



## *Installation and Operation Manual*



### **STA-III/WX** *Smart Telephone Autocoupler III Weather Eye Version*

Firmware Version 1.09WX or greater

Manual Revised 07/12/2011

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## INTRODUCTION

Thank you for your purchase of a Broadcast Tools® Smart Telephone Autocoupler-III WX (referred to as the STA-III/WX throughout this manual). We're confident that this product will give you many years of dependable service.

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## WHO TO CONTACT FOR HELP

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If you would like more information about Broadcast Tools® products, you may reach us at:

### Broadcast Tools, Inc.

131 State Street  
Sedro-Woolley, WA 98284 USA  
Voice: 360 . 854 . 9559  
Fax: 866 . 783 . 1742

Internet Home Page: [www.broadcasttools.com](http://www.broadcasttools.com)  
E-mail: [support@broadcasttools.com](mailto:support@broadcasttools.com)

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## NOTE:

This manual should be read thoroughly before installation and operation.

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## INTRODUCTION

### Programming

With the STA III WX “Weather-Eye” version 1.09 of the firmware, no programming is required for normal Weather-Eye operation. The Weather-Eye has a five minute time-out; new firmware version 1.09 WX of the STA III WX “Weather-Eye” provides a special “No Hang Up” code. To set up an STA III WX for the “No Hang Up” feature with a code of 123 (123 is the default, any number up to 14 digits long may be used) and the number of rings set to one (1 to 9 rings), press the PGM button, enter 1 + 123, then press the PGM button again.

**NOTE: To verify firmware version numbers enter 98\*. This command may not work on older versions of firmware.**

### Rear panel connector descriptions

Line RJ-11 - Used to connect to a loop start POTS telephone line.

Loop RJ-11 - Used to loop-thru other telephone equipment. This jack is disconnected from the telephone line when the STA III WX is off-hook.

A-INA / A-INB - Balanced input to the (Send) telephone line.

A-GND Analog ground - Tied to PCB circuit ground.

A-OUT/A-OUT - Balanced output (Caller) from the telephone line.

DROP input - TTL compatible input pulled up to 5vdc. Momentary contact closure to D-GND will drop an off hook connection.

SEIZE input - TTL compatible input pulled up to 5vdc. Momentary contact closure to D-GND will seize the telephone line.

D-GND - Digital ground. Tied to PCB circuit ground.

RING - Open Collector output. Must be pulled up in some applications. Goes to ground on each ring occurrence. Limit load to 12 vdc @ 100ma.

CE-A/CE-B, Call End relay (K2) - Dry normally open relay contacts close for 1 second at the end of a call.

AUX-A/AUX-B, AUXiliary relay (K3) - Dry normally open relay contacts.

HK-A/HK-B, HooK Relay (K4) - Dry normally open relay contacts close when a valid access code is accepted or the SEIZE function is initiated.

PGM-A/PGM-B, PGM Relay (K5) - Dry normally open relay contacts

BUSY input - TTL compatible input pulled up to 5vdc. Sustained contact closure to D-GND will BUSY out the phone line.

PWR /12 VAC2.1mm Coax type power connector - Only use a 12VAC supply rated at >500 ma.

## Front Panel description

DROP Switch	Used to drop an active call/connection
SEIZE Switch	Used to force the STA III WX Off-Hook.
LED Indicators	Hook: Illuminates when connected to a telephone line (Off-Hook). Tone: Lights when a valid DTMF is detected. Ring Illuminates on each ring occurrence. Pgm: Lights when in program mode.
Pgm Switch	Program switch, recessed switch used to put the STA III WX in program mode.
Receive Lvl	This control adjusts the audio level from the caller.
Send Lvl	This control adjusts the send level to the telephone line.
Pgm Phone Jack	Attach a touch-tone (DTMF) telephone for programming purposes. Talk-battery is provided.
Pwr Led	Illuminates when power is applied.

## Installation

Follow the steps below:

Step 1 Connect your air monitor to the balanced (SEND) input labeled “A-INA / A-INB”.

Adjust the front panel trimmer for a good level and check for proper DTMF detection operation. Note: If the send level is too high, the unit may have trouble detecting the DTMF tones.

Step 2 Connect the balanced (CALLER) output of the STA III WX to your equipment. The output terminals are labeled “A-OUT / A-OUT”. The level may be adjusted on the front panel. This control is labeled “Receive Lvl”.

Step 3 Connect a POTS telephone line to the “Line” RJ11.

Step 4 Connect the supplied wall transformer to power and the STA III WX



### NOTE:

*To verify firmware version numbers enter 98\*. This command may not work on older versions of firmware.*

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## Operation Special Weather Eye Firmware

When the STA III WX is called, it will answer after the first ring. The STA III WX then goes off hook and presents the stations program audio.

3691 – Enables the Meteorologist to “hear” the radio station programming (Turns the “CALLER” (receive) audio OFF, turns ON the “SEND” audio (from stations air monitor) to the phone line and OPENS the “AUX” relay.

3690 – Enables the phone audio to “override” the automation system or out-board switcher and allows the Severe Weather report to pass (via phone) (turns the “SEND” audio OFF, the “CALLER” (receive) audio ON and CLOSES the “AUX” relay) Note: Switches on falling edge of the last tone, to eliminate the last tone from airing.

# – Disengages the telephone audio and puts back the radio station automation to air. (Turn “CALLER” (receive) audio OFF, turns ON the “SEND” audio (from station air monitor) and OPENS the “AUX” relay. The STA III WX will automatically hang up 10 seconds later. NOTE: The 10 second delay allows the caller to verify that the station is on-air). Note: Using the # key to terminate the 3690 command cleans up the air presentation.

The “ \* “ button should be used as a reset in case of errors in punching in codes by Meteorologists....



### NOTE:

*To set up an STA III WX for the “No Hang Up” feature with a code of 123 and the number of rings (1 to 9 rings) set to one, press the PGM button, enter 1 + 123 (123 is the default, any number up to 14 digits long may be used), then press the PGM button again. When the STA III WX is called, it will pick-up on the first ring and then you may remotely enable the “No Hang Up” feature by entering the code 123. The STA III WX will beep to acknowledge, and the “No Hang Up” will be enabled until the call is disconnected.*

*In order to hang up, the STA III WX must be connected to a POTS line and receive the CPC signal or on the other side of a PBX that generates a CPC and/or long dial tone signals. Otherwise, it will never hang up since the auto hang-up is there in case CPC signals are not received for hang up. The STA III WX will automatically reset five minutes after going off-hook. This is a fail-safe feature.*



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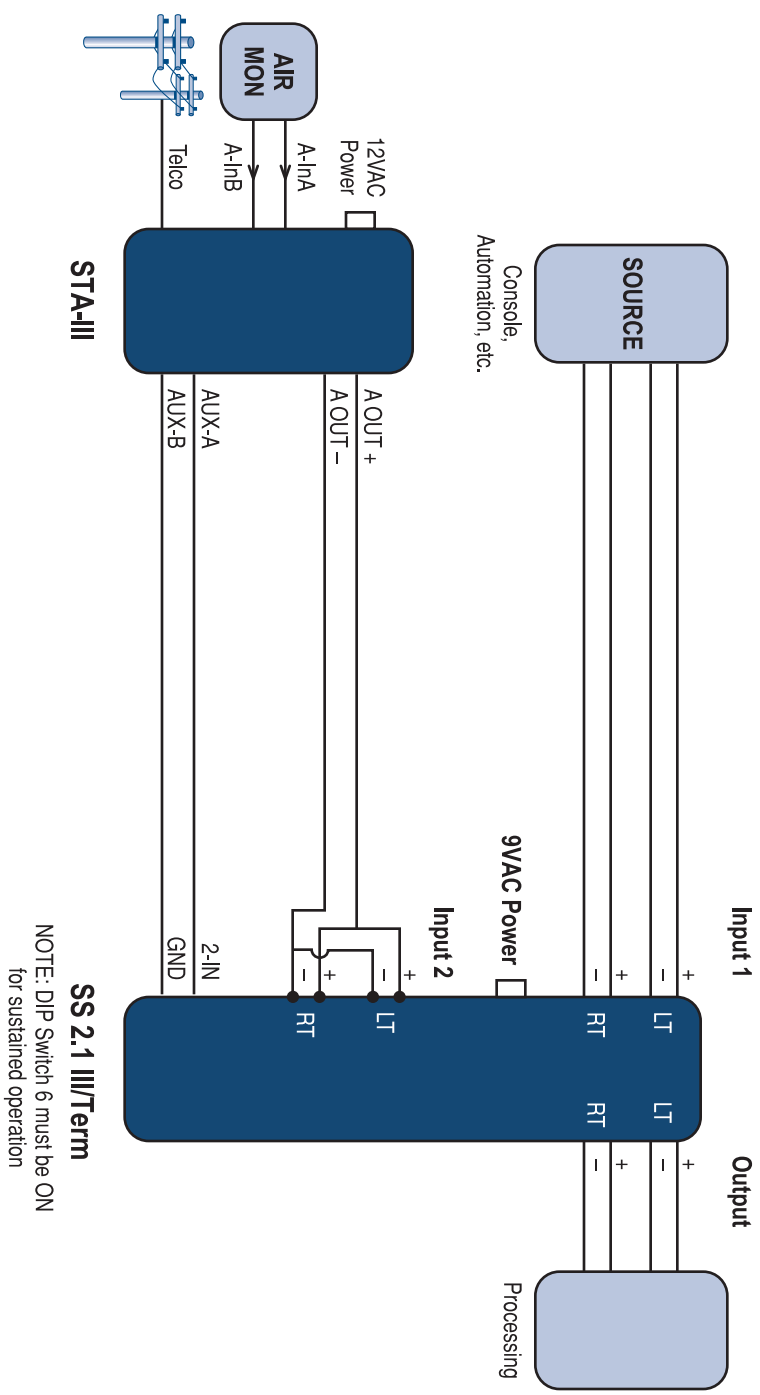
### **Broadcast Tools, Inc.**

131 State Street  
Sedro-Woolley, WA 98284 • USA

360.854.9559 **voice** • 866.783.1742 **fax**  
support@broadcasttools.com **e-mail**  
www.broadcasttools.com **website**

# Broadcast Tools® STA-III & SS2.1 III/Term

## Installation Application



131 State Street, Sedro-Woolley, WA 98284 • 360.854.9559 • Fax 360.854.9479

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