Makin

Church Organ Builders

CUSTOM ORGANS


CHOIR
GREAT
ROYAL TRUMPET
TUBA MIRABILIS
TREMULANT
ORCHESTRAL OBOE
CLARION
CLARINET
MIXTURE
POSAUNE
DOUBLE TRUMPET
LARIGOT
TIERCE
SHARP MIXTURE
MIXTURE
RECORDER
NAZARD
FIFTEENTH
TWELFTH
CHIMNEY FLUTE
PRINCIPAL
FLUTE
PRINCIPAL
CLARINET FLUTE
OPEN DIAPASON
DOUBLE OPEN DIAPASON
OPEN DIAPASON

CRAFTSMANSHIP FOR MANY YEARS

Through the years from our origins with the John Compton organ business, Makin has always strived to deliver the best in terms of both sound and leading edge technology to a very discerning audience of organists, schooled in the English style of organ building.

This great tradition continues today with our Custom range of instruments. Designed and built by organists for organists, these instruments are at the pinnacle of the pipeless organ world with a sound and build quality that simply can't be beaten, yet at a price that is affordable. We never compromise on sound so rather like a pipe organ which has a separate pipe for every note, we have a separate 'sample' for every single note of every single stop. This is why Makin organs are so authentic and indeed so sort after.

Through the years we have developed many new features with associated benefits, including for example a realistic swell box where on closing the box, the upper frequencies are lost first just like in a pipe organ. What's more Makin has no artificial limitations in its system so octave and suboctave couplers and features such as 'Great & Pedal Combinations coupled' come as standard on our instruments. An organist used to an English pipe organ will immediately feel at home.

As a customer of one of our custom built instruments you will have an unbelievable number of options to consider, including choice of colour and finish, motorised drawstop or illuminated tab control, the number and type of manuals and speaking stops, even the placement of the speaker system and minutiae of console design.

When designing an instrument, customers can use one of our sample specifications, several of which can be found in this publication, and make changes as they feel fit or indeed start from scratch with a blank piece of paper. For some, this could be daunting, but since all our organ consultancy staff are organists with many years' experience, you can be sure to be guided through this in a most professional and courteous manner.

We have an unrivalled in-depth knowledge of our instruments, and church organs in general, so we guide our customers through many questions and options with ease. Typically most time is spent on the final details of the specification which, above all, should be versatile and not limited. As a simple example, for a three manual instrument, should the third manual be an enclosed choir division or an unenclosed positive; the choice is yours.

Whatever the options chosen, these are market leading instruments designed to help enhance your playing and the singing of your congregation.

When it comes to voicing an organ in church, some customers like to be extensively involved in this aspect of the process, others prefer to defer to the real world experience of our staff and our Tonal Director Professor Ian Tracey, Organist Titulaire at Liverpool Cathedral. If so required, we can also work with other third party voicers and consultants.

In short customers get a top quality organ at a highly competitive price. I have often said that you don't buy a Makin organ, but rather you invest in one. Read on and I am sure you will agree that there has never been a better time to do so. Just weeks later you could have your own 'King of Instruments'.

Sincerely

Dr Keith A Harrington
CChem MRSC, FSCO, MInstSMM, MIoD
Managing Director

WHY BUY A MAKIN?

Makin is a financially stable, professionally run and secure company, well capitalised with no outstanding debt or loan activity; a rare achievement in today's business world, yet indicative of our efficient management and continuing worldwide sales growth and customer acceptance.

Makin has a history of supplying Church organs since 1970 and is still expanding. One of the main factors in its success is the support and post-sales service given to existing customers. Indeed, the majority of new business comes from recommendations from satisfied customers who continue to provide excellent testimonials. On average, we continue to install between two and three organs per week.

Simply the best in customer service

That's what our customers tell us. It's all well and good buying an organ today when realistically you are buying it for the future. You need to ensure that the company you choose has excellent post-sales service with their own maintenance engineers on staff who are knowledgeable about the product. If a major fault occurs on a Sunday, Makin endeavour to correct the fault by the following Sunday. On occasions when this is not possible, Makin can bring in a temporary loan instrument whilst yours is being fixed.

Makin is committed for the long term and we continue to provide parts for every organ we have ever built. We ensure that our parts are affordable and easily obtained. With modular designs you won't have to spend a fortune on service. In the unlikely event of a

problem, we can express ship any part direct from our factory.

Dedicated and professional organ consultants will assist you in all phases of your search for the right instrument. You'll find our approach to be ethical and more assisting in helping you decipher confusing hype. Get the facts about Makin directly from us. Our business ethics are based upon a higher level of personal integrity that is reflected throughout our organisation. The majority of Makin's staff have been with the company for many years and are very experienced in the Church organ field. This experience, coupled with their expertise, is a major benefit for existing and new customers who appreciate dealing with people they know they can trust and are experts in their particular field.

Quality, durability and reliability are built into every Makin organ which is backed up by an extensive warranty of ten years for both parts and labour. All organs come complete with an owner's manual. This is true commitment to our customers and one that is fully appreciated by them.

English designed and specified organs

Our instruments closely follow standards for the English pipe organ so that any pipe organist can sit down and play them without the need to worry about superfluous and often confusing controls. The specifications we suggest are English through and through, as are the pipe samples we use. Makin uses the best 'real time' sampled sound instead of physical or waveguide modelling. 'Real Time' Sampling captures the detail of each sampled (recorded) pipe. With the latest multi-sample technology there is a separate sample for every single note of every single stop. Makin offers note by note sampling for the most detailed sound, capturing every harmonic and scaling detail of a real pipe organ. Indeed with pipe organ 'Mixtures' we sample them individually, instead of sampling multiple ranks together like some other brands. Sampling rate and bit resolution are two of the most important aspects required to accurately replicate pipe organ tone and harmonic detail. While Compact Disks use 16 bit sample resolution Makin uses 24 bits (plus additional 8 bits for the expression for a total of 32 bits). Using pro audio sampling rate, our instruments' tonal accuracy is 256 times greater than Compact Disk.

Makin provides more pitch sources

The Makin system allows each note of each digitally recalled pipe sample to be assigned an independent pitch source so that minute pitch variations and harmonics are properly replicated even at full organ. Many digital organs share pitch sources or actually drop out stops, notes or harmonic detail as you build up to full organ which is why, what appears to be a good organ when played quietly, deteriorates when played loudly. Makin retains the full harmonic and pitch detail that you would hear in an equivalent pipe organ.

Makin knows that a real pipe organ speaks into a room from many locations. This is why we provide more channels of audio separation with many amplifiers and speaker systems. You'll experience the pipe organ warmth and ensemble as the sound embraces you from multiple locations. Just like a pipe organ, you'll hear different ranks of pipes speak from different areas, surrounding you with natural ambiance augmented by the advanced digital effects generation system of acoustic enhancement found on every Makin organ.

Sound quality is all. The best in sound quality is obtained by the use of multi-samples, a high ratio of amplifiers to the number of stops and integrated speakers systems designed for

Continued overleaf

organ tone. The combination of these factors is why the average person cannot differentiate between a good pipe organ and a Makin digital instrument.

Note by note and stop by stop voicing

With our voicing software and a laptop computer you can voice Makin organs in a variety of ways. What sets Makin apart from other digital organ voicing capability is how much flexibility you have. Superior levels of tonality adjustment, and extensive volume levelling and scaling are accomplished on site. The voicing software also provides other adjustment capabilities to further customise your instrument. Our Tonal Director, Professor Ian Tracey, will visit your church to voice your organ.

Variety is the spice of life and Makin has it. Makin samples real pipes on site, an advantage since the pipes are voiced for harmonic activity in relationship to sound projecting aspects, such as casework that captures, focuses and enhances pipe tonality. Nothing sounds worse than a pipe being blown in a soundproof chamber, because the soundproofing material within the anechoic chamber soaks up the harmonic tones of the recorded pipe. Acoustics and pipes cannot be separated if you want to capture all of the harmonic and sound activity of each individual pipe that was part of the tonal concept of the original pipe builder. 'On site' sampling is one of the reasons Makin organs have a 'life-like' sound quality with the associated warmth that you get from the pipe organ. All Makin organs are fully English in their concept, design and sound and the samples are recorded from English pipe organs.

More console choices

Choose from hardwood consoles and even special woods and finishes, mechanical moving drawstops or tabs, custom stops or a custom specification from the ground up. Whatever the need, Makin has your affordable solution.

VOICING

Our approach to voicing has great similarity to the approach of a pipe organ builder, where we consider the instrument both as a whole and also by looking at every note of every stop.

Every custom organ is voiced on site by our Tonal Director Professor Ian Tracey in a note-by-note procedure, even including the individual ranks of each mixture, ensuring that the instrument is perfectly voiced for the building it speaks in, as would be the case with a new pipe organ. Tone colours are vivid and exciting, with thrilling chorus work, perfect interdepartmental balance and tonal blend.

We start with the Great Diapason chorus since this sets the tonality of the whole organ and very much acts as the lynch pin to the rest of the instrument.

Following this we complete the Great division by working on the flutes and then the reeds. Using a similar stepwise process we work through the remaining manual and pedal divisions to complete the organ. Whilst laborious, this ensures that we produce an instrument that fits its building perfectly, providing the church with the best available digital sound.

PROVEN TECHNOLOGY THAT WORKS

The technology behind the Makin Custom series is a highly developed form of Real Time Sampling. This has been developed by our Research & Development (R&D) team over the last few years and has represented a fantastic leap forwards in digital organ sound reproduction and has displaced other forms of artificial sound generation.

Real Time Sampling is used to store true recordings of actual pipe organ stops; this isn't just ordinary sampling. With Multisample technology, rather like a pipe organ with a single pipe per note of every stop, Makin uses a separate sample for each individual note of each individual stop. In a village Chapel a small choir will produce enough sound to fill the building. However, in a larger Church the same size of choir will not be adequate and a larger choir is required.

The same principles apply with digital organs. Makin Custom Organs start with a minimum of 9 channels of amplification (8.1) and can go up to 16 (14.2) on a single system. However quadruple systems with 64 channels (56.8) are reasonably common. As with the choir example, we do not increase the volume of each channel but increase the number of channels in the same way as the number of singers can be increased in a choir. This leads to a much more realistic organ tone from the quietest of sounds through to full organ. An individual speaker box, which may contain multiple speaker drivers is connected to each individual amplifier. So for example, an organ with 16 channels of amplification (14.2) may have 14 main speaker cabinets and two bass cabinets containing a total of 44 speaker cones.

When listening to a single note held on a pipe organ, the note continually changes and is not a steady sound; this is what gives the pipe organ its unique character. To reproduce this characteristic, long recording samples are used and reproduced in our custom instruments. We use large memory chips that allow samples to be taken that are 10 seconds in length, which is more than sufficient time to incorporate all the variations from the original pipe. In addition, we have other additional effects within live sampling, where for example in the case of rapidly repeating notes, we accurately reproduce the effect of wind still being in the pipe.

Every stop is C-C# divided. This means that adjacent keys sound from different loudspeakers and with good placement of speakers you can hear the C and C# sides of the organ separately. Multi-rank stops, such as mixtures, are built up from individual stops equal to the number of ranks; for example, a Mixture IV has 4 ranks of pipes, each rank having two channels (C-C# split) allocated to it. Hence, if you play two keys on a 4 rank mixture you will hear 8 separate audio channels playing at the same time. What's more, each individual mixture rank is voiced independently on site and each note of every rank is a separate sound sample.

With our unique voicing software designed and developed in-house by our R&D team, the Voicer adds the final touches to the instrument, making it totally unique to the building within which it resides. This highly skilled process

includes removing simple irregularities of the sounds that may be caused by some frequencies being absorbed, balancing all chorus and solo stops and much, much more. Indeed, we like to encourage our customers to be personally involved in the final stages of voicing, since we are merely the custodians of their new organ.

Loudspeakers can never be perfect and reproduce different frequencies at different levels producing 'peaks and troughs' throughout the frequency range which can severely affect the tonal quality of the organ in a building if not compensated for. With our Custom technology, all the 'peaks and troughs' can be evened-out by utilising the note-by-note regulation feature, which allows every note of every stop to be adjusted separately on site. This overcomes all the shortcomings of loudspeakers and allows our professional voicer to set up an organ in any space to not only match the acoustics, but to overcome any loudspeaker irregularities that may be present.

TECHNICAL SPECIFICATIONS

Console	2T	2D	3T	3D	4D
Eight standard colours on oak	•	•	•	•	•
Other varieties of wood & colours	o	o	o	o	o
Different wood and colour for stop jambs	o	o	o	o	o
Console and bench end panels	o	o	o	o	o
Wood console back	•	•	•	•	•
Panelled console back	o	o	o	o	o
Console split	o	o	o	o	o
Key switches for on/off and piston lock	•	•	•	•	•
Stop Console					
Illuminated Tabstop	•	n/a	•	n/a	n/a
Motorised Drawstop	n/a	•	n/a	•	•
Illuminated Drawstop	n/a	o	n/a	o	o
Music Desk					
Wooden music desk	•	•	•	•	•
Adjustable music desk	o	n/a	o	n/a	n/a
Lighted music desk	o	o	o	o	o
Perspex music desk	o	n/a	o	n/a	n/a
Brass music desk clips	4	4	4	4	4
Roll top					
Wooden roll top cover	•	•	•	•	•
Specification					
Number of speaking stops	o	o	o	o	o
Bespoke stop list	•	•	•	•	•
English	•	•	•	•	•
French, German, Dutch or Italian	o	o	o	o	o
Single Intonation	•	•	•	•	•
Multiple Intonations (typically 4)	o	o	o	o	o
Harpsichord & Piano module	o	o	o	o	o
Manuals					
Synthetic keyboards (61 notes)	•	o	•	o	o
Synthetic keyboards with wood core (61 notes)	o	•	o	•	•
Velocity sensitive keys	•	•	•	•	•

Swell Pedals	2T	2D	3T	3D	4D
Wooden swell shoes with rubber inlay	•	•	•	•	•
Metal swell shoes with rubber inlay	o	o	o	o	o
Programmable expression pedals	•	•	•	•	•
Number of swell shoes	1	1	2	2	3
Additional swell shoes	o	o	o	o	o
General crescendo pedal	o	o	o	o	o
Toe Studs					
Brass toe studs	•	•	•	•	•
Pedalboard					
32 note AGO pedalboard with plain sharps	•	•	•	•	•
32 note AGO pedalboard with dark sharps	o	o	o	o	o
27, 20, 32 note BDO pedalboards	o	o	o	o	o
LED pedalboard light	•	•	•	•	•
Bench					
Bench with lift lid for music storage	•	•	•	•	•
Height adjustable bench	o	o	o	o	o
External Connections					
MIDI (In, MOD-out, SEQ-out)	•	•	•	•	•
Aux in /Aux out	•	•	•	•	•
Headphone socket	•	•	•	•	•
Audio					
Audio system	from 8.1	from 8.1	from 12.1	from 14.1	from 14.1
Digitally equalised audio control	•	•	•	•	•
Reverb channels	2.1	2.1	2.1	2.1	2.1
Adaptive sound reverb, 12 unique reverbs	•	•	•	•	•
Live reverb, sampled reverb	o	o	o	o	o
Amplification & Speakers					
Full range 180w amplifiers	from 8	from 8	from 12	from 14	from 14
Bass 350w amplifier	from 1	from 1	from 1	from 2	from 2
External full range speakers	from 1	from 1	from 12	from 14	from 14
External subwoofer	from 1	from 1	from 1	from 2	from 2
Church or home speaker options	•	•	•	•	•

Voicing	2T	2D	3T	3D	4D
Note by note, stop by stop on site voicing	•	•	•	•	•
Voicing software to purchase	o	o	o	o	o
Piston & memory Functions					
Graphical control of memories	•	•	•	•	•
Memory levels	250	250	250	250	250
Split memories (general & divisional)	o	o	o	o	o
Divisional pistons	6	6	8	8	8
General pistons	8	8	8	8	8
Coupler reversible pistons	3	3	6	6	10
Setter piston	•	•	•	•	•
General cancel piston	•	•	•	•	•
Pedal divisional toe studs	6	6	8	8	8
Swell toe studs (duplicating)	o	o	o	o	o
General toe studs (duplicating)	o	o	o	o	o
Coupler reversible toe studs	2	2	2	2	2
Great & Pedal Combs Coupled	•	•	•	•	•
Transfers (e.g. Gt Reeds on Ch)	o	o	o	o	o
Stepper pistons & toe studs	o	o	o	o	o
Miscellaneous Functions					
Bellows simulator	•	•	•	•	•
C - C# split	•	•	•	•	•
Dynamic chiff	•	•	•	•	•
Live Tuning	•	•	•	•	•
Manual bass	•	•	•	•	o
MIDI sequencer	o	o	o	o	o
Overall volume control	•	•	•	•	•
Temperaments	12	12	12	12	12
Transposer	•	•	•	•	•
Tuning (pitch) control	•	•	•	•	•
Miscellaneous Extras					
Console indicator lights	o	o	o	o	o
Mobile plinth polished to match	o	o	o	o	o
Wood console base polished to match	o	o	o	o	o
Multiple plug in points	o	o	o	o	o
Bench covers	o	o	o	o	o
Damp chaser	o	o	o	o	o
Rodent repeller	o	o	o	o	o
Surge protector	o	o	o	o	o

- • standard feature
- o optional
- n/a not applicable

DIMENSIONS

Organ	Height (without music desk)	Height (with music desk)	Width	Depth (no pedalboard)	Depth (with pedalboard)
2 manual Tabstop	117cm	139cm	144cm	63cm	111cm
2 manual Drawstop	133cm	139cm	158cm	75cm	130cm
3 manual Tabstop	125cm	147cm	144cm	75cm	119cm
3 manual Drawstop	133cm	139cm	158cm	75cm	130cm
4 manual Drawstop	134cm	148cm	179cm	75cm	130cm

2 MANUAL

In addition to our Thirlmere 2-30 'standard' instrument we offer a range of suggested specifications from a small 2-20 to a large 2-35 organ. You can use these specifications as a mere starting point, or indeed design your own bespoke instrument.

2-20

Pedal

Bourdon	16’
Bass Flute	8’
Fagotto	16’

Great to Pedal
Swell to Pedal
Gt & Ped Combs Coupled

Great

Open Diapason	8’
Stopped Diapason	8’
Gamba	8’
Principal	4’
Harmonic Flute	4’
Fifteenth	2’
Mixture (19.22.26)	III
Trumpet	8’

Swell Sub Octave to Great
Swell to Great
Swell Octave to Great

Swell

Geigen Diapason	8’
Lieblich Gedackt	8’
Celeste (II)	8’
Gemshorn	4’
Flageolet	2’
Mixture (15.19.22)	III
Corno di Bassetto	16’
Oboe	8’
Tremulant	
Cornopean	8’

Sub Octave
Unison Off
Octave

2-25

Pedal

Violone	16’
Bourdon	16’
Principal	8’
Bass Flute	8’
Fagotto	16’

Great to Pedal
Swell to Pedal
Gt & Ped Combs Coupled

Great

Open Diapason	8’
Stopped Diapason	8’
Gamba	8’
Principal	4’
Harmonic Flute	4’
Twelfth	2 2/3’
Fifteenth	2’
Mixture (19.22.26)	III
Trumpet	8’
Corno di Bassetto	8’

Swell Sub Octave to Great
Swell to Great
Swell Octave to Great

Swell

Geigen Diapason	8’
Lieblich Gedackt	8’
Salicional	8’
Voix Celeste	8’
Gemshorn	4’
Flageolet	2’
Mixture (15.19.22)	III
Oboe	8’
Tremulant	
Contra Fagotto	16’
Cornopean	8’

Sub Octave
Unison Off
Octave

2-35

Pedal

Sub Bourdon	32’
Open Diapason	16’
Violone	16’
Bourdon	16’
Principal	8’
Bass Flute	8’
Choral Bass	4’
Trombone	16’

Great to Pedal
Swell to Pedal
Gt & Ped Combs Coupled

Great

Bourdon	16’
Open Diapason I	8’
Open Diapason II	8’
Claribel Flute	8’
Stopped Diapason	8’
Gamba	8’
Principal	4’
Harmonic Flute	4’
Twelfth	2 2/3’
Fifteenth	2’
Seventeenth	1 3/5’
Mixture (19.22.26.29)	IV
Corno di Bassetto	8’
Trumpet	8’

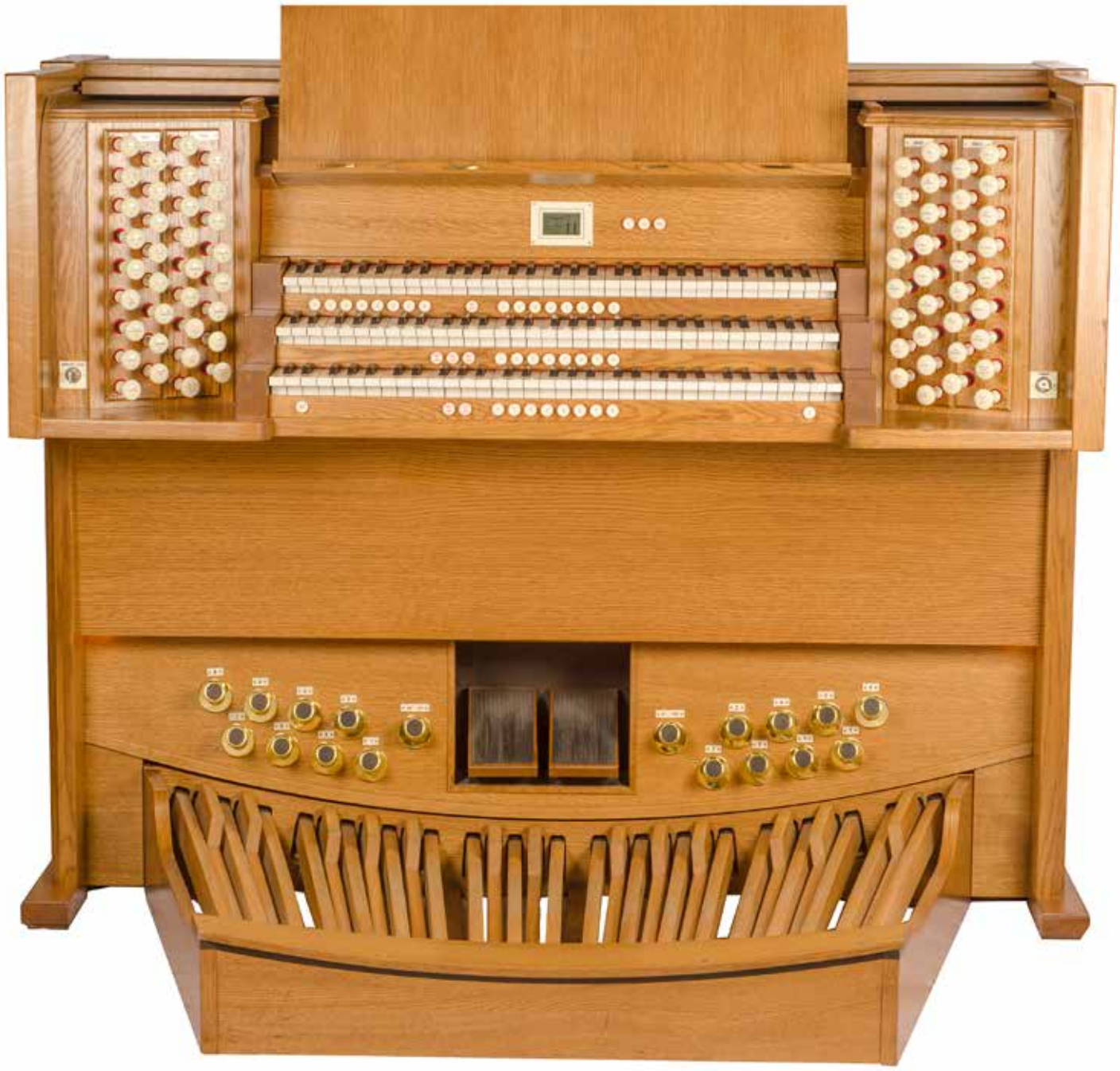
Swell Sub Octave to Great
Swell to Great
Swell Octave to Great

Swell

Lieblich Bourdon	16’
Geigen Diapason	8’
Lieblich Gedackt	8’
Salicional	8’
Voix Celeste	8’
Gemshorn	4’
Lieblich Flute	4’
Flageolet	2’
Mixture (15.19.22)	III
Oboe	8’
Tremulant	
Contra Fagotto	16’
Cornopean	8’
Clarion	4’

Sub Octave
Unison Off
Octave

3 MANUAL



In addition to our Windermere 3-45 'standard' instrument we offer a range of suggested specifications from a small 3-35 to a large 3-50 organ. You can use these specifications as a mere starting point, or indeed design your own bespoke instrument.

3-35

Pedal

Open Diapason	16’
Violone	16’
Bourdon	16’
Principal	8’
Bass Flute	8’
Choral Bass	4’
Trombone	16’

Choir to Pedal
Great to Pedal
Swell to Pedal
Gt & Ped Combs Coupled

Choir

Stopped Diapason	8’
Suabe Flute	4’
Nazard	2 2/3’
Blockflute	2’
Tierce	1 3/5’
Corno di Bassetto	8’
Tremulant	
Solo Posaune	8’

Sub Octave
Unison Off
Octave
Swell to Choir

Great

Bourdon	16’
Open Diapason I	8’
Open Diapason II	8’
Hohl Flute	8’
Gamba	8’
Principal	4’
Harmonic Flute	4’
Twelfth	2 2/3’
Fifteenth	2’
Mixture (19.22.26.29)	IV
Trumpet	8’

Choir to Great
Swell to Great

Swell

Geigen Diapason	8’
Lieblich Gedackt	8’
Salicional	8’
Voix Celeste	8’
Gemshorn	4’
Fifteenth	2’
Mixture (15.19.22)	III
Oboe	8’
Tremulant	
Contra Fagotto	16’
Cornopean	8’

Sub Octave
Unison Off
Octave

3-40

Pedal

Sub Bourdon	32’
Open Diapason	16’
Violone	16’
Bourdon	16’
Principal	8’
Bass Flute	8’
Choral Bass	4’
Trombone	16’
Trumpet	8’

Choir to Pedal
Great to Pedal
Swell to Pedal
Gt & Ped Combs Coupled

Choir

Stopped Diapason	8’
Viol d Orchestra	8’
Viole Celeste	8’
Suabe Flute	4’
Nazard	2 2/3’
Blockflute	2’
Tierce	1 3/5’
Corno di Bassetto	8’
Tremulant	
Tromba	8’

Sub Octave
Unison Off
Octave
Swell to Choir

Great

Bourdon	16’
Open Diapason I	8’
Open Diapason II	8’
Hohl Flute	8’
Gamba	8’
Principal	4’
Harmonic Flute	4’
Twelfth	2 2/3’
Fifteenth	2’
Mixture (19.22.26.29)	IV
Trumpet	8’

Choir to Great
Swell to Great

Swell

Geigen Diapason	8’
Lieblich Gedackt	8’
Salicional	8’
Voix Celeste	8’
Gemshorn	4’
Fifteenth	2’
Mixture (15.19.22)	III
Oboe	8’
Tremulant	
Contra Fagotto	16’
Cornopean	8’
Clarion	4’

Sub Octave
Unison Off
Octave

3-50

Pedal

Sub Bourdon	32’
Open Diapason	16’
Violone	16’
Bourdon	16’
Lieblich Bourdon (Sw)	16’
Principal	8’
Bass Flute	8’
Choral Bass	4’
Contra Trombone	32’
Trombone	16’
Trumpet	8’
Schalmei	4’

Choir to Pedal
Great to Pedal
Swell to Pedal
Gt & Ped Combs Coupled
Gen on Sw Toes

Choir

Stopped Diapason	8’
Viol d Orchestra	8’
Viole Celeste	8’
Suabe Flute	4’
Nazard	2 2/3’
Blockflute	2’
Tierce	1 3/5’
Larigot	1 1/3’
Sifflet	1’
Corno di Bassetto	8’
Tremulant	
Tuba	8’

Sub Octave
Unison Off
Octave
Swell to Choir

Great

Bourdon	16’
Open Diapason I	8’
Open Diapason II	8’
Hohl Flute	8’
Gamba	8’
Principal	4’
Harmonic Flute	4’
Twelfth	2 2/3’
Fifteenth	2’
Mixture (19.22.26.29)	IV
Sharp Mixture (26.29.33)	III
Contra Posaune	16’
Trumpet	8’
Clarion	4’

Choir to Great
Swell to Great

Swell

Lieblich Bourdon	16’
Geigen Diapason	8’
Lieblich Gedackt	8’
Salicional	8’
Voix Celeste	8’
Gemshorn	4’
Fifteenth	2’
Mixture (15.19.22)	III
Oboe	8’
Vox Humana	8’
Tremulant	
Contra Fagotto	16’
Cornopean	8’
Clarion	4’

Sub Octave
Unison Off
Octave

4 MANUAL

Our 4-60 specification is a mere starting point.
You can design your own bespoke instrument.

4-60

Pedal

Double Diapason	32’
Open Diapason	16’
Violone	16’
Bourdon	16’
Lieblich Bourdon (Sw)	16’
Principal	8’
Bass Flute	8’
Choral Bass	4’
Contra Trombone	32’
Ophicleide	16’
Trombone	16’
Trumpet	8’
Schalmei	4’

Choir to Pedal
Great to Pedal
Swell to Pedal
Solo to Pedal
Gt & Ped Pistons Coupled
Gen on Sw Toes

Choir

Chimney Flute	8’
Unda Maris	8’
Gamba	8’
Suabe Flute	4’
Nazard	2 2/3’
Blockflute	2’
Tierce	1 3/5’
Larigot	1 1/3’
Sifflet	1’
Corno di Bassetto	8’
Trompette Harmonique	8’

Tremulant
Sub Octave
Unison Off
Octave
Swell to Choir
Solo to Choir

Great

Double Open Diapason	16’
Open Diapason I	8’
Open Diapason II	8’
Hohl Flute	8’
Stopped Diapason	8’
Principal	4’
Harmonic Flute	4’
Twelfth	2 2/3’
Fifteenth	2’
Mixture (19.22.26.29)	IV
Sharp Mixture (26.29.33)	III
Contra Posaune	16’
Trumpet	8’
Clarion	4’

Choir to Great
Swell to Great
Solo to Great

Swell

Lieblich Bourdon	16’
Geigen Diapason	8’
Lieblich Gedackt	8’
Salicional	8’
Voix Celeste	8’
Gemshorn	4’
Fifteenth	2’
Mixture (15.19.22)	III
Oboe	8’
Tremulant	
Contra Fagotto	16’
Cornopean	8’
Clarion	4’

Sub Octave
Unison Off
Octave
Solo to Swell

Solo

Quintaton	16’
Harmonic Flute	8’
Concert Flute	4’
Viol d Orchestra	8’
Viole Celeste	8’
Vox Humana	8’
Orchestral Oboe	8’
Tremulant	
French Horn	8’
Tuba Mirabilis	8’
Orchestral Trumpet	8’

Octave
Unison Off
Sub Octave

SPEAKERS

A promising organ on paper can be disappointing if the correct speakers are not used in an attempt to cut corners and potentially save money. This is a false economy.

As a company, Makin always provides the best speaker system for its organs. Indeed, if budget becomes an issue, we look to reduce costs in other ways, for example, by reducing the overall specification rather than reducing either the number of channels of amplification or by suggesting an inferior speaker system. Getting the right ratio between the number of stops and channels is critical in getting the most out of an instrument.

In anything but the smallest chapel or building, Makin recommends the use of our UL speaker system which contains a range of speakers designed to cover all organ sound frequencies from the lowest 32' C through to the top C of a fifteenth and beyond. After many years of research and development, these speakers work hand in hand with our organs to provide simply the best in sound with all the warmth of a pipe organ. They are not designed to work with the human voice, and of course the opposite is true, so don't imagine you will get a good organ tone through a PA system. Our speakers have multiple speaker drivers (or cones) per speaker, meaning that whilst an organ may have 14.2 channels of amplification, with a UL speaker system there will be at least 45 individual speaker drivers. All these factors together give a Makin organ a fullness of sound through all frequencies.

UL5000

Active Mega Woofer
800w
103cm x 50cm x 62cm
66kg

UL3300

Sub Woofer
200w
64cm x 50cm x 50cm
36kg

UL3000

Sub Woofer
200w
120cm x 40cm x 35cm
29kg

UL2700

Full range
200w
58cm x 20cm x 29.5cm
12.2kg

ENCLOSURES

The successful positioning of speaker enclosures is vital to the overall success of a pipeless instrument. Whilst the primary concern should always be for the best placement acoustically, there are often secondary considerations to balance in terms of the aesthetics.

Makin consultants work closely with the church authorities, organ advisers and architects to get the best individual solution for each church. Common speaker locations include in the original pipe organ loft, mounting in an existing balcony, wall mounting and mounting in the roof structure, but there are endless possibilities to consider to ensure that the right solution is found for each individual case.

In some situations, speakers can simply be placed out of sight in a position to provide excellent reflected sound. However, in other cases bespoke enclosures are made to contain the speakers. No two buildings are the same and assuming that the chosen position is good acoustically, the next objective is to get the aesthetics right by designing an enclosure that fits in with the local surroundings, being sympathetic to the fittings in place and to the age of the building. For example, what looks right in a modern church would look totally out of place in a Victorian building. Makin has a great deal of experience in producing something that is just right and fit for purpose and our consultants will readily be able to provide you with a number of options and examples.

From pipe façades, through to specially shaped cabinets in modern art forms our craftsmen can build what you need.

INSTALLATION

The Makin Installation process has been carefully crafted through the years to ensure that each organ is installed exactly to meet all acoustic and aesthetic design specifications.

With an average of two to three installations per week taking place, organisation and planning is key. By meeting, and on many occasions improving upon original thoughts and ideas, customers simply get the best sounding and best looking organ installation ensuring that their money has been spent well and that there are no unexpected additional bills to pay.

In reality, the installation process starts before a firm order has been placed by the customer with one of our team of organ consultants making an assessment of all the requirements such as speaker and console location, the best routing of cables and of course any scaffolding to be built. It is certainly true that a picture is worth a thousand words, and we are careful to ensure we have everything recorded on digital camera from speaker locations and working heights through to simple access into the building itself.

Since no two buildings are alike we hold weekly installation meetings with our Organ Consultants and our Installation Manager where each installation is described in detail and preparations made to ensure a smooth and speedy installation. For the more complex installations, our Installation Manager will undoubtedly make a personal site visit to verify any remaining details.

Our busy diary often means that installations are booked many weeks in advance. Installations themselves can take anything from an hour with two staff through to a full week with a large team. Whatever is required, you as a customer should expect to be kept well informed of the plan and progress against it, and of any obstacles to be overcome that we find along the way. Between them, our team has many years of experience and what may seem to be an insurmountable task to the layman, is very run of the mill to ourselves, and we can be more or less left to it.

Makin ensures that all work we do meets all relevant health and safety legislation, so for example all our tools are regularly PAT tested and we work safely at height on scaffolds as opposed to swinging from ladders. Clearly this is critical to the safety of our staff, but also to anybody else who is in the building with us.

Verification of the work is made at regular stages through the process, so you can expect to hear some organ sounds quite early in the day, but don't put on your organ shoes until we have finished and demonstrated the instrument to you.

Finally, the features of your new organ will be demonstrated and some initial voicing will be undertaken at the end of the installation. Ideally we would like the resident organist to be present for this to ensure that they fully understand the new instrument. Indeed we ask the organist to keep a list over the next month or so of voicing changes they would like to discuss so that when the final voicing has been completed you will have an instrument to savour and that you will feel that your investment in a new organ was a good one.

SERVICE, WARRANTY AND MAINTENANCE

New Makin organs all come with a ten year parts and labour guarantee covering all aspects of the organ. All we ask in return is that, should a fault develop you do not take the back off and 'have a go' yourself, indeed by doing so you will invalidate the guarantee.

Customers always have an option to have an annual health check of the organ to ensure there are no potential faults developing and to have that extra peace of mind that an engineer's visit provides.

Once the guarantee expires, you can extend it by paying an annual fee which includes an annual service visit to the instrument aimed at preventative maintenance.

As with any electrical or electronic product efficient after-sales service is vital. Clearly engineers must be totally familiar with the product and have an adequate supply of spare parts. In addition there is also a need for a speedy response should the organ need repairing for the following Sunday or for a 'special service' when the organ must be at its best. With these facts in mind Makin has its own team of engineers that are based geographically around the country so that customers have access immediately to a true product specialist who will be in a position to efficiently diagnose any problems and more often than not, fix them there and then. We do not use third-party engineers.

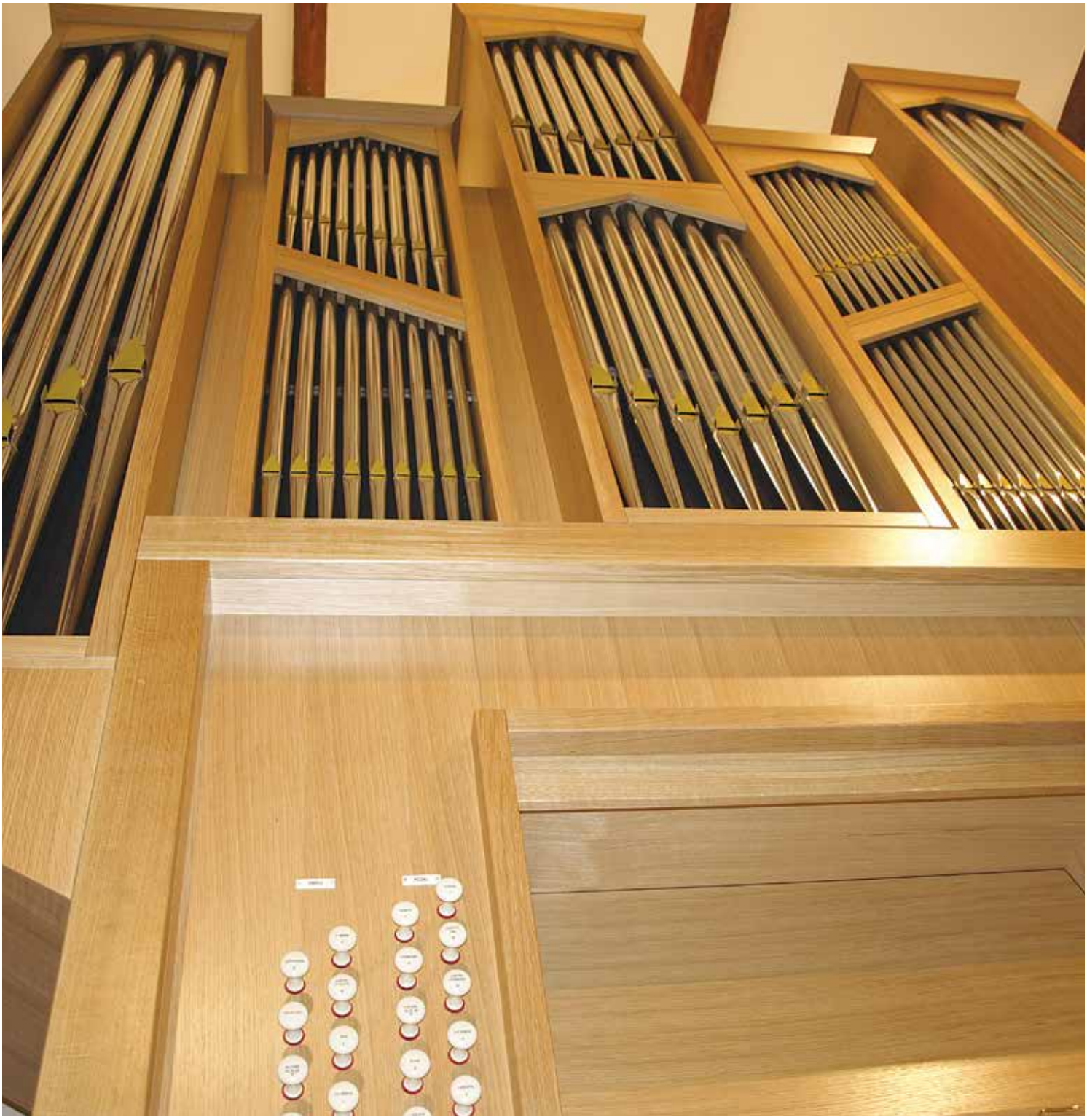
When a fault has been reported, our staff will speak directly to the customer to ascertain as much detail as possible prior to making a visit. Indeed it can be the case that an apparent fault can in fact be resolved over the phone which of course helps keep both our costs and customer bills down and gets the organ up and running again more quickly.

Makin rightly claim, since our customers tell us so, that our after sales service is second to none and indeed this continues to be a matter of pride for our staff. There is no doubt that good service helps prolong the life of products and since we are still maintaining instruments that are thirty years old the initial build quality and after-sales service must be excellent.

REBUILDS AND UPGRADES

It has always been possible to rebuild or upgrade Makin instruments with the latest available software and hardware configurations, and through the years many customers have decided to do so in order to protect their initial investment with us.

Makin has always looked to the future and provided each and every customer with the best options available at the time, rather than focussing on a single technology or hardware supplier. This open and flexible approach continues today as we provide upgrades to instruments from previous generations and extend their lives far beyond the original expectations.



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