

IST'S CLOCK REMOTE

The Clock Remote eliminates the need for wires to connect your water polo shot and game clocks to the Polo Interface. Eliminating wires makes your pool deck neater and safer. Please take a few minutes to read this manual to become familiar with the features and operation. The 900 MHz radio frequency used does not require an operator's license.

The Clock Remote consists of a Clock Transmitter that connects to your Polo Interface and a Clock Receiver that connects to your Shot or Game clock. If you want to use more than one clock, you must order additional receivers separately (Part Number: CLOCKRCVR). The Clock Transmitter gets its power from the Polo Interface and the Clock Receiver gets its power from the Shot or Game clock, so no batteries are required.

1.1 Assembling the Clock Remote

When you unpack the Clock Remote, you should have the following pieces:

- Clock Transmitter with coiled cable (see photo below)
- Clock Receiver(s) with coiled cable(see photo below)
- Adhesive-backed Velcro strips
- Clock Remote Operating Instructions.

If any of the items are missing, call 800/835-2611 for replacements.

Begin assembly by connecting the Clock Transmitter to your Polo Interface. Place the fine half of a Velcro strip horizontally on the back of the transmitter and the coarse Velcro strip vertically on a blank side of the Polo Interface. Press the transmitter in place with the antenna pointing up (see photo at right). The round connector on the coiled cable plugs into the mating socket on the front of the transmitter—the RJ11 (phone-style) socket is not used in this application. Plug the RJ11 plug on other end of the coiled cable into any of the RJ11 sockets on the top of the Polo Interface. For best results, the Polo Interface should be placed where the transmitter's antenna is in clear view of the clock receiver(s).



Clock Remote Operating Instructions

Next connect the Clock Receiver(s) to your Shot Clock(s) and/or Game Clocks. Place the fine half of a Velcro strip horizontally on the back of the receiver. Before removing the backing, attach the coarse half of the Velcro vertically to the fine strip on the receiver. Facing the back of the clock, align the receiver in the upper right corner so the antenna is above the top of the clock and the coiled cord can easily reach the connectors on the side of the clock. Stick the Velcro in place. The round connector on the coiled cable plugs into the mating socket on the side of the clock. **NOTE: When using non-battery clocks (SHOTCLOCK-HI or SWIMCOUNT-HI) with the Clock Remote, the clocks must be connected to a 110 volt GFI outlet.**



1.2

Selecting an Operating Channel

When using the Clock Remote, both the Clock Transmitter and Clock Receiver must be on the same channel, numbered **0-7**. to find a clear channel in your facility, begin by turning on the clock (connected to 110 volt GFI outlet if without battery). The **Power** LED on the receiver should be lit. The Channel Select switch is on the top of the Clock Receiver. The button marked “+” selects a higher channel and the “-” button selects a lower one.

Move through the channels and monitor the yellow **Carrier** LED on the front of the receiver for 10-15 seconds on each channel. If the LED lights up, there are other radio devices in the area that are using that frequency. These channels should not be used. You should find several channels that will not detect any radio signals, where the **Carrier** LED does not light up. These are the channels you should use for the receiver and transmitter. When you have selected a channel on the receiver, set the Channel Select switch on the transmitter (and any other receivers) to the same channel. If the transmitter and receiver(s) are not on the same channel, the Clock Remote will not function.

If you are not able to find a channel without other radio traffic, you can return your Clock Remote to IST and they will be reprogrammed with a different set of frequencies to ensure communication.

1.3

Testing the Clock Remote

Connect the Polo Interface to your POLOWARE Computer as usual. Using the Clock Remote does not require any changes to the POLOWARE Software. Make sure that the Polo Interface and all clocks are connect to 110 volt GFI outlets and that the Clock Transmitter and all Clock Receivers are on the same operating channel. Make sure all clocks are turned on.

From your POLOWARE Software go to Match/Hardware Diagnostic. All Shot Clocks should display **51** and the Game Clock should display **:50**. If the clock displays are correct, you are ready to run a match!

If your clocks do not display the diagnostic properly, check the following items:

- Is the Polo Interface connected to the POLOWARE Computer and connected to a 110 volt GFI outlet?
- Is there a clear line of sight from the transmitter antenna to the receiver antenna(s)?
- Are all clocks connected to 110 volt GFI outlets and turned on?
- Is the **Power** LED on the receiver(s) lit?
- Are the transmitter and receiver(s) on the same operating channel?
- Is the **Carrier** LED on the receiver(s) off? If not, try a different channel for the transmitter and receiver(s).

If all of these items have been verified, disconnect the transmitter and receiver(s) and connect one clock with a water polo cable. Try the hardware diagnostic again. If the clock works properly with a cable, there may be a problem with the Clock Remote. Call IST at 800/835-2611 for further instructions.

1.3

Monitoring the Carrier LED

Even though you selected a clear channel when you set up the Clock Remote, you may still see the yellow **Carrier** LED on the receiver(s) flash occasionally. If people come into the area using devices that are on the same frequency as the selected channel on the receiver(s) , the yellow **Carrier** LED on the receiver(s) may flash. You may want to select another clear channel on both the transmitter and receiver(s) to avoid possible interference.

1.4

Warranty

The IST Clock Remote transmitter and receiver are covered by a five-year limited warranty that includes parts and labor to repair any manufacturing defects. A separate, detailed warranty statement is included with your shipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are design to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with these instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Select a different channel
- Reorient or relocate the receiving antenna
- Contact International Sports Timing for assistance at 800/835-2611



International Sports Timing
3286 Kentland Ct. SE
Grand Rapids, MI 49548-2310
Phone: 800/835-2611 or 616/247-1033
Fax: 616/247-0086
Email: info@istime.com
Web: www.istime.com