Operation of Foxton Level Crossing

Foxton Level Crossing is controlled from Foxton Crossing Box which overlooks the crossing.

An interior view of the box looking towards Foxton level crossing.
The Crossing Box is alerted by a beep from the train describer when a train is approaching the area.

There is a list of trains passing through the area so the crossing keeper can see whether the train stops at Foxton.
The point at which the gates are locked and barriers are lowered is different for fast and stopping services, as described on this notice.

The Crossing Keeper monitors the position of the train on the large diagram to identify the point at which the barriers should be lowered. Note that the signals protecting the crossing are Red at this point so until the crossing is closed the train will be stopped before reaching the crossing.
The Crossing Keeper now walks over to the control panel, checks to see if there is anyone on the foot crossings and if they are clear starts the crossing closing procedure as follows.

Once the crossing has been observed to be clear the Wicket Gates are locked and the barrier closing sequence is started using the buttons on the control panel indicated below. The controls outlined in red operate the barriers and the controls outlined in blue operate the wicket gates (these coloured lines are not on the panel itself).

The Crossing Keeper observes the crossing while the barriers are closing and can press a button to stop the barriers in an emergency, and also if a pedestrian is seen for any reason between the gates any of the 4 wicket gates can be independently opened to let them out.
Once the barriers have closed, the Crossing Keeper makes a thorough final check that the crossing is clear. To ensure every area of the crossing is covered, a CCTV camera has been installed covering a potential blind spot on the Cambridge side of the crossing.

It covers the area just to the right of the house.
The switches at the top of the control panel are then used to clear the relevant signal or signals to Green (outlined in red in the photo below). In an emergency the signals can be set back to Red by either the Crossing Keeper at Foxton or the Signal Box at Cambridge.

The panel also has a series of warning indicators and control switches (outlined in blue) which show if there is a problem with the crossing (e.g. a power failure or wicket gate lock failure). If there are any problems with the wicket gates then they are padlocked out of use and Network Rail engineers will be called to fix the fault.
The crossing is kept locked until the train has passed, and only then can the Crossing Keeper raise the barriers.

A video camera continuously records the crossing to provide evidence in the case of an incident or misuse of the crossing. Several days of video are stored.
Cambridge Signal Box has overall control of the railway through Foxton but the signals protecting the crossing cannot be cleared to Green unless both Cambridge and Foxton authorise this.

The section of the panel at Cambridge covering Foxton is shown below.
Meldreth, Shepreth and Foxton Rail User Group visit to Foxton Crossing Box on 11th May 2012

Visit to Cambridge Signal Box on 16th May 2012
The Rail User Group returned to Foxton Level Crossing to see the upgraded equipment on 22\textsuperscript{nd} November 2012.

The upgrade included new magnetic locks for the wicket gates to improve their reliability. Also 2 CCTV cameras were installed, one to allow the crossing keep to observe a blind spot and the other to continuously record the crossing to provide evidence in the case of an incident or misuse. A new control panel was installed and located closer to the window of the box to give the crossing keeper a clearer view of the crossing. The level crossing has a battery backup and this was replaced. The barriers and wicket gates can be operated by battery for 6 hours if there is an electrical supply failure, and beyond this time a portable generator can be delivered to keep the crossing operating indefinitely.

One of the new magnetic wicket gate locks: