

SPORTS POD[™]

MIC/HEADPHONE CONTROL + INTERCOM SYSTEM

HENRY ENGINEERING

PO Box 3796

Seal Beach, CA 90740

Tel: 562.493.3589

www.henryeng.com

DESCRIPTION

The Sports Pod is an announcer's mic/headphone controller and intercom system for use by talent at a remote broadcast. It is ideal for use at sporting events or in any studio that requires on/off control of a mic, headphone audio mixing, and duplex communication between talent and an off-site producer, engineer, or "remote truck".

The Sports Pod provides the announcer a convenient way to turn his mic on and off or mute it if he needs to cough. The mic on/off function can also be remotely controlled. Sports Pod also allows the announcer to control headphone volume, and create a mix of remote-site "Local" audio and the "Return" audio that is sent to the site from the main studio. The Talkback system functions as a duplex intercom, so that talent can communicate, off-air, with a producer. For broadcasts with multiple announcers, several Sports Pods can be used so that each announcer can control his own mic, headphone audio, and intercom. Sports Pods can be used "stand-alone" or with a Henry Engineering MultiPhones II Master unit or SixMix USB console. They can be "mixed-and-matched" with Talent Pods, Guest Pods, and MiniPods. Several Sports Pods can be powered with a single wall transformer. (If used with a MultiPhones Master unit or SixMix USB Console, the transformer is not required.)

IMPORTANT NOTE: In this manual, **LOCAL** refers to the "program" audio mix from the remote-site mixer; **RETURN** is the "IFB" or "Cue" audio sent back to the remote site *from* the main studio.

USER PROGRAMMING

Before the Sports Pod is installed, it should be configured for its intended use. See the component layout, and set the jumpers as necessary. **NOTE: Factory default settings are indicated with an asterisk*.**

Mic output level (L*): Set **both** JP1 jumpers to either L or M to select either "line" or "mic" output level.

Talkback output level (L*): Set **both** JP2 jumpers to either L or M to select either "line" or "mic" output level.

Local audio linking (ON*): Set **both** JP3 jumpers ON to link Local headphone audio to/from other units via cat5.

If JP3 is set OFF, Local audio must come from 1/4" Local input jack, and will not be linked to/from other units.

Return audio linking (ON*): Set **both** JP4 jumpers ON to link Return headphone audio to/from other units via cat5.

If JP4 is set OFF, Return audio must come from 1/4" Return input jack, and will not be linked to/from other units.

Mono/Stereo mode (M*): Set **both** JP5 jumpers to M if headphone audio is "dual-monaural": mono Local and mono Return (typical for use at remote and sports broadcasts). Set JP5 jumpers to S if the Sports Pod is used in a studio, where there the local audio is stereo and there is no Return audio.

TB Bus (OFF*): Set JP7 OFF for most applications. Set ON to feed Talkback audio to cat5 link cable.

INSTALLATION

Microphone: Connect any professional microphone to the MIC IN jack on the back of the unit. (Powered condenser mics may be used, though the Sports Pod does not provide phantom power.) Connect another cable from the MIC OUT jack to the input of the mic mixer being used.

Headphone audio inputs: Most remote broadcasts require the talent to hear a mix of the remote-site Local audio and the Return audio that is sent *back* to the remote site from the main studio. The Sports Pod has inputs for each. Connect Local audio to the LOC input jack, and connect Return audio to the RTN jack. Both inputs are balanced. For multi-unit installations (with cat5 linking), feed Local and Return audio to the first unit only.

For studio installations with stereo audio, connect the left channel to LOC and the right channel to RTN.

Headphone output: Plug the headphones into the PHONES jack. (Do not use older "8 ohm" headphones.)

Talkback output: Connect to the input of whatever device will be used to monitor talkback audio. This output is transformer-isolated, and is suitable for very long cable runs. If multiple Sports Pods are used in a system, an external mixer (a Henry Engineering MicroMixer or StereoMixer) can be used to combine the Talkback outputs of all units. OR, if the TB Bus jumpers (JP7) are set ON, Talkback audio will be mixed via the cat5 link, and a common Talkback output can be taken from pin 5 of the cat5 connector on any unit.

Mic Remote Control: Connect a momentary push button and "mic-on" tally LED to this jack. See diagram on page 3.

Power: For "stand-alone" use, connect a Henry Engineering power supply to the 12 VAC power input jack. If using multiple Sports Pods, only one transformer is needed. All units linked with cat5 cables will be powered via the cat5 cabling. (If using a MultiPhones Master unit or a SixMix console, no transformer is needed. The Sports Pod(s) will be powered via cat5 cabling to these units.)

Linking multiple units: For broadcasts with multiple announcers, use a separate Sports Pod for each. Connect Local and Return audio to the first Sports Pod, then "daisy chain" the 2nd, 3rd, (etc) units using cat5 cables via the LINK I/O jacks. The cat5 cables will distribute Power, Local, and Return audio to all units in the system, with each announcer having independent control of his headphone audio mix and volume.

USING A MULTIPHONES II MASTER UNIT FOR TALKBACK/INTERCOM

Sports Pods can be used with a MultiPhones II Master unit to add multi-unit Talkback to the system. In this configuration, talkback audio (e.g., from a Producer to talent) will temporarily override the 'normal' headphone audio heard by Sports Pod users. Since the MultiPhones II Master unit has 3 isolated outputs (with a Talkback button for each), up to 3 Sports Pods can be individually called. Connect the Local and Return headphone audio sources to the Left (Local) and Right (Return) inputs of the MultiPhones Master unit, then use cat5 cables to connect to the Sports Pods. For individual Talkback, use a separate cat5 cable to each Sports Pod. If common Talkback is acceptable, connect the first Sports Pod to the Master unit, then daisy-chain additional units as needed. The MultiPhones Master unit will provide power and audio to all units.

USING SPORTS PODS WITH A SIXMIX USB CONSOLE

Connect the first Sports Pod to the "Guest Pod" jack on the back of the SixMix console. Additional Sports Pods can be daisy-chained as needed. The Talkback function of the SixMix will "talk to" all Sports Pods. The SixMix console will provide power and stereo Monitor audio to all units.

MIC GAIN

The gain of the internal mic preamp should be set so that the output level at the MIC OUT jack is about 0 dBu (if JP1 is set for line level) or about -50 dBu (if JP1 is set for mic level).

LOC: EXT/MIC BUTTON

This button selects what is sent to the LOCAL headphone volume control. OUT is for "normal" operation: Local audio will be sent to the LOCAL volume control. If this button is IN, mic audio sent to the LOCAL volume control. This would normally be used only if no other Local audio source was available.

OPERATION

Operation of the Sports Pod is simple and straightforward. The mic is turned on and off by *momentarily* pushing the MIC ON pushbutton. The MIC ON button will illuminate when the mic is on. (The mic in/off function can also be controlled via a remote button.) Pushing the COUGH button momentarily mutes the mic. Pushing the TALKBACK button will mute the mic from the Mic Out (to air) output, and send mic audio to the Talkback output. Note that the TALKBACK function will operate whether the mic is on or off.

Plug headphones into the Sports Pod using via the PHONES jack.

Adjust the volume of the remote-site Local audio using the LOCAL volume control. The PAN switch below the volume knob will position this audio in the left, center, or right channel of the headphones.

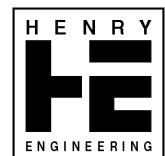
If Return audio is being sent to the remote site from the main studio, its volume is adjusted using the RETURN volume control. The PAN switch below the volume knob will position Return audio in left, center, or right channel of the headphones.

If the unit is set for Stereo operation (JP5 jumpers set to S), Local audio will be stereo (no Return audio). The volume is controlled with the LOCAL volume control. The RETURN volume control and PAN switches are disabled.

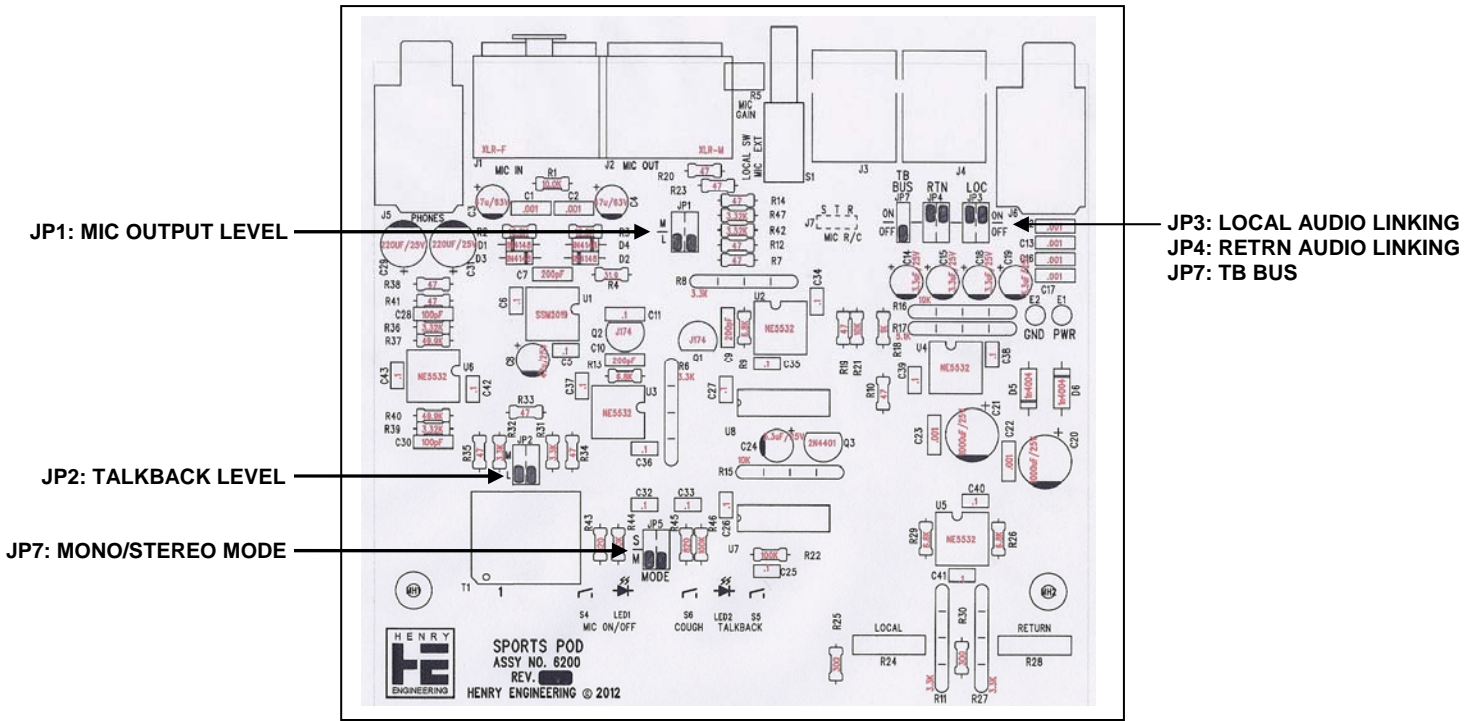
If the LOC EXT/MIC button is IN, audio from the mic (only) will be fed to the LOCAL volume control. This setting would be used if there is no other source of Local audio.

TECHNICAL SPECIFICATIONS

Mic Input	Any Lo-Z balanced microphone, female XLR
Mic Output	0 dBu (line) or -50 dBu (mic), balanced, male XLR
Mic Pre gain	Adjustable via rear panel Gain trim
Mic Remote	SPST momentary closure turns mic on/off, 3.5mm TRS
Mic Tally	20ma source for Mic-on tally LED, via Mic Remote jack
Talkback Output	0 dBu (line) or -50 dBu (mic), transformer balanced, ¼" TRS
Headphone Output	>24 ohms, ¼" TRS Do not use older "8 ohm" headphones.
LOC, RTN Inputs	-10 dBu to +4 dBu, 20K bal or 10K unbal, ¼" TRS
Link I/O	Links multiple units with cat5 cable, distributes Power, Local and Return audio to all units
LOC button	Selects LOCAL input: Local audio or Mic as Local source
Power	12VAC, 60ma per unit, provided by wall transformer or MultiPhones Master unit or SixMix USB audio console.

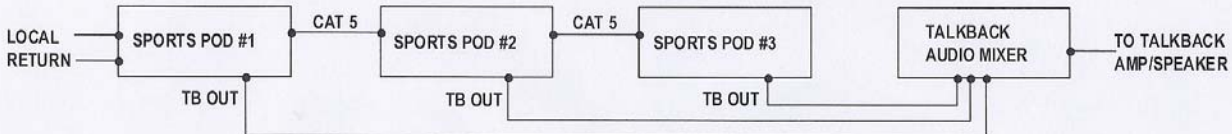


Refer to the drawing below to set programming jumpers. Jumpers are shown in factory default settings.

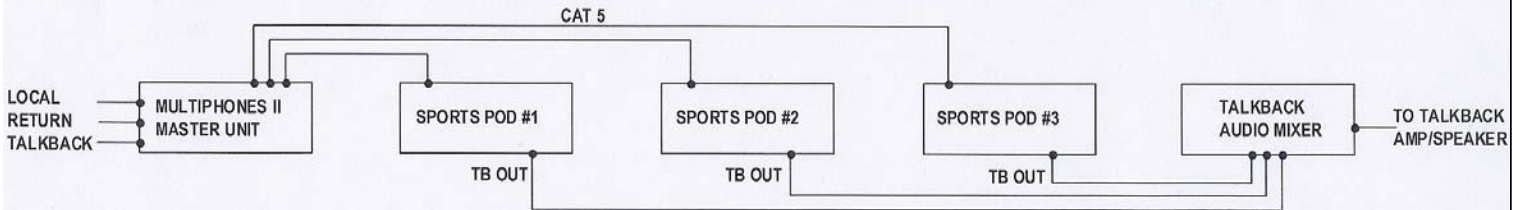


TYPICAL INSTALLATIONS illustrating "one-way" and duplex Talkback

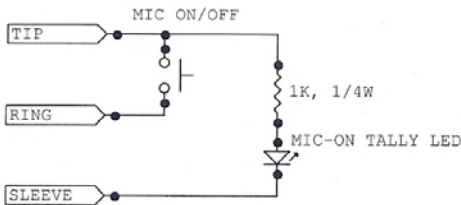
Installation showing "one-way" Talkback, from Sports Pods to Producer. Local & Return audio fed to first Sports Pod; 2nd and 3rd units are daisy-chained via cat5. Talkback output of each SP is mixed, fed to Talkback amp or speaker. (Mic in/out wiring not shown.)

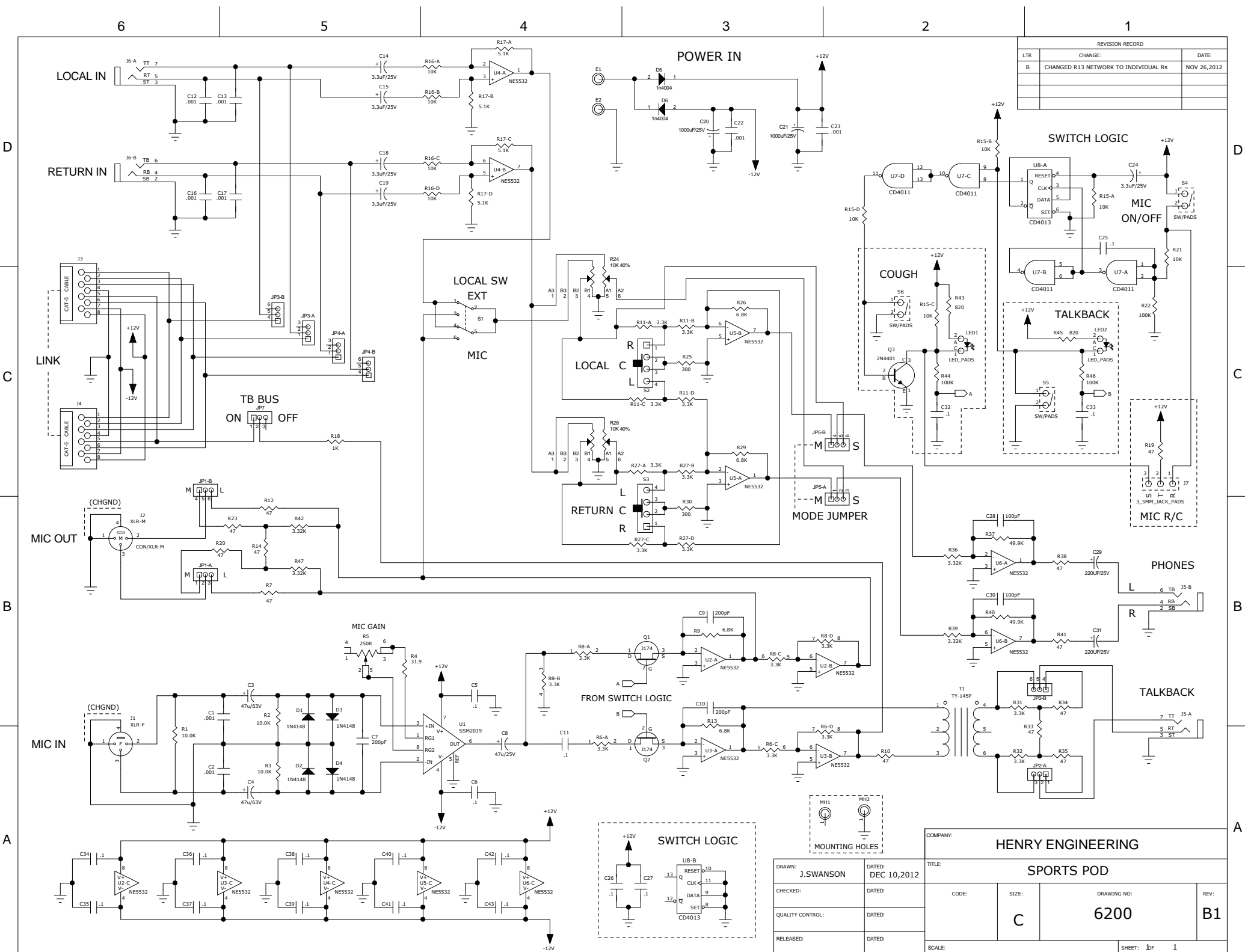


Installation showing duplex intercom. Local & Return audio and Producer TB mic fed into MultiPhones II Master unit. Cat5 outputs of MultiPhones II Master are individually fed to each SP. Talkback output of each SP is mixed, fed to Talkback amp or speaker. (Mic in/out wiring not shown.)



REMOTE MIC ON/OFF WIRING DETAIL





REVISION RECORD		
LTR	CHANGE:	DATE:
B	CHANGED R13 NETWORK TO INDIVIDUAL RS	NOV 26, 2012

COMPANY:		HENRY ENGINEERING		
DRAWN:		J.SWANSON		
CHECKED:		DATE: DEC 10, 2012		
QUALITY CONTROL:		CODE:	SIZE:	DRAWING NO:
RELEASED:		C		6200
DATE:		REV:		B1
DATE:		SCALE:		SHEET: 1 of 1

DRAWN:		DATE: DEC 10, 2012	
CHECKED:		DATE:	
QUALITY CONTROL:		DATE:	
RELEASED:		DATE:	

COMPANY:		HENRY ENGINEERING		
DRAWN:		J.SWANSON		
CHECKED:		DATE: DEC 10, 2012		
QUALITY CONTROL:		CODE:	SIZE:	DRAWING NO:
RELEASED:		C		6200
DATE:		REV:		B1
DATE:		SCALE:		SHEET: 1 of 1