device is being connected near a power source and away from sources of extreme heat/humidity.

This device uses SG and LTE. Please make sure the device is being installed in an easily accessible area providing good cellular reception.

IMPORTANT: Please refrain from putting furniture or other obstacles in front of the device.

This may influence signal quality, thus degrading cellular reception.

LED LIGHT INDICATORS

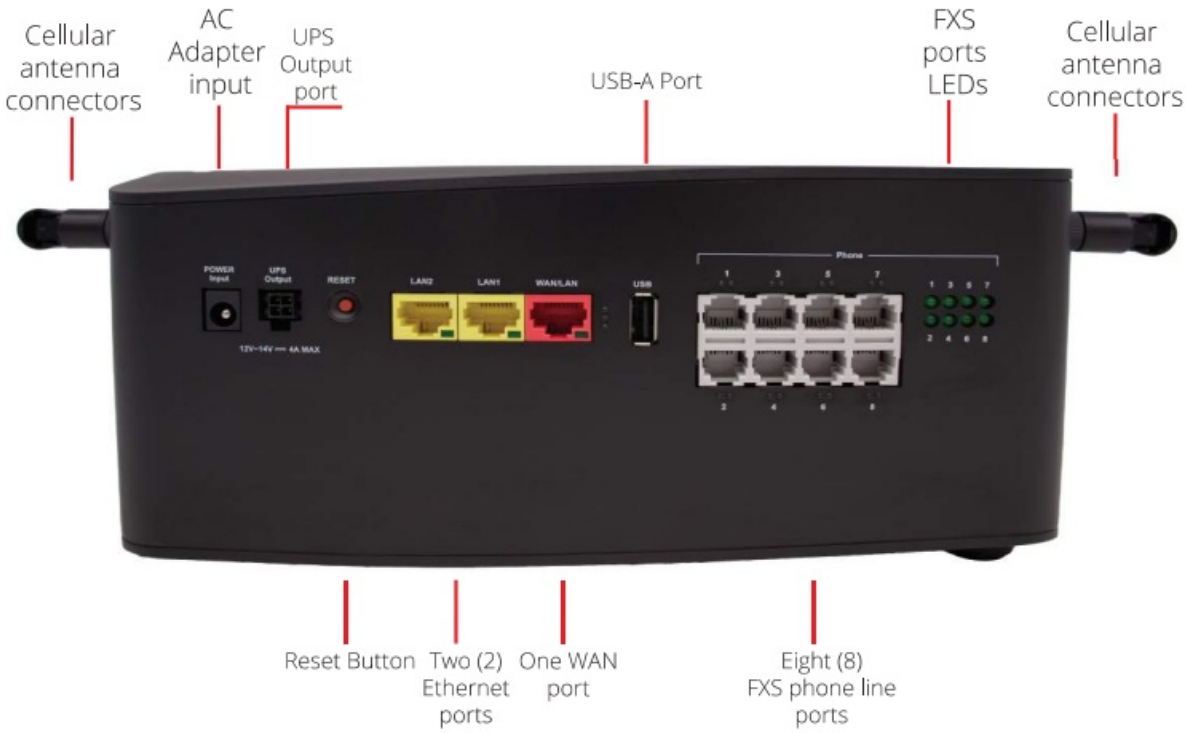
Please get acquainted with the LED indicators and connectors before use.

FRONT PANEL

BOTTOM PANEL

LED	STATUS	
Power	Solid (GREEN)	The device is powered on and connected to WAN.
	Slow Flashing (GREEN)	Reboot mode
	Fast Flashing (GREEN)	Factory Reset mode
	Solid (BLUE)	The device is powered on and connected to cellular WAN
	Slow Flashing (BLUE)	Kernel done booting. Device POST stage
	Fast Flashing (BLUE)	Boot-loader / Kernel boot
	Solid (RED)	Factory Reset mode
	Fast Flashing (RED)	Boot-loader booting issue. Invalid / Absent / Corrupted firmware
	Slow Flashing (AMBER)	Firmware upgrade in progress
	OFF	Device powered off
Battery	Solid (GREEN)	Battery charged (power connected)
	Flashing (BLUE)	Battery charging
	Flashing (AMBER)	Battery Discharging (power not connected)
	Flashing (RED)	Battery low & power not connected
Cell	Solid (GREEN)	Connected to 5G
	Slow Flashing (GREEN)	Connected to 4G
	Fast Flashing (GREEN)	Attempting to connect
	OFF	Disconnected
Signal	4x GREEN	Strong: All bars solid - RSSI <-50dBM to -69dBM
	3x GREEN	Only three bars solid - RSSI <-70dBM to -79dBm
	2x GREEN	Two bars solid - RSSI <-80dBm to -89dBm
	1x GREEN	One bar solid - RSSI <- 90dBm to 120dBm
	OFF	OFF - RSSI 120dBm and below
	On (GREEN)	Good LTE Signal Detected
WAN / LAN	Flashing (GREEN)	Port is sending or receiving data
	OFF	Disconnected
LAN 1	Flashing (GREEN)	LTE Data Carrier Detected
	OFF	3G Data Carrier Detected
LAN 2	Flashing (GREEN)	No service
	OFF	SIM Active
Phone 1 - 8	Solid (GREEN)	Registered / On-hook
	Flashing (GREEN)	Active call / Off-hook
	OFF	Not Registered

WHAT IS ON THE BOTTOM OF THE DEVICE?



IMPORTANT: The LED FXS lights of the Data Remote 90X1 device are arranged in a left-to-right sequence. The top row of FXS ports includes number 1,3,5, and 7. While the bottom row comprises of ports 2,4,6, and 8.

IMPORTANT! Before starting to configure the device, please connect it as shown in these “step by /4\Ll..:::. ! step” directions. Any questions regarding installation, please contact the Support number provided on the device’s paperwork.

STEP 1

Insert a quarter into the slot on the back of the device and pull in the direction indicated to open the battery compartment. Then, insert the SIM card into the slot marked, “SIM 1” or “SIM 2”, as appropriate, until the locking mechanism is engaged.

After inserting the SIM into the proper slot, place the battery cover back to its original state.

After inserting the SIM into the proper slot, place the battery cover back to its original state.

STEP 2

Connect one end of the power cord into the back of 90X1 and the other end to an electrical outlet or surge protector.

WARNING: Ensure the original 19V, 3.4A power adapter supplied with device is being used to avoid damage.

STEP 3

Connect an ethernet cable (RJ-45) from the LAN port on modem, switch, or router that is supplying internet connection, into the RED WAN port of the 90X1.
NOTE: This is a representation of a network switch. Models and appearance may vary depending on source of connectivity.

STEP4

Connect an ethernet cable from either of the two YELLOW LAN ports on the 90X1 to the equipment to receive an internet connection from the device.

NOTE: This step may be bypassed if no equipment requires a wired internet connection.

STEP 5

Connect the GREY RJ-11 (Phone Cord) from the phone or equipment requiring an analog POTS connection to the 90X1 device's FXS port(s).
WARNING: Do not connect an active RJ-11 with voltage directly from the wall into the 90X1's RJ-11 ports. This will damage the device permanently. Each 90X1 RJ-11 FXS port is an active port supplying voltage. The FXS port is only to be connected to an FXO analog phone or another FXO device.

STEP 5

Connect the four (4) supplied Cellular antennas to the device via the SMA connectors located on the sides and top of the device.

Place two on top and two on the sides as shown below for the highest quality SG IL TE signal.

STEP 6

Once all these steps have been completed, the device is ready to be configured/provisioned for service.

SERVICE TECHNICIAN INSTALLATION

OVERVIEW OF THE DATAREMOTE 90X1 DEVICE

The DataRemote 90X1 device is part of DataRemote's POTS IN A BOX (Plain Old Telephone Service) product line. It is an Analog Telephone Adapter (ATA) with battery backup that uses the Internet and the 5G / LTE Cellular Data Network to provide high levels of reliable connectivity. It directly replaces wire-line or POTS lines, including the capability for transmission of voice, FAX, alarm, analog data, ring-down and emergency lines with full access to E-911.

SCOPE OF WORK

The scope of work to be completed on-site includes the following:

- Locate existing devices (ie: Fire Panel(s), Call Boxes, FAXES, Voice lines).
- Using a cable toner, locate demarcation for existing POTS lines currently serving devices.
- Unpack, assemble then test the DataRemote 90X1 device unit in “Standalone” Mode with power cable connected.
- Mount the DataRemote device and test FXS 1-8 phone jacks (if applicable) by calling in/ out using a telephone test set or a simple single-line telephone and cell phone prior to connecting any device/ appliance.

SCOPE OF WORK

- Mount the biscuit jacks (RJ-11 Surface mount) close to the DataRemote 90X1 device to serve as the new incoming phone line service.
- Connect existing devices to newly installed RJ-11 biscuit jacks.
- Ensure no “Foreign Voltage” is present by measuring the voltage at the tip and ring terminals on the new biscuit jacks connected to the devices. Voltage should read: “zero” volts DC (direct current)

IMPORTANT! IF the foreign voltage is present, locate and disable it. IF no foreign voltage is present, proceed to next step

- Connect the Data Remote 90X1 device FXS 1-8 jacks (if applicable) to existing devices.
- If installing a Call Box or Voice Line, test by making inbound/ outbound calls.
- If installing a Call Box, also test “Gate / Door Entry” tone (DTMF / “Press 9”) and programming calls inbound to the device. Request client or call vendor technical support to facilitate programming test calls as needed.
- If installing a Fire Alarm Panel, test that fire alarm panel’s primary & secondary lines accordingly, calling out through the DataRemote 90X1 device. If RJ-31 style jack is used, verify that tip/ ring connections are on pins 4 & 5 of jack.
- If installing a FAX, test by sending/ receiving FAX using customer equipment.

MATERIALS LIST PROVIDED BY DATAREMOTE

Basic Package Contains (Refer to “What comes in the box” section)

- One (1) Data Remote 90X1 Device
- Four (4) Cellular Antennas (SMA-M Connectors)
- One (1) AC Power Adapter Output: 19V, 3.4A
- One (1) Gray Phone Cord (RJ-11)
- One (1) Red Ethernet Cord (RJ-45)
- One (1) Yellow Ethernet Cord (RJ-45)
- One (1) Set of Mounting Hardware/ One (1) Mounting Diagram

TOOLS LIST FOR TECH:

- Sufficient quantity of dual RJ-45 port surface mount boxes (aka biscuit jack)
- Sufficient quantity of RJ-11 or RJ-45 keystone plugs

- CATSE cable – minimum 150 feet
- Power strip (as a precaution in case there are not sufficient outlets in the room)
- Zip Ties / Velcro for wire management
- Extra RJ-11 cable and RJ-11 male adapters, in the event additional or longer runs are required.
- Flashlight
- Cat5e patch cables of varying lengths
- Cordless drill/ driver with bits to install mounting hardware to wallboard
- All termination tools and line/ tone testers
- All hand tools required to make Cat5 cable runs (glow-stick, wire tape, etc.)
- Butt Set (or analog test telephone if Butt Set doesn't have an RJ-11 plug/ jack interface)
- Label maker (to label biscuit jacks)
- Digital camera with 3.0 megapixels or higher photo resolution
- 6″ torpedo level
- Voltmeter
- **NOTE:** A photo of Cable Tester results will be required in deliverables
  IMPORTANT! TECHNICIAN MUST FOLLOW THIS MANUAL EXACTLY, AS EACH PHASE & STEP & ARE DESIGNED TO ENSURE PROPER MIGRATION. ANY DEVIATION MUST BE APPROVED BY YOUR RESPECTIVE EMPLOYER ONLY!!

Please review these steps before starting and ensure a printed copy of this guide and installation checklist are at the site to use as a reference during the installation.

PREP-INSTALLATION TASKS

On-site Arrival and Initial Equipment Testing:

1. Upon arrival, call respective Program Manager (PM) on the check-in line to confirm tech is on-site. Be prepared to supply the store number/ location ID, City and State listed on Work Order.
2. The Tech will ask for the Manager On Duty (MOD), and introduce themselves, stating the purpose of their visit as the installer for the Data Remote 90X1 device.
    - **a**. Please report any store access issue to your Project Manager immediately.
3. The DataRemote device was shipped to the site in advance of the tech dispatch; please obtain this package from the Manager.

a. Please open the package in front of MOD and inspect for a complete kit per the previous page's material list; especially if the package was already opened.

IMPORTANT! ANY DIRECTIVE FROM ON-SITE STORE PERSONNEL DEVIATING FROM THE NORM OR OUTSIDE THE SCOPE OF THIS GUIDE MUST BE RELA YEO TO THE PM IMMEDIATELY. (BOTTOM LINE, CONTACT PM FOR APPROVAL PRIOR TO ACCEPTING AND ACTING UPON ANY DIRECTION FROM STORE PERSONNEL ON-SITE).

PHASE 1

DATAREMOTE 90X1 DEVICE ASSEMBLY PRE-TEST+ FIRE PANEL LOCATION

1. Remove the 90X1 device and inspect the antenna accordingly:

- **a.** The antennas provided are for cellular connectivity only. This device is SG / L TE capable. Please ensure all four provided antennas are connected, for best possible reception. Please contact PM if incorrect antennas was received.
- **b.** Cellular Antennas – Male Center Pin Wi-Fi Antennas – Female Center Hole Cellular Antennas Male Center Pin Wi-Fi Antennas Female Center Hole

Cellular Antennas
Male Center Pin

Wi-Fi Antennas
Female Center Hole

Please contact your PM if incorrect antennas have been received.

c. The four (4) Cellular antennas connect to the SMA connectors, two on the top and two on the side of the device. All four must be connected to ensure the best cellular connection to this device.

- **2**. Plug the power cord into an AC power outlet. This will turn on the device if it has not already been connected to power at this moment. Ensure the AC Adapter is secured to prevent damage to the mo lex of the power plug.
- **3**. Once the DataRemote 90X1 device is positioned to achieve the best signal strength possible (high on the wall with atennas facing up), install the device mounting hardware in the selected location. Dress and secure the 90X1 ‘s AC adapter cable path neatly. Then secure device to wall with the included mounting hardware. If there are any questions with the devices placement, please contact Installation Support.
- **4**. If the device is not plugged into its permanent power outlet, move the power plug to its permanent AC power; verify correct LED lights are illuminated on the Data Remote 90X1 device.

WAN CONNECTIVITY VERIFICATION VIA LED LIGHT

- Verify WAN (Wired Broad Band) – WAN link light is on
- Verify all Cellular lights (Cell and Signal) are on and the signal strength bars are lit.
- 1-4, 4 being the strongest
- Verify Line Registration with FXS LEDs.
- Verify Power and Battery lights are on.

NOTE: ANY VARIATIONS FROM THE ABOVE, CONTACT THE INSTALLATION SUPPORT TEAM.

TESTING VOICE LINE

Phone FXS 1-8 indicators should be either solid green (On-Hook) or flashing green (Off-Hook I Busy). Call Installation Support if LED indicators for the FXS ports are not lit. Once the lights above have been verified, use a butt-set (or an analog test phone if your model butt-set doesn’t have an RJ-11 modular connection) to place a test call from the phone 1 jack to your cell phone, only if voice lines.

IMPORTANT: Call MUST be completed by answering it; otherwise, the device will not register the test call event in the server logs, which are used for install validation.

NOTE: If there are any issues other than a completed call and calling number identification I verification such as call not going through or any other condition, STOP and call Installation Support to report the issue and work to resolve before proceeding. Record the calling phone number in the checklist/or this site as phone 1’s (primary) new ATA number. Repeat steps 2 -5 accordingly by performing the steps again using the phone 2-8 line ports of the DataRemote 90X1 device, only if voice lines.

TESTING FIRE PANEL

1. Locate the Fire Alarm Panel. Have the Manager escort you to the room/ area where the active

Fire Panel is located. If not already visible, refer to your Installer Representative Manual for a sample picture of typical Fire Alarm Panels.

- The site’s active Fire Alarm Panel will have one or two POTS lines connected to it. These

POTS lines may be terminated near the panel in several ways, including:

a. Two (2) surface-mount jacks located just outside of the Fire Panel, generally RJ-31 style
b. Located in a 4×4 electrical box just off to the side of the fire panel.

c. Jacks may be located inside the Fire Alarm Panel on Motherboard and/ or a dialer module.

IMPORTANT: DO NOT TOUCH these existing surface mount jacks or their cabling at &this time! Take a “BEFORE” picture of the panel and any status indicators I displayed messages appearing to represent the condition of the panel upon arrival!

WARNING: 00 NOT DISCONNECT ANY EXISTING PHONE LINES UNTIL INSTRUCTED TO DO SO LATER IN THIS DOCUMENT. DOING SO EARLIER MAY RISK A POSSIBLE DISPATCH FROM THE RESPECTIVE ALARM COMPANY.

PHASE 2

Installation Tasks – Locate Existing POTS Lines file

WARNING! DO NOT TOUCH THE EXISTING RJ-31 POT JACKS NEAR THE FIRE PANEL UNLESS INSTRUCTED TO DO SO!

Once the Fire Panel is located, connect the DataRemote 90X1 device’s phone 1-8 ports respectively with the Fire Alarm Panel’s primary & secondary phone line ports, preferably utilizing the existing cabling by preparing to disconnect the terminating end from the

POTS line jack and connecting to the appropriate DataRemote FXS port.

As stated earlier in STEP 1 when trying to find the Fire Alarm Panel, note cabling is typically terminated near the Fire Panel via some method before running inside the panel to connect to it. A common method uses two (2) surface mount jacks, but other methods may be used as well.

ID the termination points of the two (2) POTS lines serving the Fire Alarm Panel at the Telco Closet/ Demarc. To do so, try one or more of the following:

- Look for the two (2) telephone numbers (TN), if identified and labeled at the Fire Panel. Record them in your installation checklist. Then look for labels with those TN’s at the Telco Room I Demarc.
- Be sure to also note which TN may be labelled primary or secondary.
- Tone-trace the existing cabling:
- Temporarily unplug the cable from the Fire Alarm Panel leading into one of the RJ-31 x surface mount jacks.
- Plug the tone generator into the surface mount jack to tone out the cabling back towards the Demarc to discover its location. Repeat for other RJ-31 x jack/ cable too if needed.
- Restore connection to RJ-31 jack(s) if removed to conduct tone-test.

PHASE 3

Cut-over Fire Alarm Panel lines to new 90X1 device

WARNING! ONLY PROCEED IF STEPS 1 AND 2 ARE COMPLETE AND ARE FREE OF OPEN ISSUES.

Once those POTS Line terminations are found in the Telco Closet Demarc/ SIN, their cable runs to the Fire Alarm Panel need to be isolated from their telco POTS lines and redirected to the DataRemote 90X1 device’s phone ports using included 5 foot long phone cords. The method of termination of those lines coming back from the Fire Alarm Panel will dictate the next steps taken to cut them over to the Data Remote 90X1 device.

1. If the cable runs coming from the Fire Panel terminate in the Telco closet demarc / SIN to an RJ-11 or RJ-45 patch-panel or surface-mount (SMT) jack:

a. Determine which jack is associated with the primary or secondary line from Fire Alarm Panel and mark them respectively with new device's telephone numbers as noted in your checklist during STEP 1 tasks for 90X1 's phone 1-8 ports respectively.
b. Remove what is plugged in the Primary marked jack now. Plug one end of the included phone cord into that jack and the other end into the Phone jack of the Data Remote 90X1 device respective line for Fire Alarm – Primary Dialer connection.

NOTE: Mark this phone 1 port's phone cord with a "1" or "P" to reflect it connects to the 90X1 device's primary phone alarm port.

c. Repeat with other included phone cord for the secondary marked jack into the phone 2 jack of the DataRemote 90X1 device for Fire Alarm – secondary dialer connection.

NOTE: Leave the second phone line unmarked or place a "2" or an "S" on its phone cord.

d. If cable runs coming from the Fire Panel terminate in the Telco closet demarc / SIN to a 66 or 110 block, check the following:

- Determine which jack is associated with the Primary or Secondary line of Fire Panel and mark them according if not already apparent/ visible.
- Isolate the Telco-side connection from those two (2) pairs (i.e. lift bridging clips on

66-block) Punch down the two pairs of the new cable run to a dual SMT jack or two (2) Single-port SMT jacks (a.k.a. biscuit jacks).

- Determine and mark/ label each SMT jack cover with its new device telephone number plus some primary or secondary suffix – i.e:

678.555.1234 678.555.2468 FIRE PNL-Prim FIRE PNL-Sec

- **2**. Mount the SMT Jack(s) somewhat near to the DataRemote 90X1 device depending on 5 feet long phone cord's reach and distance between 66-Blk & SMT box(es)
- **3**. Using your cable tester, test both SMT jack terminations and take a PHOTO of test results to add to deliverables (REQUIRED).
- **4**. Using included phone cords with RJ-11 terminations, connect FXS alarm ports from 90X1 device to the "FIRE-Primary & FIRE-Secondary" SMT box respectively
- **5.** Mark Cables**:**
    - Mark the DataRemote 90X1 device alarm line 1 port's phone cord with a "1" or "P" to reflect it connects to the Data Remote 90X1 device's alarm line 1 port.
    - Mark the Data Remote 90X1 device's alarm 2 port's phone cord with a "2" or "S" to reflect it connects to the DataRemote 90X1 device's alarm line 2 port.

PHASE 4

Testing Fire Alarm communication over DataRemote's 90X1 device

The DataRemote 90X1 device will be set in auto alarm mode. It will detect what type of supported protocol the panel communicates in, Contact-ID, SIA, Pulse … Etc.

NOTE: Do not plug in a butt set to the 90X1 device and make a test call on any of the alarm lines as this will deactivate the auto-detect mode. The first alarm call will fail during the auto-detect sequence. This is normal. If calls continue to fail, contact Installation Support.

From the cut-over steps above, the Fire Alarm Panel may have already communicated it is a Telco trouble fault condition and restoration to the alarm vendor, but it needs to be tested again.

1. Determine if the Fire Alarm Panel has a current "trouble condition". It could be a controller display, message or LED Indicator. Note or take a picture if so. Then, go back to the Data Remote 90X1 device.
2. Invoke a Fire Alarm Panel "trouble condition" by removing all phone cords from alarm line 1-8 jacks respectively of the Data Remote 90X1 device unit and leave disconnected for at least 3 minutes. If time permits, walk back to Fire Alarm Panel to wait for it to go into trouble condition as may be indicated in the Controller Display and/ or via certain LED indicators being lit on the motherboard.

NOTE: If this phone line disconnect method doesn't invoke a "trouble condition" in Fire Alarm Panel to be reported from the panel, please contact Install Support Team as you may have to temporarily disconnect backup batteries or power-cycle the panel to force an event required to be communicated to monitoring vendor.

Testing Fire Alarm communication over DataRemote's 90X1 device

- **3**. Test the Fire Alarm Panel trouble resolution process.

IMPORTANT: DO STEPS IN THIS ORDER ONLY, DO NOT CHANGE THE ORDER.

Secondary Line Testing:

ONLY plug the phone cord back into the secondary alarm line of the Data Remote 90X1 device.
Wait for the Phone 2 green LED on the DataRemote 90X1 device to start flashing. Once the flashing phone 2 LED goes back to solid green, the system attempts the call to report the trouble event to the alarm vendor.

Primary Line Testing:

Once the secondary test call is successful, leave the phone 2 port's cord plugged in, and now plug the remaining phone cord into the primary Alarm Line 1 port of the Data Remote 90X1 device.
Wait for the Phone 1 green LED on the DataRemote 90X1 device to start flashing green. Once the flashing Phone 1 LED goes back to solid green, the system attempts the call to report the trouble event to the Alarm Vendor.

- **4**. Fire Alarm Panel confirmation:
- **a**. Walk back to the Fire Alarm Panel to verify that the panel cleared the trouble condition.
- **b.** If both test calls above are completed successfully and the trouble condition cleared, then proceed to call Alarm Vendor next.
- **c**. If testing was unsuccessful on either line, then:
- Verify the DataRemote 90X1 device phone ports are still providing dial-tone and allowing outbound calls to be

made. If not working, then contact Install Support.

- Verify cabling connections to/ from Fire Alarm Panel / Data Remote 90X1 device.
- Call Install Support Team to assist in troubleshooting.
- **5**. Call Fire Alarm Vendor to confirm they show the “trouble condition” report and that it has been cleared:
    - Record the new telephone number from the Data Remote 90X1 in your checklist to provide to the Alarm Vendor for monitoring and future programming.
    - Confirm the Fire Alarm Vendor is receiving the alarm call from the Data Remote 90X1 device phone
- **1-8** (respectively) telephone numbers recorded in your checklist against the respective primary & secondary line trouble calls they received/ logged in their monitoring system.
- **6**. Call Install Verification line to confirm communication through the DataRemote 90X1 device was successful.
- **7**. Clean up area, dress any cables needed, and take photos of installation as required in below deliverables section.
- **8**. Confirm the phone 1-8 LEDs (respectively) are all solid green (if blinking, it may be making a call so just wait for it to go solid again). Lights should be as below; capture picture of their status.

(REQUIRED, SEE AN EXAMPLE BELOW):

PHASE 5
Testing FAX Lines

FAX Mode Details:

- FAX Works in VOiP and FAX modes on the Data Remote 90X1 device.
- FAX calls in VOiP mode cannot be assured of full transmission and or quality.
- FAX in FAX mode works in Basic (9600 Baud), Normal (14400 Baud) with ECM (Error Correction Mode) ON & OFF depending on the customers fax machine.
    - **NOTE**: The printing duration per page can range from 25 seconds to 1 minute, contingent upon factors such as the BAUD rate, line quality, and ECM status.

Here is a breakdown of the average time it takes for a single page FAX to transmit based on the Baud Rate of the sending and receiving FAX lines.

Please keep in mind that these are average times of FAX transmission speeds.

BAUD RATE	INBOUND MINUTES PER PAGE	OUTBOUND MINUTES PER PAGE
2400	2 Minutes 30 seconds	2 Minutes 50 seconds
4800	1 Minute 45 seconds	1 Minute 50 seconds
7200	1 Minute 15 seconds	1 Minute 15 seconds
9600	1 Minute	1 Minute
12000	55 Seconds	55 Seconds
14400	45 Seconds	45 Seconds
28800	35 Seconds	35 Seconds
33600	25 Seconds	25 Seconds

FAX Testing:

1. Connect the respective FXS line that is provisioned for fax to the “Line” port of the customer FAX machine.
2. Make a test outbound FAX call to a number provided by your Project Manager.
3. Contact the Project Manager to return the FAX for inbound FAX testing.
4. Repeat test (Steps 1-3) on both WAN and L TE.

NOTE: If at any point FAX is not working, please contact the Installation Support Team.

PHASE 6

Testing Analog Data Lines

1. Connect the respective FXS line that is provisioned for analog data with the RJ-11 cable to the modem device.
2. Initiate an outbound data call to the receiving station/monitoring company. If you do not have a number, please contact your Program Manager or the site MOD.
3. Request the receiving station I monitoring company call the modem device for a programming call. If you do not have an external station/company number, please contact the site MOD.
4. Repeat test (STEPS 1- 3) on both WAN and LTE.
    - **NOTE**: If at any point the modem is not working, please contact the Support Team.

Post-Installation Tasks.

- Present installation checklist to MOD to sign.
- Call the Tech Check-in/ Check-Out line to be released from the site.
- Upload all taken & required pictures to your Work Order.

Advanced Programming Information.

- For advanced programming information, please go to **Support.Dataremote.com**. The support desk site for submitting Tier 3 trouble tickets.
- Please set up an account by requesting access to “Advanced Programming Information Guides” and entering

your email contact details.

- An email will be sent asking you to log in and set up an account.
- Then, a second email will be sent with a link to the login to your support desk.
- The support desk contains documentation for advanced programming of the 90X1 as well as a means to submit and check on support request tickets.

Deliverables

1. Signed Work Order.
2. Signed Tech Installation Checklist.
3. Required photos.
4. View of the Data Remote 90X1 device with Battery and Power LED “On”.
5. View of Signal LED of the Data Remote 90X1 device for signal strength indication.
6. Wide-angle view of the room where Fire Alarm Panel resides.
7. View of Fire Alarm Panel outside cover.
8. View of Fire Alarm Panel status upon arrival – Controller display / any fault LED’s.
9. Inside door view of Fire Alarm Panel – any labels or block diagrams.
10. View of the inside of Fire Alarm Panel – Motherboard.
11. View of old POTS lines surface mount jacks at Fire Alarm Panel.
12. View of old POTS lines terminations at telco closet I demarc / SNI.
13. View of cable test results of newly installed SMT boxes (as applicable).
14. View of SMT boxes labelled with new Telephone numbers & Prim/ Sec Suffixes.
15. View of marked phone cords plugged into the DataRemote 90X1 device 1-8 ports.
16. View of Fire Panel’s controller display before cut-over to the DataRemote 90X1 device Ports.
17. Photo of all cable management.
18. Wide views of the entire wall and the Data Remote 90X1 device closeup to show the completed installation job.
19. Picture/ scan of both pages of the Tech Checklist.
20. Picture/ scan of signed Work Order.

NON-Alarm Installation Tasks:
For all other Device installations follow same steps excluding RJ-31 biscuit connections and monitoring company communications.

Regulatory & Safety Certifications

Carrier Certifications

Industry Standards

Statements and Disclaimers

DataRemote Incorporated declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, many cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/IV technician for help

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices) FCC Radiation Exposure Statement.
This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This End equipment should be installed and operated with a minimum distance 20 cm between the radiator and your body.

CALIFORNIA PROPOSITION 6S WARNING

This product can expose you to chemicals including Carbon black and Nickel, which are known to the State of California to cause cancer, and including Bisphenol A and 1,3-Butadiene, which are known to the State of California to cause birth defects and/or other reproductive harm. For more information please visit **www.P65Warnings.ca.gov**

E911 Disclaimer

PLEASE READ THE FOLLOWING IMPORTANT 911 INFORMATION

The POTS IN A BOX® and related Services rely on an Internet-based IP network and adequate power or battery to function. This Section provides important information for Customers about emergency calling, including 911 /E911 services in the U.S. for this Service. In compliance with the Federal Communications Commission (FCC) WC Docket No. 05-196, DataRemote, Inc. hereby advises all current and potential customers that enhanced E911 /911 calling services are available at this time but may not be available in all service areas and may/or may not function the same as traditional 911 Services.

YOU ACKNOWLEDGE THAT DATAREMOTE DOES NOT OFFER ALTERNATE PRIMARY LINE OR LIFELINE SERVICES. IT IS STRONGLY RECOMMENDED THAT YOU ALWAYS HAVE AN ALTERNATIVE MEANS OF ACCESSING TRADITIONAL 911 OR EMERGENCY DIALING SERVICES.

In some instances, 911 service may not be available when using an Interconnected VoIP service or may be limited in comparison with traditional 911 telephone or commercial mobile radio service (“CMRS”) service.

These instances include, but are not limited to:

- 9-1-1 is dialled from a location other than the Registered Location last provided;
- The broadband connection (wired, wireless and/or Wi-Fi) is unavailable, or has been disrupted or impaired;
- The data service upon which the broadband connection is dependent is terminated or is disrupted or impaired;
- Loss of electrical or battery power;
- Network Congestion/outages;
- Customer or User terminal equipment is not configured correctly;
- Applicable equipment set-up instructions are not properly followed;
- Delays have occurred in processing a newly updated registered location;
- The customer has not provisioned and connected PSTN service for one or more locations;
- The customer has not updated DataRemote or the Service provider of the change of Registered Location;
- Payment of your subscription service.

Accordingly, Customer should always have an alternate means of accessing traditional 911 services, or other applicable emergency calling services, and such alternative means should include the ability to access 911 services, or other applicable emergency services, through the Public Switched Telephone Network where available. Failure to update Registered Location information may result in emergency calls being routed to the incorrect Public Service Answering Point (PSAP), preventing or delaying emergency response. If Customer

changes the phone number used for 911 calling, the Customer must register the new E911 CUD number and its associated address with DataRemote, in order to enable 911 capabilities for the updated number. Failure to do so may result in 911 services not being available to Customer when using an unregistered phone number

If you use a Private Branch Exchange (PBX) telephone system, the 9-1-1 dispatcher may see only your corporate or billing address, not the location information of the emergency. Customer should inform all Users of the Service of these limitations (including but not limited to, and of available alternate means of accessing 911 /E911, or other emergency calling services. If you are unable to speak during a 911 call, the emergency operator will assume that the call originates from your last registered address.If your account is suspended or terminated, all services, including E911, will cease to function. No E911 address accuracy guarantees are made during a Proof of Concept or demonstration of the product and you agree to hold harmless DataRemote for any claims made as to the provision of the E911 services. DATAREMOTE SPECIFICALLY DISCLAIMERS ALL LIABILITY RELATED TO THE E911 SERVICE. We recommend that you leave this notice near your phone or device.

YOU HAVE READ AND UNDERSTAND THE LIMITATIONS ASSOCIATED WITH THE 911 SERVICES DESCRIBED ABOVE. YOUR USE OF THE DEVICE AND SERVICES SHALL BE DEEMED AS UNDERSTANDING AND ACKNOWLEDGMENT OF THE ABOVE DISCLAIMER.

CAUTION

The battery used in this device may present a risk of fire or chemical burn if mistreated. Replace the battery with only a DataRemote-manufactured or approved battery. Use of another battery is prohibited and may present a risk of fire or explosion and void any battery or device warranties. Dispose of used battery promptly and in a manner authorized by your jurisdiction.

Do not disassemble, crush and do not dispose of it in fire. Keep away from children.

WHAT CAN THE NEW DEVICE DO?

Virtually every application that requires a copper hard-line can now be replaced with one device!

Documents / Resources

	DataREMOTE 90X1 Moving Data Over Wireless Router [pdf] User Guide 90X1 Moving Data Over Wireless Router, 90X1, Moving Data Over Wireless Router, Data Over Wireless Router, Over Wireless Router, Wireless Router, Router

References

- **User Manual**