

CARTER VOCE

111-113 CHILTERN ST

BERRYLANDS

SURREY KTS 85

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St John the Baptist, Pinner

Sound Reinforcement System

modified April 1994

The system designed by Carter Voce Ltd is to accommodate reinforcement of speech and musical instruments to be heard in the nave, chancel and Lady Chapel and also by the hard of hearing on an induction loop system. It is comprised as follows;

Control System

The system is based around a Soundcraft 12:2 mixer which will give excellent control of all necessary sound sources. This will be positioned at the rear of the nave in a custom built console. This places the operator in a position where the worship leaders can be both seen and heard clearly. The console will also contain other equipment like amplifiers and radio receivers and a cassette tape recorder. A second portable mixer will be provided for use as a musician's sub-mixer and is small enough to be placed on the shelf next to the organist who has request its use. A small temporary monitor loudspeaker is also provided there.

Loudspeakers

All six speakers shown on the plan are small JBL System 1 designed for both speech and music, finished in white to blend with the decor and are positioned in the best place to reinforce the sound from the centre of the chancel in the most natural way. Likewise musicians contributions to worship can be balanced using high quality speakers placed so as to contain the sound to the centre of the church. See photos enclosed to see the proposed positions on nave pillars. In order to produce a good base response for music use a sub-base unit is also provided. This can be positioned almost anywhere and out of sight behind the organ console is suggested. Other types and positions of main speakers have been considered but are either much bigger, intrude on windows or produce a very wide sound image.

Microphones

Two permanent sites are provided for removable microphones at the pulpit and lectern using modern discrete units. A permanent microphone is installed on the inside of the chancel arch to relay a continuous signal to listeners of the induction loop. Two radio microphones are provided with personal lapel microphones and one alternative hand held unit. Removable microphones and stands will be provided for extra voices and musicians.

Cables

Microphones cables will be fed in existing floor heating ducts as shown on the plan. Loudspeaker cables will follow the route of lighting cables along the nave roof and back down the aisles, where they will drop discreetly where necessary to the speakers. The induction loop cable will replace the existing unsightly cable round the outside of the floor space avoiding the Lady Chapel and High Altar areas as at present.

Main equipment to be installed

- 1 Soundcraft Folio 12:2 mixing desk
- 1 ~~Millbank Ultima ULT 1201 power amplifier~~ *Crest Audio LA601*
- 6 JBL Control 1 loudspeakers (grey)
- 1 ~~JBL Control SB-1 loudspeaker~~ *Celestion SR6 Port flow*
- 1 ~~Telex 12-inch gooseneck microphone for pulpit~~ *Audio Technica AT915C MRX*
- 1 AKG C1000S condenser microphone for lectern
- 1 D 130 microphone for choir (re-used from lectern)
- 3 D 3700 microphones for musicians
- 1 D 190 microphone for voice (re-used from pulpit)
- 4 microphone floor- stands
- 1 TOA WT - radio receiver
- 2 TOA WTU - 770 receiver modules
- 1 TOA WP - 760 tuner panel
- 2 TOA WM - 370 lapel transmitter / microphone
- 1 TOA WM - 270 hand held transmitter/microphone
- 1 TOA YW - 620 dipole aerial
- 1 Ampetronic ILD9 loop amplifier
- 1 Pioneer CT - W420R double tape cassette machine
- 1 4way microphone input boxes
- 1 Fostex 6031 monitor loudspeaker for organist (portable)
- 1 Shure 268 sub-mixer for organist (portable)

Sound Enhancement System

INPUT

The input to the system is from ^{the following} a selection of microphones.

Fixed microphones :-

Pulpit - Telex 12

Lectern - AH9 C 1000 S

Choir - D 130

} High quality unidirectional
multidirectional

On stands :-

Musicians - D 3700 (3)

Cantor - D 190

unidirectional
unidirectional

Radio Microphones :-

Lapel - Radio 1

Lapel - Radio 2

Handheld - Radio 2

Reddot

Reddot

} Must not be
used together

SOUND ENHANCEMENT SYSTEM

MICROPHONES

Choir Mike - Is intended to provide some input to the loop whilst the choir is singing. Otherwise there would be silence on the loop if all the white sliders were down. When using the choir mike in this mode, the red sliders should be down, otherwise selected voices from the choir go to the speakers.

Radio Mike 1 - Normally used by the Celebrant when at the altar. Take slider down whilst he is administering the sacrament.

Radio Mike 2 - (with red dot) - Normally used by the Deacon for the Gospel at 11a.m.

If the radio mikes are switched on by the wearer throughout the service they can be controlled from the console and the wearer does not have to worry about them. Be sure the white sliders for the radio mikes are right down when they are not in use.

Hand-Held Radio Mike - (also with red dot) - Must not be used at the same time as Radio Mike 2 (both are on the same frequency)

Control with 'Radio Mike 2' Slider .

Pulpit Mike - check before the service that it is correctly positioned.

Control with white slider as required.

Lectern Mike - adjust position ,if necessary, so that it is not hit when page is turned -particularly with Bible at 6.30 p.m.

Control with white slider as required.

Spare Mikes 1 and 2 - Operational when plugged into appropriate sockets near Deacon's stall

Sub-Mixer - In use when mikes are required for instrumentalists etc.

White slider to be on max. Control will then be from Sub-mixer located near the organ. Other mikes can be controlled as usual from main console.

LOUD SPEAKERS

The two red sliders control the out put to the speakers. Set at 10 (red arrow) will be about right if the input has been correctly set.

Blue Sliders - One controls the input from a pre-recorded tape, the other is not in use. (KF can advise on recording and playing back tapes)

THE LOOP

The loop will carry whatever input signal is selected by the white sliders. (also blue for tape recordings). The signal will go to the loop even when the red sliders are right down. i.e. speakers off.

BRING ALL SLIDERS RIGHT DOWN BEFORE SWITCHING ON OR OFF .

AT THE MAIN SWITCH ON THE WALL PLUG.

The above information was provided by the sound engineer Neile Voce. 27.3.95

NOTE FOR SOUND OPERATORS

Change in procedures

The Vicar has pointed out that, in all services, we are getting the clergy voice dominating what should be congregational responses.

To avoid this, after the first line of each response etc., the red sliders should be brought down to zero and, of course, returned to normal at the end of the response.

By this means there will be no clergy voice through the speakers, but it will remain on the loop for those using it.

In the special copy of the 'Eucharist Booklet' for the sound consol operators, the response sections in question have been marked with a vertical black line on the left hand side.

The same applies to Baptisms and to Evensong.

KF / 25.1.96.

NOTE FOR 9 a.m. SOUND CONSOLE OPERATORS.

1. For the instrumentalists' performances, the 'Sub-mixer' slider should be at maximum and the Main Church speakers ON. The organist will control the Sub-mixer.

When they are not playing, the 'Sub-mixer' slider should be returned to minimum. There have been some noises-off when this has not been done.

2. The Cantors would like more boost to their part. Set the 'lectern slider' a little above the red arrow and have the Main Church sliders at or above the red arrow.

Check on the input ladder - it should just reach the top of the green on the loudest notes.

3. For the intercessions, check that the radio mike 2 on the stand will be 9 to 12 inches from the mouth of the speaker. Check the input on the ladder. The level can be deceptive when the speaker is near you - sometimes the sound has not been loud enough.

5. 7. 95 /KF

IMPORTANT AT 9 AM SERVICE

The hand-held Radio 2 Mike may be used for intercessions. Arrange with Intercessor before service. Remind him/her to switch on just before starting.

There may be interference if both Radio 2 (red dot) mikes are on together.

Ask Deacons to switch off their Radio mike after Gospel until end of Intercessions.

DEACON AT 9 AM SERVICE. - Please switch off your Radio 2 Mike at end of Gospel until end of Intercessions to avoid interference on the sound system whilst the other Radio 2 Mike is in use.

GENERAL SCHEME FOR SUNDAY 9AM

	MIKES — means OFF					SPEAKERS
	LECTERN	PULPIT	RADIO 1	RADIO 2	HAND RADIO 2	
* <u>BLUE SUB MIX</u> ON MAX for Instrumentalists — OFF when not playing						
WELCOME	ON	—	—	—	—	ON
START WITH CANTOR + HYMN	ON	—	—	—	—	ON
PRIEST at ALTAR	—	—	ON	—	—	ON
DEACON at ALTAR (for invitation)	—	—	ON	ON	—	ON
PRIEST at ALTAR	—	—	ON	—	—	ON
READING FROM LECTERN	ON	—	—	—	—	ON
HYMN	ON	—	—	—	—	ON
GOSPEL FROM NAVE (DEACON)	—	—	—	ON	—	ON
SERMON	—	ON	—	—	—	ON
CREED	ON	—	ON	—	—	ON
* INTERCESSIONS from NAVE	—	—	—	—	ON	ON
PRAYERS OF PENITENCE	ON	—	—	—	—	ON
PEACE PRAYER	—	—	ON	—	—	ON
EUCCHARISTIC PRAYER	—	—	ON	—	—	ON
DECLARATION OF FAITH	—	—	ON	ON	—	ON
PRIEST	—	—	ON	—	—	ON
DISTRIBUTION TO COMMUNICANTS	—	—	—	—	—	OFF
ANTHEM (LOOP ONLY)	ON	—	—	—	—	OFF
AFTER COMMUNION (as required)	ON	—	ON	ON	—	ON
<u>END OF SERVICE</u> — ALL OFF and SWITCH OF at WALL SWITCH						

IMPORTANT AT 9 AM SERVICE

The hand-held Radio 2 Mike may be used for intercessions. Arrange with Intercessor before service. Remind him/her to switch on just before starting.

There may be interference if both Radio 2 (red dot) mikes are on together.

Ask Deacons to switch off their Radio mike after Gospel until end of Intercessions.

SOUND — GENERAL SCHEME FOR SUNDAY 11 A.M

PAGE #	RITE B	PAGE IN BIBLE BOOKLET	MICROPHONE				— Mutes OFF		SPEAKERS
			LECTERN	PULPIT	RADIO 1	RADIO 2	CHOIR		
20E					CELEBRANT	DEACON			
BOOKLET ↓	OPENING HYMN		ON	—	—	—	ON (30)	—	OFF
32	SENTENCE of SCRIPTURE	32	—	—	ON	—	—	—	ON
2/3	PREPARATION	32	—	—	ON	—	—	—	ON
33	GLORIA / KYRIE	33	ON	—	—	—	—	—	OFF
34	COLLECT	34	—	—	ON	—	—	—	ON
35	READINGS . (OT + NT)	35	ON	—	—	—	—	—	ON
	HYMN		ON	—	—	—	ON (30)	—	OFF
35	GOSPEL	35	—	—	—	ON	—	—	ON
36	SERMON	36	—	ON	—	—	—	—	ON
36/7	CREED .	36	ON	—	—	—	—	—	OFF
37	INTERCESSIONS	37	ON	—	—	—	—	—	ON
38/9	PRAYERS OF PENITENCE and HUMBLE ACCESS	38/39	—	—	ON	—	—	—	ON
41	PEACE <i>Make speakers off during sharing</i>	41	—	—	ON	—	—	—	ON
	HYMN		ON	—	—	—	ON (30)	—	OFF
42	GREAT THANKSGIVING	42	—	—	ON	—	—	—	ON
43	EUCCHARISTIC PRAYER	43	—	—	ON	—	—	—	ON
45	LOARD'S PRAYER	45	—	—	ON	—	—	—	ON
46	INVITATION	46	—	—	ON	—	—	—	ON
46	DURING ADMIN OF COMM	46	—	—	<u>OFF</u>	—	—	—	OFF
	HYMN / ANTHEM / MOTET		ON	—	—	—	ON (30)	—	OFF
47	AFTER COMMUNION	47	—	—	ON	—	—	—	ON
	FINAL HYMN		ON	—	—	—	ON (30)	—	OFF

During Hymns the lectern & Choir mikes are used to give some (low 30) input to LOOP — but Speakers should be OFF

END OF SERVICE . SWITCH OFF AT WALL SWITCH — LOCK CONSOLE and RETURN KEYS TO SACRISTY

SOUND - GENERAL SCHEME FOR EVENSONG. SUNDAY 6.30PM

VARIATIONS MAY BE NECESSARY FOR EVENING PRAYER.

	MIKES		- Power OFF.		SPEAKERS
	LECTERN	PULPIT	RADIO 1	RADIO 2.	
WELCOME	ON	-	-	-	ON
OPENING PRAYERS.	ON	-	-	-	ON.
HYMN and PSALM.	ON	-	-	-	OFF.
FIRST LESSON	ON	-	-	-	ON.
MAGNIFICAT	ON	-	-	-	OFF
SECOND LESSON	ON	-	-	-	ON.
AGNE DIMITTIS	ON	-	-	-	OFF
GOSPEL	ON	-	ON	-	ON
PRAYERS.	ON	-	ON	-	ON.
ANTHEM.	ON	-	-	-	OFF
SERMON	-	ON	-	-	ON.
HYMN	ON	-	-	-	OFF.
INTERCESSIONS	-	-	ON	-	ON.
HYMN.	ON	-	-	-	OFF.
BENEDICTION AT ALTAR.	-	-	ON	-	ON.

BE SURE TO TURN WALL SWITCH OFF AT END OF SERVICE

OPERATION OF SOUND ENHANCEMENT

SUNDAY 8 AM and WEDNESDAY 10 AM

Mikes to be used - Lectern ; Radio 1 (Celebrant).

Speakers - ON - Red arrow - 10 Leave on throughout service.
MAIN CHURCH ONLY

Start - Lectern only ON -50 Adjust to suit readers if necessary.

When Priest goes to Altar - Lectern OFF ; Radio 1 ON.

During administration of Sacrement - Lectern OFF ; Radio 1 OFF.

After Communion - Radio 1 ON for closing prayers.

End of service ALL OFF

Stage-box Microphones.

We now have three new microphones to replace those that were lost or stolen earlier in the year.

These microphones are for use with the "Stage-box" sockets in the chancel. They can also be used in place of the normal lectern and pulpit microphones. These microphones are rarely needed for normal church services now that we have Radio Microphones 3 and 4.

We do not have sufficient channels to use all our usual microphones -(there are seven- 4 radio, pulpit, lectern and choir) and stage box microphones at the same time.

If stage box microphones are to be used, select the normal channels not required, remove the plugs from the appropriate sockets in the console and plug in plugs labelled "Stagebox 1 and 2". Connect the new microphones to the chancel sockets with microphone leads of appropriate length.

Storage.

The three new microphones are in boxes in the "Sound system" drawer in the sacristy. Microphone stands and leads are ⁱⁿ the corner of the old vestry office.

December 2007 / KF.

SOUND CONSOLE

Some operational notes :-

INPUT

The white sliders control the input to the amplifier from the selected mike

The level of input can be checked by pressing the button at the base of the appropriate white slider. The input level is then shown on the row of green yellow and red lamps. At max. sound input the top of the green should be reached. - Yellow or red indicates the input is too high.

If all the white sliders are right down there will be no signal to the loop. For the choir and organ to be on the loop (or to record) use the choir and/or lectern mike. (but with no output to speakers).

OUTPUT

The red sliders control the output to the speakers - main church and/or lady chapel.

Signals from the selected mikes will go to the loop (and tape deck if required) even when the red sliders are right down.

SETTINGS

As a general guide input 0 and output 10 is about right but be prepared to adjust according to strength of voice.

TO PROTECT THE EQUIPMENT BRING ALL SLIDERS RIGHT DOWN BEFORE SWITCHING THE MAIN SWITCH ON OR OFF.

KF/ 20.3.95

NOTE FOR SOUND OPERATORS

Recent poor quality and interference was due to the button to the right of the mixer desk (marked AUX 1 PRE) being inadvertently pushed IN. This is not very obvious but it must be in the OUT position.

It seems prudent to put the following information on record, although no action is called for unless the settings are interfered with.

1. AUX 1 PRE BUTTON - It is important that this is in the 'OUT' position. The Loop will then receive only the signal selected by the white sliders which is the way we need to operate. If the button is in the 'IN' position, all the microphones will feed to the loop even when the sliders are down and if two mikes are used by a speaker simultaneously (e.g. Radio 1 & Lectern) there will be interference.
2. AUX 1 AFL & AUX 2 AFL - should be in the 'OUT' position.
3. OSC. BUTTON - must be in the 'OUT' position otherwise a loud oscillation signal will be fed to the system. This is for test purposes. A cover protects this button
4. 'POPPING BUTTONS' - Along the top of the desk, beside the treble control knobs there is a row of grey buttons - one for each microphone circuit. These are normally in the 'OUT'. If they are pressed 'IN' the 'popping' from the particular mike will be reduced. This facility may be useful if e.g. the speaker is tapping the pulpit or there is a lot of clothes noise.
5. CASSETTE PLAY BUTTON - should be in the 'IN' position for maximum input/output.

KF/23.8.95

PINNER PARISH CHURCH

To 11 A.M. Sound Operators.

I have received some comments on the quality of the sound re-inforcement at the 11 A.M. service that suggest a review of some of the operations is desirable.

1). SOUND LEVELS

The sound level has sometimes been too high, particularly when the radio mikes are in use. It will depend on the voice of the individual and the position of the lapel mike.

Judgement of level by ear is not always satisfactory. Press the button at the base of the appropriate slider. The input level will then be shown on the 'ladder' of green, yellow and red lamps. The maximum voice sounds should result in the green lamps lighting to near the top. If yellow or red lamps light, input is too high - bring down the white slider.

When no buttons are pressed, the ladders show the output to the speakers. For the sound re-inforcement we are seeking the bottom green lamps should flick on occasionally. If more green lamps flick on, output is too high - bring down the red sliders. The red arrows on the sliders are intended only as a guide.

2). THE LOOP

People using the loop comment that it cuts-out occasionally. There may be two reasons for this :-

- a). the sound level is excessive and an automatic cut-out operates to protect the listener's ears. Care on 1) above should deal with this.
- b) all the white sliders are down resulting in no input to the loop (or anything else).

Only the red sliders should be brought down during congregational responses to reduce the output from the loud speakers. The White sliders remain up to provide input to the loop. If all the white sliders are down those on the loop hear nothing !

3). MICROPHONES

Try to avoid taking input from the Radio mikes and the Lectern and Pulpit mikes at the same time. During the sermon only the Pulpit mike should be on otherwise you may get an echo.

4). GENERAL

Correct operation of the sound system requires concentration with the result that the operator unfortunately cannot fully participate in the worship.

I hope this note will prove helpful. Please contact me if you would like further clarification or if you think it would be helpful for me to sit in with you one Sunday.

Keith French



Phone 0181 8683599

22nd April 1996

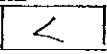
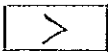
TAPE DECK

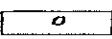
Located in the cupboard to the right of the mixer desk.


It is a conventional double tape cassette unit.

To record or play insert the tape into one of the decks.

TO PLAY



Press  or  depending on the direction you wish the tape to run.

Take care not to press the bars  just above these direction buttons.

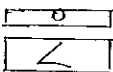
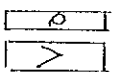
A pause button is marked .

Control the volume by the blue slider and the red sliders.

Press  to stop.

To re-wind press  or  according to the direction required.

TO RECORD

Press the pair of buttons  or  depending on the direction

you wish the tape to run.

Whatever is selected by the white sliders (or sub-mixer blue slider) will then be recorded. (with or without the speakers being in use.)

Stop; Pause and Re-wind controls as above.