NSW Referees RefAudioPro Setup and Guide to using in team of 3

Preparation

Responsibility for setting up the comms gear is a collective one and starts before game day. It starts after the previous match:

1) One person will be delegated to take the kit home based on the draft appointments for the following week.
2) Wash arm bands/vests (hand wash/soak or delicate cycle) – never store wet vests in the case with radios (leads to corrosion).
3) Charge all five radios (red charging light goes out once fully charged).
4) Setup and test all five radios. Notify Alex of any issues as early as possible.
5) Bring the kit on game day (including the vest / arm bands).

At ground setup is normally the responsibility of the AR2 for 1st Grade (i.e. the 3rd Grade, Colts 3 or Barbour Cup referee). The AR1 will already be refereeing, and this frees the 1st grade referee up to focus on their game. Setup should be done around half-time of the 2nd Grade/Colts 2 game to allow for fault finding. Do no assume that it will work, even if it did the night before . . .

The setup sequence should be:

1) Turn on all five radios.
2) Check that the caps on the three microphones are tight. If not, finger tighten (or risk losing the cap, clip and microphone mid game).
3) Identify the referee's radio (will show 'Master' and 'Talk' on the screen). Feed the connector for the referee microphone (no Press To Talk 'PTT' button) through the slit at the bottom of the pocket on the vest or armband and connect to the referee radio.
4) Identify the AR radios (will show 'Talk' on the screen). Feed the connector for the AR microphone (has PTT button) through the slit at the bottom of the pocket on the vest or armband and connect to the AR radio.
5) Connect coach headphones to one of the remaining two radio (which should not have 'Talk' on their display).
6) Talk through each of the AR microphones in turn while holding the PTT button and listening through the referee's earpiece. You should hear both ARs.
7) Talk through the referee microphone and listen through each of the AR earpieces and then the coach headphones on each of the 'listen only' radios. You should hear the referee on all four of the other radios.
8) Assuming steps 5 and 6 worked, ensure all radio are locked (LC on screen). Turn radios off (if you need to save battery), or leave turned on ready for the game.
9) Take one of the 'receive only' radios to the camera operator with the 3.5 mm and XLR cables. Ensure the volume is set to 1 (low) and the camera operator adjusts manually on the camera (using 'line in' input if that is an option).

Radio Settings:

Radio Role	ID	Sidetone	Microphone	Sensitivity	Volume
Referee	0	SF (off)	PO (on)	C1 (very low)	User set
AR	1 or 2	SO (on)	PO (on)	C2 (low)	User set
Coach	3, 4 or 5	SO (on)	PF (off)	C2 (low)	User set
Camera	3, 4 or 5	SO (on)	PF (off)	C2 (low)	1 (very low)

Troubleshooting:

Issue	Solution
Can't hear another radio	Check that the earpiece isn't blocked (e.g. ear wax). Check that the airtube isn't crimped/blocked. Turn both radios on and off again. Check both radios are on the same channel. Check that you aren't transmitting from a 'listen only' radio.
Sound is muffled	As above, plus check the microphone position and turn up the volume
Network is being jammed	Check that referee coach and camera radios are set to 'listen only' and aren't transmitting accidentally

Each kit should contain:

1) 5 radios.
2) 1 referee microphone.
3) 2 AR microphones (with PTT button).
4) 2 USB chargers.
5) 5 USB charging cables.
6) XLR cable (for camera).
7) 3.5mm cable (for camera).
8) Mix of silastic earpieces (generally 1 ML, 1 MR, 1 LL, 1 LR) and plug earpieces.
9) 1 referee coach earbuds with stereo adaptor (and adaptors for different sized ears).
10) 3 x M vests and 1 x L vest.
11) 1 x armband and chest strap.

Please check that you have the above before leaving the ground. If you are missing something, notify Alex ASAP.

Using Comms Gear

1) Allows the AR to provide live calls BUT, remember you're there to assist, not to referee the game.
2) Calls at the wrong time, or with irrelevant information can distract the referee.
3) Do not talk when the referee is talking or listening to players.
4) ARs should be calling the clear and obvious (i.e. relevant):
    a. Players not retiring to the last feet (you should be standing on the D line).
    b. Players in front of the kicker who advance/don't retreat.
    c. Set piece offside.
5) ARs should not call 'timing' offsides (e.g. was the ball out of the ruck) as the referee is in the best position to judge this.
6) Include the player number or position on field so the referee knows what you're referring to, and can communicate it to the players (e.g. red 10 offside).
7) Live scrums calls are generally not wanted, but observations of what you're observing on your side are helpful prior to resets or at the next scrum.
8) Knock-ons and forward passes should only be called if you're on the ball-line and they're C & O.
9) C & O blind-side infringements might be called (e.g. hands in ruck or entry).
10) Foul play which is PK only is communicated as "high tackle blue 12".
11) Foul play which is a card is communicated as "I have a foul play report against blue 12".
12) AR should focus on foul play around the breakdown (i.e. neck-roll, dangerous charge, late tackle), rather than at the ball (which the ref is likely focused on).
13) Communicate substitutions as "substitution red 6" (i.e. red 6 is coming off).
14) Trends can be communicated in down-time. Often referees ask the ARs for these after tries. A good idea to compare notes with the other AR behind the posts.
15) Referee might choose not to act on your call. Keep making them!